

SEGA

ELECTRONIC ARTS®

P R E S E N T S

WING COMMANDER®

The 3-D Space Combat Simulator



ORIGIN®

PRODUCED BY ORIGIN SYSTEMS, INC.
AN ELECTRONIC ARTS COMPANY

LICENSED BY SEGA ENTERPRISES, LTD.
FOR PLAY ON THE SEGA CD™ SYSTEM



Rated by V.R.C.™

MA-13

Parental Discretion
Advised

Mature Audiences

WARNING:

READ BEFORE USING YOUR SEGA VIDEO GAME SYSTEM.

A very small percentage of individuals may experience epileptic seizures when exposed to certain light patterns or flashing lights. Exposure to certain patterns or backgrounds on a television screen or while playing video games may induce an epileptic seizure in these individuals. Certain conditions may induce previously undetected epileptic symptoms even in persons who have no history of prior seizures or epilepsy. If you, or anyone in your family, has an epileptic condition, consult your physician prior to playing. If you experience any of the following symptoms while playing a video game — dizziness, altered vision, eye or muscle twitches, loss of awareness, disorientation, any involuntary movement or convulsions — IMMEDIATELY discontinue use and consult your physician before resuming play.

WARNING TO OWNERS OF PROJECTION TELEVISIONS:

STILL PICTURES OR IMAGES MAY CAUSE PERMANENT-PICTURE TUBE DAMAGE OR MARK THE PHOSPHOR OF THE CRT. AVOID REPEATED OR EXTENDED USE OF VIDEO GAMES ON LARGE-SCREEN PROJECTION TELEVISIONS.

HANDLING YOUR SEGA CD DISC:

- The Sega CD Disc is intended for use exclusively with the Sega CD™ System.
- Do not bend it, crush it, or submerge it in liquids.
- Do not leave it in direct sunlight or near a radiator or other source of heat.
- Be sure to take an occasional recess during extended play, to rest yourself and the Sega CD Disc.
- KEEP YOUR SEGA CD DISC CLEAN. Always hold by the edges, and keep in its case when not in use. Clean with a lint-free, soft dry cloth — wiping in straight lines from center to edge. Never use solvents or abrasive cleaners.



This official seal is your assurance that this product meets the highest quality standards of SEGA™. Buy games and accessories with this seal to be sure that they are compatible with the SEGA CD™ SYSTEM.

WING COMMANDER

1

PLAYING WING COMMANDER

STARTING THE GAME	2
LOUNGE	4
SIMULATOR	5
BARRACKS	5
MISSION HANGAR	6
COCKPIT INSTRUMENTS	6
IN-FLIGHT SYSTEMS	12
CAMERA VIEWS	15
LANDING	15
GENERAL TIPS	15
YOUR FIRST MISSION	16
THE CAMPAIGN	20
VEGA SECTOR MAP	20
CLAWMARKS MAGAZINE	21
CREDITS	64

THE 3-D SPACE SIMULATOR

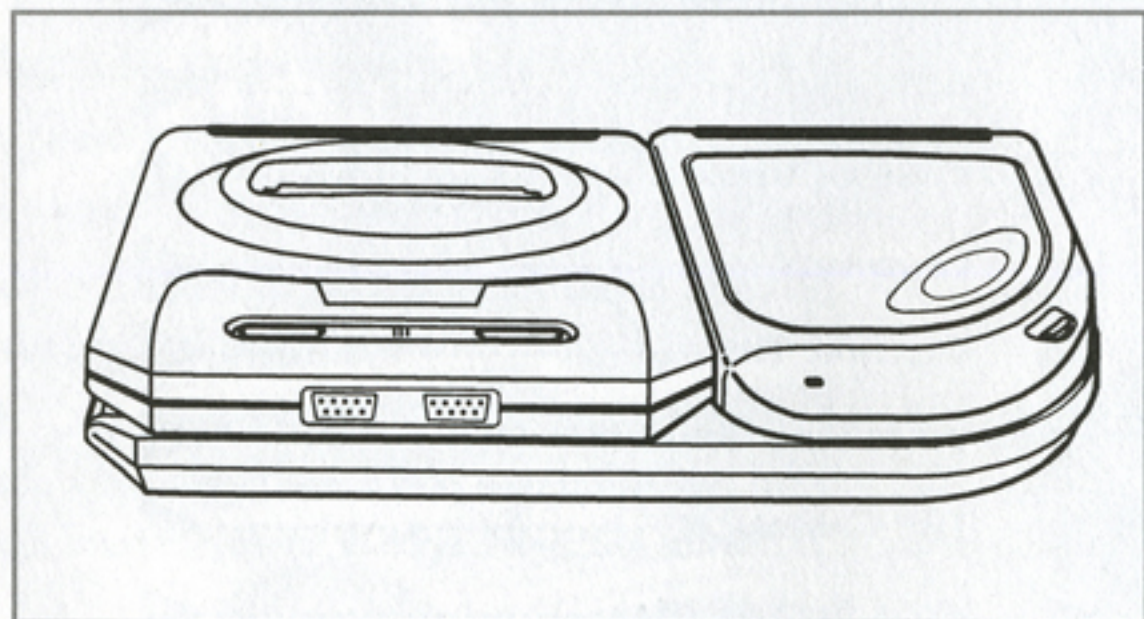
The Confederation could use a hero right now. If you've got the stamina and guts to survive, you can save humanity and help topple the evil Kilrathi Empire. Since 2634, this race of vicious, catlike aliens has been attacking and conquering colonies and planets aligned with the Terran Confederation.

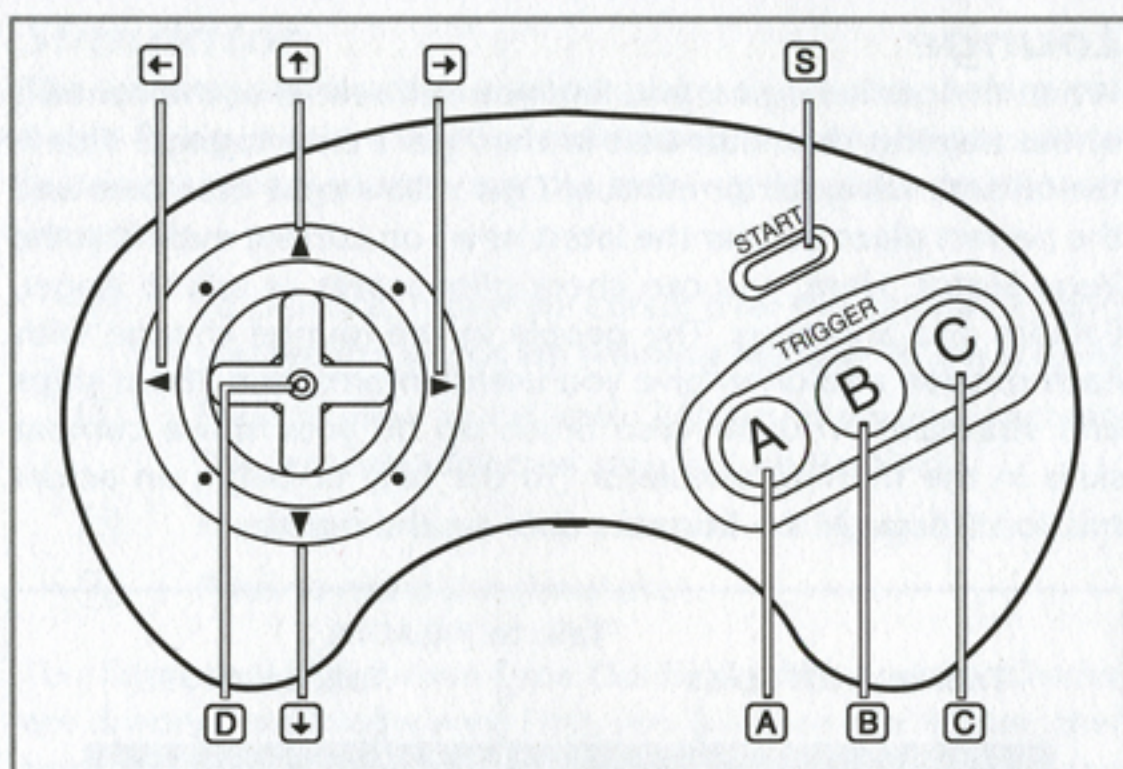
Now, it is the year 2654, and you've just graduated from the TCS naval academy as one of the top pilots in your class. It's been your dream as long as you can remember to make it as a combat pilot in the deadliest war in history. Having chosen the Tiger's Claw as your homeship, you've almost completed the final leg of your journey. As the Tiger's Claw rolls into view, your heart fills with pride and pounds with anticipation...

STARTING THE GAME

To begin *Wing Commander*, open the disc drive and place the disc in the Sega CD system. Then, make sure the AC adapters are plugged in for both the Sega Genesis and Sega CD systems. Finally, turn on power to the Sega Genesis system (if necessary, refer to the hardware documentation).

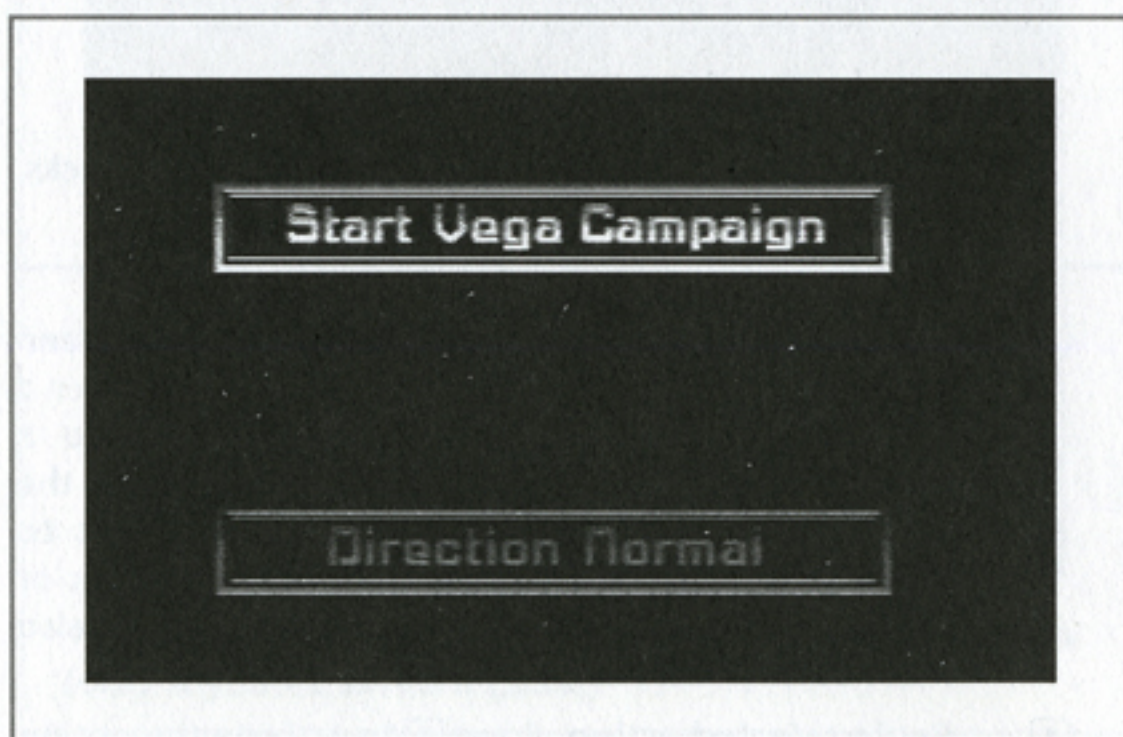
The game will automatically load and proceed through an introductory animation. To bypass the entire introduction and other animations, press **[B]** on the control pad. The following diagram shows the standard 3-button Sega control pad. (You may use other compatible control pads, but all functions may not work with *Wing Commander*):





- [D] Use the D-pad to position the cursor (on the carrier) and steer your ship (during flight).
- [B] ↑ Whenever you see more than one symbol, press all keys simultaneously. For example, in this case you would press [B] and ↑ (on the D-pad) at the same time.
- [A] x 2 Press the indicated key twice.

