

# Installation and Reference Guide

**STRIKE  
COMMANDER<sup>®</sup>**

**SYNDICATE  
PLUS**

**PAGAN<sup>™</sup>  
Ultima<sup>®</sup> VIII**

**WING  
COMMANDER<sup>®</sup> II**

**CREATIVE<sup>™</sup>**  
CREATIVE LABS, INC.

# Installation and Reference Guide

This guide contains all you need to get started and to play the programs - installation instructions, game references, troubleshooting, and product support information for Strike Commander, Syndicate Plus, Ultima VIII Pagan, and Wing Commander II.

A reference for each game is provided in an easy-to-use, on-line format. The Creative On-Line Documentation for viewing in Windows is provided on the CD-Rom disc containing the files for the above programs. To run Creative On-Line Documentation, you must have Microsoft Windows 3.1, 1.5MB free hard disk space and VGA displaying 640x480 resolution with 256 colors.

To install the Creative On-Line Documentation:

1. Insert the CD-ROM disc into your CD-ROM drive.
2. In Windows, select Run from the File menu in the Program Manager.
3. Type D: \MANUALS\SETUP.EXE where D: is the letter of the CD-ROM drive.
4. Follow the on-screen instructions. A Creative Labs program group with the Creative On-Line Documentation icon will be created.

To launch the Creative On-Line Documentation, double-click on the Creative On-Line Docs icon. Read the README file for important information that will assist you in using the application.

For users who prefer to review the references in DOS or to print without images, the reference for each program is also provided in text format. To view, you can use a text editor such as DOS Edit. The text file for each program is located on the CD-ROM disc:

For:	Directory:	Filename:
Strike Commander	root	strike.txt
Syndicate Plus	syndplus	syndplus.txt
Ultima VIII Pagan	ultima8	ultima8.txt
Wing Commander II	wing2	wing2.txt
Product Support Information	root	prodsupp.txt

We hope you enjoy these entertaining titles with your Sound Blaster multimedia upgrade kit.

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## INSTALLATION

### SYSTEM REQUIREMENTS

**Computer.** This game calls for an Intel 486 or 100% compatible system.

**Video Card.** IBM VGA or compatible video card with 256 colors.

**Free RAM.** You must have at least 640K or base RAM (memory) to play Strike Commander. Of that 640K, at least 557K (571,000 bytes) of base memory must be available at the DOS prompt to run the minimum game configuration. You must also have at least 2700K (2,765,000 bytes) high memory:

If your CONFIG.SYS contains an EMS driver, you must have 2700K (2,765,000 bytes) of EMS memory available.

If your CONFIG.SYS does not have an EMS driver, you must have 2700K (2,765,000 bytes) of XMS memory available.

Strike Commander won't run with less than that. See **Memory Requirements** for more information.

**Hard Disk.** You must have a minimum of 2 megabytes free on your hard disk to install and play Strike Commander CD.

## INSTALLATION

When presented with a menu press **↑** and **↓** to move through the list, then press **Enter** to accept the highlighted selection. You may abort the installation process by pressing or selecting the abort menu option.

1. Insert the CD-ROM (label side up) into your CD-ROM drive.
2. Change to your CD-ROM drive by typing the letter of the drive and a colon, then pressing **ENTER** (e.g. D:).
3. Type **INSTALL** and press **ENTER**.
4. Select **Install Strike Commander** and press **ENTER**.
5. The program prompts you for the letter of the hard drive to which you want your system configuration data and saved games written. Press the letter on your keyboard corresponding to a hard disk with adequate space. If you specify an invalid drive, the program will prompt you again.
6. You are prompted for the sound card you are going to use for music. Select any Sound Blaster (or other MIDI device, if applicable).
7. You are asked for the sound card to use for digital effects. Select **Sound Blaster Pro**.
8. If you select any of the Blaster cards (Sound Blaster, Wave Blaster, etc.) you are prompted for the Base I/O and IRQ settings of the card. The install program will initially highlight the default values for these; if you have changed either your cards I/O or its IRQ, select the correct value(s) and press **ENTER**. Note that older Sound Blaster cards have a default IRQ of 7 (rather than 5). Use **↑** and **↓** to highlight each appropriate selection, then press **ENTER**.
9. You are asked if your system is equipped with a local bus video card. If it is, choose this option for a slight improvement in performance. (If you do not have a local bus video card, choosing the option slows performance.)
10. You are given several installation options at this point. You must always install the primary executable and the current game map, so this is not given as an option. These basic files take less than 2 megs of hard drive space.

In addition, you may copy two more sets of files from the CD to your hard drive. Generally, the more files you can store on your hard drive, the faster the game will run. The drawback is that you use more space on your hard drive. Select the installation method that works best for you. The two sets of additional files, along with how much space they would occupy on your hard drive and which systems we recommend them for are:

Option	Hard Drive Space	Optimal For
Copy additional Executables	2 Megs	Single Speed CD Drives
Copy Tree	9 Megs	4 Megs Ram

Players using double speed CD drives and who have at least 8 megs of RAM might notice slight improvement in performance by copying these additional files to their hard drives.

Of course, it is possible to transfer both sets of additional files. This combination (including basic files) occupies less than 12 megs on your hard drive and is recommended for players with single speed CD drives and only 4 megs of RAM.

Note: It is possible to transfer all files from the CD to your hard drive, but this is not given as an option because doing so fills over 150 megs on your hard drive.

11. The install program copies files to your hard drive.
12. When the installation is complete and you are ready to play, go to the **Strike** directory on your hard drive. (If you accepted our default suggestion, this directory is **SC**.) Type **SCCD** to get a menu of games, and select the game you want to play (**Strike Commander** or **Tactical Operations**) from this menu.

## Changing Your Configuration

If you ever add a sound card or change from one card to another, simply re-run the installation program from your hard drive. (You would re-run the install program from the CD only if you were totally replacing the game.)

## Re-installing

Should you find it necessary to re-install **Strike Commander**, we recommend that you first delete all the files in the **Strike Commander** directory except any files with the **.SAV** or **.TOI** extensions (these are your **Strike Commander** and **Tactical Operations** saved games, respectively). The install process will not write over them.

## On-line Help

Press **F1** for on-line help during installation.

# OPTIMIZING YOUR SYSTEM

## Memory Requirements

We have tried to minimize the amount of time you spend configuring the memory in your system, but *Strike Commander* is a memory-intensive game, and adjustments to your memory configuration may be needed.

There are three types of RAM referred to in this manual: DOS (conventional base RAM), extended and expanded. *Strike Commander* has specific minimum requirements for each of these types of memory. If you are unsure about these different types of memory, consult your DOS manual.

To find out how much DOS, extended and expanded memory your computer has available, type **MEM** at the DOS prompt. When the memory information is printed on the screen, look for the following listings:

- Largest executable program size
- Largest available upper memory block
- Total extended or XMS
- Bytes free of XMS
- Bytes available XMS
- Bytes free of EMS
- Free expanded (EMS)

The **Largest Executable Program Size** should be at least 557K. (Actually, it can be as small as 527K, if the **Largest Available Upper Memory Block** is at least 30K.) You will have only one of the last five listings - **Total Extended or XMS/Bytes Free of XMS/Bytes available XMS/**

**Bytes Free of EMS/Free Expanded (EMS)** - partially depending on whether or not you have an EMS driver. Regardless of which listing you have, it should show at least 2700K available.

If you are experiencing problems installing or running "Strike Commander", it might help to create a separate boot disk or decrease the number of memory-resident programs (TSRs) you have loaded. Refer to your DOS manual.

Your boot disk should contain the following lines in the CONFIG.SYS file:

```
If you are using DOS 5.0:  
DEVICE=C:\DOS\HIMEM.SYS  
DEVICE=C:\DOS\EMM386.EXE 2592 /I=B000-B7FF RAM  
DOS=HIGH  
DOS=UMB  
FILES=30  
BUFFERS=30  
DEVICEHIGH=C:\<CD-ROM DRIVERS>  
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

If you are using DOS 6.0 with double space:

```
DEVICE=C:\DOS\HIMEM.SYS  
DEVICE=C:\DOS\EMM386.EXE 2592 /I=B000-B7FF RAM  
DOS=HIGH  
DOS=UMB  
FILES=30  
BUFFERS=30  
DEVICEHIGH=C:\<CD-ROM DRIVERS>  
DEVICE=C:\DOS\DOUBLESPACE.SYS /MOVE  
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

**Do not delete your AUTOEXEC.BAT or CONFIG.SYS files completely, or alter them on your hard drive, without them, your computer will not function.**

### Using your boot disk

1. Turn your computer off, insert your new boot disk in your A: drive and turn the computer back on. (If your CD drive is external, turn it on.)
2. Insert the CD-ROM disk (label side up) into your CD-ROM drive.
- 3a. If you haven't yet installed the game, change to your CD-ROM drive by typing its drive letter followed by a colon (e.g., d:) and pressing **[Enter]**, then continue from Step 3 in **Installation**.
- 3b. If you've already installed the game and you are ready to play, go to the game directory on your hard drive. (If you accepted our default suggestion, this directory is SC) Type SCCD to get a menu of games, and select the game you want to play (STRIKE COMMANDER or TACTICAL OPERATIONS) from this menu.

### CACHING

Strike Commander uses all available memory for its own internal disk caching. Adding SmartDrive or any other caching utility may actually slow disk access.

### I/O and IRQ

If the install program reports difficulty finding your sound card, check to make sure you've selected the correct I/O and IRQ. Consult your sound card documentation if you continue to have difficulties.

## STARTING THE GAME

Make sure your *Strike Commander* CD is in your CD-ROM drive.

1. Select the drive on which the game is installed. (For example, if you installed the game on your C-drive, type "C:" **[ENTER]**.)
2. Select your *Strike Commander* directory. (If you used the default directory, type "CD\SC" **[ENTER]**.)
3. Start the game (by typing "STRIKE" **[ENTER]**.)

After a brief animated sequence, your screen will display the startup menu.

**Note:** If you are starting *Strike Commander* for the first time, the continue game option will not yet be available. If you have not saved a game, the load game option will not yet be available.

**Start New Game.** To begin the full *Strike Commander* game, select start new game with your mouse or joystick cursor.

**Training Mission.** For instant action, choose training mission. You can use this customizable option to design practice missions against air or ground targets and to continue playing *Strike Commander* after you have finished the preplotted game. Although practice missions will not affect your status in the game, they are a good way to brush up on your flying and improve your combat skills while getting to know enemy planes and vehicles.

If this is your first flight simulation game, running a few custom missions before you play the main game is a good idea.

**View Objects.** Selecting view objects allows you to see three-dimensional views of the planes, tanks, trucks, weapons and other objects you will encounter in the game. Use the object viewer to familiarize yourself with friendly and enemy equipment, or just to enjoy the artwork.

**Load Game.** To resume any of the games you have saved, choose load game. When you select this option, a list of the games you have saved will appear. Select the name of the saved game that you want to continue, and click on the load button. You will then find yourself at the point where you saved - the barracks at the Wildcat base or the tent at the strike base.

**Transferring Your Character.** You can transfer your character to Tactical Operations from any *Strike Commander* saved game. If you select load game from the startup menu in Tactical Operations, the saved games in white are from *Strike Commander*. If you select one of these games, your character's name, callsign and keyboard stats will be transferred from the *Strike Commander* game you selected to a new Tactical Operations game-the *Strike Commander* game you selected is not affected. (Your *Strike Commander* saved games are not available from the Tactical Operations Barracks Option Screen.)

**Continue Game.** To keep track of your progress, *Strike Commander* will automatically save your position in the game, usually after missions or when you return to the Wildcat base. The

auto-save is a backup feature, not a regular save function, and you can not use it to return to a previous series of missions, so be sure to use the regular save option frequently. If you exit without having saved your game, however, selecting continue game from the startup menu will return you to your most recent auto-save position. If you want to return to one of your saved games, use load game instead.

### Starting a New Game

After you select start new game, a "Mercenary Defense License Application" will appear on your screen. Enter your last name, your first name, and your call sign in the spaces provided. Press **ENTER** or **TAB** to move between fields, and **BACKSPACE** to correct mistakes.

Once you've typed text in all three fields, press **ENTER** again to start the game. Your jeep will drive up to the Wildcat base, and your game will begin.

### Player Score

The game keeps a running score of how you're doing. You can look at it by pressing **Alt S** between missions. To maximize your score, play the game with the ACE option.

### Exiting Strike Commander

We recommend that you save and exit using the barracks and strike tent option screens. If, however, you wish to quit your game immediately, press **Alt X** to exit. This function does not save your game.

### Saved Game Limit

Strike commander will only recognize the first 100 saved games in the game directory. All additional saved games are ignored and cannot be selected in the Save/Load menu. You may delete unwanted saved games using the DOS delete command.

### Training Missions

After you choose Training Mission from the startup screen, the dogfight background will appear, and you will be asked to choose either a dogfight mission or an air-to-ground mission. To practice dogfighting with enemy planes, choose Dogfight. To practice ground attack runs, choose search and destroy. You can also choose Gauntlet.

If at any time you want to return to a previous option screen, select Backup. You can backup as far as the first screen. If at any time you want to return to the startup menu, select Cancel.

### Air-to-Ground Missions

After you choose Search and Destroy, you will be given a brief statement of your mission objectives and asked to confirm your choice. Selecting Accept sends you to the weapons loading screen. To load weapons, click with the mouse on the weapon you want to add to your plane. The weapon will appear under the wings of your plane on an appropriate hardpoint. Weapons are always loaded onto your plane in pairs. If you click on a weapon already loaded on your plane, it will be removed and returned to the ordnance carts. (For more information on Loading Weapons, see **Loading Your Weapons**.) Afterwards, select the cockpit to fly your mission or the hangar doorway to return to the startup menu.

### Dogfight Missions

After you choose Dogfight, you will be given a brief statement of your mission objective. At the bottom of your screen will be a set of fumbered buttons. Choose the number of enemy planes you want in the first group that you will face. You will then be asked to choose the types of planes in that group.

After you choose number and type of planes, you will be given four options. If you only want to fight one group of enemies, select Enough. If you want to add more groups, select More and choose the number and type of planes in the next group.

Once you're satisfied with the selection of enemies and the mission configuration, choose the altitude at which the engagement will begin (5,000, 15,000 or 25,000 feet). After choosing your altitude, choose whether to engage Rookie, Veteran or Ace opponents. Next, you load weapons onto your plane. To do so, click with the mouse on the weapon you want to add to your plane. The weapon will appear under the wings of your plane on an appropriate hardpoint. Weapons are always loaded onto your plane in pairs. If you click on a weapon already loaded on your plane, it will be removed and returned to the ordnance carts. (For more information on loading weapons, see **Loading Your Weapons**.) Afterwards, select the cockpit to fly your mission or the hangar doorway to return to the startup menu.

For a walk-through of a few missions, see **Practice Missions** in the on-line documentation.

### Object Viewer

When the object viewer appears on your screen, you see an F-16 as it appears in the game. Initially, the plane will be spinning. To change the direction of the spin, click on one of the Rotate buttons with the right mouse button. To stop the object from spinning, click on one of the rotate buttons with the left mouse button. Once the motion is stopped, you can use the left mouse button to manually rotate an object and view it from different angles. **↑** and **↓** rotate the object around the horizontal axis of the screen. **←** and **→** rotate it around the vertical axis.

To get a closer look at an object, press the Zoom up arrow. To zoom back out, press the Zoom down arrow.

To view other objects from *Strike Commander*, select the button with the name of the object you're viewing. The next piece of hardware from *Strike Commander* will appear on your screen

## TROUBLESHOOTING

Occasionally, something will go wrong with the installation process. Common error messages are given below, along with some solutions.

**Online Help.** Some of this information is included in the install program's on-line help feature, which can be accessed at any point during installation by pressing **F1**.

### MESSAGES DURING INSTALLATION

**The version of DOS on your machine is too old to run Strike Commander.**

You need DOS version 5.0 or higher. Newer versions of DOS can be purchased at a computer dealership. Strike Commander has been fully tested with versions 5.0, 6.0 and 6.2.

<The CPU detected on this machine is not compatible with Strike Commander. You need an 80386 or better to install and play Strike Commander.>

Strike Commander requires a computer with an 80386 or better CPU. Older CPUs do not have the processing power required to play Strike Commander—they can not run the game. (Some players with 386 CPUs are satisfied with Strike's performance on their systems, but most are not. We recommend that you use at least a 486.)

If you do not have one of these CPUs, you will need a CPU upgrade in order to play Strike Commander. If you do have a 386 or better and receive this error message, try installing again from the beginning. If you still receive this message there may be a defect in your processor.

<Could not copy files from the CD to the hard drive.>

Although this could mean that your drive is malfunctioning, the most common cause of this message is a read error. Check to make sure the CD is properly inserted in the drive and that the drive is closed completely, then try installing again.

<One of the configuration files either could not be located, or could not be created.>

An error has been detected with an install configuration file. This usually means one of two things has occurred:

- (1) A file needed by the install program to properly determine your computer's configuration was not found. The file could have been damaged, deleted or moved, or the directory structure of your machine could have been altered since the last installation.
- (2) The install program was unable to write a configuration file. The hard disk could be full or could contain undetected errors. Another possibility is that your computer has a memory problem that is stopping the installation. See **Optimizing Your System** to remedy this situation.

Make sure you are in the directory in which Strike Commander was previously installed, or in the directory where the install program is.

**Could not find treefile.**

This means that one of the files necessary to run the game was not available. There are a number of possible causes for this error, including:

- The CD-ROM is not loaded in the drive correctly.
- The CD-ROM drivers are not installed correctly or have been incorrectly modified.
- The hard disk where the installed game is located could not be found.

Make sure that all game files on your hard drive are located in the game directory. If this problem persists, attempt reinstalling Strike Commander CD-ROM. If this does not fix the error, please contact ORIGIN Product Support.

<Could not create the Strike Commander directory.>

A file exists with the same name as the directory, the drive may not have enough free space, or you have attempted to install to a disk that is set to read only. The latter should only be a problem if you are loading onto or with a network. *We do not recommend loading Strike Commander while network drivers are loaded.*

## Troubleshooting During Play

<My mouse is not working with Strike Commander CD. My mouse works with all of my other software applications—why not with Strike Commander?>

If your mouse is not working with Strike Commander, you should first check to see if your mouse has been loaded in DOS (in your AUTOEXEC.BAT file) or onto the boot disk you are using to play the game. Windows and many other "multi-tasking" environments load their own built-in mouse driver. These mouse drivers will not operate outside of their shell environment. Loading a mouse driver into the DOS environment can be as simple as typing mouse **[ENTER]** at the command prompt. For example:

```
C:\MOUSE [ENTER]
```

This command can differ depending on which mouse driver software you are using. Please consult your mouse user's guide for further details. You may also experience trouble running Strike Commander with a *non-Microsoft* (or 100% compatible) mouse driver. If you do, any of the following steps should fix the problem:

1. Replace the mouse driver with a Microsoft mouse driver.
2. Disconnect your mouse and use your keyboard or joystick instead.
3. Remove the mouse driver and use your keyboard or joystick instead.

<Why do I get the message: "Sound System Initialization Failed"?>

*You probably have enough memory to run the game, but not enough to load the sound drivers you selected during installation.* You will either have to increase the amount of free DOS memory (see *Optimizing Your System*) or play without sound. Or, if your sound card is not one of the cards listed on the box or in the installation program, but is 100% compatible with one of the cards listed, *it may need to be configured for Sound Blaster emulation mode.* Consult your sound card manual.

<I am having trouble using my joystick.>

- Your joystick may be set to "auto fire." If this is the case, the buttons may not function as you expect. To correct the problem, turn auto fire off. If your joystick doesn't allow you to turn auto fire off, unplug it and play with a mouse or use the keyboard controls.
- In the event that you experience any joystick calibration problems, be sure that you don't have more than one active gameport on your system at any time, as they will conflict with Strike Commander's calibration routine and will affect game performance. This includes gameports present on sound cards, gamecards or I/O cards. You may need to consult the documentation for your system, sound card and game card to resolve any problems.

- If you are using a multi-speed gamecard, be sure that you have performed the software or speed dial tests for your particular gamecard. If you continue to have problems, try adjusting the speed-dial or numeric software settings a little higher or lower than normal. On cards like the Gravis Eliminator game card, we found settings between 4.0 and 5.5 to be well suited for Strike Commander. For other cards, please check your game card documentation to configure the card for different speed settings. If the problem persists, you may have a defective joystick or gameport.

<Why does my computer lock up or give me "run time" errors?>

On some machines, the CD-ROM drive may be daisy-chained with several other drives on a cable from the SCSI controller card. Because this game needs to have simultaneous access to both the hard drive and the CD-ROM drive, it cannot run on a CD drive that is daisy-chained

with other drives. We strongly recommend that Strike be installed to a drive that is not on the same cable as your CD-ROM drive.

**<I've got 16 (or more) megs of RAM and a digitized sound card, so I shouldn't be having any problems, but speech in the game is full of static.>**

*Because direct memory access (DMA) will not work with memory addresses above 16 megabytes, the digitized speech of Strike Commander may not work correctly on machines with large amounts of memory. If you hear static in the game when speech would be more appropriate, then this problem could be occurring.*

The best solution is to remove your memory manager and let the game supply the high memory using its own memory manager. See *Optimizing Your System* for more details on memory configuration.

**<I've got a digital sound card, and I've turned on digital FX, but I still sometimes get undigitized sound effects.>**

With digital FX turned on, you may run into instances where you will get non-digitized sound effects. This will happen if a digital effect is supposed to be played at the same time as another digital effect. The chip used by most sound cards to produce digitized sound and effects can only play one digitized effect at a time.

**<When I try to start a new game, it crashes to DOS and gives me Error Code #1910 or #1941.>**

This is caused by a bad installation or a corrupted file on the original installation. To determine which is the case, boot from a clean configuration that does not load other conflicting device drivers such as a disk cache. See **Optimizing Your System** for more information on the proper configuration. Next, delete all files from the Strike Commander directory (default: C:\SC). Finally, re-install Strike Commander and Tactical Operations (while booted from the clean configuration).

## Specific Hardware and Software

### DoubleSpace

Strike Commander has been fully tested with MS-DOS's DoubleSpace disk compression utility. We cannot guarantee the compatibility of our games with other disk compression utilities. You might want to add the following line to your CONFIG.SYS file to free more DOS RAM (base memory):

```
devicehigh=c:\dos\dbl.space.sys /move
```

### Thrustmaster Weapon Control System

The DIP switch settings on the Weapon Control System for Strike Commander are switches 1, 2 and 6 on. All other switches should be off.

### CH GameCard III Automatic

The CH GameCard III Automatic requires a program to be run whenever the machine boots up. This program is called CHJOY3.EXE. Please be sure that this program runs before calibrating joysticks in Strike Commander, or unpredictable results will occur. You may want to add the following line at the end of your AUTOEXEC.BAT:

```
CHJOY3.EXE
```

### DOS 5.0 SMARTDRIVE.SYS

Strike Commander does not support the SMARTDRV.SYS that comes with some version of DOS. It does support SMARTDRV.EXE which comes with Windows 3.0 or better.

### Bus Mastering Hard Drive Users

If you're using a bus mastering hard drive controller card (you'll probably know if you are), and if the game text and graphics are garbled, add the following line to your CONFIG.SYS:

```
device=c:\dos\smartdrv.exe /double_buffer
```

### SB16/Waver Blaster and CH Flightstick Combination

Due to a hardware conflict between the joystick port on the Creative Labs' SB16/Wave Blaster combination and the CH Flightstick, General MIDI music will not be heard when the Flightstick is connected to the SB16/Wave Blaster joystick port. Another manufacturer's joystick or another joystick port must be used to receive the General MIDI music. Contact the respective manufacturers if you have any further compatibility questions.

### General MIDI

Strike Commander CD has joined the next generation of sound quality with its support of the General MIDI standard as defined by the MPU-401 instruction set. At the time of publishing, only a few cards support MPU-401. These cards include the Roland SCC-1 and RPA-10 and the Creative Labs Sound Blaster 16 Basic, Sound Blaster 16 MultiCD, Sound Blaster 16 SCSI-2, Sound Blaster AWE32 (all with or without the Advanced Signal Processor DSP) with the attached Wave Blaster daughterboard. Other manufacturers have already released, or are planning to release, sound cards that use the MPU-401 instruction set. However, sound cards that use a memory-resident program (TSR) to emulate MPU-401 may not work with this software.

Note that some General MIDI cards offer digitized speech or sound effect capabilities. Strike Commander CD will only use those sound cards that carry the OPL2 FM chip for digitized speech or sound effects. As in the case of the Roland RAP-10, customers will need to use a second sound card, such as a Sound Blaster, Sound Blaster Pro or 100% compatible sound card, for digitized speech and effects. Review your sound card documentation or contact the manufacturer if you have any questions.

## GAME OPTIONS

### OPTION SCREENS

Strike Commander has a comprehensive option screen interface that allows you to tailor the visual, audio and flight characteristics of the game to suit your tastes and your hardware. Activate the option screens from the cockpit by pressing **[Alt][O]**.

### Configuration

The main configuration screen has the following buttons:

**Rookie, Veteran and Ace.** Selects the overall difficulty level of the game. The main Option Screen (accessed by pressing **[Alt][O]** during flight) allows you to select Rookie, Veteran or Ace difficulty levels. Rookie level selects the easier



option from each of the following choices; Ace level selects the more difficult option. Veteran level selects the following options:

ON Easy Gun Hits, Mid-Air Collisions, Easy Landings, Stalls, Auto Targeting, 360-degree Lock, Smart Targeting, Sun Glare, G Effects.