When the introduction is over, a menu will appear:

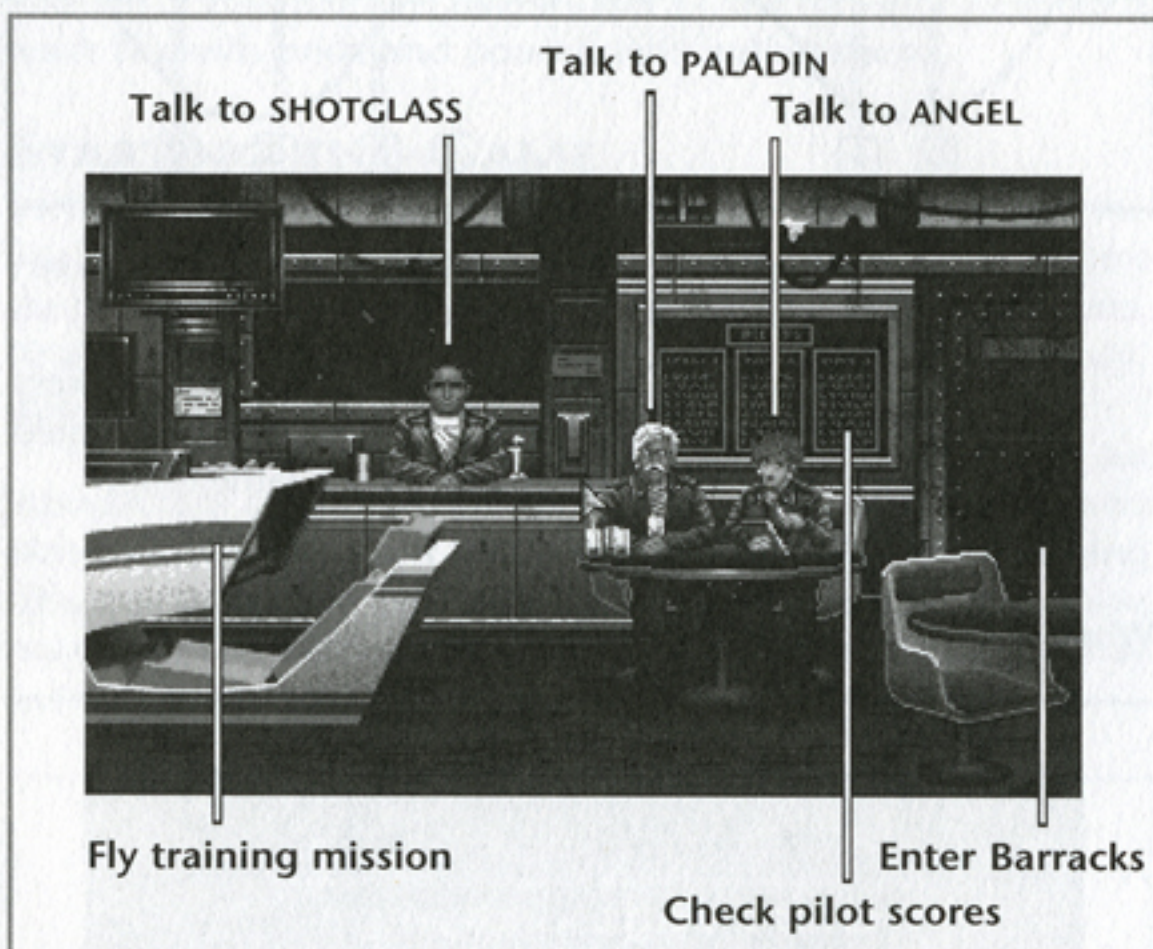


The **Direction Normal** option may be changed to **Direction Reverse**. **Direction Normal** simulates a joystick control, meaning that pressing ↓ will make your ship turn upward. **Direction Reverse** is just the opposite; pressing ↓ will make your ship turn downward. To change this, use [D] to select the **Direction** option and then press [A] to toggle between **Normal** and **Reverse**.

After you save games, you will also see **Continue Campaign**.

Lounge

When the game begins, you find yourself seated at the controls of the training simulator unit in the *Tiger's Claw* lounge. This is the favorite hangout for off-duty *Tiger's Claw* crew members and the perfect place to hear the latest news on current events in the Vega Sector. Here, you can check pilot scores or talk to Angel, Paladin and Shotglass. The people in the lounge change with each mission and often give you useful information about ships and strategies. You can also brush up on your space combat skills in the training simulator (to the left) or begin an actual mission (through the barracks door on the right).



- [D] Choose an action.** Press **[D]** to position the green arrow on the training simulator to the left or over a character or door. The arrow then changes to a crosshair, and text appears at the bottom of the screen: **Talk to ANGEL**, **Talk to PALADIN**, **Talk to SHOTGLASS**, **Fly training mission**, **Enter Barracks** or **Check pilot scores**. (Later in the game, you can also meet other pilots here.)
- [A] Begin selected action.** Press **[A]** to activate the option you've chosen with the cursor. You can stay in the lounge as long as you want, but you must enter the barracks to fly a real mission.

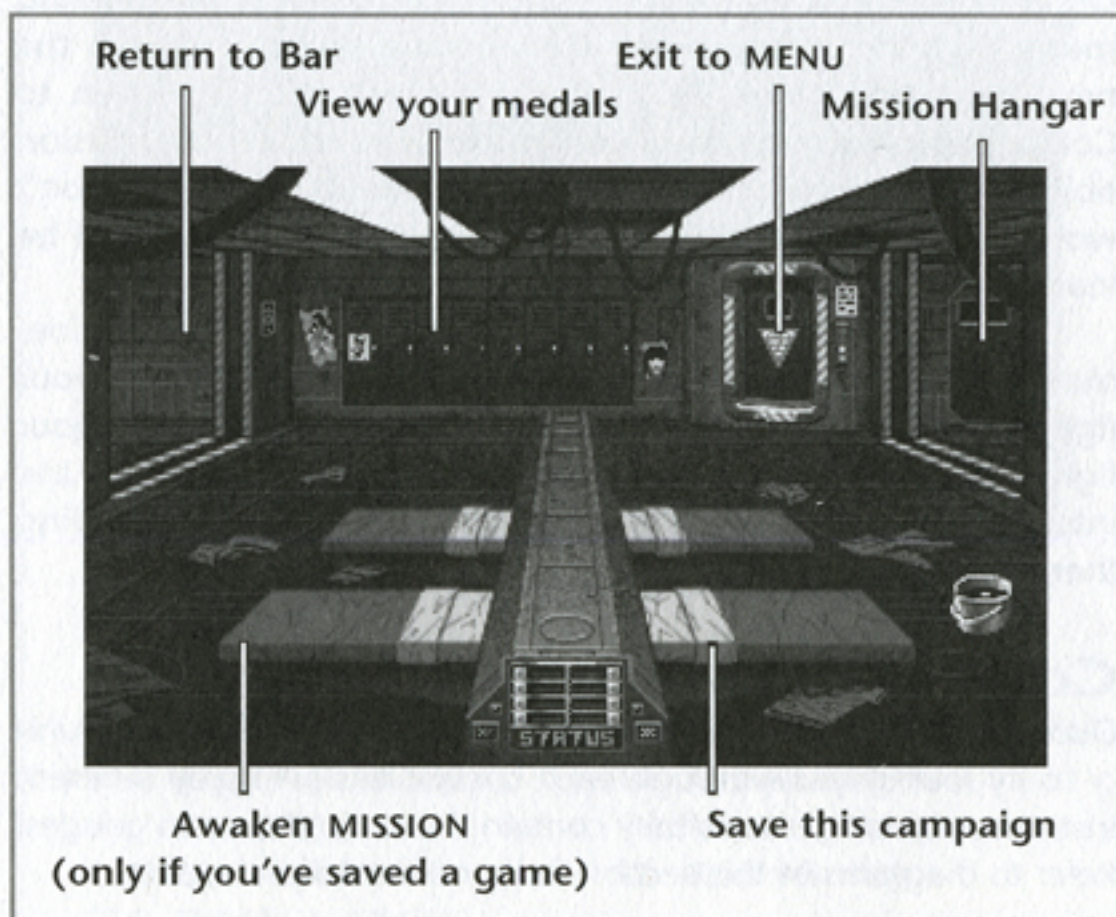
Simulator

The training simulator is a good place to practice before you begin flying missions. If your main trouble is shooting accurately, for example, you can use the training simulator to improve your skills.

- [D] To practice, move the cursor over the simulator (until you see the words **Fly Training Mission** on the screen).
- [A] Press to view four Kilrathi fighters in your viewscreen. The currently selected ship will be flashing.
- [D] Press to choose a ship you wish to fly against.
- [A] Press to enter the simulation.

Ten fighters of the chosen type (*Salthi*, *Dralthi*, *Krant* or *Gratha*) are divided into four waves. First, you will face one fighter, then two, then three, then four. If you complete the fourth wave, you proceed on to the next fighter. Your score appears in the upper left portion of the screen, and the time remaining displays in the upper right corner.

Barracks



- [D], [A] Press [D] to position the cursor over the barracks door, then [A]. In the barracks, you can choose **Save this campaign**, **Awaken MISSION**, **View your medals**, **Return to the Bar**, **Exit to MENU** or **Mission Hangar**. Again, to select an option, use [D] to position the cursor over that option, then press [A].

SAVING A GAME. Move the cursor to the *head* of a bunk (using [D]). You should see the words **Save this campaign**. Then, press [A]. A sleeping pilot will appear in the bunk, indicating that the game has been saved. You can save up to four different games.

LOADING A GAME. Move the cursor to the *foot* of a bunk (using [D]). The words **Awaken MISSION** will appear. The mission number also appears, describing the last mission flown in the saved game. Press [A]. Check to make sure this is the game you wish to load, then press [A] again. If you *don't* want to play this game, press [→], then [A] to remove the words **Awaken MISSION** from the screen.

VIEWING MEDALS. Move the cursor over the lockers against the back wall (using [D]). You will see the words **View Your Medals**. Press [A] to view your uniform with your current rank, ribbons and medals. Press [A] again to return to the barracks.

FLYING A MISSION. Move the cursor over the door to the far right. When you see the words **Mission Hangar**, press [A].

Mission Hangar

On your way to the Mission Hangar, you stop in the briefing room. If you've already seen the briefing, you can skip to the next animation (press [B]). If you haven't seen it, listen to Colonel Halcyon as he gives you instructions about your mission objectives, navigation route and wingman assignment. Don't worry about writing down the navigation details; they will be loaded onto your ship's computer automatically.

After you are dismissed from the briefing, you enter a cinematic launch sequence that takes you to the hangar, into your fighter and through the launch process. Once you are in your fighter's cockpit, you are actually flying the mission. All the information screens may be intimidating at first, but reading them will soon be second nature.

COCKPIT INSTRUMENTS

During the *Wing Commander* campaign, you have the opportunity to fly four ships. Although each cockpit has a slightly different instrument arrangement, they contain the same dials and gauges. Refer to diagrams in this section for specific cockpit layouts.

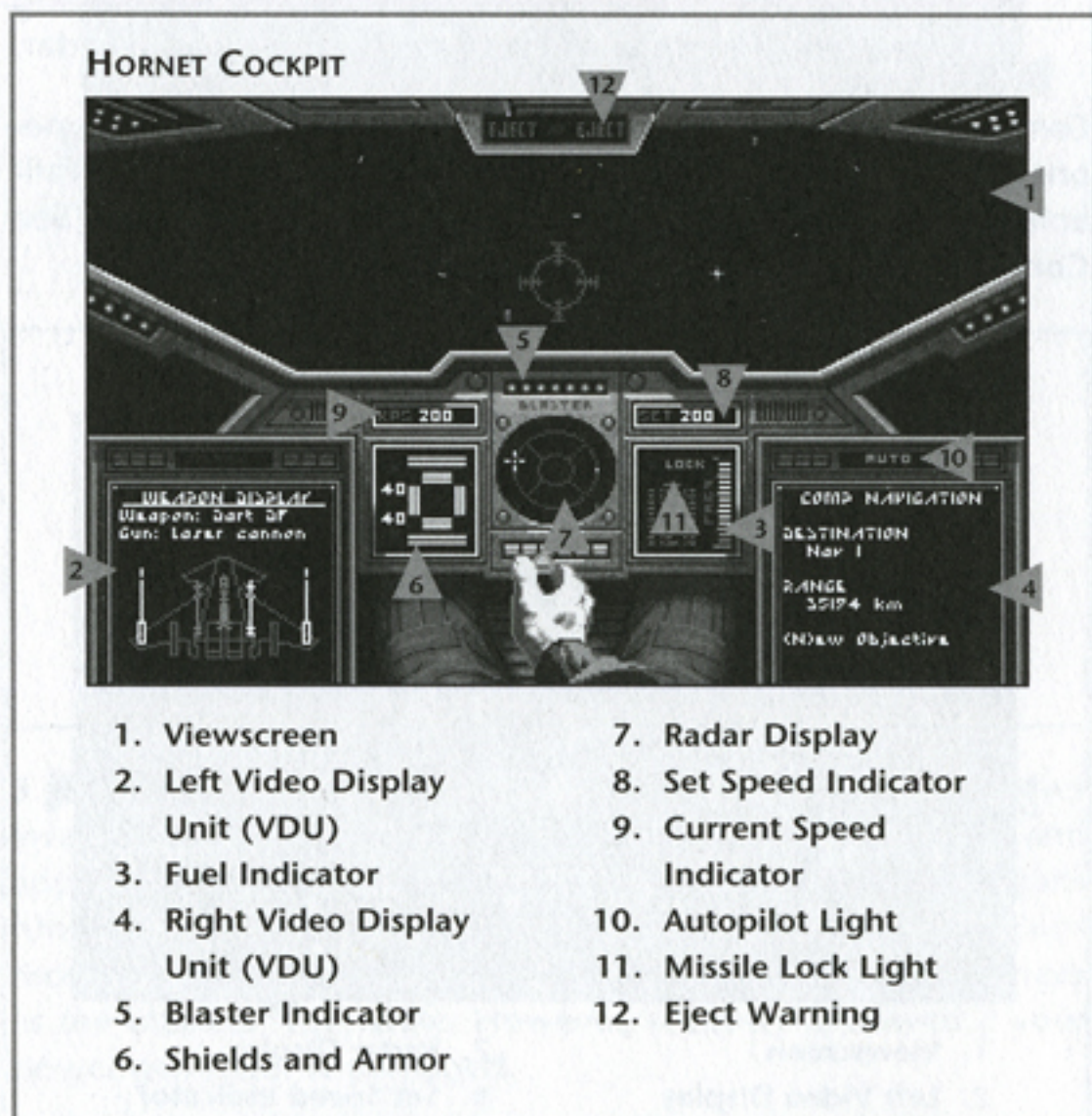
1. Viewscreen. The Viewscreen and Heads-up Display provide a clear view of space directly ahead of you. When other ships enter your viewing window, your computer automatically targets the closest ship. Red brackets appear around an enemy ship, while a friendly ship gets blue brackets. Enemy or friendly ships that are talking to you have flashing yellow brackets. The green gunsight in the middle of the screen shows where your ship's guns are aimed.

2. Left Video Display Unit (VDU). The Left VDU shows a profile of your fighter and the selected gun and missile. Depending on the ship, you have different guns and weapons available. The Left VDU has three functions. Press **[S/A]** to cycle through the screens and **[C]** to cycle through specific options for each screen.

Active weapon mode. The top line of green text is bright and shows the active weapon. ("Weapons" include all single-shot munitions that are self-powered.)

Active gun mode. The second line of green text turns bright, indicating the active gun. ("Guns" include all multi-fire blasters that draw energy from your ship.)

Damage mode. The words "No Internal Damage" appear if your ship has not been damaged. However, if any ship components have been damaged, text will appear that tells you how many systems are damaged and to what extent. You'll also see a profile of your ship with the damaged part highlighted in red.



3. Fuel Indicator. This vertical yellow bar shows how much fuel you have and shortens as you use up fuel. Afterburners boost speed dramatically but burn fuel ferociously, so use them sparingly. If you run out of fuel, you can only coast on reserves at a speed of 50 kps.

4. Right Video Display Unit (VDU). The Right VDU has three modes (plus incoming message mode). It shows range and targeting system information, allows you to communicate with other ships, and shows profiles of people who are talking to you. Press **[S][C]** to cycle through the options.

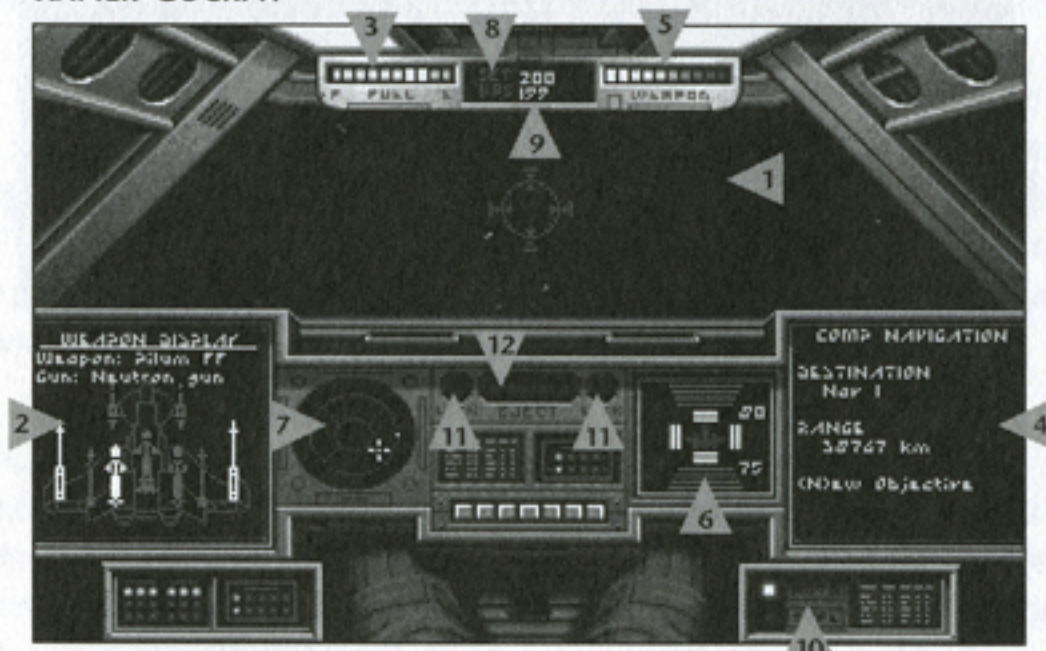
Navigational mode. When no targets are present, range information appears on the screen. You can see your currently selected Nav point and the distance to your destination. (See **Navigational Map** on page 12 for more information.)

Autotargeting mode. When another ship appears in your viewscreen, your computer automatically targets it and places a profile of the ship on the screen. You know a ship is targeted when brackets appear around it. After you bring up the autotargeting screen:

- [C]** Cycle through targets in your viewscreen.
- [S][B]** Lock/unlock the selected target. You can only lock onto one ship at a time. A locked target has flashing brackets and appears as a flashing dot on your radar.

Communications mode. If you want to send a message to someone, select the person and then the message. The list of available receivers and messages will vary for each mission. (See **Communications** on page 13 for more information.)

RAPIER COCKPIT



- | | |
|-----------------------------------|----------------------------|
| 1. Viewscreen | 7. Radar Display |
| 2. Left Video Display Unit (VDU) | 8. Set Speed Indicator |
| 3. Fuel Indicator | 9. Current Speed Indicator |
| 4. Right Video Display Unit (VDU) | 10. Autopilot Light |
| 5. Blaster Indicator | 11. Missile Lock Light |
| 6. Shields and Armor | 12. Eject Warning |

After you bring up the communication screen:

- Ⓒ Cycle through the receivers, then press **[S][B]** to select the underlined receiver.
- Ⓒ Cycle through the messages, then press **[S][B]** to send the underlined message.

Incoming message mode. When someone talks to you, that person's profile appears in the Right VDU. After the message is sent, the face disappears and you return to the previous mode.