OFF Unlimited Ammo, Smart Radar, 360-degree Radar, Smart Raw Scope. Rookie level selects rookie enemy intelligence; Veteran level selects veteran enemy intelligence; Ace level selects ace enemy intelligence. (After selecting a particular difficulty level-Rookie, Veteran or Ace-you can then change any of the options individually.)

- **Save.** Saves your unique option package.
- **Default.** Restores the default setup.
- **Exit.** Exits the option screens.
- **Exit game.** Lets you exit Strike Commander entirely. Selecting exit game brings up a menu with the following buttons on it:
- **Restart.** Restarts the mission from the beginning.
- **Abort.** Aborts your current mission and returns you to base as though the mission had not been flown yet. This can be used to change your aircraft's loadout or to listen to the briefing again.
- **Continue.** Exits the game and returns you to the base as though the mission had been completed at that point. This could be used to exit the game when you know you have completed the mission goals and don't want to continue the mission to landing. This option will allow you to exit if the mission has not been completed so be sure you mean it!
- **Exit.** Returns you to the main configuration screen.

The other buttons are used to select the option screens listed below. For information on speeding gameplay, see **Troubleshooting**. If a certain button is non-functional, it means your system does not have enough memory to make it active, or that you do not have the required hardware.

Once you have configured the options to your liking, and hit save on the main configuration screen, your game will begin with those options active until you choose to change them.

### Detail

Your game automatically selects the detail settings that it considers most appropriate for your machine. However, detail gives you fine control over the detail level of the objects and terrain by turning various textures and shadings on and off. The small window in the center of this option screen illustrates in a rough way how your changes will affect the look of the world. The less detail you select, the more rapid the game's frame rate and the smoother your game will flow (up to a maximum level). Buttons that toggle details on and off include:

#### Terrain

- **Gouraud.** The smooth shading of the terrain.
- **Transition.** The transition texture boundary anywhere terrain color changes (for example, the transition from water to land).
- **Interest.** The small clumps of trees and rock outcroppings scattered on the terrain.
- **Rivers.**

- **Fields.** The square patches of farmland.
- **Cities.** The large urban areas.
- **Runways.** The textures on the runways

### Objects

- **Gouraud.** The smooth shading on planes and other objects.
- **Texture.** The texture mapping on the planes and other objects.
- **Hi-Lo.** Switch the objects from the highest detail levels to the lowest detail levels.

There are three settings.

**Hazing.** The distance at which the terrain hazes out. There are five different settings ranging from near to far.

The lowest Hazing button (far) now produces no hazing at all. (The default for hazing is now the second button, not this first one.) With no hazing, no new objects are revealed, the game is not any faster, and it doesn't look as good. However, some players prefer to play without any hazing, so this option is now available.

Some options will affect the frame rate (i.e., your game's smoothness) more than others, depending on your machine. Experiment with different options to get the most desirable balance of detail and speed.

### Gameplay

Gameplay changes the difficulty of the game in several specific ways through the following buttons:

- **Unlimited Ammo.** Gives you unlimited amounts of the current munitions you are carrying. The Unlimited Ammo option only applies to gun rounds while playing Strike Commander. It will not give you unlimited missiles or bombs. The only exception are training missions, which do give you unlimited amounts of whichever weapons you are carrying.
- **Easy gun hits.** Makes hitting enemy planes easier at long range with the gun.
- **Enemy intelligence.** Controls the level of the enemy artificial intelligence, with rookie selecting the easiest enemies and ace the most difficult.

### Cameras

Cameras gives you control over the cameras in the game with the following buttons:

- **Auto Switching.** Automatically switches you back to the forward cockpit view if the plane is in danger of hitting the ground or is hit by enemy fire.
- **Weapon Camera.** Automatically activates the weapon camera when a mission begins. It can also turn the weapon camera on during a mission.
- **Victim View.** Automatically activates the victim camera when a mission begins. It can also turn the victim camera on during a mission.
- **Terrain in Gun Camera.** Allows the gun camera to display the terrain. This reduces your frame rate, but looks better.
- **Window Size.** Allows you to pick how much of your monitor the game screen will occupy. If you pick Small or Medium, the screen will be reduced in size and everything on it scaled appropriately. Note that you do not lose any field of view if you pick a smaller window. The smaller the window the faster the frame rate.

## Flight

Flight lets you pick how you want to control the plane, the cockpit panning and other flight related items. The buttons behave as follows:

- **Control.** Selects the method you use to control your plane. Any buttons that appear flat are not available. You may choose among keyboard, mouse, joystick or thrustmaster.
- **Panning Control.** Selects the method you use to control the cockpit panning. (As always, any buttons that appear flat are not available.) You may choose among keyboard, mouse, joystick, second joystick, thrustmaster or none. The Thrustmaster choice control cockpit panning through the thumb control on the joystick. You can always pan by pressing the second button on the joystick and moving the joystick, regardless of the control selected.
- **Mid-Air Collisions.** Allows collisions between your plane and enemy planes if it is on.
- **Easy Landings.** Is more forgiving to rough landings if it is on.
- **Show Weapons.** Will only show weapons on your own plane and on planes that are viewed through the external camera ( **F6** ). This option will reduce the frame rate (make the game less smooth, especially if many weapons are loaded on the planes).
- **Stalls.** Controls whether or not the plane can stall. If it is on, stalls are possible.

## Cockpit

This screen lets you customize the cockpit of your plane. It can also give you tools not available in present-day aircraft, depending upon which buttons you select:

- **Ladder.** Turns on and off the pitch ladder display on the HUD.
- **Tapes.** Turns on and off the airspeed and altitude above sea level tape displays in the HUD.
- **Auto Targeting.** If this button is on and no target is currently selected, as soon as a target comes into range, the computer will automatically select it as a target.
- **360-degree Lock.** When this button is on, you will not lose your target lock, even if the target cannot be seen by the weapon targeting it.
- **Smart Targeting.** When this button is on, you will be unable to target friendly or shutdown aircraft.
- **Sun Glare.** Turns on and off the glare of the sun.
- **G Effects.** Turns on and off the blackout and redout effects associated with pulling too many Gs.
- **Smart Radar.** When this button is on, the standard target blip on the radar is replaced by a series of different shapes depending upon the target's shot down status and whether or not it is friendly, enemy or neutral. For a description of these different shapes, see Air-to-Air Radar.
- **360-degree Radar.** When this button is on, the radar switches to a mode that shows you all targets around your plane, with your plane in the center.
- **Smart Raw Scope.** When this button is on, all radar-emitting targets are shown at all times.

## Invisible Cockpit

It is possible to remove the cockpit from the screen, by pressing **Ctrl** **1**. Your HUD and any active MFDs remain on-screen, as do any MFDs you subsequently activate. Radar and IR warning lights also still appear. With an invisible cockpit, you can, of course, see more of the sky in front of you, and the game's frame rate improves slightly. Toggle-pressing **Ctrl** **1** again recalls the rest of your cockpit.

## Audio

These buttons control the sound of the game. If a button appears flat, that sound option is not available with the sound card(s) you have installed. The buttons operate as follows:

- **Music.** Turns music on and off.
- **Sound FX.** Turns sound effects on and off.
- **Speech.** Turns speech on and off.
- **Digital FX.** Turns digitized sound effects on and off.

## Time Burst and Time Compression

**TAB** activates the Time Burst function. Time Burst accelerates time in the game so that everything happens six times as fast. Releasing the **TAB** key takes you out of Time Burst.

**Shift** **TAB** activates 2x time compression. Everything happens twice as fast. Hitting it again doubles the compression again to 4x. Hitting **Shift** **TAB** a third time takes you back to normal time.

## CAMERA VIEWS

In *Strike Commander*, you can watch cockpit action from many more camera angles than you've ever had before. With a little practice, you will be using these camera angles to great advantage.

Most of the camera views use the joystick pan technique. All but one of the camera views replace your HUD, so when using them, you're flying without instruments. Be advised that some of the camera views are so riveting that the development team crashed more than one plane by staying in an external camera view too long.

Never forget where your aircraft is and where it's going when you shift your view from the HUD to an external camera, and remember that **F1** will always snap you back to the cockpit. You will also snap back to the cockpit automatically if you come too close to the ground, take damage or stall, if you have auto-switching toggled on (see **Option Screens: Cameras**).

**F2** Cockpit Camera. This key snaps your eyes back to the front of the cockpit. If you are already in cockpit view, **F1** zooms the HUD in and out. You can pan (look around) your cockpit in *Strike Commander* using the joystick (with the #2 button pressed) or your keyboard, second joystick, mouse or Thrustmaster thumb joystick - see "**Option Screens**" for instructions on choosing your pan control.

**F2** Chase Camera. This is an exterior view just behind and above your aircraft.

**F3**, **F4** and **F5** Left, Right and Back Cockpit Cameras, respectively.

**F6** External Camera. Press **F6** to activate this view, then use the joystick (while the #2 button is pressed) to pan around the exterior of your aircraft. **1** and **2** zoom in and out. Press **F6** a second time to see the next closest aircraft. **Ctrl** **F6** cycles your viewpoint among ground objects in similar fashion.

**F7** **Player to Target/Target to Player.** This camera viewpoint tracks to keep you and a radar-selected target in the field of view. The first time you press **F7**, you will see your selected target from the point of view of your aircraft. Press **F7** again to reverse the view, placing your target in the foreground and your own plane in the background.

**F8** **Gun Camera.** This shows your currently selected target (for guided weapons) or a close-up of your gunsight direction (for unguided weapons). If you have a target in the cross hairs of the gun camera, your chances of hitting that target are excellent. It and the cockpit camera are the only cameras you can use and still read your HUD. The gun camera is particularly useful during combat when used in conjunction with a HUD weapons display, such as DGFT mode. It is also useful in close air support over a contested battlefield, where enemy units are intermingled with your own. It is only available from inside the cockpit.

**F9** **Victim Camera.** This view allows you to see the damage your weapons inflict on a selected target, by cutting away from your cockpit to a close-up of your kill. You can preset your game (using the **Options Screens**) to automatically cut away to victim camera whenever appropriate. **F9** toggles this view on and off.

**F10** **Weapon Camera.** This view follows the weapon you just launched. It is one of the more dramatic camera views. You can preset your game (using the **Option Screens**) to automatically cut away to weapon camera whenever you launch a weapon. **F10** toggles this view on and off.

**Y** **Auto Target Tracking.** If you have a target selected the first time you press **Y**, the camera automatically pans to keep that target in view. Press **Y** again to turn this mode off. See **Option Screens** for more details on managing this camera.

This fluid camera view, more than any other, demonstrates the concept fighter pilots call "situational awareness" - the ability to know what is happening around you at all times. The Auto Target Tracking view lets you make fast visual assessments of the situation.

## WILDCAT BASE

The year is 2011. Your mercenary squadron, the Wildcats, is struggling to survive amidst dozens of units who are as eager to find work as you are. Many of these groups, including the Wildcats, call Istanbul, Turkey, home, but your job will take you around the globe.

The Wildcat base is the center of operations for your squadron. After completing a series of missions, you will return here to purchase weapons, check the status of your squadron and talk with fellow Wildcats. From the base, you can also travel to Selim's, a bar in Istanbul, where fixers wait to offer you dangerous but lucrative missions.

**Talking to the Wildcats** You may see other Wildcats standing around the hangar. You can talk to them by selecting them with the cursor. Their conversations usually include mission

information or tips on flying, so it's always wise to stop and chat.

During any conversation, you can move to the next screen by hitting **ENTER**, **SPACEBAR** or the left mouse button. You can exit the conversation entirely by hitting **ESC**.

### Barracks

The door to the right leads to your barracks. The barracks are one of two locations where you can load and save games. It's a good idea to save as often as possible, especially after completing difficult missions. Select the right hangar door to enter the barracks.

### Office

To enter the office, select the door to the left. There, you can receive financial updates or look at the kill board to gauge your progress relative to other Wildcat pilots.

### Jeep

When the jeep is in the hangar doorway, you can select it to drive to Selim's. At the bar, you can obtain missions for your squadron, speak with fellow pilots and meet other interesting people.

### Transport Truck

You will be flying a variety of missions. For local missions, you will take off and land at the Wildcat base. For most missions, however, Virgil, your accountant, will make arrangements for a staging base in the vicinity of that series of missions. (Of course, a staging base adds to overhead costs, but it's a necessary expense.) After you accept a foreign mission, your transport truck will appear in the hangar entrance.

Select the truck to load the Wildcats and their equipment onto a C-130 transport plane to travel to your strike base. From there, you will begin the missions in that series.

### Fighter Plane

If you accept a local mission, you will see an F-16 instead of a truck parked in the doorway of the hangar. Select the plane when you're ready to fly your mission. After selecting the F-16, you will be informed of your mission targets and flight plans. Listen carefully to any instructions - missing a rendezvous or a target can result in lost payments, expensive fighter replacement costs, or even the death of a fellow pilot. If the exact locations are unclear, however, don't worry; you will have a map in your plane's cockpit that allows you to review current mission objectives.

For the first couple of missions, Stern, the commander of the Wildcats, will assign you a wingman. As you become a more experienced pilot, you may choose your own wingman.

After the briefing is finished, the weapon loading screen will appear.

### Loading Your Weapons

In the weapon loading screen, you will see your F-16 parked in the hangar (or in front of the tent, if you're at the strike base) and several racks of weapons. Some weapons won't become available until later in the game, so don't worry if there isn't a wide selection at first. Use this screen to customize the loadout your plane will carry into battle.

## To load Weapons

Select a weapon from the rack with your left mouse button. Weapons are added to your plane's inventory in pairs to ensure balance.

## Weapon Loading Screen



## To remove weapons

Select a weapon on the plane with either mouse button, or a weapon on the racks with the right mouse button. As with loading, weapons are removed in pairs.

## Loading Weapons on the F-22 Lightning II

In Tactical Operations, you will have opportunities to fly missions with the F-22 Lightning II. The F-22 can carry a maximum of two AMRAAMs and two Sidewinders (either -J or -M). No other weapons may be loaded, as this is a dedicated air interceptor. Whenever you fly a mission with this plane, its default loadout is a full load. If you wish to adjust the loadout, you can click on the loaded weapons on the plane, just as in Strike Commander.

Default loadouts are treated just as they are in Strike Commander. If the default weapons are not available in your inventory, they will not be loaded. If you do not use them during the course of your mission, they will be added back into your inventory when you return. The weapons are loaded under the wing by the intake.

**Loadout Limitations.** Your plane has eight hardpoints for carrying weapons. Each type of hardpoint can carry a limited number of weapons. At the tip of each wing is a rail that can carry either a Sidewinder-9J or a Sidewinder-9M. Underneath each wing, closest to the end, is a light hardpoint. Light hardpoints can carry only air-to-air missiles: either a Sidewinder or an AMRAAM. In the center of each wing's underside is a medium hardpoint. Because they are able to carry both air-to-air and air-to-ground weapons, medium hardpoints are the most versatile.

They can each hold:

- 2 AMRAAMs,
- 1 GBU-15E,
- 2 rocket pods,
- 1 Sidewinder (AIM-9J or -9M),
- 3 Mavericks,
- 3 Durandels,
- 6 cluster bombs (Mk20's) or
- 6 Mk82's

The innermost hardpoints are heavy hardpoints. Heavy hardpoints can carry any of the weapons carried by the medium hardpoints except air-to-air missiles.

**Returning to the Base** If you decide after the briefing that you need to check your ledger or catalog to purchase more weapons, or even if you just need to hear the briefing again, you can return to the hangar by clicking along the top of the screen.

If you wish to have the briefing repeated at that point, click on the F-16 again, and you'll go back through the briefing and the weapons loading screen.

**Flying the Mission** If you're satisfied with your loadout and have a clear understanding of your mission objectives, click on the cockpit of the plane to fly the mission.

## Barracks

### Loading and Saving Games

When you're at the Wildcat base, you can visit the barracks to save the game in progress or to load a previous one. The barracks can be reached from the right doorway in the hangar.

### Sleeping Pilot (Loading Games)

You'll notice another Wildcat pilot sleeping in a cot in the barracks. Wake her up (select her) to load a previous game. A screen will appear listing your saved games. Select the game you want to load and click on the load button. If you change your mind and decide not to load a game, click cancel to return to the barracks.

Note: If you are using the partial installation option, you may have to re-install portions of the game to return to a saved game.

### Empty Bed (Saving Games)

It's advisable to save your game every time you complete a mission. Click on the empty bed to bring up the save game window.

To save the current game under a new name, select the new button. Type the name you want to use for the file and press **[Return]**. The only limit to the number of games you can save is your hard disk space.

If you choose to delete a saved game for any reason, select its name on the list and click delete. When the game asks you to verify, click <Yes> to delete the saved game. Select <No> to cancel the deletion.

If you want to save using the same name as a previously saved game, select that name and click on <Overwrite>. Once again, you will have to confirm your choice.

To return to the barracks, select <Resume>. To exit your game at this point, select <Quit to DOS>.

## Virgil's Office

### Managing the Wildcats

Virgil is the Wildcat's accountant and chief whiner. He may be pessimistic, but it's not wise to ignore him, because he may have valuable information.

Virgil's office at the Wildcat base, you can talk to him, check squadron finances by reading the ledger, purchase weapons from the catalog, or view the kill board to compare your progress with other Wildcat pilots.

**Talking to Virgil** When Virgil is sitting at his desk, click on him to receive a fiscal update on the Wildcats. Virgil will often have important information concerning the squadron's financial well-being, so check in with him frequently.

**Ledger** View the ledger by selecting the open book on the right side of Virgil's desk. The first page of the ledger shows the financial status of the Wildcats, including overhead costs, fighter plane replacement costs, recent purchases, and net worth. The statistics that are most important to you are your current cash worth and your projected overhead costs. This will be updated when you accept a mission. Remember that the overhead is a cost per mission.

If your projected cash is ever below zero, make sure you're successful on your next few missions. Otherwise, you'll be broke, and the Wildcats will be finished.

Turn the page (by clicking on it) to see a listing of your squadron's currently available weapons. You won't order weapons here, though. Check the catalog for purchases.

To return to the office after viewing the ledger, click along the top edge of the screen.

### Catalog

Initially, Stern will purchase weapons for the Wildcats. As you gain experience, however, the responsibility for purchasing weapons for the squadron will pass to you.

When it's available, you will be able to use the catalog to make weapon purchases. View it by selecting the book and calculator on the right side of Virgil's desk. You'll be purchasing weapons for all of the Wildcats, so be sure to stock plenty of everything, especially Sidewinders and smaller bombs.

When you select the catalog, it will open to two pages of weapons and prices. Flip through the book by clicking on the top corners of pages.

### Buying a Weapon

Click on the weapon with the left mouse button. A receipt will appear on the screen with the weapon type and its price displayed on it. If you buy more of the same weapon, the number on its receipt will change.

If you change your mind and decide not to purchase a weapon, click on it with the right mouse button, or click on the receipt with either button. That item will be subtracted from the corresponding receipt.

Some weapons are available for better prices if they're bought in bulk. When you select one of the four weapon packages listed in the back of the catalog, you will receive the number of weapons listed in the package description. Weapon packages are a good way to save money and still buy enough weapons for the entire squadron.

As you select weapons and packages, the calculator next to the catalog keeps track of the amount of money in your account (top line), the amount you are spending (middle line) and your account balance (bottom line). You are allowed up to one million dollars in credit to purchase weapons, but remember that you will go bankrupt and lose the game if you return from a mission with no cash.

To return to the office, click anywhere along the top of the screen. When you do this, the weapons you have selected will be purchased, and the correct amount of cash will be subtracted from your account.

**Returning to the Hangar** Click anywhere along the bottom of the screen to return to the Wildcat hangar.

### Strike Base

When you fly foreign missions, you'll need to set up a strike base. Virgil will make arrangements for the Wildcats to use abandoned airfields or old airport facilities for these bases. It costs a bit to set up a strike base, but it enables the Wildcats to fly missions anywhere around the globe.

### Tent

The tent is the hub of activity at the strike base. Select the open flap to enter the tent, where you can load and save games, view the kill board, check the ledger and use the catalog. All of these functions are the same as they are at the Wildcat base. After tending to business, you may want to talk to other Wildcat pilots who are relaxing in the tent. They will give you background information, flight tips, and mission reports.

### Office

Some of the strike bases include a small office to the right of the runway. Occasionally, you will find Wildcats there to chat with about current missions and strategy hints. Click on the office to talk with them. Press <Esc> if you wish to terminate the conversation.

### Fighter Plane

When you're ready to begin a mission from the strike base, click on the fighter plane to hear your briefing, load your plane with weapons, and fly your mission. This works the same as it does at the Wildcat base.

### Transport Truck

When you've completed your work at the strike base, the transport truck will pull up outside the tent. Select it to pack up and head back to the Wildcat base.

### Selim's

The Wildcats pay the bills (and keep Virgil happy) by hiring out their squadron to governments, corporations and even wealthy individuals who need mercenary services. As a lieutenant commander in the Wildcats, it is your responsibility to contract these missions. You'll never actually see the people you're working for, though. They'll hire you through fixers - go-betweens who procure missions for mercenary squadrons and maintain anonymity for employers - for a small fee.

Many fixers in the Istanbul area frequent Selim's. You must visit the bar to talk to them and get your missions. You can also visit with other members of the Wildcats who hang out there.

### Bar

When you first arrive at Selim's, you'll find yourself at the bar. Sometimes you'll see other Wildcats there. They may have information about missions, so stop and talk to them whenever possible.

### Getting Missions

Go through the archway to the right to get to the main room and talk to the fixers.

### Returning to the Wildcat Base

Select the door to the left to return to the Wildcat base. Remember that if you accept a mission and leave the bar, the fixers don't want to see you again until that mission is finished.

### The Main Room

Just beyond the bar is the set of tables where the fixers can be found. To hear what a fixer has to offer, select him at his table. He will present you with a general mission goal, inform you of your payment, and ask you if you want the mission. When the fixer extends his hand to



tape of numbers in tens of degrees from 0 to 35. (For example, "35" indicates 350 degrees.) Each mark is five degrees. The caret (V) over the heading tape indicates the direction of the next selected waypoint. The stationary tick shows your current heading. Note that headings of 0, 90, 180 and 270 degrees correspond to the directions north, east, south and west, respectively. When heading directly for your next waypoint, the caret will be lined up over the stationary tick. If the heading for your next waypoint is not currently on the scale, the caret will hold at the far left or far right end of the tape.

### Altitude Readouts

The HUD displays two types of altitude measurements: 1) altitude in feet above sea level, and 2) altitude in feet above ground level (the distance between your plane and the terrain you are currently flying over). The altitude readouts are represented by the vertical tape on the right side of the HUD. Each mark on the tape indicates 100 feet. "5.5" indicates 5,500 feet. There is a caret (>) and a long dash mark along the inside of the tape. The caret shows the continuous rise and fall of ground altitude as determined by radar. The dash indicates altitude above sea level.

Note: Be very careful to watch ground altitude (>), especially when flying over mountains.

### G Force Indicators

Look for the two G Force readouts in the upper left corner of the HUD. The upper number is the current G force of the plane. The lower number is the maximum G the plane is capable of. The 9G rating of a clean F-16 will be reduced by external weapon loadouts, drag due to damage or extended landing gear.

### Fuel Warning

The word "FUEL" appears in the center of the HUD when the fuel supply of the aircraft reaches critically low levels.

### Four-G Pull-Up Warning

The HUD displays an "X" and the words "PULL UP" if the aircraft needs to pull four Gs or more to avoid the ground at any time.

### Distance to Waypoint

The distance to the waypoint selected in the Nav Map display (see Pre-Flight Checklist) is displayed in nautical miles on the right side of the HUD just under the altitude tape. This distance is prefixed with a "D".

### Landing Gear Down Indicator

"GEAR" appears in the upper right corner of the HUD when the landing gear is down.

### Flaps Down Indicator

"FLAPS" appears in the upper right corner when the flaps are down.

### Brake Indicator

"BRAKE" appears in the upper right corner when the brakes are on. If the F-16 is on the ground, "BRAKE" refers to the wheelbrakes. Otherwise, the Brake indicator refers to the airbrake.

### Stall Warning

"STALL" appears in the center of the HUD if the plane is in a stall condition.

### Throttle

The throttle setting, ranging from MIL 1 (20% throttle) through AFT 5 (maximum afterburner), is displayed just below the Mach readout on the left side. Select throttle settings with the number key (1-0; 0 is max. afterburner). To cut the engine, hit ( ) key.

### HUD Weapon Modes

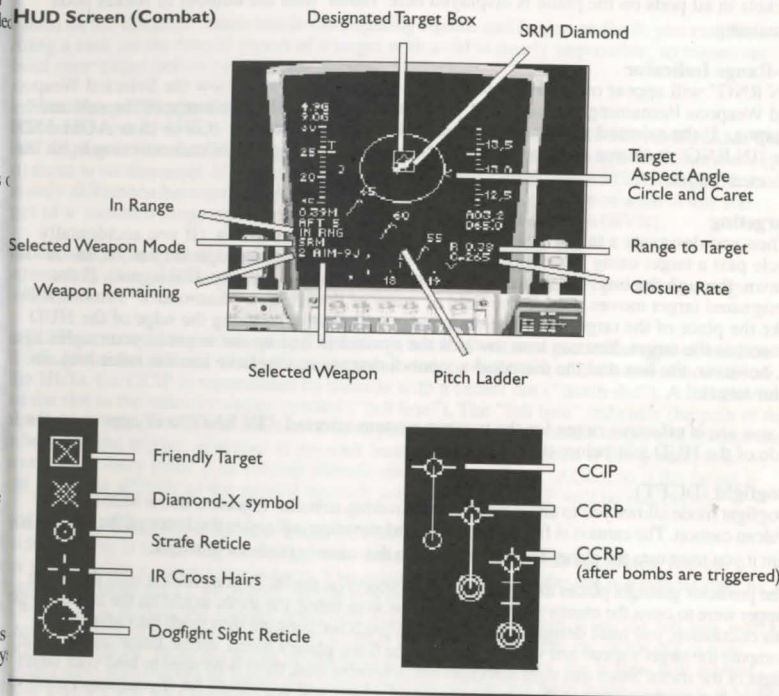
The most important function the HUD performs is weapon system management. The F-16 HUD in Strike Commander is a very sophisticated "sight" with seven modes: three for air-to-air and four for air-to-ground.

To cycle through the various weapon modes, use the weapon select key (W). Shift W moves you backwards through the list.) The weapon modes include:

- Dogfight (DGFT, for the 20mm cannon)
- Short Range Missile (SRM)
- Medium Range Missiles (MRM)
- Strafe mode (STRF, used for the 20mm cannon and rockets)
- Infrared mode (I-R)
- Continuously Computed Impact Point (CCIP)
- Continuously Computed Release Point (CCRP)

In addition to the weapon modes, you can use G to get into ACM (Air Combat Maneuvering) mode. When you activate ACM, your selected weapon will change to the cannon in dogfight mode. ACM mode restricts you to air-to-air weapons only.

### HUD Screen (Combat)



### Range to Target

The range to the selected target is indicated with an "R" followed by a number. The number is the range in nautical miles. This indicator appears below and to the left of the Distance to Waypoint indicator, on the right side of the HUD.

### Closure Rate

The closure rate in knots to the selected target is displayed under the Range to Target indicator on the right side of the HUD. Closure rate is prefixed with a "C".

### Selected Weapon Indicator

The name of the current weapon selected with (W) appears in the lower left corner of the HUD, just to the right of the Weapons Remaining indicator (see below). The weapons are: "GBU-15," "AGM-65D," "AIM-9J," "AIM-9M," "AIM-120," "MK82," "MK20," "DURANDAL," "VULCAN," and "LAU3."

### Weapons Remaining Indicator

The weapons of the selected type remaining on the plane are displayed just to the left of the Selected Weapon indicator, in the lower left corner of the HUD. Note that the total number of rockets in all pods on the plane is displayed here, rather than the number of rocket pods remaining.

### In-Range Indicator

"IN RNG" will appear on the HUD in the lower left corner, just below the Selected Weapon and Weapons Remaining indicators, if your target is in the effective range of the selected weapon. If the selected weapon is a "smart" air-to-ground weapon (GBU-15 or AGM-65D), the "IN RNG" indicator will appear only if the weapon is capable of maneuvering to hit the selected target.

### Targeting

When you designate a target (using T), a box will appear around it. (If you accidentally cycle past a target using T, Shift T) will reverse your order through the list.) If an "X" is drawn through the box, the target is friendly (transmitting a friendly IFF signal). If the designated target moves outside the field of view of the HUD, a "diamond-x" symbol will take the place of the target box. The diamond-x will always be along the edge of the HUD closest to the target. You can turn towards the symbol to line up the target in your sights again. If, however, the box and the diamond-x symbol disappear, you have lost the radar lock on your target.

If you are in effective range for the weapon system selected, "IN RNG" will appear on the side of the HUD just below the airspeed tape.

### Dogfight (DGFT)

Dogfight mode allows you to target rapidly maneuvering airborne objects with the M261 20mm Vulcan cannon. The cannon is fixed in traverse and elevation (affixed to the frame of the plane), so to aim it you must turn the plane. The real magic is in the cannon predictor gunsight.

The predictor gunsight places the sight reticle (or pipper) on the HUD in a position such that if the pipper were to cross the enemy plane as the cannon were firing, the shells would hit the target. To do this calculation, you must designate the target. The predictor gunsight then reads the radar data to compute the target's speed and vector relative to the firing plane's speed, vector, range and the time of flight of the shells. Since this sight automatically computes lead, there is no need to lead your target with it. Just put the pipper on the target, squeeze off a burst and you should hit, if your target continues

on a straight line.

The sight reticle is a circle with a dot in the middle. The broad ring around the circle shows the range to the designated target. Each tick mark on the circle indicates 1000 feet. The pilot's effective range against aerial targets is about 1 nautical mile (6000 feet). Your closing rate should be around 0, meaning that you are flying at the same speed as your target.

### Short Range Missile (SRM)

SRM mode is used to aim IR-seeking missiles, like the AIM-9J and -9M Sidewinders. When you select SRM mode, a roving diamond appears on the HUD representing the seeker head of the missile. A Target Aspect Angle circle appears in the center of the HUD. This circle is entered and non-mobile in the HUD. A caret (>) rides around the circle showing the target aspect angle. For example, if the caret is at the bottom of the circle, the target is heading straight away from you. If it is on the right side, the target is headed across your course from right to left.

If you have a sound card installed, you should hear a tone that represents the search mode of the seeker head. The tone will rise and become more rapid if you have a lock. When you designate a target, the diamond will drift over to it and follow it as long as the seeker head can retain lock.

As soon as the diamond floats inside the targeting square and begins to flash, you can fire. Getting a lock on the frontal aspect of a target with a -9J is nearly impossible, so maneuver behind your target before you shoot.

### Medium Range Missile (MRM)

MRM mode is used to lock and fire radar-guided missiles like the AIM-120 AMRAAM. The MRM display is like the SRM display (complete with Target Aspect Angle indicator), except that there is no diamond. If you have a radar lock on your target, the AMRAAM has lock. The only difference between aiming a medium range and a short range missile is that the seeker of a medium range missile will probably be beyond visible range (BVR).

### Continuously Computed Impact Point (CCIP)

Continuously-computed impact point bombing is the way most aircraft put steel on target these days.

CCIP is a computer in the cockpit that keeps track of where a particular type of weapon will fall, given the altitude of the plane, its speed and the ballistics of the bomb. Located low on the HUD, the CCIP is represented by a circle with a center dot ("death dot"). A line extends from the dot to the velocity vector symbol ("fall line"). The "fall line" indicates the path of the weapon upon release. All you have to do is to put the "death dot" on the target and release the bombs using the trigger, spacebar or joystick button #1. It works great if the ground is level. The computer only reads your current altitude above ground level (AGL), so if the target is at the same altitude as the ground beneath your plane, the CCIP will be inaccurate.

### Continuously Computed Release Point (CCRP)

CCRP bombing is like CCIP bombing, only more accurate. With this computer, you use a bar to designate a ground target spot. The aiming circle around the dot is a double line, to distinguish it from the CCIP. When the dot is over the target you want to hit, release the bombs. After you trigger the bombs, you'll see the fall line with a cross at it, which will descend toward another bar coming up from the death dot as you approach the target. Hold the plane steady, and when the lines meet, the bombs will release automatically. Since range to target and target altitude are known with great accuracy, it's hard to miss with CCRP. The elevation of the target is taken into account by the sight.



If you are at positive pitch when the bombs release, the weapons will be "tossed" towards target. Note that the bars on the fall line come together faster if you climb.

### Strafe Mode (STRF)

Strafe mode is used to aim gunfire and rocket salvos at ground targets. It is worth noting that gun attacks on ground targets are thought of as something of a last resort by modern pilots. Selecting Strafe mode causes a simple ring and dot reticle to appear in the HUD. The dot inside the ring indicates where the rockets or cannon shells will impact on the ground. There is no radar lock for this sight. It takes practice to get used to this mode - any pilot who attempts to take out his ground target with rockets and guns instead of GBUs and Mavericks has earned some bragging rights. Aerial targets are a different matter, and any pilot who says he can splash other planes with unguided rockets is either lying or very, very good.

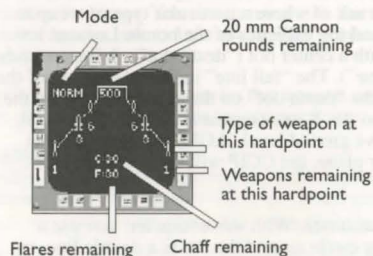
### Infrared Mode (I-R)

Infrared mode is used to aim Mavericks and GBUs. The target of the missile is covered by cross hair on the HUD which moves between the ground targets as you cycle through them by pressing T. When a missile or guided bomb locks on a target, it will retain the lock as long as it can, subject to the plane's maneuvers.

Since Mavericks and guided bombs are not very maneuverable, wait until an in-range meso appears on the HUD to launch your weapon. The best attack profile is to fly straight and level at high altitude, designate the target and release the weapon. Be advised that this tactic is suicide against modern air defense installations.

### Multi-Function Displays (MFDs)

There are two multi-function display screens in the cockpit. They can both display any of several useful types of information, including air-to-air radar, communication interface, air-to-ground radar, damage display, target view, gun camera, and weapon hardpoint display. If you activate an MFD by mistake, - will cancel the display.

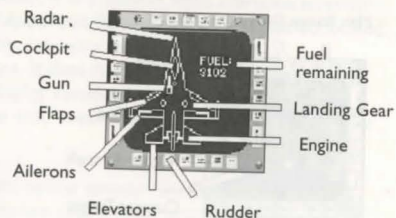


### Weapons Display

The Weapons display comes up to the MFD when you select a weapon ( W ). The selected weapon will be boxed on the display. The number under each hardpoint indicates the number of weapons left in that position. As weapons are used (or as hardpoints are blown off the plane), they vanish from the MFD. Exception: Rocket pods remain on the MFD unless they are jettisoned.

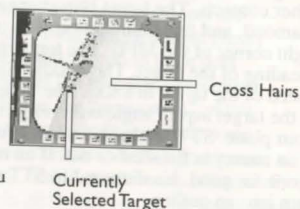
### Damage Display

The Damage display gives you an overhead view of your F-16. Destroyed systems are red. Systems which are damaged but not destroyed appear in yellow. Always use this display to check your landing gear for damage before attempting to land. If you can't land, point your bird somewhere safe to eject. The fuel remaining in the plane's tanks (measured in kilograms) is displayed in the upper right corner of the MFD.



### Gun Camera View

The Gun Camera View MFD (F8) shows a view of your currently selected target. It will play a close-up view if you are within 15,000 feet (2 or 3 nm) of the target. It is the only camera view you can use and still read your MFD. The gun camera is particularly useful during combat when used in conjunction with a HUD weapons display, such as the DGFT mode. It is also very useful in close air support over a contested battlefield where enemy units are intermingled with your own.

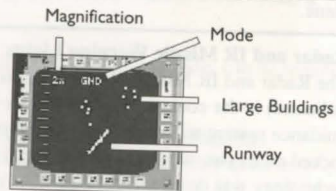


### Communication Screen

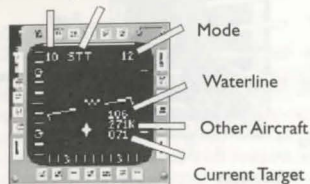
The Communication Screen MFD serve as the means of radio communication between you and the other characters in Strike Commander. To open the communication interface, hit C. The MFD displays a list of possible channels. One channel gets you the Wildcat base (or strike base), another calls your wingman, and so on. Use the number keys (0-9) shown next to the channel you want to make the call.

### Air-to-Ground Radar

The Air-to-ground radar shows objects (including runways) on the ground, unless they are blocked by terrain. As you get closer to objects shown on the screen, they will move closer to the bottom of the screen. The number at the top of this display is the scale in normal view. You can zoom in from normal view, through 4x, 8x and 16x steps, to a 32x magnification, using [ ] (larger) and [ ] (smaller).



Max Range (NM)



### Air-to-Air Radar

**Multiple Target Tracking Mode.** The default mode for air-to-air radar is Multiple Target Tracking mode. All targets are displayed as square blips. The closer the blips are to the bottom of the screen, the closer they are to you.

### Targeting Mode

When you select a target, it is designated on the Radar MFD by brackets.

### Single Target Tracking Mode (STT mode)

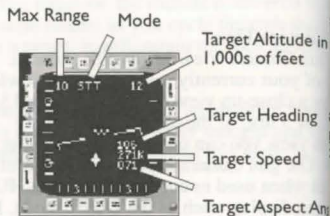
This mode displays more information about the designated target at the expense of losing all other contacts. The target blip changes into a diamond, and three numbers appear in the lower right corner of the MFD. The top number is the heading of the target. The middle number is the speed of the target in knots. The bottom number is the target aspect angle with respect to your plane. STT mode also allows you to see if an enemy is finished or not. If an opponent is gone for good, his diamond in STT mode will turn into an outline.

The air-to-air radar can operate in four scales: 80, 40, 20 and 10 nautical miles. Zoom in and out using [ ] (larger range) and [ ] (smaller range). The current scale is displayed at the top of the MFD. Across the center of the MFD is a pair of lines separated by a "W" (see diagram). These lines are called the watermark and indicate the roll of the plane.

Enabling the "smart" radar function in the option screen interface (see Option Screens) lets the radar discriminate between friendly, neutral and enemy contacts. Neutral contacts appear as circular blips, enemies are squares and friendlies are triangles. Shot-down contacts appear as outlines of circles, squares or triangles. The 360-degree scan mode in the option screen interface lets the radar scan all contacts around you. In this mode, the closer the contact is to the center of the screen, the closer it is to your plane.

### Radar and IR Missile Warning Lights

The Radar and IR Missile Warning lights are located just above the TWI (Threat Warning Indicator) in the cockpit. When a missile is tracking you, the light appropriate to the missile guidance system will come on. The red (right) light indicates a radar-guided missile has locked on to you, while the yellow (left) light denotes an IR-guided threat. (IR recognition technology was developed in 2004.) As missiles get closer to you, the radar and IR warning lights blink faster.



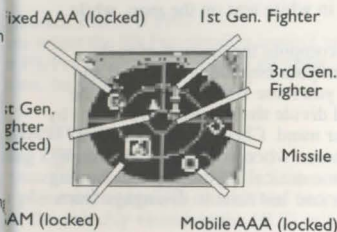
### Threat Warning Indicator (TWI, or RAW Scope)

The TWI is located to the left of and below the HUD. It is a passive radar emission receiver composed of an antennae network and computer-enhanced signal analysis equipment, located on the skin of the plane. It determines the direction, intensity and frequency of radar waves striking your plane at all times. It then displays this information in the form of icons. The position of the icons on the display correlates with the hostile radar's direction and distance from your plane. The icons will "rotate" around the display when you turn.

You set the RAW scope in "smart" mode using the option screens (see Option Screens), and all radar emitters will be displayed, whether they are facing your aircraft or not.

### Aerial Threats

The TWI also shows rough distance. As a rule, if you can see it on your threat display you can turn towards it and see it on the radar. Triangles represent enemy planes. There will be one to three dots along the base of the triangle; the number of dots indicates the "generation" of the fighter whose radar is illuminating your plane. Primitive radars, or first generation, will have one dot. There aren't many primitives still flying in 2011, but you never know. Two dots in the triangle indicate a second generation radar. The most advanced radars are represented by three dots. Air-to-air missiles (and radar-guided SAMs) are represented by a diamond.



### Ground Threats

Ground-based missile radar is represented as a square with a number inside it. The number denotes the numerical designation of the SAM most commonly associated with it. For example, an SA-6 radar will show up as a little square with a "6" in it. Gun radar is represented by a circle. A dot in the circle indicates a fixed AAA; a circle without a dot means a mobile AAA gun is down there.

Remember, while airborne radar will be located on a plane, ground-based radar can be remote and the weapons it operates.

Regardless of the icon's shape, if it suddenly glows brightly, the radar in question has switched from acquisition mode to tracking mode. A bright icon means a hostile radar is tracking you!

# FLIGHT

## Pre-Flight Checklist

Get in the habit of always performing a pre-flight check. The more choices you make now, the fewer you will have to deal with when the bandits are swarming.

- Verify your weapons loadout.
- Choose a weapon targeting mode on your HUD ( [W] ).
- Choose and activate your camera views.
- Flaps on. Brakes off.
- Set your air or ground radar to an appropriate range scale.
- Check your Nav Map ( [N] ). Find the target area and figure which heading will take you there. Locate any mountain ranges you could use to screen your approach to the target. Use the arrow keys to switch the destination of the autopilot. The current destination will appear in white text on the map, while the other areas will be in green.
- Compute fuel for return trip. The best way to compute the amount of fuel available for a mission is to subtract 10% from your beginning fuel load and divide the remainder by two. For example, if you have 1000 kg of fuel at the start of a mission, subtract 100 kg (10%) and divide the remainder (900 kg) by two, yielding 450 kg. Fix that number in your mind. Check your fuel level periodically during the mission and turn for home when you reach the "bingo" point. The 10% emergency reserve will become critical if you miss the landing approach, or if you have to hit the afterburner one last time to disengage from combat.
- Set up option screens (see Option Screens).

# HOW TO FLY

## Flight Controls

Strike Commander can receive flight control input from a mouse, keyboard or joystick. In addition, it supports the Thrustmaster flight control interface. See Troubleshooting for more information on the Thrustmaster. You can select the flight control device of your choice in the flight menu of the Option Screens.

## Mouse Control

Pushing the mouse away from you pitches the plane down, and pulling it toward you pitches the nose up. Moving it left or right banks the plane left or right. The left mouse button fires the selected weapon. If the mouse has only one button, it fires the selected weapon.

## Keyboard Control

The arrow keys (either on the number pad or the main keyboard) control pitch and roll. [↑] pitches the plane up, and [↓] points the nose down. [←] and [→] roll the plane left and right.

## Joystick Control

A joystick is the suggested flight control interface for Strike Commander. Pulling the stick back (towards you) points the nose of the plane up, and pushing it forward (away from you) points it down. Moving the stick left or right rolls the plane left or right.

Rudder

and [→] control the rudder, and thus the yaw of the plane.

Activating rudder (Flight Option screen) allows you to use rudder pedals or a second joystick to turn your fighter, rather than the < or > keys. (A second joystick can only affect flight with roll or right movements.) Note that you cannot use more than one active gameport, but you can use a Y-splitter.

## Throttle

Number keys control the engine throttle setting. 1 represents 20% thrust from the engine, 5 represents 100% military power (full power without afterburner). [6] through [0] are afterburner settings. For example, [6] is full military power plus 20% afterburner. Bring up the Damage Readout ( [D] ) and set the throttle at [5]. Observe the fuel readout in the upper right corner of the HUD. Now punch up full afterburner. Note how the rate of fuel consumption goes up. If you use full afterburner all the time, you'll run out of fuel before you complete your mission.

## FS Pro (FS Pro)

You can select the FS Pro panning control option in the flight Option Screen, the coolie hat on the FS Pro will control cockpit panning. Selecting fs pro control will enable the extra options on your FS Pro.

## Maneuvers

### Climb Off

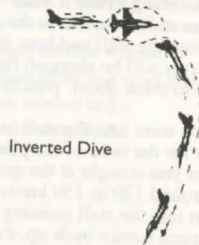
When your flaps down ( [F] ), put the brakes on ( [B] ), and punch up full afterburner ( [0] ). When the plane starts to move, release the brakes and taxi. When your speed indicates 115-125 knots, the velocity vector on the HUD will rise above the zero pitch line. (This is called a climb.)

When you pull back slightly on the stick to get into a nice steady 15 to 25-degree pitch angle, raise the landing gear, retract the flaps, and there you are. Don't try to climb too fast. A stall here would be lethal. Throttle back unless you have somewhere to go immediately; the afterburner consumes fuel at 12 times the normal rate.

You can use the auto take off feature by hitting [A]. Relax and watch the plane leap into the air.

In a climb, pull back on the stick. If you're travelling too fast when you start the climb, you can pull too many Gs and experience grayout. If your airspeed is too slow and your pitch angle is too great, you can stall. In an optimal climb, your airspeed should be about 450 knots and your pitch no greater than 35 degrees.

Rolling over into a dive from level flight at combat speed is often results in too many negative Gs and a frequent redout. Since your rate and angle of dive are restricted by negative Gs, it is often better to do a steep inverted dive. Roll your plane 180 degrees so that your cockpit is facing the ground and pull back on the stick. This maneuver allows you to dive toward the ground, even at all positive Gs.



## Rudder

The rudder is most often used when you want to keep wings level and would rather not go into a bank (see below). Good times to use the rudder are on final approach to landing, or to fine tune a precision attack run.

## Roll

A roll is the simplest maneuver of all; you'll do it without realizing it after a while. With the plane flying straight and level, move the stick to the right or left all the way. The plane will spin around its long axis. Try not to depend on the ground to gauge your position - use the HUD. Now try to roll more slowly and stop the roll at some point, like at 90 degrees (one wing pointed straight up, the other straight down). Rolls are important because you can pull out of a roll in any direction, to shake an opponent.

## Bank

A bank is a roll to the left or right, then pulling back on the stick to change your heading. Most turns in a dogfight are banking turns, since you can use the lift of the wings and their larger ailerons to come around faster than a rudder turn.

## Stall

Every aircraft has a critical angle of attack. If you exceed the critical angle, your wings no longer produce lift (due to turbulence), and the control surfaces will not have enough air across them to function. You will begin to fall. This condition is called a stall. You have control of the attitude of the aircraft in a stall, so in combat, stalling is tantamount to suicide. Your plane will hang there, out of control, as the enemy blasts it apart. If you are too close to the ground, you can't fall far enough to get your airspeed back, and you'll catch hill disease.

Common maneuvers that can trigger a stall include tight turns that lose too much velocity, loops with insufficient airspeed, take offs and landings. The slower you are flying, the more likely you are to stall.

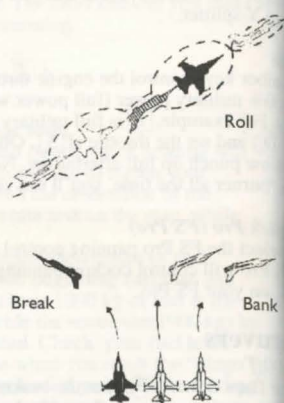
## Recovering From a Stall

If you stall too close to the ground, eject. How close is too close? That depends on how good a pilot you are. If you decide to ride it out, remember the controls will be sluggish from the low indicated airspeed. Once you drop below 500 feet, time to think about punching out. Just don't think too long.

If you went into the stall in a high nose-up attitude (pointing at the sky), cut the engine and wait for the nose of the plane to swing back in line with the velocity vector. This will point you straight at the ground. Punch up full afterburner (O) and bring your airspeed back to around 120 to 150 knots. Now pull the stick back slowly to come out of the dive. If you went into the stall pointing roughly at the ground, just keep the engine on and dive until airspeed comes back up, then pull out and start recovering the altitude you just lost from the stall.

## Landing

The easiest way to land is to use the Auto-Landing function. Simply get back to your base area and hit A. But that isn't much of a challenge, and if you want to gain full Strike Commander experience, you must know how to perform a manual landing you can talk away from. First, check the Damage MFD (D) and make sure the landing gear are intact. It's embarrassing to line up the perfect approach and not have any landing gear left. You have to line up with the runway in level flight and about 2 nautical miles out. Try to be lined up when the runway just becomes visible, or target an object at the near end of the runway to get an exact point of aim. Give yourself plenty of room. Now cut back the engine power and pull back on the stick to raise the pitch of the nose slightly. The object is to lose altitude at a rate which will put you on the runway at the end of your glide path and not in it. As your wheels are about to touch (the chase camera view is a great help to landing technique), pull the nose up a little more, cut the throttle and hit the brakes when you touch down. It takes a lot of practice to land safely, so don't get discouraged. Try it in the Training Mission area until you get it right.



## GAME INTERFACE

<b>[ALT]J</b>	Recalibrates joystick	<b>[ALT]X</b>	Exit to DOS without saving
<b>[ALT]M</b>	Music on/off (toggle)	<b>[Shift]TAB</b>	Time compression: 1x, 2x, 4x (sustained)
<b>[ALT]O</b>	Game options (detail level, difficulty, etc.)	<b>[TAB]</b>	Time burst 6x (lasts while <b>[TAB]</b> is held)
<b>[ALT]P</b>	Pause	<b>[←] [↑]</b>	Move the cursor
<b>[ALT]S</b>	Sound on/off (toggle)	<b>[→] [↓]</b>	
<b>[ALT]E</b>	Engine sound on/off (toggle)		

## REFERENCE SHEET

### KEYBOARD FLIGHT CONTROLS

#### APONS

<b>["]</b>	Drop flare	<b>[W]</b>	Select next weapon
<b>[.]</b>	Drop chaff	<b>[ALT]W</b>	Show loadout (memory permitting)
<b>[G]</b>	Dogfight mode ("Guns")	<b>[CTRL]W</b>	Jettison selected weapon
<b>[T]</b>	Select next farther target	<b>[SHIFT]W</b>	Jettison all air-to-ground weapons
<b>[SHIFT]T</b>	Select next closer target	<b>[Y]</b>	Track selected target (from cockpit only)
<b>[CTR]T</b>	Select no target		
<b>[Spacebar]</b>	Fire selected weapon		

## NAVIGATION AND MANEUVERING

- |  |   |
|--|---|
| [1]-[5] Military (normal engine power in 20% increments) | [B] Brakes on/off (toggle; air to wheels, brakes depending on location) |
| [6]-[0] Afterburner power in 20% increments              | [F] Flaps up/down (toggle)  |
| + Step up engine power                                   | [L] Landing gear up/down (toggle)                                       |
| - Step down engine power                                 | [A] Autopilot to waypoint, auto-takeoff, or auto-landing                |
| ~ Engine Shutoff   | [N] Navigation map  |
| ← ↑ Flight control (pitch and roll)                      | [S] Calibrated/True airspeed (toggle)                                   |
| → ↓  | [Ctrl][E] Eject   |
| < Left rudder  |   |
| > Right rudder   |   |

## Multi-Function Displays

- |                             |   |
|-----------------------------|---|
| [C] Communication systems   | [R] Radar (mode depends on selected)    |
| [D] Damage control and fuel | [K] AA radar <b>single target</b> track |
| [F8] Gun camera MFD         | [.] [.] Zoom in, out (radar)            |

## Camera Views

- |                                      |  |
|--------------------------------------|--|
| ← ↑ Pan around cockpit               | [Ctrl][F6] View ground targets (cycles through ground targets) |
| → ↓ (if enabled at option screens)   | [F7] Player to target/target to player (toggle)                |
| [F1] Cockpit camera (front view)     | [F8] Gun camera (MFD)  |
| [F2] Chase camera                    | [F9] Victim camera   |
| [F3], [F4] Left, right and back      | [F10] Weapon camera  |
| [F5] Cockpit cameras                 | [.] [.] Zoom in, out   |
| [F6] External camera                 |  |
| [Ctrl][I] Invisible cockpit (on/off) |  |
- (cycles through air targets)

## OTHER FLIGHT CONTROLS

### Thrustmaster Weapon Control System

- |                            |                               |
|----------------------------|-------------------------------|
| Main unit Throttle control | Switch 7a.....AA/AG Radar     |
| Switch 1.....Flare         | Switch 7b.....(no function)   |
| Switch 2.....Chaff         | Switch 7c.....Dogfight toggle |
| Switch 3.....Target select |                               |
| Switch 4.....Weapon select |                               |
| Switch 5.....Flaps         |                               |
| Switch 6.....Brakes        |                               |

### Thrustmaster Flight Control System

- |   |
|---|
| Stick joystick.....Flight control                                       |
| Stick joystick.....Pan around cockpit (if enabled at option screens)    |
| Stick trigger.....Fire selected weapon                                  |
| Stick up button.....Select weapon (if no WCS) or Return to cockpit view |
| Stick left button.....Select target                                     |
| Stick right button.....Return to forward cockpit view                   |

### Joystick Control

- |   |
|---|
| Stick joystick.....Flight control   |
| Stick button 1.....Fire selected weapon                                       |
| Stick button 2.....Pan around cockpit (move joystick while button is pressed) |

### Thrustmaster Pro Joystick Control

- |  |
|--|
| Stick left button.....Select weapon                |
| Stick right button.....Select target               |
| Stick up button.....Return to forward cockpit view |
| Stick right hat.....Pan around cockpit             |

### Mouse Control

- |  |
|--|
| Stick mouse.....Flight control (if no joystick active) |
| Stick left button.....Fire selected weapon             |
| Stick right button.....Pan around cockpit              |

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### INSTALLING SYNDICATE PLUS

You need at least 1MB of hard disk space for this game. To play syndicate Plus, the CD must be inserted into your CD-ROM drive.