RAPTOR COCKPIT



- | | |
|-----------------------------------|----------------------------|
| 1. Viewscreen | 7. Radar Display |
| 2. Left Video Display Unit (VDU) | 8. Set Speed Indicator |
| 3. Fuel Indicator | 9. Current Speed Indicator |
| 4. Right Video Display Unit (VDU) | 10. Autopilot Light |
| 5. Blaster Indicator | 11. Missile Lock Light |
| 6. Shields and Armor | 12. Eject Warning |

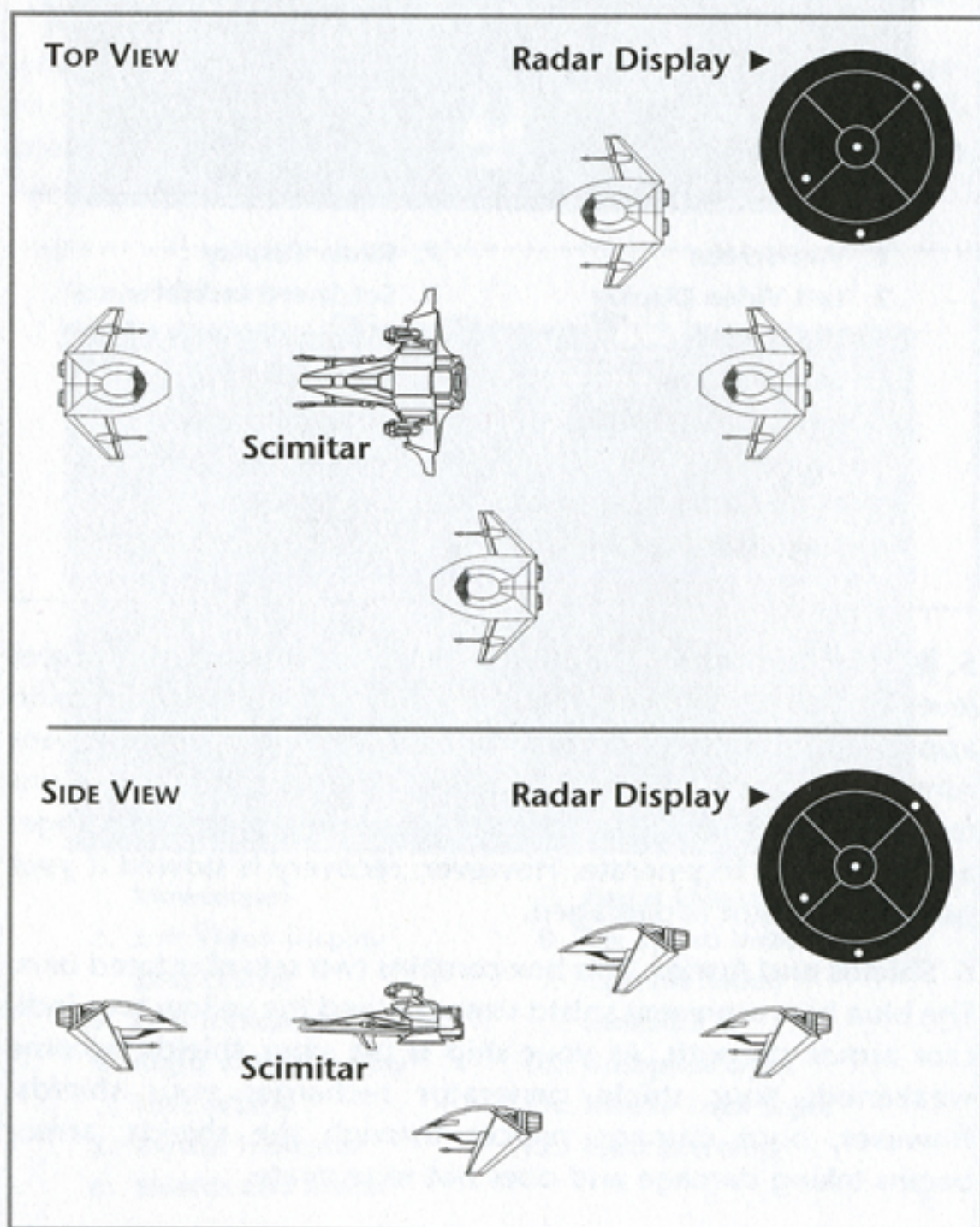
5. Blaster Indicator. The blaster indicator displays the power level of your lasers, mass drivers, and/or neutron guns, and appears as a dotted orange bar. Frequent firing of your guns runs down your blaster power and shortens the bar. Guns recover power gradually, and the blaster bar will grow longer as the blasters regenerate. However, recovery is slowed if your power generator is damaged.

6. Shields and Armor. This box contains two sets of colored bars. The blue bars represent shield strength, and the yellow bars indicate armor strength. As your ship is hit, your shields become weakened. Your shield generator recharges your shields. However, once damage pierces through the shields, armor begins taking damage and does not regenerate.

7. Radar Display. This circular radar screen appears in every cockpit. It shows how far you have to rotate to bring a target into your front viewscreen, but it does *not* show you how far away the target is. The radar display is divided into six sections, and each ship detected appears as a colored dot. The outer ring shows the position of ships *behind* you; the center circle shows ships *ahead* of you; and the four middle quadrants show ship positions *alongside, above or below* you. Dots appear as follows:

Red dot.....Enemy ship
 Blue dot.....Friendly ship
 Blinking dotLocked target
 Large Yellow dotEnemy missile
 Large Orange dot.....Enemy transport, tanker or capital ship
 Large White dotFriendly transport, tanker or capital ship

Tactical Tip: To bring a locked target back into view, find the flashing dot on the radar. Try to center the dot in the innermost circle of your radar display. This will bring the target directly in front of you and into your viewscreen.



SCIMITAR COCKPIT



- | | |
|-----------------------------------|----------------------------|
| 1. Viewscreen | 7. Radar Display |
| 2. Left Video Display Unit (VDU) | 8. Set Speed Indicator |
| 3. Fuel Indicator | 9. Current Speed Indicator |
| 4. Right Video Display Unit (VDU) | 10. Autopilot Light |
| 5. Blaster Indicator | 11. Missile Lock Light |
| 6. Shields and Armor | 12. Eject Warning |

8/9. Speed Indicators. The current speed indicator is a numerical gauge that shows the *current speed* of your ship. It changes when you speed up (**[B↑]**) or slow down (**[B↓]**). It also changes when you apply your afterburners.

Another speed indicator displays your *set speed*, or the speed that your ship returns to after you finish using your afterburners or turning. The current speed fluctuates constantly as you maneuver and use your afterburners, but the ship always returns to the set speed whenever you let up on the afterburners.

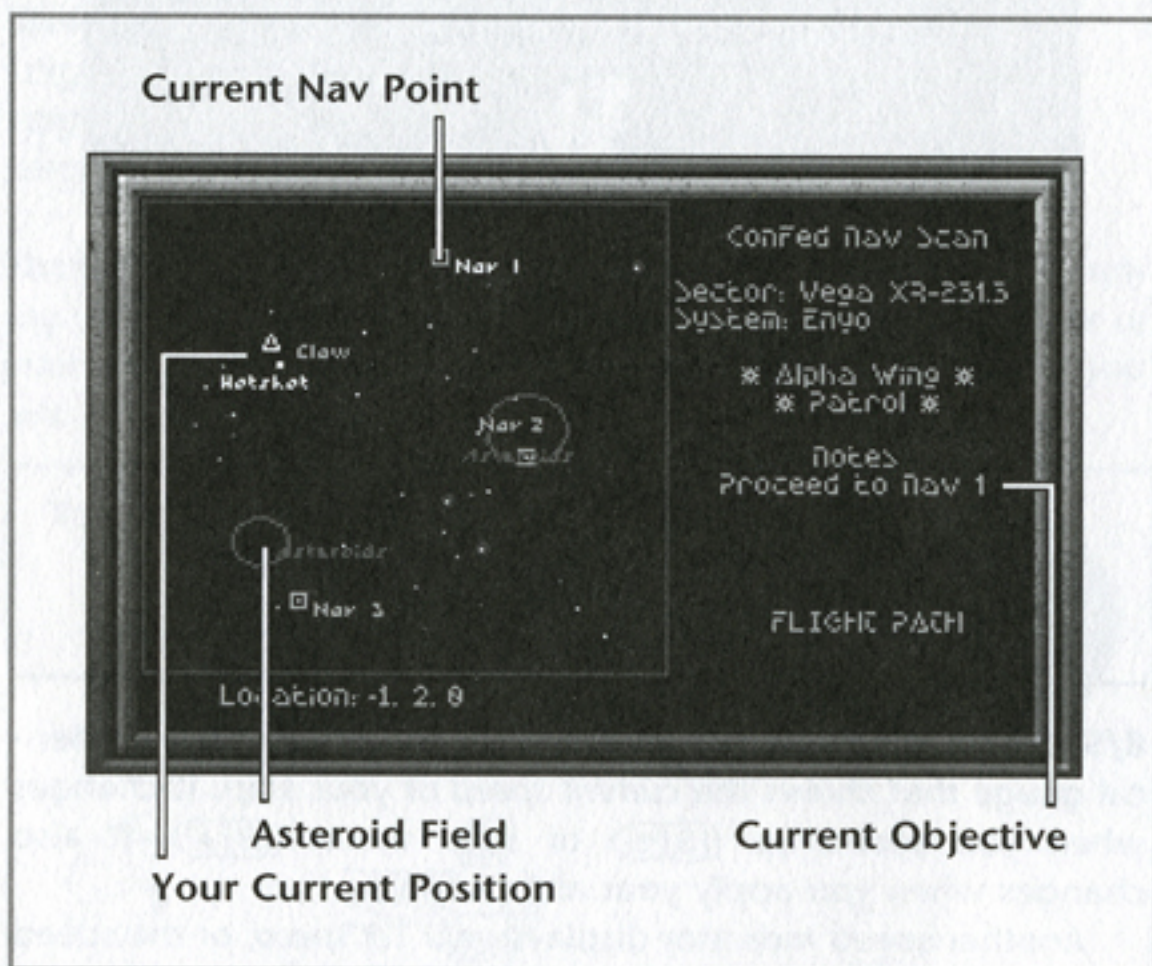
10. Autopilot Light. The autopilot light (AUTO) is located on the instrument panel, although its position varies between ship types. It remains dim if asteroids or enemies are present or if you are already near your destination, but glows orange when it is safe to autopilot.

11. Missile Lock Light. The missile lock light (LOCK) is on the instrument panel. If an enemy has a missile lock on your ship, this light flashes bright orange.

12. Eject Warning. The eject warning flashes red if your ship sustains heavy damage. The location of the warning light differs between cockpits. When the warning lights up, you must decide how serious the situation is and whether to eject or not. If you eject (**[S][B][C]**), the Confederation will suffer from the loss of a starfighter, but you will automatically live to fight another day.

IN-FLIGHT SYSTEMS

Navigational Map. When you begin a mission, your navigational points and mission objectives are automatically loaded into your computer. The white cross you see on your radar and in your viewscreen represents the direction of your next navigational point. When you pop up the Nav map, it shows the currently selected Nav point in yellow letters and your position as a flashing white square. Notes on the right side of the screen identify the objective for each Nav point.



- [S][B] Bring up your navigational map and pause play.
- [C] Cycle through Nav points.
- [A] or [S] Resume play. You'll still see a white navigation cross, but it now identifies the new Nav point you selected.

Note: You must have the nav screen active in the Right VDU in order to display the white navigational cross on your screen!

Autopiloting System. You can autopilot to the next Nav point by pressing [B][C], as long as no enemies or hazards are in the area and as long as you are not already near your destination. If conditions will not permit autopiloting, you will see yellow text in the Right VDU that says "Hazard Near", "Enemy Near" or "Already Near."

Missile Lock. Depending on what ship you're flying, you have access to certain missiles. Dumbfire missiles are "point-and-shoot" weapons and do not need a missile lock. Friend-or-Foe (FF) missiles automatically fix on the nearest enemy when you're within firing range. (They may attack friendly ships that are damaged and unable to transmit Confederation signals.)

However, Heat-Seeking (HS) and Image-Recognition (IR) missiles require you to lock onto a heat source. This means you have to approach an enemy ship from the *rear* so that your missiles can lock onto its hot exhaust system. When a locked target comes into view, a red gunsight appears on the screen and drifts toward the flashing brackets. Keep the target in view. When the red sight overlaps the red brackets and begins to flash, you'll hear a missile lock tone. This means you can fire your missile.

- [S][A] Cycle through Left VDU modes until you reach your weapon screen.
- [C] Select the appropriate missile.
- [S][C] Cycle through Right VDU modes until you reach auto-targeting.
- [C] Cycle through targets.
- [S][B] Lock the selected target.

Listen for the missile tone and wait for the red sight to flash. Once the red sight overlaps the gunsight and begins flashing, you can fire your HS or IR missile.

- [A][B] Launch the missile. (Note: If the target evades a heat-seeking missile, it will lock onto the nearest heat source — possibly your own ship or another friendly ship!)

Communications. This screen lets you send messages to friendly and enemy ships. You can send various orders to your wingman, request landing aboard your carrier or taunt the enemy. (You can only talk to an enemy if he is currently targeted.)

- [S][C] Cycle through Right VDU modes until you reach the communication screen. You'll see a list of ships able to receive radio messages.
- [C] Cycle through the list of receivers. (If only one receiver is available, the computer will skip this step and display the list of messages instead.)
- [S][B] Accept the underlined receiver. You'll see a list of messages (they vary, depending on what ships are in range).
- [C] Cycle through the messages.
- [S][B] Send the underlined message and return to the cockpit.

Here's a complete list of messages:

Break and Attack. Tells your wingman to break formation and engage enemy ships within 12,000 meters.

Keep Formation. Denies a wingman's request to break and attack on his own initiative.

Formate/Form on My Wing. Tells your wingman to return to formation and follow your ship.

Return to Base. Instructs your wingman to return to the *Tiger's Claw* immediately. If the command is obeyed, your wingman will not be available for the duration of the mission.

Help Me! Commands your wingman to engage the enemy attacking you.

Aim That. Tells your wingman to engage the enemy you have currently targeted. This is the only way your wingman will attack an enemy capital ship.

Keep Radio Silence. Prevents your wingman from talking to you until a "Broadcast Freely" is sent.

Broadcast Freely. Allows your wingman to talk to you and breaks the "Keep Radio Silence" command.

Never Mind. Allows you to exit this mode without sending a message.

Die furball! (etc.). Taunts the enemy. (When you have an enemy ship targeted, you can send various taunts and insults. Taunting can sometimes draw enemy ships to you, luring them away from a ship you're protecting or saving a wingman whose ship has been damaged.)



Wingman Portrait 
(Displays when someone sends you a message.)

CAMERA VIEWS

When you are in flight, you can view the action from several perspectives. You can also turn on a missile camera that follows a launched missile to its target.

[S][↑] or **[S][↓]** Cycle through external and cockpit views.

[S][←] or **[S][→]** Cycle through port, rear, starboard and cockpit views.

[S][A][B] Toggle missile camera on/off. (Note that you only need to turn this on once, no matter how many missiles you fire. However, the missile camera is only active while a missile is in flight.)

[C] or **[S]** Return to cockpit view.

LANDING

Once you complete your mission, head back to *Tiger's Claw* using the autopilot function (**[B][C]**). When you are ready to land, target the *Claw* (see **Autotargeting**). Use the Communications screen (see **Communications**) to signal the ship's traffic control officer and request permission to land. You *cannot* land if enemy vessels are near the *Tiger's Claw* or if you haven't fulfilled at least one of the following requirements:

- a) traveled to any Nav point
- b) achieved at least one mission objective
- c) killed at least one enemy ship
- d) taken heavy damage

After you receive permission to land, fly around the *Tiger's Claw* until you see a light-gray landing hangar. Steer toward it and let the automatic landing system take over. Upon landing, you can see how much damage your ship has sustained. Then, you go to a debriefing, where Colonel Halcyon evaluates your performance and notable achievements.

GENERAL TIPS

Here are a few general tips to aid you in dogfighting:

- You can't autopilot out of an area until the enemy is at least 10,000 clicks away from you.
- Use your radio to order your wingman to attack a target on which you're locked. This will allow you to select another target to attack.
- If you've given your wingman an important task, you can toggle between enemy targets and taunt them. This will usually draw them away from your wingman.

- [S][B] Open your full-screen navigational map.
(This pauses play.)

When you open this screen, it shows the currently selected Nav point in yellow letters and your position as a flashing white dot. Notes on the right side of the screen identify the objective for each Nav point.

- [C] Cycle between navigational points. (Make sure you return to "Nav 1" before performing the next step.)

- [A] or [S] Resume play and return to cockpit view.

- Autopilot toward the first Nav point.

- [B][C] Engage autopilot.

On the way to Nav 1. During your journey to the first Nav point, Spirit warns you of enemy ships ahead. You will see three Kilrathi *Dralthi*. Here are a few tips to aid you in your first fight:

- Order Spirit to break and attack.

- [S][C] Cycle through Right VDU modes until you reach the communication screen. A list of ships will appear. (Note: If an enemy ship isn't targeted, Spirit will be the only available receiver. The computer will then display a list of messages instead.)

- [C] Press until *Spirit* is underlined in the Right VDU (this selects Spirit's ship).

- [S][B] Press to display a list of messages.

- [C] Press until *Break and Attack* is underlined.

- [S][B] Send the message.

- Bring one of the *Dralthi* into view and use your Dumbfire missiles. Try to tail the *Dralthi* and use your Dumbfire missiles at close range. Two missile hits or seven direct laser hits should be enough to down one of these ships.

- [D] Maneuver until you have an enemy ship in your viewscreen.

- [S][A] Cycle through Left VDU modes until you reach your weapons screen. (If you haven't chosen a different type of missile, you will not need to access the weapons screen. The Dumbfire is already selected.)

- [C] Cycle through the available missiles until *DF* displays.

- [A][B] Launch the missile (you have two of this type) when the enemy is lined up with your green gunsight.

- After you finish off these enemies, finish autopiloting to the first waypoint.

- [B][C] Autopilot to the first Nav point.

Nav 1. Here, you'll find yourself flying straight into the asteroid

- [S][C] Cycle through Right VDU modes until you reach auto-targeting.
- [C] Cycle through the targets in your viewscreen. (Notice that your automatic targeting system places red brackets around one of the enemy ships in view.)
- [S][B] Apply missile lock to the target. The red brackets and the red dot on your radar will begin flashing.
- When the locked target comes into view, a red gunsight appears on the screen and begins to drift toward the flashing brackets. As the red sight moves over the red brackets and begins to flash, you'll hear a missile lock tone. This means you can fire your missile.
- [B] Launch the missile.
- After destroying these targets, autopilot to Nav 3
- [B][C] Engage autopilot.

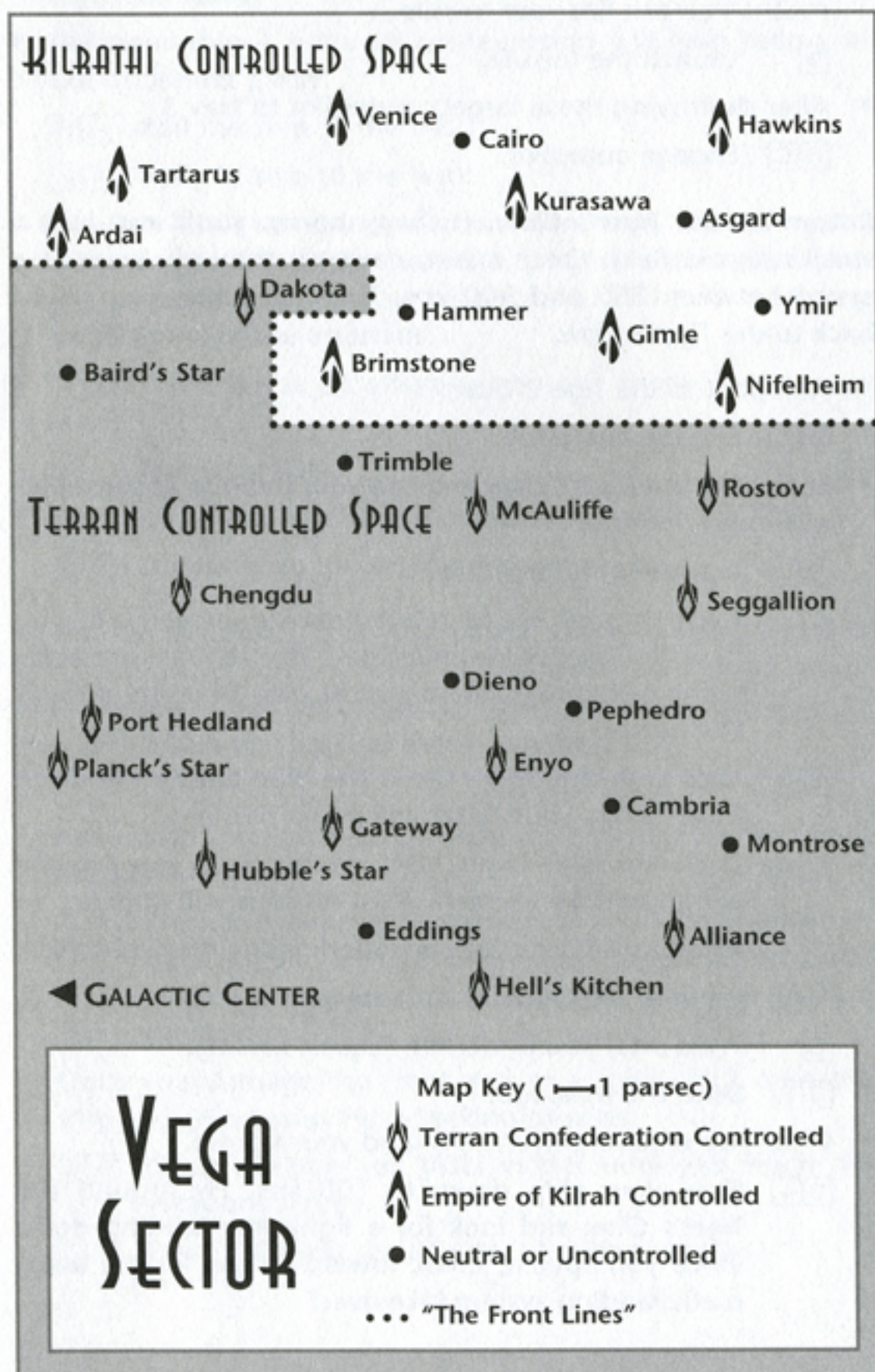
Return to the *Tiger's Claw*. Halfway home, you'll run into a small asteroid field. Once again, navigate through them at a speed between 250 and 300 kps. Then, continue your flight back to the *Tiger's Claw*.

- Autopilot to the *Tiger's Claw*.
- [B][C] Engage autopilot.
- Lock onto the *Tiger's Claw* and use your radio to request permission to land.
- [S][C] Activate autotargeting.
- [C] Cycle through the targets in your viewscreen until you have the *Tiger's Claw* bracketed. Notice that your automatic targeting system places *blue* brackets around the carrier.
- [S][B] Lock onto the *Tiger's Claw*. The blue brackets and the blue dot on your radar will begin flashing.
- [S][C] Cycle through Right VDU modes until you see the communication screen. A list of ships will appear.
- [C] Press until *Tiger's Claw* is underlined in the Right VDU.
- [S][B] Press to display a list of messages.
- [C] Press until you underline *Request landing*.
- [S][B] Send the message.
- Once you receive permission, land your fighter.
- [B][↓] Slow your ship down to 100 kps. Fly around the *Tiger's Claw* and look for a light-gray landing dock. Once you spot it, coast toward it and let the automatic landing system take over!

THE CAMPAIGN

Each campaign has its own plot and conclusion. Each series of missions you fly — and whether or not you're victorious — affects the Confederation's chances for ultimate victory in Vega Sector.