To install syndicate Plus onto your hard drive, follow these instructions:

1. Boot your computer with MS DOS (version 3.3 or higher).
2. Place your CD into your CD-ROM drive.
3. Type the CD-ROM drive letter (Example D:) and press ENTER.
4. Change directory to Syndicate Plus by typing "CD\SYND" and press ENTER.
5. Type INSTALL followed by the CD-ROM drive letter you've placed the CD-ROM in, then type the letter of the hard drive, and press ENTER. Example: Install D:C:"
6. Once the installation is complete, You can set up the game to run Properly with your hardware.

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## GETTING STARTED

The first time you run Syndicate Plus, you need to select language and sound configuration options. A SYND directory is then created on your hard drive for saved games information. For this 1 MB of space is required on your C: drive. From then on, to play Syndicate Plus simply insert the CD, log onto your CD drive, change directory to SYNDPLUS and type SYND <ENTER>.

### The First Time You Play

To play Syndicate Plus:

1. Insert the CD-ROM in the CD drive and type CD\SYNDPLUS.
2. At the DOS prompt, type SYND to run the setup. The Syndicate title screen appears. Press <ENTER> to continue.

**Note to Sound Blaster 16 users.** To take advantage of your soundcard's enhanced capabilities:

- a) Log to the CD drive then change directory to SYNDPLUS
- b) Type CD SB16 <ENTER>
- c) Type SYND <ENTER>

3. The Select Language screen appears. Use the cursor keys to choose between English, French, Italian or Spanish, and then press <ENTER>.

All mission information and on-screen text is presented in the language chosen but you need to choose again each time you start to play Syndicate Plus afresh.

4. Now select Sound ON or OFF with the cursor keys. If you select ON, you must set your soundboard settings, again using the cursor keys.

Note: Syndicate only supports Sound Blaster and 100% compatibles.

5. Press Return to confirm your selections.
6. Select the version of the game you want to play with the cursor keys. Syndicate Plus lets you play either Syndicate, or the 21 extra missions that make up the American Revolt

Consult the *Syndicate Executive Brief* following for details of how to play original

Syndicate. If you elect to quell the American Revolt, you will also need to refer to the *Playing American Revolt* section of this reference.

Press Return to load the game and begin the mayhem.

**IMPORTANT: Never remove the CD while playing, even if the disk is not being accessed at the time.**

## GAME OVERVIEW

For you, the future is now.

As a young executive in a small European Syndicate you're looking to make your mark. You observe from a control platform in an airship high above the teeming city streets as your agents, controlled by CHIP technology, spread the shadow of your terror. Equipped with the latest in hi-tech weaponry, their cyborg bodies souped up with extra powerful implants "the best that Syndicate money can buy" your finger rests on the pulse of their every reaction.

These CHIPs inserted in their necks control IPA (Intelligence, Perception and Adrenaline) levels. With these, you set the degree of an agent's operational independence during missions. (For information on the strategic uses of IPA Levels, see *Playing A Mission - IPA Levels*.)

Each mission takes place among the canyons of concrete and steel, the mazes of streets and sewers, that our cities have become. The population goes about its business - living among the traffic, commuting on trains, rushing to and from work - unaware of the violence about to explode around them. Casualties among the good citizens in most cases bring a swift response from local law enforcement agencies. Equip your cyborgs with a special pass and the police believe they're working with the authorities; they're free to continue the slaughter unhindered.

There are over 50 named missions for you to choose between, but before you choose one, you need to develop an overall strategy for world domination. Tactical considerations vital to the ascendancy of your Syndicate include the maintenance of an adequate mission Budget, the skills and experience built up in the Cryo Chamber of potential recruits, and developing your own maneuvering skills.

Your syndicate executive must be a master of strategy, assessing a mission environment and planning agent moves. An executive must also have the reflexes of a steroid-

addicted sprinter and a remorseless lust for power to commit acts of gross violence sleep soundly at night.

Still think you've got what it takes to make it in the Syndicate?

## OBJECT OF THE GAME

The aim of the game is to spread the dark stain of your Syndicate's color across the surface of the entire globe.

The world map is divided into various territories. From your home base in Europe, invade adjacent territories and, through the violent subterfuge of your agents, wrestle them from rival Syndicates. Having done so, raise taxes on the locals to increase your profits and punish them for serving the wrong Syndicate.

But raising taxes can make you very unpopular. And furious natives leading popular rebellions can eat into Syndicate profits. So keep an eye on foreign interests and pick your troublemakers with your teams of agents.

And while you're busy expanding your Syndicate's empire abroad, rival agents are working in your own back yard to de-stabilize your Syndicate. Ensure agents are loyal to weed out traitors whose actions might bring about your downfall.

By meeting all the challenges, destroying all targets and gaining control of all the territories, your Syndicate triumphs.

## QUICKSTART

### Key Commands

ESC	Quit to Main Menu
P	Toggle Pause on/off
F1	Toggle on/off sound effects
F2	Toggle on/off music
Control D	Self-destruct (if equipped with Version 2 or 3 chest)
Space Bar	Go to Mission Debriefing after mission
Cursor Keys	Move mission view

## PROBLEMS WITH THE GAME?

If you are having a problem installing or playing the game, we want to help. First, please make sure you have read the installation instructions thoroughly.

If you have followed the directions in the documentation, and are still having trouble installing or operating the software, below are some hints that might help solve the problem.

**NOTE:** Before attempting any of the following suggestions, please make sure you are familiar with the DOS commands being used. Consult your DOS manual for more information.

### Video Card Troubleshooting

Some video cards have a 'Turbo' option which enables 'zero wait states.' This needs to be disabled in order for Syndicate to work.

### General Troubleshooting

If you are having trouble playing your SYNDICATE game, the information in this section may help you get going again.

### Increasing The Amount Of Available Memory

Memory problems are caused by the machine not having enough AVAILABLE conventional (or Base) memory. Although almost all machines have 640K of Conventional memory, TSRs, device drivers, and other types of memory resident programs will take away from the amount of available base memory.

DOS 5.0 or higher users can check the amount of available base memory by typing MEM/C and then pressing the ENTER key. Towards the bottom of the screen, the number next to "Largest Executable Program Size:" is the amount of available base memory. If you want to see which drivers are loaded into Conventional Memory and there is too much information to view on the screen at once, type: MEM/C/ MORE to view your computer's memory information one screen at a time. Press any key to view the next screen.

**NOTE:** On certain machines you may only be able to access the MEM command from within the DOS directory. On these machines, type C:\DOS\MEM/C and then press the ENTER key to access the memory configuration.



If this number is less than 565K (572,000 bytes) then you probably don't have enough available base memory to run your SYNDICATE game. You should remove any non-resident programs to free up the memory needed.

MS DOS 5.0 or higher users can check the amount of available Extended memory (XMS) also by typing MEM/C and then pressing the ENTER key. The line that starts with "FREE EXTENDED (XMS)" or "BYTES FREE XMS MEMORY," will display the amount of Extended memory available. If this number is less than 3072K (3,098,000 bytes), then you probably don't have enough available EXTENDED memory to run SYNDICATE game. In order to free up additional memory, refer to the following section.

### Freeing Up Additional Memory Using The DOS Boot Disk: READ THIS SECTION COMPLETELY BEFORE YOU BEGIN.

To configure the Boot Disk to free up enough available base memory and to set up Extended Memory (XMS):

#### FORMAT A:\S

1. Back up your CONFIG.SYS and AUTOEXEC.BAT files before editing them. You can return to the originals if you have any problems. To back up the files, type COPY C:\CONFIG.SYS C:\CONFIG.BAK and press the ENTER key, then type COPY C:\AUTOEXEC.BAT C:\AUTOEXEC.BAK and press the ENTER key.

2. Copy the CONFIG.SYS and AUTOEXEC.BAT files from the root directory of your hard drive to the root directory (A:\) onto the Boot Disk that you have just created.

Example: At the C:> prompt, type COPY C:\CONFIG.SYS A:\ and then press the ENTER key. To copy the AUTOEXEC.BAT file, type COPY C:\AUTOEXEC.BAT A:\ and then press the ENTER key.

3. Open the copy of the AUTOEXEC.BAT file using the EDIT program from MS-DOS 5.0 or greater.

- i. Type CD\DOS and then press the ENTER key.
- ii. Type EDIT A:\AUTOEXEC.BAT and press the ENTER key.

4. From the Boot Disk copy of the AUTOEXEC.BAT file, delete all lines, except the following:

<SB16 directory> is the name of the Sound Blaster software directory - the default name is "SB16". "Set Blaster" environment may vary depending on whether you have changed the configuration of your Sound Blaster sound card.

The mouse driver is normally located in one of the following directories:

C:\MOUSE, C:\WINDOWS, C:\OR C:\DOS.

If you do not have a line that loads your mouse driver, you must load a mouse driver before running your SYNDICATE program.

Example: LH C:\MOUSE\MOUSE.COM

NOTE: Your mouse line may be different if you are NOT using the MOUSE.COM mouse driver. Do not change this line if it looks different. Drivers that have a .SYS extension will be loaded through the CONFIG.SYS file and you should leave that line the same when you are editing the CONFIG.SYS file. If you have other questions about loading your particular mouse driver, consult your mouse documentation or DOS manuals.

Save the edited AUTOEXEC.BAT file and open the Boot Disk copy of the CONFIG.SYS file from within EDIT.

To save, press Alt-F to bring down the File menu and press the "S" key. To open, press Alt-F, press the "O" key and then type: "A:\CONFIG.SYS" and press the ENTER key.

While still in EDIT, delete all lines from the Boot Disk copy of the CONFIG.SYS file EXCEPT the following:

```
DEVICE=C:\DOS\HIMEM.SYS
DOS=HIGH,UMB
FILES=40
BUFFERS=20
DEVICEHIGH=C:\<CD-ROM driver>
```

<CD-ROM driver> will vary depending on your particular CD-ROM player. If your CONFIG.SYS file does not contain the last two lines of the above example, please consult your CD-ROM documentation.

If the HIMEM.SYS and memory manager file are not located in the DOS directory, replace DOS with the name of that directory in the first two lines of the above example eg.C:\WINDOWS). If you have not moved these files, then they will be located in the DOS directory and your file should look identical to the three lines above.

<CD-ROM driver> will vary depending on your particular CD-ROM player. If your

CONFIG.SYS file does not contain the last two lines of the above example, please consult your CD-ROM documentation.

7. Save the edited CONFIG.SYS file and Exit the EDIT program.
  - i. To save, press Alt-F to bring down the File menu and press the "S" key.
  - ii. To Exit the EDIT program, press Alt-F and then press the "X" key.
8. You now have a boot disk which should free up enough available base memory to set up EXTENDED Memory (XMS). You can start your computer from this disk by inserting it into the A: drive and restarting your machine. Your computer will boot to the A:> prompt. Type "C:" and then press the ENTER key to return to the hard drive. This boot disk bypasses the AUTOEXEC.BAT and CONFIG.SYS on your hard drive and starts up your computer in as clean a DOS environment as possible. Try reinstalling the software if you were having trouble doing so, or try starting software from the directory you installed to.

For more information on editing your CONFIG.SYS and AUTOEXEC.BAT files, or changing your startup configuration, please consult your DOS manual.

# ULTIMA® VIII PAGAN™

## THE CHRONICLE OF PAGAN

A Treatise on the Glorious History of this  
Foremost Society  
by  
Bentic, Humble Scholar and Student

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# INSTALLATION

Welcome to *ULTIMA VIII - Pagan*. This section includes quick installation instructions for users more familiar with the process, and a detailed, step-by-step guide to installing the game. If you experience any difficulty, consult Troubleshooting. To avoid compatibility or memory problems, please take a moment to confirm that your machine matches the system requirements. Remember, you may safely stop and return to the previous menu by pressing **Escape**.

*Note: Ultima VIII Pagan CD has been fully tested with the Double Space disk compression utility that shipped with MS-DOS version 6.0. Performance will decrease due to increased hard disk access. We cannot guarantee the compatibility of our games with other disk compression utilities.*

## Quick Installation

Note: If you are running a disk cache such as *SMARTDrive* prior to installing, you need to disable it to insure a clean installation. Refer to your documentation or make a system boot disk as described in *Optimizing Your System* to disable the cache. This only affects the installation of the game. *SMARTDrive* will work normally during gameplay.

1. Turn on your computer and wait for the DOS prompt. Some machines boot directly to *Windows*, or a different shell environment. Be sure to exit *Windows* (or other shell program), and install directly from the DOS command prompt (C:\>).
  2. Insert the CD-ROM into your CD drive.
  3. Type the name of your CD drive followed by a colon and **(Enter)**.
  4. Type CD\ULTIMA8 **(Enter)**.
  5. Type INSTALL ENGLISH **(Enter)**. (To install *Ultima VIII CD in French*, type INSTALL FRENCH. To install in German, type INSTALL GERMAN.)  
**You must completely delete and re-install if you decide to change language.**
- All of your saved games to that point will be lost- they are not transferable.**
6. When prompted, follow the installation program.
  7. To begin play, type U8 at the game's directory **(Enter)**.

For details, see "Installation Options".

## System Requirements

**Computer.** *Ultima VIII CD* requires at least an Intel 486 or 100% compatible system, MS-DOS version 5.0 or higher, MS-DOS CD-ROM extensions version 2.1 or higher, and a VGA video card.

**Hard Drive.** You must have a minimum of 35 free megabytes on your hard drive to install and play this game.

**Mouse.** *Ultima VIII CD* requires a Microsoft or 100% compatible mouse using Microsoft software driver version 7.0 or higher, Logitech software driver version 4.0 or higher, or 100% compatible software driver.

**Memory.** *Ultima VIII CD* uses conventional RAM (base memory) and extended memory (XMS). You must have a minimum of 4 megabytes of RAM installed in your machine.

## INSTALLATION OPTIONS

### Installation Menu:

Abort Installation

Change Source Path

Change Destination Path

Change Sound Configuration

Change Music Configuration

Install

*Ultima VIII CD* will install without sound or music configuration unless you specify otherwise.

Use (arrow up) or (arrow down) to move the highlighter up and down.

Note: If you selected INSTALL FRENCH or INSTALL GERMAN in Step 4, on-screen instructions and selections will be in French or German, respectively.

Follow steps 1-4 in Quick Installation. If you have no sound card, skip to step 9.

Highlight CHANGE SOUND CONFIGURATION, then press **(Enter)**.

Check the default choice. Highlight the appropriate configuration, then press **(Enter)**.

Highlight CHANGE MUSIC CONFIGURATION, then press **(Enter)**. Repeat Step 6.

If you wish to install to a drive or directory other than the default (C:\ULTIMA8), highlight CHANGE DESTINATION PATH, then press **(Enter)**.

Backspace over the default destination and enter your new path.

Highlight INSTALL. Press **(Enter)**. The game is then copied and decompressed onto your hard drive.

Installation of the Speech Pack then begins.

If you do not want to install speech press **(Esc)** and skip to Step 13.

11. If you installed the game to a directory other than C:\ULTIMA8, backspace over the default destination and enter that directory's path.
12. Highlight INSTALL and press (Enter). The speech files are then copied and decompressed onto your hard drive.
13. When the installation process is finished, make sure that you are in your Pagan game directory, then type U8 (Enter) to begin play.

### Changing Your Sound Card Configuration

If you change from one sound card to another, you must reconfigure the sound card configuration for Ultima VIII CD. These changes also apply to your saved games.

Return to the drive and directory where you installed the game (default: C:\ULTIMA8) and type INSTALL and press (Enter). This allows you to change the selections you made when you originally installed the game. Select CHANGE SOUND CONFIGURATION from the menu and follow the Installation Options Steps 5-8 above, then highlight INSTALL and press (Enter) to save your changes and return to the DOS prompt..

### If You Have Trouble Installing...

If you have not already, please review the **System Requirements** for Ultima VIII CD to be sure your hardware setup and *Ultima VIII CD* are compatible.

### Memory Requirements

Ultima VIII CD uses conventional RAM (base memory) and extended memory (XMS). You must have a minimum of 4 megabytes of total RAM installed in your machine. If you have this memory, you must have at least 3,580,000 bytes (3496K) free XMS memory available to run Ultima VIII CD. An Expanded Manager driver (like EMM386.EXE) may be loaded but it must be configured for no EMS memory. Consult your memory management documentation and Optimizing Your System (below) for more information. This will allow you to load necessary drivers into upper memory and load Ultima VIII CD. If you are unsure about these different types of memory, consult your DOS manual.

To find out how much DOS, XMS and EMS memory your computer has available, use the DOS MEM command. From the DOS prompt, type: MEM and press (Enter).

When the memory information is displayed on the screen, look for the following listing:

- LARGEST EXECUTABLE PROGRAM SIZE

This number indicates how much DOS conventional memory is available. You must have at least 460,800 bytes (450K) listed here.

- TOTAL EXTENDED (XMS) OR TOTAL CONTIGUOUS EXTENDED MEMORY

This is the amount of extended memory in your computer. You must have at least 3,580,000 bytes (3496K) listed here.

- BYTES FREE OF EMS OR FREE EXPANDED (EMS) MEMORY

This is the amount of expanded memory configured for your system.

- If you have a 4 megabyte machine, you must not have this line.
- If you have an 8 megabyte or more machine, you may have this line as long as it reads 4,194,304 or less bytes (4096K).

## TIMIZING YOUR SYSTEM

If you are experiencing problems running *Ultima VIII CD* or do not have enough memory, it may help to create a separate boot disk and decrease the number of memory resident programs (TSRs) you have loaded.

**Do not delete your AUTOEXEC.BAT or CONFIG.SYS files from your hard drive - if you do, your computer will not function.**

### Creating a Floppy Boot Disk

To create a separate boot disk, insert a blank high density disk in your A: drive. From the DOS prompt, type: Format A:/S and press (Enter).

#### Editing CONFIG.SYS

When the DOS prompt returns and the format is complete, type:

COPY C:\CONFIG.SYS A: (Enter)

At the prompt, type:

Edit A:\CONFIG.SYS (Enter).

When the new screen appears, make sure the command listed below are in your CONFIG.SYS file on your floppy boot disk:

```

DEVICE=C:\DOS\HIMEM.SYS
DOS=HIGH
EMM386=EMM386.EXE
EMMS=45
EMMRESERVE=40
EMM386HIGH=C:\<CD-ROM DRIVERS> (This line may be removed once the game has
installed properly)
HELL=C:\DOS\COMMAND.COM C:\DOS /P

```

#### Editing CONFIG.SYS

Save your file. Do so by typing:

(F)

#### Editing AUTOEXEC.BAT

You need an AUTOEXEC.BAT file on your boot disk. Type:

COPY C:\AUTOEXEC.BAT A: (Enter)

At the prompt, type:

EDIT A:\AUTOEXEC.BAT (Enter).

When the new screen appears, type:

PROMPT \$PSG

PATH=C:\DOS

C:\MOUSE\MOUSE.COM (Your mouse driver may load differently. See Mouse Setup for more info.)

SET COMPSEC=C:\DOS\COMMAND.COM

SET SOUND=C:\<SB16 directory>

SET BLASTER=A220 I5 D1 H5 P330 T6

C:

CD\ULTIMA8

U8

<SB16 directory> may vary depending on whether you chose to utilize the default directory name of "SB16" or a different name.

SET BLASTER variables may vary depending on whether you changed the configuration of your Sound Blaster sound card.

### Exiting AUTOEXEC.BAT

Exit and save your file. Do so by typing:

ALT F

X

Y

### To Use Your New Boot Disk

Turn your computer off. Insert your new floppy boot disk in your A: drive and turn your computer back on. The boot disk should run and automatically take you into *Ultima VIII CD*.

### Mouse Setup

Be sure that you are using a 100% Microsoft-compatible mouse driver - a Microsoft version 7.0 or higher mouse driver is preferable. If you are using a boot disk, this driver must be loaded within your boot disk configuration. Since the command line may vary from mouse to mouse, consult your hard drive's AUTOEXEC.BAT by typing at the DOS prompt: TYPE C:\AUTOEXEC.BAT. Look for your mouse driver line and copy it into your boot disk's AUTOEXEC.BAT, replacing the mouse driver line (C:\MOUSE\MOUSE.COM) that we suggest above.

Consult your mouse user's guide for more detailed instructions on loading the mouse driver for your computer.

### Disk Cache Setup

If you have more than 4 megabytes of RAM on your machine, you can load

ARTDrive (a disk caching program) after installing *Ultima VIII CD*. We recommend you allocate 1024K of memory to the disk cache. We also recommend using the ARTDrive versions from Windows 3.1 or DOS 6.0. If you decide to install ARTDrive, you will need to add the following line to the beginning of your AUTOEXEC.BAT file (you may need to change the path on this line depending upon where your disk cache program is located):  
E:\DOS\SMARTDRV.EXE 1024 C (the final letter being the drive where you installed *Ultima VIII CD*).

Note: Though other disk cache programs may work with *Ultima VIII CD*, we cannot guarantee their compatibility with this software.

### Installation Fails

It is an unlikely event that the installation fails, an error message should tell you the nature of the problem. See "Troubleshooting" for solutions to some common problems.

## TROUBLESHOOTING

### Checking Your Installation

If you are having trouble with *Ultima VIII CD* after installation, you may use our built-in troubleshooting program. Go to the drive and directory where *Ultima VIII CD* was installed (default C:\ULTIMA8) and type U8-TEST and press Enter. The Test Screen displays information about your installation and three menu columns. Use your arrow keys to pull down the menu called TEST. There are three options: TEST FILES, TEST LIC and TEST SFX (Sound Effects).

To check the integrity of the files that were installed to your hard drive by selecting TEST FILES. The program checks each program file of *ULTIMA VIII CD*. If PASSED, your files should be stable. However, if the word FAILED appears by any of the files listed, you should reinstall the game from your disk.

If you want to hear both music and sound effects, and either of these choices are gray, you need to configure your sound card. See "Changing Your Sound Card Configuration" in Installation.

Test your sound card(s) based on the options you selected during installation by selecting TEST MUSIC or TEST SFX. When you test these options, you should hear a musical example or sound effect. If you do not, your sound card is configured incorrectly or you have a conflict. A common situation is that your sound card and other peripheral device (such as a printer) are configured with the same IRQ, I/O or address. Reconfigure your sound card for the appropriate settings, or get further information by consulting your sound card documentation or contacting your sound card manufacturer.

When you are done, select QUIT TO PAPAN. To return to the DOS prompt when you are done, select QUIT TO PAPAN. If you want to begin a game, select QUIT TO PAPAN.

### Common Questions

**Q:** When I was installing Ultima VIII, I got the following error code. What's wrong?  
HALTING: INTERNAL ERROR!  
WHERE: INSTALL.C-248  
REASON: ERROR #0001

**A:** This error message indicates that you have a bad or corrupted CD. You should return to Creative Labs Customer Support.

**Q:** Ultima VIII CD fails to load or run and generates an error code. What's wrong with my game?

**A:** Certain error messages can easily be interpreted and remedied:  
YOU MUST HAVE AT LEAST 3 MEGABYTES OF HARD DRIVE SPACE FREE.

Ultima VIII needs this much hard drive space to store saved games. Make more room on your hard drive by deleting unused files or upgrade to a larger hard drive.