After several missions, you'll be presented with Campaign Progress Screens and story updates that describe what's happening in the war. Do badly, and the forces of the Terran Confederation take a beating. Do well, and Terran forces prevail. Do *very* well, and you may be responsible for Confederation victory in Vega Sector.



CLAWMARKS



ONBOARD MAGAZINE

TCS TIGER'S CLAW

VOLUME 1 No. 4

2654.110

TABLE OF CONTENTS

NOW HEAR THIS:

WORDS FROM THE EDITOR	23
COMM RELAY	24
TAGGART'S TACTICS.....	28
JOAN'S FIGHTING SPACECRAFT (VEGA SECTOR SUPPLEMENT)	39
TERRAN AND KILRATHI WEAPONS.....	48
COMRADE CLIPS.....	50
KNOW YOUR ENEMY	58
NEW ON THE FLIGHT DECK.....	63
UP AND COMING	63

PUBLISHER:

Col. Christopher Roberts

EDITOR-IN-CHIEF:

Maj. Warren Spector

EDITORS:

*Cpt. Aaron Allston
2nd Lt. Tuesday Frase*

PRODUCTION MNGR:

Cpt. Mike Harrison

ClawMarks is the onboard magazine of the TCS Tiger's Claw. It is produced monthly (Terran calendar) in hard copy and E-File editions. E-File Editions are free to all crewmen aboard the Tiger's Claw: hard copy subscriptions available by special arrangement.

The E-File edition of this issue is available from the ship's library as >>Periodicals>>Armed Forces>>ClawMarks>>4/2654.

©1990-1994 ORIGIN Systems, Inc. Wing Commander, Origin and We Create Worlds are registered trademark of ORIGIN Systems, Inc. Electronic Arts is a registered trademark of Electronic Arts.

NOW HEAR THIS:

WORDS FROM THE EDITOR

Space is a near-vacuum, as all good Academy graduates and most two-year-old children know. And, if you ask, "When I drop a pebble into space like I do into a pool of water, will it cause ripples?" you'll get some strange looks from everyone.

Nevertheless, someone dropped a pebble in space not too long ago, and we're still encountering the ripples.

Last month, two very good pilots (Lieutenant Larry Dibbles and Captain R.A. Skinner) went out on a routine mission and didn't come back. Here in Vega Sector, it happens all the time. You sit for a while; you look at your pal's empty bunk; you think about where he's gone and hope you won't soon follow his lead. Then, it's back to work.

Yes, it happens all the time. But it's been happening a *lot* lately — not just routine casualties, but casualties caused by sloppiness, over-eagerness and a variety of other fatal diseases. The ship's statistical resources show that avoidable casualties are up 5% over this time last year ... and are up 9% over expected optimum performance. So, we're seeing ripples.

Here's one ripple: Two pilots are gone and won't be back.

Another: This issue, we've asked one of the ship's most experienced pilots, Major James Taggart (a.k.a. Paladin on the flight-line), to talk about the Basics: Basic tactics, goals and maneuvers.

Even if you're sure you know the Basics, read what he has to say. Remember, Paladin is still going strong after twenty-plus years as a combat jockey. And, even if he doesn't wear his Ace of Aces ribbon, it's still there.

Another: You won't be seeing the *Hornet's Nest* from this point on. The strange and silly adventures of the TCS *Hornet's Nest* — a carrier that bore an unfortunate and unmistakable resemblance to the *Tiger's Claw* — were the product of an artist and pilot who went by the moniker of Tooner. We like to remember Tooner as having a deft wit and a diseased mind, but all we can do *is* remember him. He was also known as Lieutenant Larry Dibbles. R.I.P.

Also in this issue, we have the latest Vega Sector update from *Joan's Fighting Spacecraft*, including the most up-to-date data on the Kilrathi ships we're facing; an excerpt from Borger's new survey of Terran and Kilrathi weapons systems; and our usual assortment of news, facts, trivia and profiles. Enjoy them ... but think about them.



COMM RELAY

NEWS FROM EARTH (SOL III)

(New York, North American States, Terran News Services) — On 2654.080, representatives of the Committee for Interaction with Alien Intelligences announced contact with a new alien race.

CIAI spokesman Iola Jonson issued the following statement: "The CIAI regularly launches unmanned probes to uncharted jump-spheres; these probes contain our most sophisticated translation and interpretation equipment. Eight days ago, Probe Number H227 reappeared in a Terran jump-point carrying data and artifacts from a species we are currently referring to as the Double Helix.

"From the information we have so far been able to interpret from H227's records, the Double Helix are a sentient race possessing space travel, and we are not ruling out the possibility they possess FTL drive technology. Physically, they appear to be carbon-based anthropoids who communicate through scents and pheromones. Their name is derived from the double-helix shape of their spacecraft."

World Science Federation officials believe this to be the most significant contact with an alien species since the discovery of the Kilrathi and hope that contact will remain friendly.

TCSO SHOW SCHEDULED

(*Tiger's Claw*, TCAFCN) — There's good news for servicemen aboard the TCS *Tiger's Claw* — The TCSO (Terran Confederation Service Organization) will send an entertainment unit to the much-decorated carrier as early as next month.

The TCSO troupe includes dancers (normal and zero-g), singers, comedians and the Confederation's best cyberlink illusionists.

Vidstar Saranya Carr, exotic heroine of the popular *Luna Jones*, *JumpScout* serial, is accompanying the TCSO troupe to the *Tiger's Claw*. Carr, 25, stated, "You bet your life I'm happy to be working with the TCSO. I mean, you see Luna Jones blowing Kilrathi fuzzies out of space every week, but Saranya Carr doesn't know a nav computer from a dialogue transceiver. Since I can't help our fighting forces directly, I'm proud to be able to entertain and build morale. Besides," she adds, "I'm not completely unselfish. Perhaps I can persuade *someone* to give me a ride in one of those new *Rapiers* ..."

ROOKIE TURNED ACE

This past week, the *Tiger's Claw* was fortunate enough to add another ace to its Confederation ranks. Second Lieutenant Todd "Maniac" Marshall knocked down his fifth Kilrathi in an engagement near Kurasawa System, where he and his wing-leader, Captain Jeannette "Angel" Devereaux, were escorting a cargo ship.

While passing through an asteroid belt, the two pilots encountered a wave of five *Dralthi* fighters. Devereaux downed the first with a volley of mass driver cannon, while Maniac broke formation and nailed the second enemy fighter with a heat-seeking missile. The Kilrathi, amazingly enough, began to retreat when Maniac radioed that he was chasing them down. He managed to destroy one more ship, reaching ace status three missions after graduating from the Academy.

"No way I was going to pass up *that* opportunity," exclaimed Maniac upon his return. "There they were, sitting ducks just waiting to face the best pilot on the *Tiger's Claw*. I knew ol' Devereaux could take care of the *Bonnie Heather*, so I hit my afterburners and took care of *them*. I guess they got what they deserved!" added Marshall.

Devereaux refused to comment on Marshall's success, calling his chase "a ridiculous misuse of Confederation firepower."

ALL ABOARD, AUSTINITES

Don't be alarmed if you notice a couple of uniformed strangers amidst the *Tiger's Claw* crew. For the next two weeks, we're entertaining two important visitors from the TCS *Austin*, our sister carrier assigned to a first-response patrol in Enigma sector. Major Zach "Jazz" Colson and Captain Etienne "Doomsday" Montclair arrived late last week to meet with our Tactical Plotting group and discuss air defense procedures.

Rumor has it that the Confederation is laying out a defense plan for an anticipated attack on McAuliffe, a teaching and research colony housed in an orbital space station and a ground-based research facility. The vast libraries on McAuliffe are under top security, and Terran Intelligence suspects that the Kilrathi will try to gain access to its Terran Knowledge Bank (TKB) within the next few weeks.

Although details of the upcoming objectives remain classified, I took the liberty of interviewing the two men between their meetings with Colonel Halcyon. Here's a short profile of each:

POISED AND READY



NAME: ZACH COLSON
CALLSIGN: JAZZ
RANK: MAJOR
AGE: 32
ORIGIN: KANSAS CITY,
NORTH AMERICA

Jazz describes himself as a self-taught jazz pianist and elite pilot who has "uniquely balanced his creative and analytical minds." He's a distinguished Academy alumnus, having graduated at the top of his class nine years ago. Since then, he's claimed no less than 28 Kilrathi kills.

"I know I'm talented and well trained, just like most of our Confederation pilots." Colson says as he mindfully strokes one of the ribbons decorating his uniform. "But it's poise that determines who survives in combat every time. You can't just launch, find the furballs and rush right in ... you have to visualize your attack and follow through without a hitch.

"That's where my training gives me an edge. Back on the *Austin*, I've implemented a visualography machine — it uses visualization techniques and holographic goggles to test and improve your combat reflex skills. I wouldn't say it's the train sim of the future, but it's made a heck of a difference in my flying.

"I put the visualography machine to the test a couple of weeks ago as a mission warmup tool — I'd been practicing for about an hour when the defense siren sounded. Five minutes later, I was loose and blasting furballs with ease. My wingman had a hard time keeping up with me. You better believe this contraption's got my vote!"

DOOM AND GLOOM



NAME: ETIENNE MONTCLAIR

CALLSIGN: DOOMSDAY

RANK: CAPTAIN

AGE: 34

ORIGIN: HAWK BAY,
NEW ZEALAND

Captain Montclair calls himself a "devil's advocate" because he always tries to view things from the worst-case scenario. "That way," he says, "I'm never disappointed. And if I'm wrong about something, it turns out better than I expected." Always anticipating disastrous results, he accurately bears the callsign *Doomsday*.

"I grew up with pride and prejudice — literally speaking, not *literaturely*," explains Montclair. "My training in the history of Maori warriors taught me not to expect much from the world and the people around me. Instead, I've learned to take pride in my flying and trust my own instincts.

"The reason I fly with Jazz isn't that big of a secret. Admiral Tolwyn feels he's doing me some kind of favor by pairing me with such an upbeat showoff," sighs Doomsday. "I like Jazz — he's a good pilot and all — but I'd still rather fly patrol missions in a safe sector somewhere. I'm never going to see forty if these Kilrathi keep jumping our nav points."

According to Doomsday, this war's going to drag on forever. Of course, he says the Confederation will pull through, but not before thousands of Terrans sacrifice their lives and colonies to the Kilrathi. Despite his brand of pessimism, Montclair has racked up an impressive count of 187 successful missions and 21 kills.

CAPTAIN ETIENNE MONTCLAIR, *DOOMSDAY*

TAGGART'S TACTICS

HOW TO ACCOMPLISH YOUR OBJECTIVE AND (BEST OF ALL) COME BACK HOME

Here's a simple question from a simple test. Every fighter-jock answered hundreds of these at the Academy.

Hypothetical Situation: You and your wingleader, flying *Scimitars*, are on a strike mission against a *Ralari*-class destroyer. En route, you see two damaged *Jalthi*-class heavy fighters, the survivors of an engagement that must have just ended.

Both craft are in dire straits: one is tumbling helplessly, all stabilization hardware destroyed. The other is limping away, its thrusters blasting intermittently, its maneuverability obviously impaired. One target lies a few seconds to port of your flight path, the other a few seconds to starboard. Your wingleader doesn't go after either of these easy marks — he presses on directly toward the strike objective. What do you do?