NOT ENOUGH MEMORY TO RUN ULTIMA VIII PAGAN.  
You either do not have 4 megs of RAM installed on your computer or too much memory has been used by an expanded memory manager such as EMM386.EXE. **"Problems With The Game"** at the back of the manual for creating a boot disk.

THE EXISTING MEMORY IS TOO FRAGMENTED.  
You have some piece of software (like a disk cache or an expanded memory manager) that is fragmenting too much memory for Ultima VIII CD to use. See **Creating a Floppy Boot Disk** to make a boot disk to solve this problem.

YOU MUST HAVE A MOUSE DRIVER INSTALLED.  
You must have a 100% compatible Microsoft mouse driver to play this game. See next **"Troubleshooting"** answer, below.

**Q:** My mouse is not working with Ultima VIII CD. My mouse works with all other software applications. Why not with Ultima VIII CD?

**A:** You should first check to see if your mouse has been loaded into either DOS (your AUTOEXEC.BAT or CONFIG.SYS file) or onto the boot disk that you are to play the game. If neither, it cannot interact with your game. Windows and many "multi-tasking" shell environments load their own built-in mouse driver. These drivers will not operate outside their shell environment. Loading a mouse driver in the DOS environment can be as simple as typing at the command prompt (C:\>):  
MOUSE (Enter)

**A:** Your mouse may not be 100% Microsoft compatible.  
If you have Windows or DOS 6.0, you can edit the AUTOEXEC.BAT by adding C:\WINDOWS (or DOS)\MOUSE and typing REM at the beginning of your previous mouse line.

If you have the disks to Windows 3.1, you can copy the mouse driver from each disk's directory (by typing DIR) to find MOUSE.CO\_. Copy it to your game directory (ULTIMA8 is the default directory). Then type EXPAND C:\ULTIMA8\MOUSE.CO\_ C:\ULTIMA8\MOUSE.COM. Lastly, add the line C:\ULTIMA8\MOUSE to your AUTOEXEC.BAT and type REM at the beginning of your previous mouse line.

Ultima VIII CD was playing perfectly fine, but suddenly it won't let me save. Why?

At some point since the last time you saved, you destroyed an item or character necessary to the completion of the game. You may continue without the save option or return to a previously saved game.

**Why does my computer crash when I try to play Ultima VIII CD while I am wired into a local area network (LAN)?**

LAN software often tries to take over the same system resources that Ultima VIII uses. We recommend that you boot from a clean boot disk that does not load your network drivers. Please refer to **"Optimizing Your System"** section.

**I have a 100% compatible Sound Blaster sound card but I'm not getting any sound. Why not?**

or  
**Ultima VIII CD says that it cannot find my sound card or that the sound initialization failed. What's wrong?**

If your sound card is not one of the cards listed on the box or in the installation program, but is 100% compatible with one of the cards listed, it may have to be put in "SB" (Sound Blaster) emulation mode through its software or a switch setting on the card. Consult your sound card manual or its manufacturer.

**My copy of Ultima VIII CD is defective. Every time I play, it quits to DOS with an out of Memory Error.**

This indicates that not enough memory existed to continue game play. Make sure you have enough free memory in either conventional/base RAM or extended memory (XMS). Use the DOS MEM command to determine how much free memory is available. There must be at least 3,580,000 bytes free in conventional memory and XMS combined. Refer to **"Optimizing Your System"** section.

**I have a 386 with 4 megabytes of memory, and the game is running very slowly. Can I do to speed it up?**

Turn off animating items in the Options section of the game's Diary. (Press (ESC) during the game to bring up the diary, and left-click on OPTIONS. Then left-click on ANIMATIONS to make the check disappear.) Adding memory (RAM) will also make the game run faster.

**Ultima VIII CD runs slowly and occasionally locks up.**

You may be loading other software that is not compatible with Ultima VIII CD. First, boot the game from a boot disk. Refer to **"Creating a Floppy Boot Disk"**. Also, your system may not be meeting all of the necessary system requirements. 386SX and slower processors are not compatible with this game. Refer to **"System Requirements."**



**Starting The Game**

To play Ultima VIII Pagan, go to the drive where it is installed. If it is in your C: drive, type C: and press (Enter). Then go to the directory containing your game. If you are in the default directory, type CD\ULTIMA8 and press (Enter). Start the game by typing U8, and press (Enter).

**The Beginning...**

Watch the introduction to Ultima VIII and learn what the Guardian plans for you. When it is over, a diary appears and you should type in the name you wish to use while playing Pagan. Press (Enter) to begin playing the game.

**Introductory Walkthrough**

Ultima VIII is primarily mouse-driven

- Your hands and eyes are controlled by the left mouse button.
- Your feet are controlled by the right mouse button.

In addition to the mouse commands, there are some keyboard shortcuts to simplify frequently used commands. If you wish to reverse the controls of your mouse, press (ALT+H) - all following commands referring to the right button will then be controlled by the left, and vice versa. See the **Quick Reference** for other shortcuts.

**On Pagans and Pentagrams**

**pentacle** - n. a five-pointed figure, composed of five straight lines interlacing to form a starlike shape. It was a popular design in medieval art, and was given a mystical significance by astrologers and magicians.

**pentagram** - n. a pentacle; also, any figure of five lines.

**pagan** - n. a follower of a polytheistic religion (as in ancient Rome).

*Ultima VIII Pagan* is a fantasy role-playing game designed solely for entertainment purposes. The game's setting involves a confrontation with the classic mythological Elemental Titans and their polytheistic worshippers. In the game, the terms pentacle and pagan were selected for their relevance to the storyline and setting. ORIGINAL INTENT TO IMPLY NO ADDITIONAL CONNOTATIONS FOR THE WORDS AND CONCEPTS DEFINED ABOVE.

(Definitions from Webster's New Universal Unabridged Dictionary and Webster's Ninth Collegiate Dictionary.)

**INTERACTION WITH PEOPLE AND ITEMS****Conversations**

There is a kind fisherman standing nearby - you automatically get up and begin a conversation with him.

- Left-click on his text to continue, or you can wait until the text disappears.

To adjust the amount of time text remains on the screen see Diary: Options, below.

- Left-click on the phrase you would like to respond with.
- Your possible responses are always in red, and can be identified by their bullets.
- Click on the farewell keyword (usually GOODBYE, BYE, or something similar) when you are satisfied with what you have heard.
- When you want to begin talking to someone, double-left-click on that person.

Although conversations in *Pagan* do not halt the game, some scenes are important enough to move the center of the screen to the person or people with whom you are talking. When this happens, pay close attention to what is being said. You regain control as soon as the scene has run its course. Not all conversations are repeated, so pay close attention the first time you talk to anyone!

**Using Objects and Containers**

- Move to the basket to the right of the fisherman's bedroll by right-click-and-holding.
- Double-left-click on the basket.

*The large display that appears shows what the basket contains. You open books by double-left-clicking, as well.*

- Left-click-and-hold on the bowl to pick it up.

*You can't pick up items that are not close enough, or that are on the other side of something.*

*blue pointer - you can place the object here.*

*blue cross hair - you can throw the object there.*

*red cross - you cannot pick up/release it because the location is either too far away or is obstructed. Releasing the button when the cursor is a red cross returns the object to its original position.*

- Double-left-click on the display of the basket to close it.
- Pick up the basket and, for practice, toss it next to the two fish.
- Put the bowl in your backpack by dragging it over your character and releasing. Careful to check all containers carefully. Some have valuable items hidden beneath their lids.

**Jumping**

- Without pressing either button, move the cursor around the screen.
- Notice that the mouse pointer has three lengths.*

*You can jump nearly half your height to climb taller objects - but you cannot climb some things such as most vegetation, sharp objects and the highest mountain ledges.*

- When the arrow is short, try clicking both buttons simultaneously.
- *You jump in place.*
- *If there were a ledge or something overhead to grab, you would grab it and pull yourself up.*
- With a medium arrow (pointing any direction), try clicking both buttons.
- *You jump forward.*



## Walking, Running and Running Leaps

The three arrow lengths represent speeds you get when you press the right mouse button.

*short* - makes a small, cautious step forward (a "careful step").

*medium* - walks at a normal pace.

*long* - runs at full speed.

*You move in the direction the arrow points.*

- Move the arrow toward the upper right corner of the screen until it is medium length.
- Walk by pressing the right mouse button.
- When you find a brown dirt area, stretch your legs by moving the arrow to the far upper-left corner of the screen and press the right button.
- Click the left mouse button while you run.

*On the next step you leap forward about twice your height.*

*If you hold the right button as you leap across a chasm you can grab the ledge on the other side. (See **Dangerous Terrain** to learn how to navigate wide gaps.)*

- Follow the path until you come to stairs leading up to a wooden pier.
- Walk up the stairs and continue until the railing stops you.

## Climbing and Careful Stepping

- While facing the rail, click both buttons to climb on the rail.
- With a short arrow showing, right-click to take a "careful step."

*You teeter, trying to maintain your balance.*

*This is very useful when walking near cliffs - you won't accidentally walk off the edge.*

- Turn around and walk off the railing, back onto the dock.

You can fall a certain distance without damage, but from greater heights it becomes increasingly difficult to survive the experience. Falling more than two times your height is fatal.

## Combat

### Arming

- Examine the barrels near the dock until you find a dagger in a small barrel.
- Drag the dagger over your character and release it.

*The dagger disappears.*

- Double-left-click on your character.

*The larger display shows what your equipment looks like in much greater detail. In your right hand you are now holding the dagger you just acquired.*

*In addition to weapons, you can ready shields, helmets, body armor and body armor by placing them on your character display. Everything else is carried in the backpack.*

- Double-left-click on the backpack in the display.
- Place the dagger in your open backpack.

*The dagger appears inside the pack.*

*Objects inside the pack may be rearranged any way you like-they stay where you put them.*

- Take out the dagger and drag it over the display of your character. *It appears in the right hand again.*

- Close all expanded displays at once by pressing **(Backspace)**.

### Unsheathing Your Weapons

- Enter combat stance by double-right-clicking on your character - this readies your weapon.

*Whenever the weapon is drawn, you are in a combat-ready position.*

- Practice swinging by very quickly double-left clicking.
- Block your opponent (in this case, imaginary) by clicking or click-and-holding the left button down.

### Kicking

- Kick by double-right-clicking ahead of your character.

*Note that when you try to kick in another direction, you turn in that direction instead of kicking.*

### Advancing and Retreating

When in combat stance, you move differently. You cannot jump or climb while in combat stance, so you must first sheathe the weapon.

- Right-click ahead of your character to advance. Right-click directly behind your character to retreat.

*You turn when the mouse is clicked anywhere other than directly ahead or behind.*

- Practice for a moment, and then sheathe the dagger by double-right-clicking on your character once more.

To cover ground quickly during combat, move the mouse to the edge of the screen while advancing - you sheathe your weapon and begin to run. When you wish to stop and fight, release the right button - you return to combat stance.

### Dangerous Terrain

Water and lava are both dangerous. Because you do not have the skills necessary for surviving in water, falling means certain death! Also, the many lava lakes and rivers that flow underground are deadly. Be careful when traveling near any of these.

Wide gorges are also dangerous, but can be crossed. Stand at one edge of the gorge. Click both buttons to begin the leap across the gorge, then let go of the left button *don't release the right button yet!* If you jump far enough, you can grab the ledge before falling. At this point, you can drop from the ledge by releasing the right button, or you can pull yourself up by clicking the left mouse button. You can also combine leaping and climbing for a longer jump by running at full speed toward the edge. Two steps from the edge, click the left button to begin the jump. High Dexterity and practice are the keys to proficiency.

## Personal Stats

- Double-left-click on your character to see your personal stats. *To the right of your picture are your statistics:*

**Strength (STR)** affects the amount of damage each blow does in a fight. It also determines how high you can jump, how much you can carry and how far you can throw objects. Your Strength increases the more you jump or engage in combat. Your maximum encumbrance (how much you can carry) is three times your strength.

**Intelligence (INT)** determines your potential Mana. Maximum Mana is twice your Intelligence. The more spells you cast the more rapidly Intelligence increases.

**Dexterity (DEX)** affects the frequency of your attacks during combat. It also determines your ability to grab ledges and throw objects. Practicing these activities during the game is what increases Dexterity.

**Armor Class (ARMR)** is a measure of how difficult it is for your opponent to make a successful attack. The better your armor, the higher your armor class. The higher the armor class, the more difficult you are to hit.

**Hit Points (HITS)** is a measure of how much damage you can withstand. Your maximum Hit Points are twice your Strength. When your Hit Points drop to zero, you die. Unlike previous Ultimas, you do not get magically resurrected in Pagan - you must load a previously saved game. Fortunately, Hit Points restore themselves over time, and faster recuperation you can see a healer. Eating periodically helps your recuperation.

**Mana (MANA)** determines your stamina when casting spells. As you cast spells, your mental fatigue increases and your Mana drops toward zero. Without Mana, you are unable to cast spells. Mana slowly replenishes itself once you cease casting spells.

**Weight (WGHT)** is the heaviness of your load.

- Minimize the display by clicking on the button at its lower-right corner. *This keeps track of Hit Points and Mana without obscuring the screen. The red light signifies Hit Points and the blue light signifies Mana - they get smaller as the stats approach zero.*
- Double-click on the minimized display to restore it to its original size.
- Left-click-and-hold on the display (somewhere other than the backpack) to move it around the game screen. *It is always possible to move expanded displays when they are in the way. Double-left-click on a display to close it, or Backspace to close them all.*

## Diary

- Pressing ESC or dying will bring up your diary. *Left-click on any item in the Table of Contents to select it, or type the corresponding number of your selection on the keyboard.*
- Close the diary by pressing ESC when finished.

To begin a new game, select **READ DIARY** from the Table of Contents. Left-click on **ENTRY 1: THE BEGINNING** to load a game at the start.

To load a previously saved game, select **READ DIARY** from the Table of Contents. Left-click on the entry you wish to load. Left-click on downturned corners to turn pages.

To save your current game, select **WRITE DIARY** from the Table of Contents. Left-click where you wish to save the current game and enter a description of the saved game. You have up to four lines to describe the game. When finished, press Enter to save the game. If you wish to abort the procedure, press ESC to restore the previous entry. You will not be able to save your game if you've destroyed an item or character necessary to the completion of the game.

## Options Page

**MUSIC** and **SOUND FX** can be turned on or off. Digital sound effects include all speech.

**AVATAR STEPS** lets you turn off and on the sound of your footsteps.

On slower computers, turn off **ANIMATIONS**, **FRAME SKIPPING**, and/or **SPEED LIMITING** to speed the game up.

To prolong or shorten how long text remains on the screen, click on **TEXT SPEED**. The "slide bar" makes the text disappear more quickly or slowly (9 is fastest).

## Beginning the Story

- Return to the dock and walk toward the water.
- Enter the city when the execution is over.

# MAGIC

## A TREATISE

by Mythran the Thaumaturge

My years of research in the field of magic have led me to the conclusion that all magic is simply the manifestation of a being's will, superimposed upon reality, through the means of etheric emanations. Furthermore, I propose that such emanations are truly limited only by the imagination and willpower of the entity in question.

Certain rituals and words can assist the caster in visualizing the desired effect, just as certain physical objects can lend power, stability and shape to the caster's will. These props are not always necessary for beings of considerable power or intellect, but are useful for most spellcasters.

Following is a detailed analysis of the styles of spellcrafting that I have been able to observe in this world "Necromancy, the rituals of death; Tempestry, the power of the Water and storms; Theurgy, the discipline of attuning the spirit; Sorcery, the craft of destruction; and what I call Thaumaturgy, my personal study of magic.

### A Word on Casting

All spells, save the seemingly innate abilities of the Tempests, require a ritual of some sort before casting. The rituals, or props as I called them earlier, are each of varying duration, and sometimes are performed long before the actual spell is cast. In addition, the rituals all require from one to three of the following components: spell books, Foci Reagents.

Effectively, **spell books** are used as sources for spell formulae. These books describe rituals, foci or reagents necessary to cast the spells, as well as explaining the results of success and, sometimes, the results of failure.

*Foci* are material items used to bind and release magical energy. Sometimes they do nothing more than enhance the caster's ability to concentrate, that is, *focus* on his or her spell. Other foci store the energy in the form of charges, allowing the caster to prepare much of the spell beforehand and then simply release the energy when necessary. At the very least, foci serve to channel the etheric waves into usable power.

Finally, **reagents** are the disposable components of casting. They are natural materials consumed when the spell is cast. Sometimes the spell caster scatters the reagents about the affected area, while other times they are simply mixed together in precise proportions.

## Necromancy

Within all living things is a magical energy or life-force. However, once the life has passed from a body, a by-product of the life-force, emitted as etheric waves, remains inside. Lithos, the Titan of Earth, imbues those of his choice with the insight and fortitude to have some power over death and Earth.

The focus of a Necromantic spell is a small pouch filled with the reagents required to cast the spell. These reagents are easily obtainable as they are bits and pieces of the land and of those who once lived upon it.

### Reagents

Reagent	Purpose	Notes
Blood	Movement/Animation	The essence of life, reft from the body, serves as a reminder of mortality.
Bone	Summoning/Communication	The source of blood is also, strangely enough, the source of the will, and remembers the life it once embraced.
Wood	Preservation/Binding	Almost ageless, a time-aided tree can be stronger than the hardest rock.
Dirt	Protection	The plant grows from the womb of the land, its roots deeply embedded in the safety of soil.
Executioner's Hood	Death	This fungus is black in hue, dark in purpose and shaped like the namesake.
Blackmoor	Power	This is an odd mixture of the element of Earth and the mysterious Blackrock.

### Rituals

#### Mask of Death (*Quas Corp*)

By this ritual, the Necromancer may assume a state of near-death that will appear as actual death. The Necromancer is completely cognizant, and can dispel the effects at any time. • **Reagents: Wood, Executioner's Hood**

#### Call Quake (*Kal Vas Ylem Por*)

This ritual causes the very earth to rise up and heave.  
**Reagents: Blood, Bone, Wood, Blackmoor**

#### Death Speak (*Kal Wis Corp*)

This ritual briefly returns a semblance of life to a deceased body and allows the Necromancer to converse with the spirit of the once living. However, if the being has not undergone certain preparations before death, this spell is quite a painful experience, usually rendering the subject incoherent. • **Reagents: Blood, Bone**

#### Rock Flesh (*Rel Sanct Ylem*)

With this ritual, the Necromancer gains an innate resistance to damage by transforming the very flesh into a substance as strong as stone. • **Reagents: Wood, Dirt**

#### Summon Dead (*Kal Corp Xen*)

This spell summons from the Earth a number of dead warriors to serve the Necromancer as guardians. They are mindless, attacking anyone not endowed with the power of Necromancy. Though it is possible to summon armies of the walking dead, I have never seen more than one appear. • **Reagents: Blood, Bone, Wood**

### **Open Ground (Des Por Ylem)**

When cast near a tombstone, this ritual, under the guidance of a Necromancer, shapes the ground and stone. Most often, however, it is merely used to create a grave or open a weakened wall of rock. • **Reagents: Blood, Blackmoor**

### **Create Golem (In Ort Ylem Xen)**

This spell calls up a creature made of Earth, generally in the shape of a man, to perform the bidding of the caster. It follows a few terse commands, usually understanding statements to retrieve or open things. • **Reagents: Blood, Bone, Wood, Dirt, Blackmoor**

### **Withstand Death (Vas An Corp)**

By means of this preparation ritual, the Necromancer returns from death once (and only once), with all ailments removed and in full health.

**Reagents: Wood, Dirt, Blackmoor**

### **Grant Peace (In Vas Corp)**

This potent ritual calls upon the bailiwick of the Necromancer, that being death. The recipient, if the undead of Earth, instantly reverts to the lifeless corpse it was before becoming animated. If cast upon the fully living, the life force of the recipient is momentarily severed from the body, often resulting in death, but in some instances, causing only temporary confusion.

**Reagents: Executioner's Hood, Blackmoor**

## **Tempestry**

This power is purely and simply the ability to control the Water and storms. It is an inherited trait, and therefore little is known about it. We do know some of the powers displayed to date by the ruling nobility of Tenebrae. Since I do not know the actual names of the powers, I will merely list what I have observed.

### **Powers of Tempestry**

I have seen a trained Tempest walk upon the Water as if upon dry land, breathe Water as easily as Air, create and calm windy storms, still the turbulent seas, cause clouds to skid across the sky with preternatural agility, and send great bolts of lightning to strike those deemed unworthy of life.

Note that the Tempest requires no components, foci or magical incantations, as all etheric waves are amplified and channeled by Hydros, the Titan of Water.

## **Theurgy**

The Order of Enlightenment from which issued this magical discipline believes that to purify oneself and focus the inner energies of the mind eliminates the need to find power in the world around. Therefore these mages require no reagents of any sort.

However, in the process of becoming attuned to Stratos, the Titan of Air, small silver tokens representing the spells become necessary. These tokens are the doorways to power for the Novice, unlocked by words of magic. Once a monk has become an Adept, achieved "enlightenment," and then continued studies for several more years, he or she will find the foci no longer required and that the power flows from the mind of the Theurgist unimpeded by physical restraints.

### **Invocations**

#### **Divination (In Wis)**

This invocation reveals the Theurgist's location, time of day, day of the week, and current month.

**Focus: Sextant**

#### **Healing Touch (In Mani)**

This is a healing spell, affecting minor wounds.

**Focus: Pointing Hand**

#### **Aerial Servant (Kal Ort Xen)**

This spell calls a whirling being of Air, which will accept the Theurgist's directives to manipulate or move any object. An unusual ability of this creature is that it is able to move an object through solid obstacles, such as walls and closed doors.

**Focus: Arm Band**

#### **Reveal (Ort Lor)**

This spell releases a wave of energy that dispels all forms of invisibility around the Theurgist.

**Focus: Open Eye**

#### **Restoration (Vas In Mani)**

This is a powerful invocation. It restores a living recipient to full health, eliminating wounds, maiming or disease.

**Focus: Open Hand**

#### **Fade from Sight (Quas An Lor)**

As the name of this invocation states, the Theurgist becomes completely invisible to the sight of nearly all mortal beings.

**Focus: Closed Eye**

#### **Air Walk (Vas Hur Por)**

By means of this invocation, the Theurgist is capable of jumping a great distance with the aid of the surrounding Air. I am told that this is cast the first time without a focus, when the Theurgist leaps to Windy Point to speak with Stratos.

**Focus: Wings**

### Hear Truth (An Quas Lor)

This invocation reveals the truth to the Theurgist, as if the Air, itself, were unraveling the thread of the message.

**Focus:** Chain

### Intervention (In Sanct An Jux)

One of the most powerful abilities of the Theurgist is to call into existence a wall of Air that blocks all damaging forces. While this spell can make the mightiest sword blow feel like a tap, it will not prevent death from immersion in lava or drowning in Water.

**Focus:** Fist

### Resurrection (Vas An Corp)

The most powerful ability of the Order of Enlightenment is the ability to restore life to the recently departed. However, the price for this ability is eternal blindness. I am sure there must be an easier way, but my research has yielded nothing worthwhile.

**Focus:** None but blindness and eternal life

## Sorcery

Sorcerers deal in magic of Fire and destruction, having long ago founded the Cabal that bound Pyros, the Titan of Fire, to their wills. In doing so, they also garnered the ability to call upon his servants, the daemons.

In the performance of Sorcery, one must use rituals, reagents, foci, magical words and a specially designed protective circle, called a pentacle or pentagram for the five-pointed star confined within. The tremendous powers of Pyros are released in great gouts of flame, and only a trained Sorcerer would dare to call upon them. Even, then, the pentacle is required to keep the Sorcerer from being consumed along with the reagents.

The Sorcerer places the spell's focus at the pentagram's center, the candles at each point around the circle, and the reagents near the candles, all while intoning the mystic words to shape the unbound energies. When this ritual enchantment is done, the Sorcerer is left with a charged (even multiply charged), glowing focus, suffused with the power of the spell invoked. The spell can then be cast at any time.

### Reagents

Reagent	Purpose	Notes
Volcanic Ash	Flame	The refuse of the volcano has the property of creating the initial spark of Fire.
Pumice	Distance	This rock, cast highest and farthest from the volcano, retains the etheric impetus built up in the flight.
Obsidian	Duration	While seeming to be a fragile, easily broken substance, it endures the heat of the volcano.
Pig Iron	Protection	Iron's hard yet versatile nature works in protective Sorcery as no

Brimstone

Power

other reagent can. This is the rock that burns or, more to the point in Sorcery, explodes. A virtually limitless source of power dwells within its etheric composition.

Daemon Bone

Summoning/  
Binding

Having taken a hint from the Necromancers, the Cabal found that Bone does, indeed, retain its tie to life. It is even useful in the ritual of binding when enough power is at hand. Daemonic forces are summoned and controlled by use of this reagent.

### Spellcraft

#### Extinguish (An Flam)

This spell douses any flame, save the very hottest.

**Foci:** Symbol, Wand, Rod or Staff

#### Ignite (In Flam)

This spell lights the red and black candles placed around the pentagram.

**Foci:** Symbol, Wand, Rod or Staff

#### Flash (Flam Por)

By means of this spell, the Sorcerer can move from one visible place to another without actually traversing the intervening space. After many years of practice, a Sorcerer can even move to places visible not only to the eye, but to memory as well.

**Foci:** Wand, Rod, Staff or Symbol\*

#### Flame Bolt (In Ort Flam)

This spell shoots a bolt of fire from the caster, burning anything unlucky enough to be the target of the Sorcerer's ire.

**Foci:** Wand, Rod, Staff or Symbol\*

#### Endure Heat (Sanct Flam)

This spell creates a glowing field that allows the Sorcerer to touch any non-magical flame and remain unharmed. With this spell, a Sorcerer can even endure the heat of lava if it is solid enough to walk upon.

**Foci:** Rod, Staff or Symbol\*

#### Fire Shield (In Flam An Por)

With this spell, flames come into existence encircling the Sorcerer. No tangible creature except a daemon can pass through this flaming barrier, including the Sorcerer. Anyone foolish enough to try is thrown back and burned in the bargain.

**Foci:** Rod, Staff or Symbol\*

#### Armor of Flames (Vas Sanct Flam)

This spell bathes the Sorcerer in a corona of magical flames that ward off all other Fires of magical nature, including those cast by another Sorcerer.

**Foci: Rod, Staff or Symbol\*  
Create Fire (In Flam Ylem)**

At the casting of this spell, a fire erupts around the target. Those who are foolish enough to remain in the blaze will continue to suffer damage until they step out of the flames.

**Foci: Staff or Symbol\***

**Explosion (Vas Ort Flam)**

This is much like the Flame Bolt spell, but with considerably larger and more devastating effects.

**Foci: Staff or Symbol\***

**Summon Daemon (Kal Flam Corp Xen)**

This ritual of binding will summon a daemon to attack one foe of the Sorcerer's designation. The dangerous nature of this spell lies in the fact that if no victim is specified as soon as the creature appears, the daemon will attack the Sorcerer.

**Foci: Daemon Talisman or Symbol\***

**Banish Daemon (An Flam Corp Xen)**

As the name so plainly states, this spell will usually return a daemon to its home in the Fire of the volcano. Unfortunately, even the most skilled Sorcerers have been known to perform an unsuccessful banishment.

**Foci: Daemon Talisman or Symbol\***

**Conflagration (Kal Vas Flam Corp Xen)**

This is the most powerful ritual that the Sorcerer's Cabal has revealed. If any greater exists, only they know about it. By use of this spell, a malicious, daemonic force of destructive nature manifests near the caster, where it then commences to wreak savage destruction on all things near the Sorcerer.

**Foci: Daemon Talisman or Symbol\***

\*Note: As it is not the most stable focus for these spells, the Sorcerer's symbol of the pentagram will be able to retain only one charge.

## THAUMATURGY

Thaumaturgy is the term I use to define the collection of spells that I have learned over time. Put quite simply, Thaumaturgy borrows and steals a bit from each of the other magics, choosing the clear path of chaos rather than becoming too well defined and stagnant. Much like Sorcerers, I enchant items with the power of reagents and the mind.

Any Thaumaturge who knows the business may craft spells, scrolls, potions or various other implements of magic. There is almost nothing that I cannot do through the use of this form of magic, as it does not confine itself to a style.

In Thaumaturgy, the foci are the actual spell books that contain the formulae and references to the reagents required for the spell. In addition, enchanted, single-use scrolls that require no other components can also be used to cast spells. Most of the spells from the other forms of magic can be distilled to their basics and put into scrolls and books as well - by a Thaumaturge of sufficient skill, that is.

## Reagents

*These unusual reagents are used in combination with those from other disciplines.*

Reagent	Purpose	Notes
Eye of Newt	Sight/ Knowledge	This aids a mage in focusing the inner eye within the mind.
Bat Wing	Life/ Creatures	The flesh, bone and blood found in this structure serve as an excellent lodestone to the essence of life.
Serpent Scale	Destruction/ Separation	The poison in the mouth of this beast seeps into the flesh and corrupts the scales, giving them the magical ability to act as a destructor of bonds.
Dragon Blood	Great Power	So powerful is this creature that the blood burns as if aflame. Precise measurements of this are wise, for too much and the magic will go dangerously awry.

## Enchantments

**Confusion Blast (In Quas Wis)**

This causes a release of etheric energies, inflicting no real physical damage, but causing all combatants near the Thaumaturge to forget completely the present combat.

**Reagents: Eye of Newt, Bat Wing, Serpent Scale, Obsidian, Brimstone**

**Summon Creature (Kal Xen)**

This highly variable spell magically calls a creature to the Thaumaturge's defense. The type of creature that appears is not automatically under the control of the caster, depending upon creature's vicinity and the caster's power.

**Reagents: Bat Wing, Pumice, Obsidian, Bone**

**Call Destruction (Kal Vas Grav Por)**

This spell causes bolts of lightning and destructive explosions to cascade around the Thaumaturge, unerringly striking any visible foes.

**Reagents: Serpent Scale, Dragon Blood, Ash, Pig Iron, Executioner's Hood**

**Devastation (In Vas Ort Corp)**

This spell, first formulated by what could only have been an insane mage, is designed to disrupt the very fabric of life throughout the world. All creatures and beings, save the crazed Thaumaturge who casts this spell, face instant eradication. As far as I can tell, there has never been a successful casting of this spell.

**Reagents: Bat Wing, Serpent Scale, Dragon Blood, Pig Iron, Executioner's Hood, Blackmoor, Brimstone**

**Meteor Shower (Kal Des Flam Ylem)**

Rocks, summoned from unseen heights, cascade in a fiery torrent upon friends and foes alike - on the caster remains untouched.

**Reagents: Ash, Dirt, Serpent Scale, Brimstone, Blackmoor**

# WING COMMANDER® II

## VENGEANCE OF THE KILRATHI DELUXE EDITION

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## REFERENCE SHEET

### Commands Between Missions

D	Delete a saved game (at console)	+/-	Increase/Decrease pointer speed
L	Load a saved game (at console)	Alt-X	Escape to DOS
P	Pause cinematic scene	1 - 5	Adjust text speed (fastest-slowest)
S	Save a game (at console)	Esc	Cancel command/Skip conversation
Spacebar/Left Mouse Button/ Joystick Button #2		Advance through cinematic scene	

### Commands During Spaceflight

A	Engage autopilot	F4	View rear/Go to Broadsword or Sabre rear turret
C	Select Communication panel/Clear incoming communication	F5	Chase plane view
D	Display ship damage screens	F6	Battle view
G	Select ship's gun type (or tractor beam)	F7	Tactical view
J	Hyperjump (Broadsword only)	F8	Missile camera view
L	Lock Targeting computer/Activate I.T.T.S. (if available)	F9	Tailing views
M	Change message duration	Esc	Leave Nav Map or current mode
N	Once to select Navigation	Tab	Afterburners
NN	Twice to view new Navigation screen/ Again to view next Nav point	Bkspc	Immediate stop
P	Pause game	Alt-A	Send "Attack my target" message
R	Replay mission recording	Alt-B	Send "Break and Attack" message
T	Select targeting computer/change target	Alt-D	Request wingman damage report
V	Enable/Suppress communication video	Alt-F	Send "Keep Formation/ "Form on my wing" message
W	Select weapon system	Alt-H	Send "Help me out here" message
1 - 5	Adjust message speed (fastest-slowest)	Alt-T	Taunt enemy pilot
F1	View front	Alt-X	Exit to DOS
		Ctrl-E	Eject from ship

### Using A Joystick

*Between missions:* Move the joystick to maneuver the arrow-shaped pointer around the scene. When the pointer's shape changes into a cross, press button #1 to select functions.

*In Space:* Instructions for the movements of the joystick and the use of the joystick buttons for basic flight control.

- **Turn left or right** by moving the stick in the appropriate direction.
- **Climb or dive** by moving the stick toward or away from you.
- **Fire selected guns** by pressing button #1. You can fire while maneuvering.
- **Fire the afterburners** by double-clicking button #2.
- **Fire a selected missile** by pressing both joystick buttons at once.

- **Increase speed** by holding down button #2 and pushing the stick away from you.
- **Decrease speed** by holding down button #2 and pulling the stick toward you.
- **Roll the ship** by holding down button #2 and pushing the stick left or right.

### USING A MOUSE

*Between missions:* Move the mouse to maneuver the arrow-shaped pointer around the on-screen picture. When the pointer's shape changes into a cross, press the left mouse button to select game functions.

*In Space:* When you move the mouse, a white, circular pointer appears in the viewscreen. Your ship homes in on the pointer. Maneuver by moving the mouse until the pointer is where you want to go. You travel in that direction until you move the mouse to a new position.

- **Turn left or right** by moving the pointer toward the left or right side of the viewscreen.
- **Climb or dive** by moving the mouse toward or away from you.
- **Stop diving, climbing or turning** by placing the white pointer inside the green sights in your viewscreen.
- **Roll the ship** by holding down the right button and moving the mouse left or right.
- **Kick in the afterburners** by double clicking on the right mouse button. Release the button to stop the afterburners.
- **Increase speed** by holding down the right button and pushing the mouse away from you.
- **Decrease speed** by holding down the right button and pulling the mouse toward you.
- **Fire selected guns** by pressing the left mouse button.
- **Fire selected missiles** by pressing both buttons simultaneously.

### USING A KEYBOARD

*Between missions:* Use the arrow keys or numeric keypad to move the arrow pointer. When the pointer's shape changes into a cross, press **Enter** to select functions.

*In Space:* Both the numeric keypad (with Num Lock off) and arrow keys are active for controlling flight.

- **Gradual turns** are initiated by pressing a directional key alone. Let up on the key and you continue straight ahead in the direction of your last key press.
- **Sharp turns or rolls** are initiated by pressing **Shift** and the appropriate key simultaneously. Let up and you continue in a straight line.
- **Climb or dive** by pressing the up or down arrow.
- **Roll left** by pressing the **Ins** or the **<** key.
- **Roll right** by pressing the **Del** or the **>** key.
- **Increase speed** by pressing the + (plus) key.
- **Decrease speed** by pressing the - (minus) key.
- **Decrease speed quickly** by hitting the **Backspace** key.



- **Fire your afterburners** in a short burst by pressing **[Tab]** or \* (numeric keypad). Hold down the key to keep your afterburners lit.
- **Fire selected guns** by pressing **[Spacebar]**. You can maneuver at the same time.
- **Fire selected missiles** by pressing **[Enter]**.

## CD-ROM INSTALLATION/CONFIGURATION

### Installation Checklist

This **Installation Checklist** has been provided to further insure that you are able to fully realize all of the many powerful features incorporated into *Wing Commander II* that your particular computer system is capable of handling. If you continue to experience difficulty installing *Wing Commander II* after carefully considering all of the information provided to you by this **Installation Checklist**, please contact ORIGIN's customer service department at (512) 335-0440 for further assistance.

**Special Note.** To play *Wing Commander II* from a CD-ROM drive, you must load DOS 5.0 high. For more information about loading DOS 5.0 high, see the **Expanded Memory/DOS 5.0** section of this manual.

#### Do you have enough base memory?

To determine your amount of base memory, and whether you have enough free to play *Wing Commander II*, see the **Memory Usage** section and also refer to the chart below:

#### Wing Commander II base memory requirements

	No Sound Board	Ad Lib or Roland	Sound Blaster
VGA without speech	583K	583K	583K
VGA with speech	N/A	N/A	587K expanded memory

#### Do you have enough hard drive space?

You must have at least 1 megabyte of drive space available for minimum installation. Your hard drive is used for temporary storage and is used to save your game.

#### Are you unable to hear Speech with your Sound Blaster or does your game crash during the opening introduction?

Run the WINSTALL program from the WING2 directory of the CD-ROM disk (see **Quick Install**) to determine your IRQ setting. Consult your Sound Blaster manual for instructions on setting it.

#### Quick Install

1. Make sure you have approximately 1 megabyte of free disk space on your hard drive.
2. Insert the CD-ROM disk into your CD-ROM drive.
3. Log onto your CD-ROM drive by typing its drive letter followed by a colon (i.e. **[D:]**) and pressing **[Enter]**.
4. Type CD\WING2 and press **[Enter]**.

5. Type WINSTALL and press **[Enter]**. (When you want to play the game without reconfiguring, simply type **[W][C][2]** and **[Enter]** and you will be taken straight into the game.)
6. The first time you run WINSTALL, you will be asked which drive you want to use for temporary storage and for saving your game. Simply use the up/down arrows to select the correct drive and press **[Enter]** (most users should select Drive **[C:]**).
7. After selecting a storage drive, you will be asked several questions about your hardware configuration. Read the on-screen instructions and answer the questions for your type of system configuration. See the **CD Installation/ Configuration** section for more information regarding configuring your system correctly.

**Note.** To use the speech accessory pack for *Wing Commander II* be sure to choose "Yes" during installation when asked if you want to hear digitized speech.

### CD INSTALLATION/CONFIGURATION

This information is for those who had trouble installing the game during the Quick Install/Tutorial. You may also wish to consult this section if you upgrade your system and want to change your configuration.

### INSTALLING THE GAME

1. Make sure you have approximately 1 megabyte of free disk space on your hard drive. Your hard drive is used as temporary storage during game play, plus is used to store your save game files.
2. Insert the CD-ROM disk into your CD-ROM drive.
3. Log onto your CD-ROM drive by typing its drive letter followed by a colon (i.e. **[D:]**) and pressing **[Enter]**.
4. Type CD\WING2 and press **[Enter]**.
5. Type WINSTALL and press **[Enter]**.

#### The Installation Screen

The installation program detects your hardware configuration and displays information about your system on the left side of the screen. On the right side of the screen, a series of menus appears, with the current configuration option highlighted on each menu.

To change your configuration, use the arrow keys on your keyboard to move the highlight bar and press **[Enter]** to select a highlighted option. Note that the first letter of each option is displayed in red-in addition to using the arrow keys, you can select an option by pressing the appropriate red letter.

To cancel installation at any time, press the **[Esc]** key. This returns you to DOS.

#### Menu 1:

##### Selecting the Music and Sound System

A sound board is not required to play *Wing Commander II*, but if you wish to hear the game's musical score and enhanced sound effects, you must have a sound board installed.

If you have one, highlight the sound board that is installed in your computer. If you do not have one of the supported boards (Roland MT32/LAPC-1, Ad Lib or Sound Blaster), highlight "PC Speaker" (sound effects only) or "No sound." Press **[Enter]**. (The game runs slightly faster when you select "No sound.")

## Menu 2:

### Selecting Digitized Speech

If you have a Sound Blaster or 100% compatible digitized sound board, you can hear characters talking during flight and in several animated scenes. Choose "Yes" when asked whether you want to hear the digitized speech. If the install program has trouble finding your sound board, it may ask for some more information about it-if you cannot answer the questions, consult the documentation that came with your sound board.

If you have more than one sound board installed, you can use one for your music and sound effects and a different one for digitized speech. If, for example, you have a Roland board and a Sound Blaster, you can select the Roland on menu 1, and answer "Yes" on menu 2 to hear Sound Blaster speech. When you play *Wing Commander II*, you would then hear Roland music and effects and Sound Blaster digitized speech.

### Completing the Procedure

A screen appears asking if the configuration is correct. If not, press **[N]** and reset the options as you prefer. If the information displayed accurately reflects your system configuration, press **[Y]** and the installation program saves the information. When installation is complete, you will be taken straight into the game.

### MEMORY USAGE

You must have at least 640K of RAM to play *Wing Commander II*. Regardless of the amount of RAM in your machine, you must have 583,000 bytes of free RAM to run the game.

Use the DOS command, CHKDSK or MEM, to determine how much RAM memory is free. If you have less than 583,000 bytes free, you do not have enough free RAM and the game will not run.

You may want to remove memory-resident programs that are unnecessary for system usage from your AUTOEXEC.BAT and CONFIG.SYS startup files.

If you have too little main memory and do not want to reconfigure your system, we suggest you make a bootable DOS system floppy disk to start your computer prior to play. The procedure for creating a startup floppy disk is described in **Troubleshooting**.

### Expanded Memory/DOS 5.0

Memory beyond 640K can be allocated as "expanded memory" which *Wing Commander II* uses to provide extra graphics and sound. During installation and loading the game, you will be told if expanded memory was detected.

Expanded memory is not the same as "extended memory"-if your computer has extended memory. For further information, consult your software dealer or the documentation that came with your expanded memory manager.

**386 Systems.** To access enhanced graphics and sound, you must use an expanded memory manager program. Two of the most common ones are QEMM.SYS (which comes with Quarterdeck's Desqview) and EMM386.SYS (which comes with Microsoft *Windows* and DOS 5.0), but there are others. Memory managers are installed by adding

a line to the CONFIG.SYS file on your computer.

The Microsoft Windows memory manager, EMM386, allocates only 256K of expanded memory unless you specify a greater amount. Your Windows documentation can tell you how to increase this. Allocate 1 megabyte or more expanded memory. In addition, you must have HIMEM installed to use the Windows memory manager. Your CONFIG.SYS file should include the following lines in this order:

```
DEVICE=<PATH>\HIMEM.SYS
DEVICE=<PATH>\EMM386.SYS 1024
```

In the lines just above, <PATH> is the directory in which these files are found, usually C:\WINDOWS.

To use EMM386 with DOS 5.0, your CONFIG.SYS file should read a bit differently:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE 1024 RAM
DOS=HIGH
DOS=UMB
FILES=30
BUFFERS=30
DEVICEHIGH=C:\<CD-ROM DRIVERS>
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

To use EMM386 with DOS 6.0 with doublespace, your CONFIG.SYS file should read:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE 1024 RAM
DOS=HIGH
DOS=UMB
FILES=40
BUFFERS=40
DEVICEHIGH=C:\<CD-ROM DRIVERS>
DEVICEHIGH=C:\DOS\DBLSPACE.SYS /MOVE
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

The more expanded memory you have available, the more game features you'll get. The program loads game features into expanded memory, stopping once all available memory is used. The features are loaded in this order:

1. 64K digitized speech buffer (only if digitized speech is selected)
2. 64K VCR replay buffer
3. Extra space objects (the jump flash, large explosions and debris, etc.)
4. Cockpit animations, such as the pilot's arm
5. Spaceflight music
6. Unique Kilrathi missiles (as opposed to the generic Human missile)

7. Cockpit views (to make switching cockpit views faster)
8. Tractor beam shapes
9. On-the-fly graphics: ship-specific debris, communication screen faces, etc.

Consult your hardware dealer or your expanded memory manager documentation for more information about configuring expanded memory and determining how much expanded memory is available.

To play *Wing Commander II* from a CD-ROM drive, you must load DOS 5.0 into high memory. To do this, simply include the following line in your CONFIG.SYS file: DOS=HIGH. This command frees more of the base 640K for use by *Wing Commander II*.

## TROUBLESHOOTING

**Q:** *Why doesn't my joystick work correctly?*

**A:** Owners of Gravis joysticks or older Suncom models may experience some problems. If you take a Gravis apart and clean the contacts, it should work fine. Some older Suncoms simply will not work with *WC II*. The only solution here is to purchase a newer joystick.

**Q:** *Why does my game crash when I play WC II through Microsoft Windows for Desqview or the MS DOS Task Swapper?*

**A:** "Multi-tasking environments" - *Windows, Desqview, Software Carousel, the DOS 5.0 Task Swapper*, etc. - often conflict in their use of memory and other system resources. Even if you do run the game under a multi-tasker, do not swap to another application while playing. Your system will crash if you try to suspend *WC II* to run another program. In general, we recommend that you exit out of Windows (or similar applications) and play from the DOS prompt.

**Q:** *Why does my computer crash when I try to play WC II while I logged into our LAN (local area network)?*

**A:** LAN software often tries to take over the same system resources that *WC II* uses. Sometimes the two can coexist, but often they can't. If you have strange problems with *WC II* while your LAN drivers are loaded, try booting from a clean boot disk (see Creating a Boot Disk section in this manual).

**Q:** *When I boot the game, it says "Expanded memory not detected," but I have two or more megs of RAM. What's wrong?*

**A:** First, not all types of extra RAM are equal. There are two basic kinds - *exTENDED* and *exPANded*. *WC II* uses expanded memory. If you're using a 386SX, a 386, or a 486, you need to configure your extended memory to act like expanded memory by using an expanded memory manager (we recommend QEMM386, by Quarterdeck; ask your software retailer about it).

If you have no expanded memory, but *WC II* still won't acknowledge it, most likely some other piece of software, such as a disk cache or RAM disk, may be using up all of your expanded memory. Check the CONFIG.SYS and AUTOEXEC.BAT files for such programs, and consult the documentation that came with those programs to find out how to reduce their memory consumption.

**Q:** *WC II threw me out to DOS. It said I had an "Out of memory error." When I tried to re-start, it did it again. or*

**Q:** *My copy of WC II is defective. Every time I play, it throws me to DOS with a Memory Allocation Error.*

**A:** Both are trying to play with less than 583K free. If the game does this, use the DOS command CHKDSK and read the last line of output. It should say "XXXXXX bytes free." This is the amount of free RAM available. If this number is less than 583,000 bytes, modify your AUTOEXEC.BAT and CONFIG.SYS files.

**Q:** *The game still doesn't work after I modified my AUTOEXEC.BAT and CONFIG.SYS files.*

**A:** Copy down the information the computer provided when it dumped you to DOS, then see ORIGIN Customer Service in the Problems With The Game/Product Support/Limited Warranty readme file (Prodsupp.txt).

**Q:** *What if none of the advice above helps?*

**A:** Change to the \WING2\GAMEDAT directory on your CD-ROM drive and type: TYPE Spacebar README.DOS, and press Enter. If the information in that file doesn't help and if you've tried all of the suggestions above, contact ORIGIN Customer Service. Refer to Problems With The Game/Product Support/Limited Warranty readme file for contact information (Prodsupp.txt).

**Q:** *This guide says I should make a DOS system disk. I don't know how to do this and I can't find my DOS manual.*

**A:** To make a system boot disk, get a blank floppy disk and insert it into your A: drive. Type your had drive prompt (for example, C:) and then press Enter. Next type FORMAT A:/S and press Enter. This formats the disk and copies the appropriate system data to the disk.

If this doesn't work, insert a blank disk into your floppy drive, as above, but type SYS Spacebar A: after the drive prompt. When the words SYSTEM TRANSFERRED appear, type:

COPY COMMAND.COM A:

and press Enter. You should see 1 FILE COPIED, which indicates the disk is now a boot disk.

If either your AUTOEXEC.BAT and CONFIG.SYS calls upon an expanded memory manager, we recommend that you copy the appropriate software to the boot disk as well. If you wish to use your mouse, copy your mouse driver to the disk. In any of these cases, a stripped version of your CONFIG.SYS file will be required for your computer to make proper use of the device drivers. Be sure to include CD-ROM extensions. For further information, call ORIGIN Customer Service.

To boot from a floppy, turn your computer off, insert the new boot disk in your A: drive and turn the computer back on.

**Q:** *The game still doesn't work after I modified my AUTOEXEC.BAT and CONFIG.SYS files.*

**A:** Call ORIGIN's Customer Service department. Be sure to copy down the information the computer provided when it dumped you.

# PLAY GUIDE

## THE STORY SO FAR...

In *Wing Commander*, you and the other starfighter pilots of the TCS *Tiger's Claw* fought against overwhelming odds, leading the Confederation forces to victory over the Kilrathi Empire in the Vega Sector.

Next, during *Wing Commander The Secret Missions*, the *Tiger's Claw* was ordered to report immediately to the Deneb sector, where the Goddard Colony was under attack by Kilrathi forces. But before the *Tiger's Claw* could enter the fray, the enemy used a devastating secret weapon to destroy the colony. You and your fellow pilots played a deadly game of hide and seek with the Kilrathi fleet. Ultimately, the secret weapon was destroyed...

Then, during *Wing Commander The Secret Missions 2: Crusade*, the Kilrathi declared a holy war. A huge Kilrathi fleet maneuvered toward an isolated star system and a planet of peaceful, primitive natives. After a Kilrathi renegade defected, you flew a Kilrathi ship in a series of "undercover" missions. Finally, you discovered the secret reason for the holy war and saved the Firekkan race.

Soon after, however, disaster struck. While the *Tiger's Claw* was attacking the *K'tithrak Mang*, you encountered several fighters that faded mysteriously from sight. Even your radar couldn't track them! Not wanting to panic the *Claw* over what you thought to be a radar malfunction, you went looking for the ghostly fighters.

The search delayed your return to the *Claw* just long enough for the fighters to destroy the hapless carrier.

Landing on the TCS *Austin*, you learned that you were the only pilot to encounter these "stealth" fighters. Furthermore, your flight recorder disk mysteriously disappeared right after you landed. Brought before a general court martial, you were charged with treason, and your claims about stealth fighters were ignored.

A lack of evidence led to the treason charges being reduced to mere negligence, but you incurred the wrath of certain flag officers, Admiral Tolwyn among them. Your career appeared to be over.

But you're still a pilot in the Terran Confederation Navy and in *Wing Commander II*, your goal is to defeat the Kilrathi enemy. Each mission you fly (and your success or failure in each mission) affects the Confederation's chances for ultimate victory. *Wing Commander II* presents one campaign in the on-going war. *Special Operations 1* and *2* continue the story.

## STARTING THE GAME

The first thing you see when you begin play is the *Wing Commander II* logo sequence, followed by the main menu. Here you are asked if you want to "Start New Game" or "Resume Current Game."

If you are a first-time player (or you want to start the game again from the beginning), select "Start New Game." If you have already played *Wing Commander II* and wish to pick up where you left off, choose "Resume Current Game."

To make the choice, use your joystick, mouse, arrow keys or numeric keypad to move the pointer until it is over the option you want. The pointer changes into a cross. When the cross is over the option you want, press joystick button #1, the left mouse button or **[Enter]**.

*Start New Game.* If you choose "Start New Game," you may see a screen asking you which campaign you wish to play. This screen will only appear if you have installed one or both of ORIGIN's *Special Operations* scenarios. Move the pointer to the campaign you wish to play and press button #1, the left mouse button or **[Enter]**.

Once you have selected a campaign, the introduction begins, bringing you up to date on events in the *Wing Commander* universe. When this is over, the Terran Confederation Navy Personnel Database computer appears on the screen. Follow the prompts, choosing "(T)ransfer an existing personnel file" or "(C)reate a new personnel file."