- A. Hold formation, ignoring these targets.
- B. Roll out for a couple of seconds to destroy the completely helpless fighter.
- C. Roll out for a very brief engagement with the seriously damaged fighter.
- D. Go after both damaged enemies.
- E. None of the above.

If you answered (E), do the corps a favor — resign your commission and stay away from civilian piloting jobs. Indecision kills faster and more reliably than making the wrong decision.

If you answered (B), (C) or (D), everyone who's ever put on an acceleration suit knows how you feel. But, you know it's not "by the book." As boring as that may sound, you've left your wingleader unguarded for a few critical seconds.

If you answered (A), you deserve congratulations ... but perhaps not many. It's easy to pick the right, by-the-book answer when filling out a test in the placid atmosphere of your own quarters or a testing hall. It's quite another in the cockpit during an actual mission. In the field, the temptation to mark up a couple of safe kills — especially if you're only one or two short of your Ace classification — will often overcome your Academy-drilled impulses.

Of course, this is only a hypothetical situation. Unfortunately, it was real for Captain R.A. "Mule-Skinner" Skinner and Lieutenant Larry "Tooner" Dibbles.

THE TRUTH FROM THE BLACK BOX

A month ago, Captain Skinner and Lieutenant Dibbles went out as part of a strike team assigned to destroy the *Ralari*-class destroyer *Rathtak*. They launched from the *Tiger's Claw* at 2300 hours. At 2321 hours, the carrier bridge caught static-laced transmissions from Skinner to Dibbles, ordering him back into position. These were the last messages from either man. Ever.

Follow-up crews were eventually able to recover the remains of Skinner's flight recorder and reconstruct what happened from its record of radar images.

The real scenario unfolded exactly like our hypothetical situation above. Mule-Skinner ordered his partner back into position. Either presuming that Tooner would immediately turn back, or just unwilling to delay his mission because of a flaky wingman, Skinner pressed on toward the objective. Tooner did not immediately turn back, probably planning one last strafing run before rejoining his wingleader. Unfortunately, the painful truth was that neither *Jalathi*-class fighter was damaged.

When Lieutenant Dibbles came within a reasonable assault distance of his target, it abruptly rolled out in controlled flight and engaged him. Simultaneously, the "dead" Kilrathi fighter powered up, and moved into position behind Captain Skinner.

To Lieutenant Dibbles' credit, he was able to hold off his opponent for a while. But while he was dogfighting with one Kilrathi, the other was destroying his wingleader. Skinner's flight recorder blacks out with the radar showing Dibbles still in desperate combat with his opponent.

Even without the benefit of Dibbles' unrecovered flight recorder, it doesn't take much creativity to reconstruct what happened next. The second *Jalathi* moved in to engage Dibbles. Between the two of them, they easily shot Dibbles down.

"Sometimes you've got to throw the book away." I hear this form pilots both young and old ... and sometimes, maybe, it's true. But in this case? No. Dibbles didn't have to throw the book away. He wanted a kill, another bright spot on his personal record. To obtain it, he endangered his wingleader and mission objective. What were the results of this decision? We lost two pilots with several years' worth of combat experience.

Colonel Halcyon had to write the appropriate letters of condolence. The remaining elements of the strike mission damaged, but did not finish off, the destroyer objective. While it is not conclusive that the presence of two additional *Scimitars* would have resulted in *Rathtak's* destruction, it was at least a possibility. Last of all, this error cost the *Tiger's Claw* a great morale-booster: Dibbles was the writer and artist behind *Hornet's Nest*, the wonderful comic strip that has appeared in every issue of *Claw Marks* for the last two years.

The "book" you're trained to go by was written for a reason. It's a good book, one worth following. It's worth reviewing now.

BASIC TACTICS: A REVIEW

Let's go over the basic, Academy-standard tactics you're supposed to follow in the field.

Individual Objectives. Here's the simplest thing in the world to remember — if you're willing. The wingleader's objective is to accomplish the mission. The wingman's objective is to protect the wingleader at all costs. If he is eliminated, it becomes the wingman's duty to accomplish the mission objectives.

There's not much room for variation. Occasionally, a seasoned wingleader may decide to trade roles with his trainee wingman, or he might send his wingman to protect a buddy who's being swarmed while he goes after another enemy plane. But in all cases, nobody is solo. If the two trade roles, we still have a wingleader and a wingman. If the two split up to help friends under siege, the two are acting as temporary wingmen to temporary wingleaders. The buddy system is still intact. We live by that system. Without it, we die.

Mission Objectives. Objectives vary with types of missions. On the *Tiger's Claw*, 98% of our flight missions fall into five categories:

Defend. You are assigned to guard a stationary position — a capital ship, base or jump point. Orbit that position at a distance of 2,500 meters. Do *not* break to engage incoming enemies until they move within 5,000 meters of the position you're protecting. That's 5,000 meters from their target — not from you.

Escort. You are assigned to guard larger ships on rendezvous assignments. Fly parallel to the ship you're escorting at a maximum distance of 2,500 meters and keep your eyes open. In the face of oncoming hostiles, don't break and engage too soon. The best time to break formation is when the hostiles have approached within 5,000 meters of the ship you're protecting.

Intercept. You are assigned to seek out and engage enemy vessels in a particular area — an anticipated Kilrathi jump point, or a halfway point between oncoming enemies and the ship you are protecting. No particular tactics are called for, except the standard tactics for keeping yourself and your wingmate alive.

Patrol. You are assigned to a flight pattern through unsecured territory. If an enemy force is detected, you can either engage it or head back into base. This is where a lot of novice (and some experienced) pilots make lethal errors. Nobody likes to back down. No one wants to talk to your widow or widower, either. Consider the situation carefully before engaging the enemy.

Strike. You are assigned to destroy an enemy target, usually a capital ship. Obviously, the idea is to get in quick, launch missiles, blow the target up and escape quickly. Unfortunately, the enemy usually decides to defend any target worth destroying. This is where the wingleader/wingman relationship becomes

especially critical. The wingleader must get his missiles placed, and the wingman must keep him or her alive to do so, even at the cost of his personal objectives. He or she must take out oncoming fighters and only drop missiles if a clear opportunity arises that doesn't endanger the wingleader.

FIRST CONTACT

When you first encounter a flight of enemy fighters, they will almost always be flying in formation. Once initial contact has been made, they will break formation into pairs at roughly four-second intervals. Generally, you should likewise break formation to match and engage them. All of this leads to the question of what to do once you've engaged the Kilrathi. The book has something to say about that, as we discuss immediately below.

STANDARD MANEUVERS

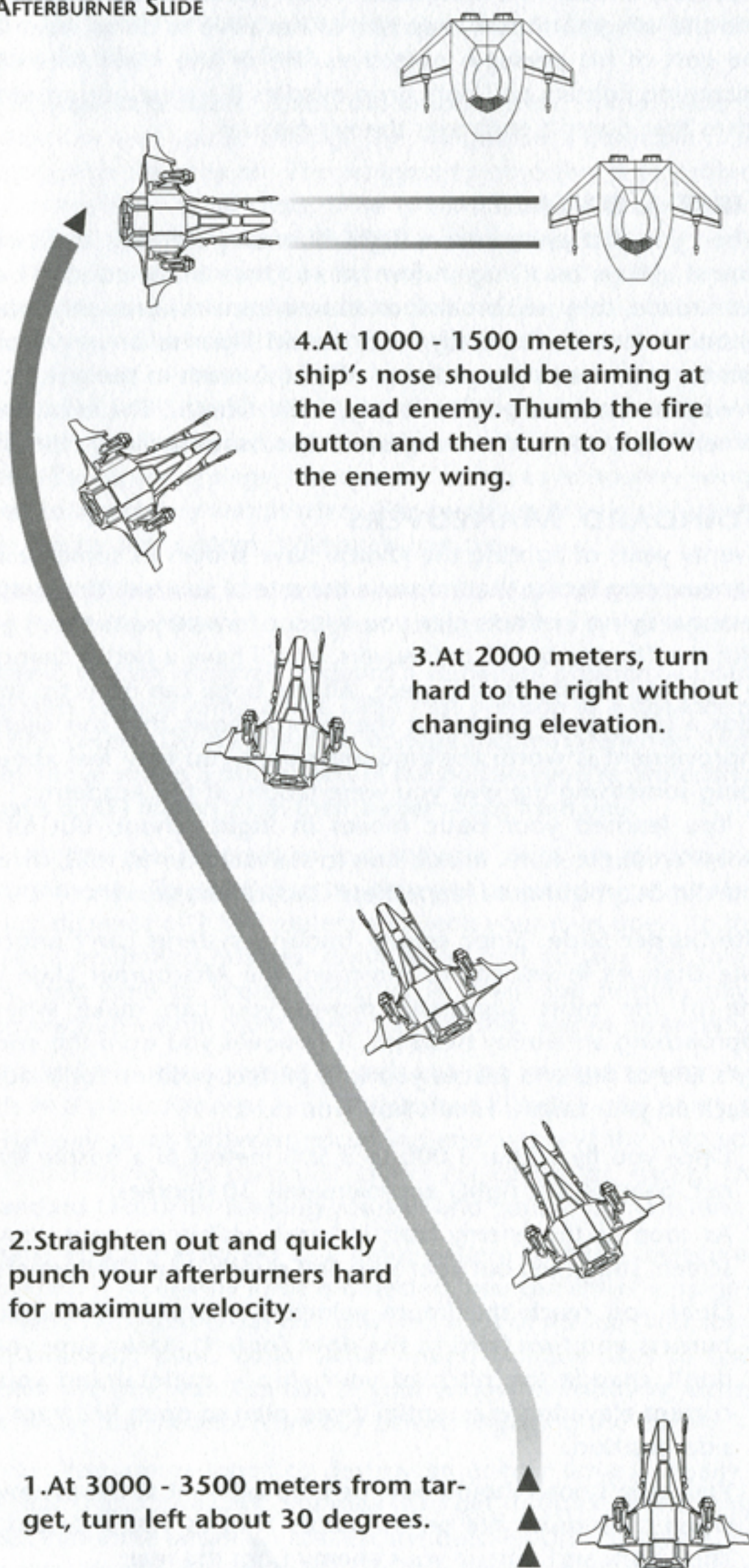
Twenty years of fighting the Kilrathi have shown us some basic maneuvering tactics that improve the rate of survival. Until your personal flying instincts give you a tactic for every situation, go with the "by the book" maneuvers. You'll have a better chance of making it home in one piece. All the book can do is tip the odds a bit in your favor, but the record shows that this slight improvement is worth the embarrassment you may feel about doing something the way you were taught at the Academy.

You learned your basic moves in flight school, but let's review a couple here. In addition to standard turns, rolls, dives and climbs, you should learn these tactical maneuvers:

Afterburner Slide. Since enemy tracking systems can't anticipate changes in velocity or direction, the Afterburner Slide is one of the most successful moves you can make when approaching an enemy head-on. It removes you from the enemy's line of fire and places you in a perfect position for a side attack on your target. Here's how you do it:

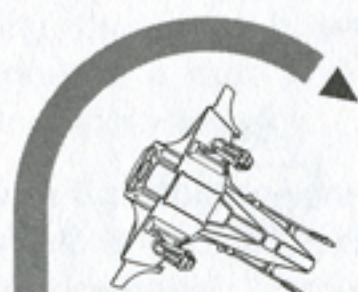
- Once you fly within 3,000 to 3,500 meters of a hostile target, bear left (or right) approximately 30 degrees.
- As soon as the enemy craft is barely visible on your view-screen, straighten out your ship and punch your afterburners.
- Once you reach maximum velocity, let up on the afterburners and turn hard to the right (or left). Make sure you don't change the pitch of your ship — maintaining your current elevation is essential if you plan to open fire from a side position.
- Your ship's nose should now be pointed right at the enemy. Open continuous fire on the target ship as you slide past. Then, turn and pursue your enemy from the rear.