## Transferring Characters

If you choose to transfer a character from another *Wing Commander* game, you will be asked the drive and pathname where that game exists. For example, if the original *Wing Commander* is installed in the C:\WING directory, you would type C:\WING\GAMEDAT when requested. Once the program has found your saved-game files from the other game, it will present you with a list of the characters you may transfer.

Once the list of transferrable characters appears, highlight the one you want (using the joystick, mouse or arrow keys) and press button #1 or **[Enter]** to make your selection. You'll be asked to type in your first name. The other statistics—last name, callsign, total sorties, total kills—are read from the old saved-game file.

## Special Note to Wing Commander I CD-ROM Users

Due to the length of the directory name used in the *Wing Commander I* CD-ROM version, you must copy your saved game files to your hard drive's root directory. This is accomplished by typing:

```
COPY C:\ORIGIN\WINGCMDR\GAMEDAT*.WLD C:\
```

This command copies your *Wing Commander* saved games files to your hard drive's root directory. If you are using a drive other than C, substitute that drive letter in the above example. Now, when the WCII Transfer Character option asks where your copy of *Wing Commander* is installed, type C:\.

## Creating a New Character

If you choose to create a new character, you will be asked for your first and last names and your character's callsign. Each may be no more than 12 letters long. Be careful when entering these—once you press **[Enter]** after typing a name, you can't go back to edit it. To change a name, you must create another new character.

After this information has been entered, move the pointer off the on-screen computer and press button #1 to continue.

## Resume Current Game

If you choose "Resume Current Game" on the main menu, you bypass the on-screen computer and go directly to the barracks or ready room (see **Non-Flying Interactive Scenes**, for details).

**Note.** In *Wing Commander II* you never have to save your game. It is saved automatically as you play. Once you've played the game for a while, choosing "Resume Current Game" places you back at the barracks, just after the last animated sequence you saw (if you ended your previous play session after watching one), or just before a combat mission (if you stopped playing during a mission).

However, a *Wing Commander II* campaign can unfold in a variety of ways, and it is often helpful to save multiple game positions. You will probably want to save your game manually from time to time. For information about saving games, see **Computer Console**.

## THE INTERFACE BETWEEN MISSIONS

Between missions, you select game functions by using a joystick, a mouse or arrow keys to move a pointer around the on-screen picture. As you move the pointer, it changes shape and color to indicate whether a game function is available in a particular location.

An arrow means that no game function is assigned to the area under the pointer.

A cross means a function is assigned to the area under the pointer. (The specific function assigned to an area is indicated in text appearing at the bottom of the screen.) To select a function, press joystick button #1, the left mouse button or the **Enter** key.

*Note:* If you use the keyboard, pressing the shift key while you press an arrow key doubles the speed of the pointer as it moves across the screen. To increase the pointer speed for an entire play session, press **+** on the numeric keypad until the pointer moves at an acceptable speed. To slow the tracking speed, press **-** on the keypad until the pointer slows to an appropriate speed.

If you ever make a mistake or change your mind, pressing **Esc** cancels most actions and returns you to the previous menu.

### Non-Flying Interactive Scenes

At various points during the game, you are shown a room in which you can save your game and perform other activities: either the barracks or a pilot ready room, depending on your position in the plot. Each activity available in these rooms is keyed to a part of the scene. Moving the pointer onto a section of the screen reveals its function (described by text at the bottom of the screen). Move the pointer over an area and select its function as described above. The active areas are:

**Hangar Door.** Select this door for your next flight mission briefing. If this door is closed, there are still some animated scenes to see before the next mission; selecting the closed door means you may miss part of the story. When the door is open, the story is complete (for now), and you should go ahead and click on the open door to fly the mission.

**Barracks Door.** Select this door to watch the cinematic scenes leading up to the next mission. These scenes update the story, telling you when you have done well and when the Kilrathi have gained the upper hand. If this door is closed, you have already seen all the scenes; selecting the closed door will replay those scenes. When the door is open, there is more story to be seen, and you should click on the open door to watch it. Press **Spacebar**

repeatedly to speed through the animated scenes. Press **Esc** to return immediately to the barracks or ready room. (**Spacebar** and **Esc** are disabled when speech is enabled.)

**Airlock Door.** Select this door to exit *Wing Commander II* and return to DOS.

### Computer Console

This lets you save a game, load a game or delete a character. It's the only place you can manually save your game. Saving games manually allows you to keep multiple characters or pick up the game at a point of your own choosing.

Selecting the computer console displays a close-up of the computer, with a menu on the screen. The menu allows you to (S)ave or (L)oad a game or (D)eleate a previously saved game. Move the pointer to the option you want, or hit **S**, **L** or **D**. (To leave this screen at any time, press **Esc** or select the on-screen computer's ON/OFF button.) Once you choose Save, Load or Delete, you are presented with a numbered list of saved-game slots. All of these are empty (indicated by rows of dots) when you begin play.

**To save a game.** Saving a game puts a copy of your current game into the slot you select, overwriting any saved game that was in the slot previously. Go to the list of saved game slots, as explained above. Move the pointer to an empty row of dots, or a game position you don't mind losing, and select that slot. (You can also select a slot from the keyboard by pressing the number corresponding to the one you want.) When prompted, type any comments you have about this saved game - enter anything you want, up to 32 characters long. Press **Esc** to return to the on-screen computer. Press **Esc** to return to the game.

**To load a saved game.** Loading a saved game restores the game to the exact state it was in when you created that saved game. To load a game, go to the list of saved game slots and move the pointer to the slot containing the saved game position you wish to resume. Press joystick button #1, the left mouse button or **Enter** to select that saved game. Press **Esc** to return to the on-screen computer. Press **Esc** to return to the game.

**To delete a saved game.** Deleting a slot clears out the saved-game data that was in that slot. To delete a game, go to the list of saved game slots and move the pointer to the slot containing the saved game position you wish to delete. Press joystick button #1, the left mouse button or **Enter** to select that saved game. Press **Enter** to return to the on-screen computer. Press **Esc** to return to the game.

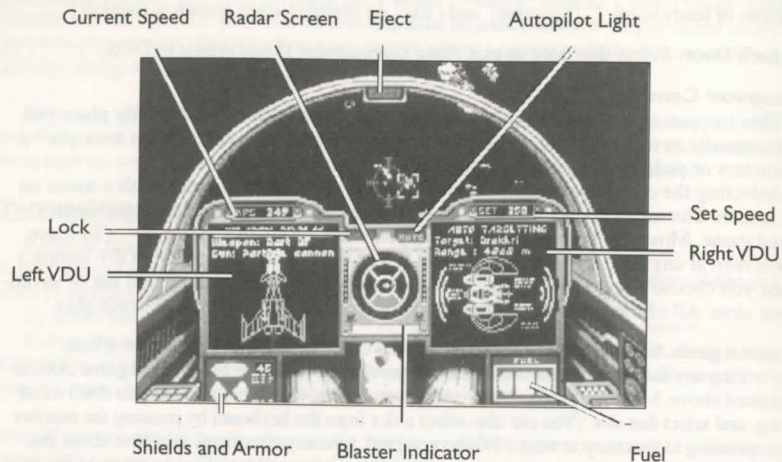
**Note.** When you create a new character or load a saved game, your new choice replaces what was your "current game" the last time you played. If you think you might want to return to your current game position, save it before creating a new character or restoring an earlier saved game.

### Mission Briefings

Immediately prior to every mission, you will be briefed about your objectives and available resources on that mission. You may get information during organized briefings, when your character discusses a mission with others prior to takeoff, or even when you're already in space.

However you find out about the mission, you will usually learn about your objective, your navigation route and your wingman assignment (though some missions are flown solo).

## Epee Cockpit



*Tactical Tip: Don't bother writing down the details of your navigation route - this information is automatically loaded into your ship's computer.*

## IN THE COCKPIT

During a *Wing Commander II* campaign, you will fly several types of ships. Though each cockpit has a slightly different arrangement, they all have basically the same screens and provide basically the same information.

### Viewscreen

The viewscreen provides a clear view of space directly ahead of you. A green circle with crosshairs shows where your ship's guns are aimed. Brackets indicate the position of a ship you currently have targeted. Hostile ships have red brackets, friendlies have blue brackets. When other vessels communicate with you, white brackets appear around them. When a target is locked (see **Targeting System**) the brackets turn into a solid box.

### Radar Display

The circular screen in every cockpit is a radar display. This display, divided into six sections, shows how far you have to rotate to bring a target into your front viewscreen. Radar contacts are displayed as dots. A dot in the outermost ring represents an enemy behind you; the center circle shows the position of enemies ahead of you; and the four middle sections represent enemy positions alongside, above or below you.

The color of each dot indicates what it is: red is for an enemy fighter, blue for a friendly fighter, orange for an enemy capital ship, gray for a friendly capital ship, white for your carrier or home base and yellow for a distress beacon (an ejected pilot or a data

capsule or an enemy missile targeted on you). In VGA graphics mode, the shade of the dot indicates its range: the brighter the dot, the closer it is.

*Tactical Tip:* To head toward a target, select the dot on the radar display that represents that target. Maneuver your ship until that dot is centered in the inner-most circle of the display. A dot centered in the radar display represents a ship directly ahead of you in your viewscreen.

### Left VDU (Video Display Unit)

On the left VDU is a profile of your fighter, showing its current status. This display has two modes, for weapons and for other components.

Pressing **W** or **G** brings up the weapons display. The text at the top of this display tells you what guns and weapon systems are currently active; the graphics below show where the weapons are located and how many remain undamaged. Repeatedly pressing **W** cycles through the available weapon systems (missiles, torpedoes and/or chaff pods); **G** (for "guns") cycles through the available combinations of blasters. A fighter's blasters can include laser cannon, mass driver cannon, neutron guns and particle cannon. For maximum firepower (and power consumption) the "Full Guns" option fires all of a ship's blasters at once.

For more about blasters and weapon systems, see **Weapons**.

Repeatedly pressing **D** cycles you through screens displaying damage your ship has taken. Most undamaged systems appear in green. Damaged systems are in red, with a description of the system.

**Note.** The first ship you fly, the Ferret, is a primitive patrol fighter and has no left VDU. On this fighter, the **W**, **G** and **D** keys have no effect.

### Right VDU

The right VDU displays the Targeting screen, the Navigation screen and the Communications screen.

**Targeting Screen.** Press the **T** key to display the Targeting screen. This screen gives the status of the ship you are currently targeting and appears automatically when you fire your ship's guns.

**Navigation Screen.** Press the **N** key to display Navigation information and to see how far to the next Nav point.

**Communications Screen.** Press the **C** key to bring up the Communication screen, showing both your communications options and, on computer systems with enough expanded memory, incoming video from other ships when they communicate with you.

**Note.** The Ferret's one VDU, in the center, is considered the "right" VDU.

For more about the right VDU functions, see **In-Flight Systems**, beginning below.

### Armor and Shields Indicator

Bars on this screen indicate the status of your ship's armor and shields. These bars diminish as armor and shields take damage. Shields gradually regenerate unless the shield generator is destroyed. Once damage gets through a shield, armor begins taking damage. Armor doesn't regenerate.

## Fuel Indicator

This bar shows how much fuel you have. It becomes shorter as you use up fuel. Afterburners boost speed dramatically, but expend fuel at a ferocious rate, so use them sparingly. If you run out of fuel, you will coast on reserves, unable to use afterburners until you return to base.

## Speed Indicator

There are two speed gauges. "Set Speed" shows the speed your fighter tries to maintain on its own (like a car's cruise control). "KPS" shows your ship's current speed, in kilometers/second.

To increase your speed, press **[+]**. To decrease it, press **[-]**.

For a sudden burst of speed, press **[Tab]** or double click joystick button #2/right mouse button to momentarily ignite your afterburners. The longer you press, the longer they remain lit.

*Tactical Tip: The safest speed for negotiating asteroid fields is 250 kps.*

## Blaster Indicator

This gauge shows the power level of your ship's gun capacitors. Frequent use of guns runs down your power. When you run out of power, your guns stop firing until the capacitors have at least partially recharged. Guns recover power gradually. (Recovery is slowed if your shields are also regenerating.)

## Eject Warning

This light flashes if your ship has sustained significant damage. When the eject warning starts flashing, you must decide how serious the situation is and whether to eject or not. If you decide to eject, press **[Control] [E]**. When you eject, you are offered two options: "Replay Mission" and "Continue Story." Selecting Replay Mission sends you back to a point just after you launched so you can try the mission again. Selecting Continue Story sends you to a debriefing (during which you may be chewed out by your superior officer for costing the Confederation a starfighter), but you will live to fight another day.

*Tactical Tip: In certain circumstances, such as when you and your carrier are deep behind enemy lines, enemy activity makes it impossible to recover ejected pilots. In those cases, ejecting will prove fatal! You will be warned during the mission briefing if it will be too dangerous to eject during the upcoming mission.*

## IN-FLIGHT SYSTEMS

### Targeting System

When the Targeting screen is up (accomplished by pressing **[T]**), it displays a profile of the ship you have targeted, along with any damage the target may have sustained.

When the targeting feature is activated, an enemy ship in your view screen will be automatically targeted. Brackets appear around the enemy ship. You can only target one ship at a time. Normally, you lose the lock on a target you are no longer facing. If you want to keep a target locked even when you are not facing it, press **[L]** to lock onto a

target when that target is on the screen. A locked target is indicated by a solid box, rather than the open brackets.

You must have your current target locked to use the I.T.T.S. or fire a torpedo. (See **Improved Target Tracking System**, or **Torpedoes**, for more information.)

*Tactical Tip: If you've just dispatched an enemy in the midst of a crowded dogfight, and you don't want to divert your attention from the viewscreen to look at the radar, just set your fighter into a spin or tight turn. Out of the corner of your eye, you can see whenever the right VDU switches from its neutral status to the Targeting screen. Even if the next target is just out of sight, (left, right, up or down from where you are currently looking), the Targeting screen will come up and you'll know you are facing an enemy.*

### Navigation System

When you press **[N]** to enter Navigation Mode, the Nav screen shows your currently selected Nav point and the distance you must travel to reach that objective. Pressing **[N]** a second time brings up the full-screen Navigation map, so that you can give it a good look. While you view the Nav map, game time is suspended—you can study the mission in as much detail as you want, for as long as you want.

Each mission you fly consists of several objectives at different Nav points. Using the keyboard, joystick or mouse, you can move the pointer to any Nav point in your current mission. When you point at something, it will be highlighted, and notes about it appear on the right side of the Nav map. You can also scroll through the Nav points (and the information about them) by repeatedly pressing **[N]**. Pressing **[Enter]** exits you from Navigation Mode and returns you to the cockpit screen.

The last Nav point you highlighted becomes your new destination. Also, when you reach a Nav point, the navigation computer intelligently (and automatically) selects the next assigned Nav point for you. You can either fly there manually or activate the autopilot and let it take you to your next objective (see **Autopiloting System**, below).

*Tactical Tip: The Nav map is drawn in only two dimensions, so it is possible for your ship to appear to be right on a Nav point while your ship's systems indicate that you are thousands of kilometers away from your objective. This simply means that you are "above" or "below" the Nav point.*

### Autopiloting System

When you activate Navigation Mode, a white cross appears on your radar display and in your heads-up display. Both crosses represent the location of the current selected Nav point relative to your starfighter. To reach your selected Nav point, maneuver your ship until these crosshairs are centered in their respective displays. (Centering one centers the other automatically.) Keep the crosshairs centered and you will eventually reach your destination.

In practice, you will want to shorten the trip by activating the autopilot. If there are no hazards (enemy ships, asteroids or mines) in the area, the autopilot light (marked "auto") goes on. Press **[A]** to elect autopilot. Your ship, wingman and any escorted ships form up and proceed to the Nav point automatically as a group.

Autopilot automatically disengages a few thousand meters from your destination. It also disengages when you encounter enemy vessels or hazards (asteroids, etc.), allowing you to deal with them.

## Communications System

Press **C** to activate the Communication screen. This presents you with a numbered list of potential recipients for your message.

Select a receiver by pressing the corresponding number key, and a second numbered menu appears listing the messages you can send to that person. To send the message, press the appropriate number key.

The communications system checks your current situation and determines who you can communicate with and what messages you can send. If there is only one pilot who can receive your communication, no menu is presented and the message goes to the sole eligible recipient.

When other pilots send a message to you, a white box appears around their ship in your viewscreen. Their messages appear at the top of the screen, unless you have a digitized sound board supported by *Wing Commander II* and have installed the optional Speech Accessory Pack (sold separately). In that case, you will actually be able to hear their radio messages directly.

To exit Communications, press **C** or **Esc**.

*Tactical Tip: The most frequently used messages can be sent instantly, without entering Communications mode, simply by pressing **Alt** and a single letter key simultaneously. These **Alt** key combinations are listed below.*

**Wingman Orders.** Wingmen sometimes disobey, but you can give them the following orders:

- **Break and Attack** (**Alt B**). A command to leave formation and engage enemy fighters within 12,000 meters. Your wingman will not attack a capital ship until you do. (See "Attack My Target" command, below.)
- **Keep Formation** (**Alt F**). Denies a wing-man's request to break and attack on his own initiative. This only applies to a wingman who is currently in formation.
- **Form on My Wing** (also **Alt F**). Tells your wingman to return to formation and follow your vessel. This only applies to a wingman who has broken formation, either to attack or to return to base.
- **Return to Base** (no **Alt** key combination). A command instructing your wingman to immediately head for home. If this order is obeyed, your wingman won't be available to help you for the duration of this mission.
- **Help Me Out Here** (**Alt H**). A command to your wingman to engage the enemy attacking you.
- **Attack My Target** (**Alt A**). A command telling your wingman to engage the enemy you have currently targeted. This is the only way your wingman will attack an enemy capital ship, but remember that certain capital ships can only be attacked with torpedoes-if your wingman won't be able to harm a target, he'll refuse this command.
- **Keep Radio Silence** (no **Alt** key combination). A command telling your wingman to send no messages until you send a "Broadcast Freely" message.
- **Broadcast Freely** (no **Alt** key combination). Allows your wingman to talk to you. This negates "Keep Radio Silence."
- **Damage Report** (**Alt D**). If possible, your wingman broadcasts to you a damage display of his ship, which appears in the right VDU. This display remains on and is constantly updated until you press **T** or **N**, at which point the link is broken.

**Taunting the Enemy.** When you have an enemy ship targeted, you can activate Communications to bring up a menu of taunts. Select one of these and your insult is sent to the target. You can send a random taunt by pressing **Alt T**.

*Tactical Tip: Taunts sometimes attract enemy ships to you, drawing fire away from a ship you are protecting, or perhaps saving a wingman whose ship has been damaged.*

## Weapons

Depending upon which ship you're flying, you may have blasters, chaff pods, missiles and/or torpedoes available to you. In larger ships, like the Broadsword and the Sabre, you can switch from the front viewscreen to turrets positioned at the sides and rear of the ship. Each weapon type serves a different purpose and is used in a somewhat different manner than the others.

**Blasters.** These are the basic spacecraft weapons. To fire your blasters, line the target up in the green crosshairs on your viewscreen and press joystick button #1, the left mouse button or **Spacebar**.

**Chaff Pods.** To use a chaff pod, press **W** until the pod is selected. Then press **Enter** or both fire buttons to drop the pod, as if it were a missile. The pod falls behind your ship, and all enemy missiles targeted on your ship fly toward the chaff pod instead of toward you.

*Tactical Tip: Be sure to drop the pod at the last possible instant and kick in your afterburners. Don't wait too long, or you'll be in the missile's blast radius anyway. Use chaff near the beginning of a large dogfight, when there are several missiles targeted on you-it works on every enemy missile at once! When there's just one missile coming in, you're usually better off dodging, or just taking the hit, than using up one of your precious chaff pods.*

**Missiles.** There are four missile types - Dumb Fire, Heat-Seeking, Image Recognition and Friend or Foe. Press **W** until the missile you want is selected. Then fire by pressing both joystick or mouse buttons simultaneously or by pressing **Enter** on the keyboard.

- With the Dumb Fire missile, you line up a target by eye, then fire.
- The Heat-Seeking missile automatically locks on a target when you're on his tail. When lock is possible, a red circle (the lock indicator) appears on your viewscreen. Maneuver until this is positioned on your target. When the lock indicator blinks and the words "Missile Locked" appear in the right VDU screen, fire the missile.
- The Image Recognition missile automatically locks on a target when you've held it in the viewscreen for a few seconds. Wait until the red, circular lock indicator blinks, then fire.
- The Friend or Foe missile automatically targets the nearest enemy ship. When launched, it seeks out the closest enemy (or the nearest ship with a damaged communication system!).

**Torpedoes.** Capital ships are equipped with special shields that are invulnerable to the weapons fighters normally carry. Special missiles called torpedoes are necessary to penetrate these shields.



To fire a torpedo, press **[W]** until the torpedo is selected. Then press **[L]** to lock the target ship. If the target is a valid torpedo target, the lock indicator will slowly move toward the target. From this point onward, until you complete the lock, you must not maneuver your ship too quickly. There's a little leeway, but you must fly mostly straight toward the target - any significant deviation will break the lock, forcing you to start all over again. (For this reason, only turret-equipped ships, the *Sabre* and *Broadsword*, carry torpedoes, even though any of the other fighters could theoretically handle the missiles.)

When the lock is complete, the red targeting crosshairs begin to flash. At that point, press **[Enter]** (or both joystick- or mouse-buttons) to launch the torpedo. A single torpedo will generally kill a freighter or corvette, unless the target's flak cannon shoot down the incoming missile. It takes one or two torpedoes to get through the armor on the larger capital ships, followed by another torpedo or two into the now-unprotected side to finish the ship off.

*Tactical Tip: Once you start the torpedo run, reduce your set speed and switch to the turrets. Your autopilot will keep a straight course and will inform you when the torpedo lock is complete. If there is any enemy fighter cover, your only defense during the torpedo run will be your turrets.*

### Turrets (Broadsword, Sabre).

Two of the ships you fly, the *Broadsword* and the *Sabre*, have multiple guns. In addition to the standard complement of front-firing weapons, the *Sabre* has a turret in the back, and the *Broadsword* has three turrets (one to the rear, one to the left and one to the right).

To access a turret, use the view keys (**[F2]** - **[F4]**):

**[F2]** ) Switches you to the *Broadsword's* left turret

**[F3]** ) Switches you to the *Broadsword's* right turret

**[F4]** ) Switches you to the *Broadsword* or *Sabre's* rear turret

From the turret, you can fire turret-mounted blasters and use the tractor beam.

**Blasters.** When you switch to a turret, your ship goes on autopilot - flying straight as possible while attempting to avoid ships and other obstacles. The joystick (or mouse or keyboard) now controls the horizontal and vertical movement of the turret. White tick marks on the turret's radar screen indicate the limits of turret movement. When a white line is centered in the radar screen, you have rotated the turret as far as it will go in a given direction.

As in the front viewscreen, crosshairs appear in the middle of the turret screen. Center your target in the crosshairs and press joystick button #1, the left mouse button or **[Spacebar]** to fire. As you fire, your blaster indicator shows the power level of your ship's gun capacitors. When you run out of power, your guns stop firing until the capacitors have at least partially recharged.

**Tractor Beam.** In addition to standard turret-mounted weapons, the turrets in the *Broadsword* and *Sabre* are equipped with a new device - a tractor beam.

First, maneuver next to the target and match speeds with it. Access the rear turret as described above and press **[G]** to change from your active weapon to the tractor beam. Line the target up in the crosshairs and press the fire button. As long as you keep the target centered in the crosshairs, it will be pulled closer and closer to your ship. If the target moves too far from the center, it is lost and the beam shuts off.

Once the item has been pulled close enough to the ship, an animated sequence is triggered, showing the retrieval of the item. You then return automatically to the front viewscreen and control of the ship returns to you.

### Other Functions

**Alternate Camera Views.** You start each mission with a view from the inside your ship's cockpit. From the front view-screen, you can use the function keys (**[F1]** - **[F9]**) to view the action from a variety of angles.

- **[F1]** (Cockpit View) Returns you to the forward view from any other view.
- **[F2]** (Left), **[F3]** (Right), **[F4]** (Rear) These views allow you to look out the left and right sides of your ship as well as out the rear. Good for tracking your wingman and spotting enemy ships during dogfights.
- **[F3]** (Chase Plan View) Puts the camera directly behind your ship. Hold **[F5]** down to cycle between following your ship closely and hanging back a little. This is a good view for flying through asteroid fields.
- **[F6]** (Battle View) Displays a long-distance view of an entire battle.
- **[F7]** (Tactical View) Always keeps you and the ship you have targeted (or the most significant threat) in view.
- **[F8]** (Missile Camera View) Gives you a missile's eye view of the action. Select this option and the camera tracks the next missile you fire to its target.
- **[F9]** (Tailing View) Positions the camera behind any ship in the area. Press **[F9]** repeatedly to change ships.

**Improved Target Tracking System.** The Improved Target Tracking System (I.T.T.S.) is a feature available in the most advanced fighters, such as the *Epee* and *Sabre*. This advanced targeting system calculates the amount you must lead your target in order to maximize the chance of a hit.

When you lock onto a target while flying an I.T.T.S.-equipped ship, a special red cross appears on the screen. Keep this cross inside your main crosshairs and you will be virtually guaranteed to hit the target, unless the target is particularly quick and evasive.

**Jumping Out.** A hyperspace jump is the quickest way to travel from one point of the universe to another. Of the ships you fly, only the *Broadsword* bomber is capable of making such a jump. Press **[J]** at a jump point and your *Broadsword* jumps to another jump point. This works only at a jump point and the destination of each jump point is predetermined: your briefing officer will tell you whether jump points are available and your Nav map shows you where they are.

**Pause.** If the action gets too hot or the outside world intrudes, press **[P]** to pause the game. Press any key or button to resume play.

**Replay.** Press **[R]** any time you're in the cockpit of your ship to watch the Instant Replay. Replay records everything automatically, from the time you begin a dogfight until you leave the area or press **[R]**. You can only watch a replay once. Action stops while you watch.

Once you've seen the sequence, the "gun camera" resets and you return to the game. Pressing R again only replays what took place since the end of the last replay sequence. You cannot save replay sequences.

If you want to end a replay sequence and return to the cockpit, hit **[Esc]**.

Depending upon when you activate it, this replays all of your actions since:

- 1) the beginning of the mission;
- 2) the last time you came out of autopilot;
- 3) or the last time you watched the Replay.

While in Replay mode, the current mission freezes. The default Replay view is the Chase Plane View (**[F5]**), but you can switch to most of the other camera views during a Replay. However, the Missile Camera View (**[F8]**) is disabled.

Note. Instant Replay requires expanded memory and is not available on systems that lack the appropriate software and/or hardware. See **Memory Usage** in the Install/Configuration section for more details.

## DYING

If you die in the course of a mission, you are given two options: "Replay Mission" and "Continue Script." Replay Mission sends you back to the moment just after you launched, allowing you to try the mission again. Continue Script allows you to watch your character's funeral. The game then begins again, allowing you to start from scratch or load a saved game.

## LANDING

If you complete your mission successfully, head back to the base. At the base, target the ship upon which you want to land (*don't fire!*) and use the Communications system to signal the ship's traffic control officer to "Request Landing."

Often, if you follow your mission plan, the mission will end automatically at this point and you don't have to worry about coming in for a landing - the carrier's automatic landing system handles that for you. At other times, particularly when there are many enemy ships present or you're trying to abort your mission, go through the following procedures to land:

After you request landing, the carrier's traffic control officer decides whether you will be allowed to land. To land, the space around the carrier must be free of enemy ships and one of the following must be true:

- 1) you have traveled to any Nav point;
- 2) you have achieved any mission objective;
- 3) you have killed at least one enemy ship; or
- 4) you have taken a large amount of damage.

If you are cleared to land, you must pilot your ship in close to your destination. Once you're close enough, the carrier's automatic landing system takes over, ending your mission.

If your landing request is denied, check to see if any enemy ships are around. If so, you must destroy them before landing. If not, you haven't fulfilled any of the above conditions and must continue the mission until you fulfill at least one.

Landing, whether automatic or upon request, takes you back to the hangar, where you can

see any damage your ship has sustained. From the hangar, you go to a debriefing. This may be quite formal, with staff officers present, or informal, possibly during a casual conversation with another character.

After the debriefing, you are placed in the barracks scene once again, and you may continue the story or exit to DOS.

# SPECIAL OPERATIONS I & 2

## PLAYING SPECIAL OPERATIONS I

**Note:** This reference assumes that you have a joystick. If you do not, consult the *Wing Commander II Installation/ Configuration* section for instructions.

1. Make sure you have approximately 1 megabyte of free disk space on your hard drive. Your hard drive is used as temporary storage during game play, plus is used to save your game in progress.
2. Insert the CD-ROM disk into your CD-ROM drive.
3. Log onto your CD-ROM drive by typing its drive letter followed by a colon (i.e. **[D:]**) and press **[Enter]**. Type **CD\WING2** and press **[Enter]**.
4. Type **[S][O][I]** and press **[Enter]**. (If you want to change the hardware configuration for *Special Operations I*, you must run the *Wing Commander II* installation/configuration program. Please refer to Step #4 of the **Quick Install** section of the *Wing Commander II Installation/Configuration* section for more information.) Also note that you **must** run the *Wing Commander II* installation/configuration program before attempting to play *Special Operations I*.
5. The *Special Operations I* game should now load and the *ORIGIN FX* logo will appear. If the game does not load, check the *Wing Commander II Installation/Configuration* section for more information on WC II hardware and software requirements.
6. Following the *ORIGIN FX* sequence, you will see the *Wing Commander II: Vengeance of the Kilrathi* logo and two boxes with the choices: "Start New Game" and "Resume Current Game." If this is your first time to play *Special Operations I*, then you are only given the "Start New Game" option.
7. From this point, you will go into the game, starting with the introduction scene.
8. After the introduction scenes, a computer terminal with the options "Create Character" and "Transfer Character" appears. If this is your first time to play *Special Operations I*, press **[C]** to create a new character. Enter your first and last name and callsign. After entering the information, you will be taken to the barracks

where you can start your first mission. (See the Transfer Program section of this configuration guide for more information on transferring a previous *Wing Commander II* character to *Special Operations I*.)

**Note:** Sorry, it is not possible to transfer an existing character from *Wing Commander I*.

9. Enter your first mission in Special Operations 1 by clicking on the open door marked "Fly Mission." From there you will see the mission briefing and then fly the first mission of the game.
10. Special Operations 1 has a joystick calibration program that can be accessed while the player is in space, the barracks or the start. To begin calibration press **[Ctrl] [J]**. Specific instructions will appear on the screen.

\* Please refer to the *Wing Commander II Play Guide* if you have any questions concerning game play. All commands and features of *WC II* are supported by *Special Operations I*.

11. All Special Operations 1 game positions can be saved in the barracks only. Saving Special Operations 1 games will not over-write saved *Wing Commander II* games.
12. As in all of the *Wing Commander* series, the *Special Operations I* campaign varies in length based on your performance in the game. If you fail some of the missions, the progress of the Terran-Kilrathi war will be affected and your game may be shortened. In a single complete play-through, you can play a maximum of nineteen combat missions.

### The Transfer Program

You can transfer a character from your *Wing Commander II* game to *Special Operations I*, using a method built into the *Special Operations I* program.

If you have finished *Wing Commander II* and have a saved game from any mission, you can bring that character from *WC II* into *Special Operations I*. If you have not yet finished *WC II* you can still transfer a character. However, we recommend that you complete *WC II* before beginning *Special Operations I* in order to maximize your enjoyment of these two products, and to best follow the story line.

#### To transfer a character:

1. With the CD-ROM disk in your CD drive, make sure you are at the WING2 directory and type **[S] [O] [I]** and press **[Enter]** to begin *Special Operations I*.
2. After the *ORIGIN FX* sequence, select the "Start New Game" option.
3. When the computer terminal appears, press **[T]** to transfer a character.
4. You will next be given a list of all of the saved characters from *Wing Commander II*. Choose whichever character you wish by clicking on that character.
5. Once you have chosen a character to transfer, you will see the barracks. You will be ready to continue the game with your transferred character.

### The Wing Commander II Mission Selector Program

*Special Operations I* includes a program that will allow you to play any mission in *Wing Commander II*, but not *Special Operations I*. *Wing Commander II* contains twelve different series of four missions each (except Series 7, which contains only three missions). Each mission is labeled A, B, C or D. You can choose a series number from the *Wing Commander II* Mission Tree chart on the following page. Then pick any letter, A through D, to select a mission in that series.

To access this mission Selector feature, type **[P] [L] [A] [Y] [-] [W] [C] [2]** followed by a series number and then a mission letter, separated by spaces. This must be typed from the WING2 directory of your CD-ROM drive.

Here is an example of how to use this program:

**[P] [L] [A] [Y] [-] [W] [C] [2]** Spacebar **[8]** Spacebar **[D]**

If you type the above and press **[Enter]**, the following appears on your screen:

WING COMMANDER II Mission Selector  
Now loading Series 8, Mission D.

Then the program will automatically load *Wing Commander II*. Your game will begin at the option screen (the barracks room) directly before the mission you selected.

You can begin the mission immediately by clicking on the Briefing Room door, or save your game and then continue. Please keep in mind that winning *Wing Commander II* is based on your accomplishments throughout the entire game; if you use the Mission Selector to begin, you may not be able to win the campaign. If you begin with Mission A of any series, you will be able to play and win the remainder of the campaign.

If you receive the messages, "Sorry, that isn't a valid series number" or "Sorry, that isn't a valid mission number," you have given the program an incorrect series or mission number. Double check against the *WC II* chart to make sure that you're trying to load a correct series.

### The Insult Modification Program

*Special Operations I* also includes a program that will allow you to modify the insults with which your character can taunt enemy pilots. You must be in the WING2 directory of your CD-ROM drive to access the insult program. To load the Insult program, type **[I] [N] [S] [U] [L] [T]** and press **[Enter]**.

You can then choose to type new insults or restore old insults. Press **[1]** to restore the original *Wing Commander II* insults. Press **[2]** to type new insults. Press **[H]** for the help screen. After you press **[2]**, press the number of the insult you wish to change. Then type your new insults and press **[Enter]**. The program will automatically make a backup copy of your old insult text file. (The fourth insult appears irregularly, only as a response to enemy taunts.)

## Wing Commander II Mission Chart

Series/ Mission	Wingmen	Ship Type	Location
1	Shadow	Ferret	Gwynedd
2	nobody	Ferret/B.S.	Niven
3	Hobbes	Rapier	Ghorah Khar
4	Doomsday	Broadsword	Novaya Kiev
5	Spirit	Epee/Sabre	Heaven's Gate
6	Stingray	Rapier	Tesla
7	Angel	Broadsword	Enigma
8	Jazz	Sabre	K'tithrak Mang
9	nobody	Ferret/B.S.	Ghorah Khar
10	Doomsday	roadsword	Novaya Kiev
11	Stingray	Rapier	Tesla
12	Jazz	Sabre	Gwynedd

### Playing Special Operations 2

Please refer to instructions under *Special Operations 1*, except type **S002** in Step 4.

#### The Transfer Program

Please refer to the instructions under *Special Operations 1*, except type **S002** in Step 1. Note that you can also transfer characters from *Special Operations 1* to *Special Operations 2*.

#### Special Operations 1 and 2 Mission Selector Program

*Special Operations 2* includes a program that will allow you to play any mission in *Special Operations 1* or in *Special Operations 2*.

Both *Special Operations 1* and *2* contain five different series of four missions each. Each mission is labeled A, B, C or D. You can choose a series number from the mission charts below. Then pick any letter, A through D, to select a mission in that series.

To access *Special Operations 1* Mission Selector feature, type PLAY-SO1 followed by a series number and then a mission letter, separated by spaces. This must be typed from the WING2 directory of your CD-ROM drive. Here is an example of how to use this program:

**P L A Y - S O 1** **Spacebar** **4** **Spacebar** **D**

If you type the above and press **Enter**, the following appears on your screen:

SPECIAL OPERATIONS 1 Mission Selector  
Now loading Series 4, Mission D.

Then the program will automatically load *Special Operations 1*. Your game will begin at the option screen (the barracks room) directly before the mission you selected.

You can begin the mission immediately by clicking on the Briefing Room door, or save your game and then continue.

Follow the same procedure to fly any *Special Operations 2* mission. (Type PLAY-SO2, rather than PLAY-SO1, at the appropriate point.)

Please keep in mind that winning *Special Operations 1* or *2* is based on your accomplishments throughout the entire game; if you use the Mission Selector to begin, you may not be able to win the campaign. If you begin with Mission A of any series, you will be able to play and win the remainder of the campaign.

If you receive the messages, "Sorry, that isn't a valid series number," or "Sorry, that isn't a valid mission number," you have given the program an incorrect series or mission number. Double check against the charts to make sure that you're trying to load the correct series and mission.

#### The Insult Modification Program

*Special Operation 2* also includes a program that will allow you to modify the insults with which your character can taunt enemy pilots.

Please refer to the instructions under *Special Operations 1*, except type:

**I N S U L T 2** to load the Insult program.

### SPECIAL OPERATIONS 1 MISSION CHART

Series/ Mission	Wingmen	Ship Type	Location
1/A-B	Stingray	Super Ferret	Pembroke
1/C	Stingray	Sabre	Pembroke
1/D	None	Broadsword	Pembroke
2/A	Sky and Shelton	Epee	Rigel
2/B	Bear and Bodybag	Epee	Rigel
2/C	None	Sabre	Rigel
2/D	Poelma and Quinlan	Crossbow	Rigel
3/A	Paladin	Crossbow	Ghorah Khar
3/B	Clydesdale	Crossbow	Ghorah Khar
3/C	Hobbes, Rhino		
	Cafrelli and Star	Sabre	Ghorah Khar
3/D	None	Sabre	Ghorah Khar
4/A	Hobbes and Landis	Crossbow	Ghorah Khar
4/B	Hobbes	Crossbow	Ghorah Khar
4/C	None	Crossbow	Ghorah Khar
4/D	Hobbes, Bear and Buell	Sabre	Ghorah Khar
5/A	Doomsday and Zoia	Sabre	Pembroke
5/B	Hobbes	Broadsword	Rigel
5/C	Hobbes, Ladyman and Marnier		
	Hobbes	Sabre	Ghorah Khar
5/D	Hobbes	Sabre	Ghorah Khar

## SPECIAL OPERATIONS 2 MISSION CHART

### Series/

Mission ...	Wingmen .....	Ship Type
1/A .....	None .....	Rapier
1/B .....	Stingray .....	Rapier
1/C .....	None .....	Sabre
1/D .....	None .....	Sabre
2/A .....	Maniac, Crossbones and Talon .....	Broadsword
2/B .....	Stingray .....	Sabre
2/C .....	Wasp .....	Sabre

### Series/

Mission ...	Wingmen .....	Ship Type
2/D .....	None .....	Sabre
3/A .....	None .....	Broadsword
3/B-D .....	Maniac .....	Morningstar
4/A-D .....	Maniac .....	Morningstar
5/A .....	Kaiser .....	Sabre
5/B .....	Crossbones .....	Broadsword
5/C .....	Maniac .....	Morningstar
5/D .....	None .....	Morningstar

# PROBLEMS WITH THE GAME

## PRODUCT SUPPORT LIMITED WARRANTY

## PROBLEMS WITH THE GAME

If you are having a problem installing or playing the game, read on.

First, make sure you have read the installation and start-up section of your manual, and make sure you have free hard disk space, depending on the game you are installing. If you have followed the directions in the documentation, and are still having trouble installing or operating the software, here are some hints that might help solve the problem. Before attempting any of the following suggestions, please make sure you are familiar with the DOS commands being used. Consult your DOS manual for more information.

### TSRs, DEVICE DRIVERS, AND DOS SHELLS

TSR stands for Terminate and Stay Resident. A TSR is a program (such as SideKick) that automatically executes itself when you start up your computer from a hard drive. TSRs are generally installed in your AUTOEXEC.BAT file. Device Drivers and DOS shells are also loaded automatically, and are usually installed in your CONFIG.SYS file. These TSRs or Device Drivers sometimes interfere with games, or take up valuable memory the game may need, and it is generally recommended that you not run any such programs, Device Drivers, or shells when attempting to install or play a game.

### DOS BOOT DISK

If you experience trouble during installation, unusual lockups, or other problems, we suggest you try starting up your system with a DOS boot disk. Below are the steps for creating a DOS boot disk. Please have a blank disk of the appropriate size for your A: drive, and follow these steps exactly.

To create a DOS boot disk:

1. Type **C:** and press <ENTER>
2. Insert a blank disk into drive A:
3. Type **Format A:/S** and press <ENTER>

**Note:** If you are formatting low density disks on a high density drive, use the following commands in place of Step 3:

5.25" low density disk:

Type **Format A: /S /N:9 /T:40 <ENTER>**.

3.5" low density disk:

Type **Format A: /S /N:9 /T:80 <ENTER>**.

4. You are prompted to insert a blank disk into drive A:.. Do so if you haven't already, and press <ENTER>.
5. Once the disk is finished formatting, you are asked to label (name) the disk. Type in a label or press <ENTER> for no label.

6. You are now asked whether you wish to format another disk. Type **N** and press <ENTER>.

7. You now have a DOS boot disk.

You can start your computer from this disk by inserting it into the A: drive and restarting your machine. Your computer will boot up to the A: prompt (if the CMOS setting of your PC is set to boot from the A: drive first). This boot disk bypasses the AUTOEXEC.BAT and CONFIG.SYS on your hard drive and starts up your computer in as clean a DOS environment as possible. Try re-installing the software if you were having trouble doing so, or try starting the software from the drive and directory you installed to. If the software you are trying to run requires a sound driver or mouse driver, don't forget to load those before starting the game.

### Conventional, Extended, and Expanded Memory

Most IBM and 100% compatible computers come with at least 640K RAM. This first 640K RAM area is referred to as Conventional Memory. RAM memory starting at 1MB is known as Extended Memory. For example, if you have a system with 2MB RAM, you have 640K of Conventional memory, and 1MB of Extended memory available to your applications. Many games utilize Expanded Memory (EMS) in order to provide you with 256 colors with your Super-VGA card.

**Note:** The area of memory between 640 and 1024 is referred to as Upper Memory Block or UMB. If you are using MS DOS 5.0 or a memory manager such as QEMM or 386MAX, it will take advantage of this area of memory. For more information, consult the manual of your memory manager.

Extended memory can be converted to expanded memory by using an expanded memory manager (software) that complies with the LIM 4.0 standard. EMM386.EXE from MS DOS 5.0, QEMM.SYS from Quarterdeck, and 386MAX from Qualitas are some examples of expanded memory manager (EMM) software. In order to take advantage of your memory manager, refer to the next section.

### Freeing Up Additional Memory Using A DOS Boot Disk

**USERS WITH MS DOS 5.0 OR HIGHER:** Rather than change your permanent system software configuration, you can use a Boot Disk and the EMM386 memory manager software included with MS DOS 5.0 or higher to temporarily free up available memory.

**Note:** If you are NOT using the EMM386 memory manager, consult your manufacturer's manual for more information on the proper way to load the program through the CONFIG.SYS file.

Read This Section Completely Before You Begin

1. Back up your CONFIG.SYS and AUTOEXEC.BAT files before editing them so that you can return to the originals if you have any problems.

To back up the files, at the C: prompt, type "COPY C:\CONFIG.SYS C:\CONFIG.BAK" <ENTER>.

2. Copy the CONFIG.SYS and AUTOEXEC.BAT files from the root directory (C:\) on your hard drive to the root directory (A:\) on the Boot Disk that you have just created.

Example: At the C: prompt, type "COPY C:\CONFIG.SYS A:\" <ENTER>. To copy the AUTOEXEC.BAT file, type "COPY C:\AUTOEXEC.BAT A:\" <ENTER>.

3. Open the copy of the AUTOEXEC.BAT file using the EDIT program from MS DOS 5.0 or higher:

- a) Type "CD \DOS" <ENTER>.
- b) Type "EDIT A:\AUTOEXEC.BAT" <ENTER>.

4. From the Boot disk copy of the AUTOEXEC.BAT file, delete all lines, except the following:

```
@ECHO OFF
PROMPT $P$G
PATH=C:\DOS
LH <path>\MSCDEX.EXE [parameters regarding individual CD-ROM hardware setup]
LH <path>\MOUSE.COM
SET SOUND = C:\<SB16 directory>
SET BLASTER = A220 D1 I5 H5 P330 T6
```

<path> is the directory in which your drivers are located.

The MSCDEX.EXE CD-ROM driver is located in a directory that was created when your CD-ROM hardware was installed. MS DOS 6.0 users: the MSCDEX.EXE driver is also located in the C:\DOS directory.

[parameters regarding individual CD-ROM hardware setup] will vary depending on your particular CD-ROM player. This information should already be included after the MSCDEX.EXE driver in the AUTOEXEC.BAT file you have just copied. For additional information regarding the installation and setup of your CD-ROM player, please consult your CD-ROM documentation.

The mouse driver is normally located in one of the following directories: C:\MOUSE, C:\WINDOW, C:\, OR C:\DOS. If you do not have a line that loads your mouse driver, you must load a mouse driver before running these programs which require a mouse: Hong Kong Mahjong Pro, Syndicate Plus, Space Hulk, Populous II, Chuck Yeager Air Combat, Savage Empire, Shadowcaster, Strike Commander, Ultima VII, Ultima VIII, Ultima Underworld, Wing Commander Academy, Wing Commander II.  
Example: LH C:\MOUSE\MOUSE.COM.

Note: Your mouse line may be different if you are NOT using the MOUSE.COM mouse driver. Do not change this line if it looks different. Drivers that have a .SYS extension will be loaded through the CONFIG.SYS file and you should leave that line the same when you are editing the CONFIG.SYS file. If you have other questions about loading your particular mouse driver, consult your mouse documentation or DOS manuals.

5. Save the edited AUTOEXEC.BAT file and open the Boot Disk copy of the CONFIG.SYS files from within EDIT.

To save, press Alt-F to bring down the File menu and press the S key. To open, press Alt-F, press the "O" key and then type "A:\CONFIG.SYS" <ENTER>.

6. While still in EDIT, delete all lines from the Boot Disk copy of the CONFIG.SYS file EXCEPT the following:

If you are using DOS 5.0:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE 1024 RAM
DOS=HIGH
DOS=UMB
FILES=40
BUFFERS=20
DEVICEHIGH=C:\<CD-ROM driver>
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

If you are using DOS 6.0 with doublespace, your CONFIG.SYS should look like this:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE 1024 RAM
DOS=HIGH
DOS=UMB
FILES=40
BUFFERS=40
DEVICEHIGH=C:\<CD-ROM driver>
DEVICEHIGH=C:\DOS\DBLSPACE.SYS /MOVE
SHELL=C:\DOS\COMMAND.COM C:\DOS /P
```

<CD-ROM driver> will vary depending on your particular CD-ROM drive. If your CONFIG.SYS file does not contain the last line of the above example, please consult your CD-ROM documentation.

If you do not have these lines, enter them now. If the HIMEM.SYS and memory manager file are not located in the DOS directory, replace DOS with the name of that directory in the first lines of the above example. If you have not moved these files, then they will be located in the DOS directory and your file should look identical to the above.

7. Save the edited CONFIG.SYS file and Exit the EDIT program. To save, press Alt-F and then press the "S" key. To Exit the Edit program, press Alt-F and then press the "X" key.
8. You now have a boot disk. You can start your computer from this disk by inserting it into the A: drive and restarting your machine. Your computer will boot up to the A: prompt (if the computer's CMOS setting calls for the A: drive to be booted first). Type "C:" <Enter> to return to the hard drive.

For more information on editing your CONFIG.SYS and AUTOEXEC.BAT files, or on changing your startup configuration, consult your DOS manual.

## PRODUCT SUPPORT

**For this game:** *Syndicate Plus*

Electronic Arts Technical Support  
 (415) 572-ARTS (572-2787)  
 Monday thru Friday  
 8:30 a.m. to 4:30 p.m. Pacific Time

Have the following information ready when you call: product name, type of computer you own, any additional system information (like type and make of monitor, video card, sound card, mouse, etc.), DOS version number or type of operating system, description of problem you are having, and error message displayed when the problem occurred (if any).

If your question is not urgent, please write Electronic Arts Technical Support, P.O. Box 7578, San Mateo, California 94403-7578. Please include the above information in your letter.

**For these games:** *Strike Commander*  
*Ultima VIII: Pagan*  
*Wing Commander II*

ORIGIN Product Support  
 (512) 335-0440  
 (512) 331-8559 Fax (24hours)  
 Monday - Thursday 9:00 to noon and 1:00 to 5:00  
 Friday 9:00 to noon and 1:00 to 4:30, Central Time

ORIGIN Bulletin Board Service  
 (512) 331-4446  
 8-bit, no parity, 1 stop bit  
 Seven day/week, 24 hours

Have the following information ready, if possible: DOS version number, free RAM (from the last line of the CHKDSK info), mouse and mouse driver type, graphics card, machine type, sound board, content of your CONFIG.SYS AND AUTOEXEC. BAT files, whether you are using Windows, Desqview or a DOS shell.

## ORIGIN Online Services and Bulletin Boards

Many online services provide access to ORIGIN company news, product updates, release dates, technical support and game hints. In addition, ORIGIN has established its own electronic bulletin board as a customer service.

**America Online.** You can e-mail customer Support at ORIGIN CS or Marketing at OSI. To reach out Customer Support board in the Industry Connection, press 'K for "Go to Keyword." Then type ORIGINCS in the Keyword window. In addition to reading messages, you can download files from the "Origin Software Library." For membership information and a free starter kit, you can call America Online toll-free at 1-800-827-6364.

**CompuServe.** To reach our Customer Support board in the Game Publishers Forum, type GO GAMAPUB at any "!" prompt. Then select Origin Section (12). In addition to reading messages, you can download files from the "Library (Files)" menu. Our Customer Service department e-mail address is 76004,2612 (or you can post a message in the Origin Section). For membership information and a free starter kit, call CompuServe toll-free at 1-800-848-8199 and ask Representative #361 for your free introductory membership and \$15 usage credit (offer may vary).

**GEnie.** You can e-mail Customer Support at ORIGIN. To reach our Customer Support board in the Games RoundTable, Scorpio RT, type M805; at any "?" prompts. Then select Origin Systems at Category 16. In addition to reading the messages, you can download files from the "Games RoundTable Libraries." For membership information you can call GEnie toll-free at 1-800-638-9636.

**ORIGIN BBS.** The ORIGIN BBS has modem support of: 300/1200/2400/9600/14,400 bps with N,8,1. It is operational 24 hours a day, 7 days a week. Full support is provided. No membership is required and the only cost is any long distance charges that you may incur.

Internet Address. You can e-mail ORIGIN Customer Support at ORIGIN@AOL.COM or 76004.2612@COMPUSERVE.COM.

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4. The manufacturer warrants that the product is free from defects in material and workmanship at the time of shipment.

5. This warranty does not cover damage caused by fire, flood, theft, or other causes beyond the control of the manufacturer. It also does not cover damage caused by misuse, neglect, or improper installation. The manufacturer's liability is limited to the repair or replacement of the product, at its discretion, and does not include consequential or incidental damages. Some states do not allow the exclusion or limitation of consequential damages in a contract for the sale of goods. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

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