AFTERBURNER SLIDE

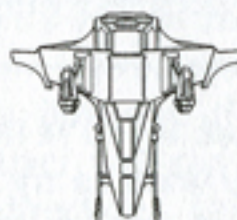


Burnout. Sometimes your opponent can maneuver just as well as you can and stay on your tail. In this case, you might try an alternate attack to evade your enemy — the Burnout. You can use this attack to put distance between your ship and your opponent's:

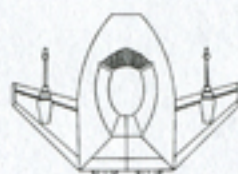
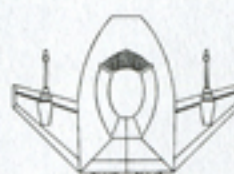
- Hit the afterburners full force until you reach maximum speed and begin to pull away from your opponent.
- Now, let up on the afterburners and perform a tight 180-degree turn. (Don't change your throttle setting). This maneuver will position you for a head-on shot at the enemy.
- It won't take long for your enemy to reach you once you reverse direction. When the target moves within your cone of fire, open up with your cannon or lasers.

BURNOUT

2. Let up on the afterburners and turn tightly 180 degrees. (Don't change your throttle setting.) This will set you up for a head-on shot at the enemy.

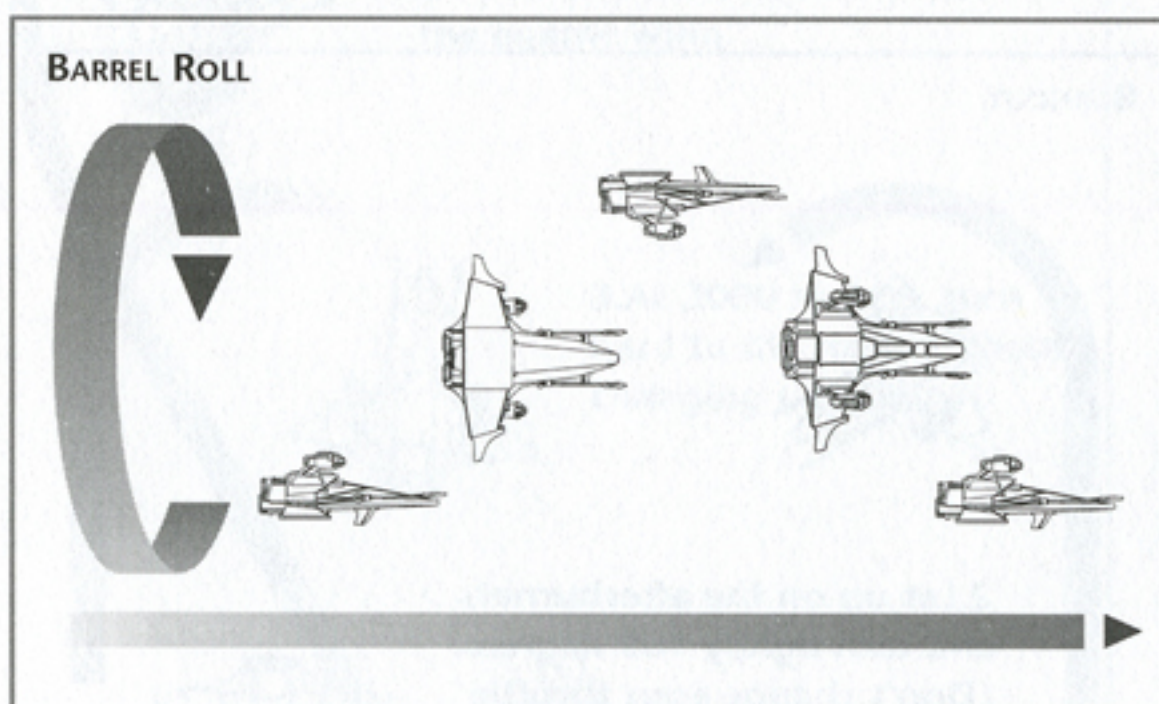


1. Hit the afterburners hard until you begin to pull away from your opponent.



Barrel Roll. If you're making an attack head-on or directly from the rear, you may find the Barrel Roll a useful move for evading enemy lasers. While closing in on your target, you perform a corkscrew-like roll:

- When your target appears in the viewscreen, fly straight toward it until you're within firing range (approximately 2,000 to 3,000 meters).
- Make a sharp bank left or right while pulling up the ship's nose slightly. This will cause your ship to maintain a constant rotation about the roll axis.
- Keep the ship banked and pitched until you have completed a 360-degree roll. At this point, you can continue the roll or level out.



Cutthroat. If you're fighting a single, highly maneuverable ship, you may want to try a Cutthroat move. Basically, all you do is cut your throttle to zero and lock onto a target. Then, you can spin and tear into the enemy while he's trying to line up for a shot. If you're willing and able to take a few hits, hold your fire until your target begins an attack run — he'll be more concerned with shooting you than evading your shots. If he catches you with a shot or two, use short afterburner bursts to randomly change your position.

Hard Brake. One tactic you can use when you're being trailed by an opponent is a Hard Brake. Executing this move is relatively simple: reduce your forward velocity as quickly as you can. If you brake sooner, harder and better than your pursuer, he will overshoot you and enter your cone of fire.

This is especially effective if you're facing a *Krant* or *Gratha*. Just cut your speed, lock onto the target and use your afterburners to maneuver into a rear attack on the enemy. These two Kilrathi ships have a hard time dealing with this tactic — apparently, they can't cut their speed fast enough to stay behind you.

COMMON STRATEGIES

With that review of maneuvers fresh in our minds, let's review strategies for specific situations. Yes, aggressive tactics will let you rack up the kills, but quick thinking will keep you alive so that you *can* rack up the kills.

You're being tailed by an enemy. Here's the situation: You have an enemy to your rear and you're in his sights. What now?

If you have a critical target in your sights and you know that your pursuer's guns are not going to crack your shell with one hit, then it's permissible (barely) for you to take that hit, drop your load and then come around to deal with your attacker. In any case, don't do this unless you're within 2,500 meters of your target.

If you don't have that critical target in your sights, or you don't know that you can take a direct hit, then evade. Evading involves a pretty complicated series of decisions you have to learn to make by reflex. If your pursuer has better maneuverability than you but you have superior acceleration, try a Burnout or a Hard Brake and prepare to be very accurate with your ship's weapons.

You're fighting a more maneuverable opponent. Many times, you'll find yourself facing quick, agile Kilrathi ships, such as *Salathi* or *Dralthi*. In this case, accelerate to maximum throttle speed and apply head-on Afterburner Slides until you've eliminated all but one of the fighters. Then, resort to a Cutthroat and attack your enemy as he lines up for a shot.

If your pursuer has better maneuverability *and* better acceleration (a *Salathi*, for example), then you have a problem. If you want to make it a slugging match, try a Burnout. If you're already hurt, try any sort of evasive maneuver you can — hard turns and rolls in a succession of different directions. Last of all, pray, because you're going to need some divine intervention.



You're battling a large group of fighters. Sometimes, you may find that you're fighting a Kilrathi ship one-on-one in the middle of a crowd. When combat occurs within a large group of fighters, past experience has shown us that separating enemy ships is an effective way to take on a single fighter at a time. In such situations, you can implement one of two divisive techniques:

Eclipse. As its name implies, this move involves using an enemy capital ship to “eclipse” you and a single Kilrathi ship from a group of enemy fighters. By using the capital ship as a shield, you can concentrate on battling one opponent at a time. (Do not, however, use the eclipse with friendly capital ships; they have enough to contend with during an attack.)

Divide and Conquer. In open space, it won't always be possible to use an Eclipse. If you're flying with a wingman, try a Divide and Conquer. Lock onto a target, and then order your wingman to attack your target. By locking onto a different target on the *other* side of the fighter group, you can split the offensive by leading your target away from the pack. Taunt your enemy and punch the throttle so that you're headed away from the battlefield. Once you move 5,000 to 7,000 meters away, you can take him into one-on-one combat.

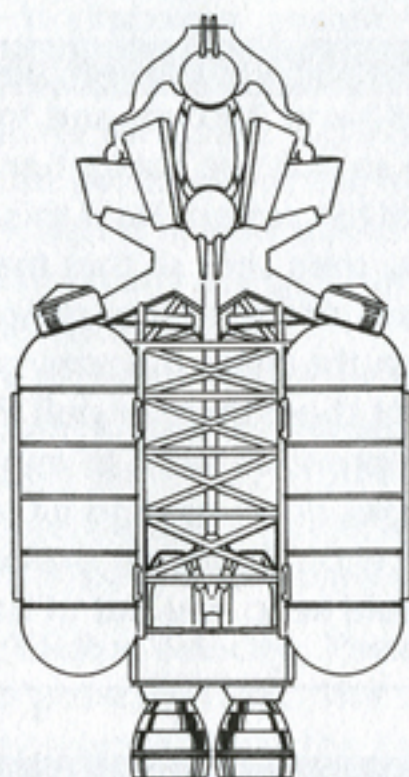
Techs studying a recently captured *Krant* ship discovered that the Kilrathi radio range is very limited, so your target won't be able to radio for help at this distance. If you're flying with an aggressive, capable pilot (such as Iceman), you may convince the Kilrathi that you've deserted the battle and your wingman. After you finish off your first victim, you'll have the element of surprise in your favor when you sneak back into the battlefront.

You're attacking a capital ship. Many of your missions involve finding and destroying Kilrathi capital ships. Two different approaches are accepted in this combat situation:

If you want your wingman to attack the capital ship, after-burn past the first wave of defending fighters. Then, lock onto the capital vessel and order your wingman to attack your target. Immediately lock onto a fighter and attack it. By shifting back and forth between fighter targets and taunting their pilots, you can lead them away from the capital ship and from your wingman. Your job is to keep the fighters busy while your wingman fires his missiles.

If you prefer to attack the capital ship, help your wingman eliminate the defending fighters. Then, approach the capital vessel from the rear at a distance of 4,000 meters. Begin firing your missiles once you move within 2,000 meters. Then, barrage the ship with your forward guns. At 1,000 meters, break hard to one side, turn 180 degrees and punch the afterburners. This will allow you to evade enemy fire, recharge your blasters and circle around for another approach.

ATTACKING A CAPITAL SHIP



37

5. Hit
Afterburners

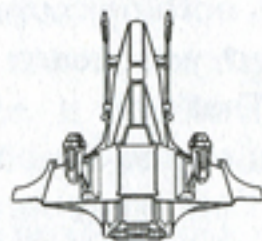
4. 1000 meters
turn left or right

5. Hit
Afterburners

3. Gun barrage from 1500
to 1000 meters

2. Launch missiles before
2000 meters

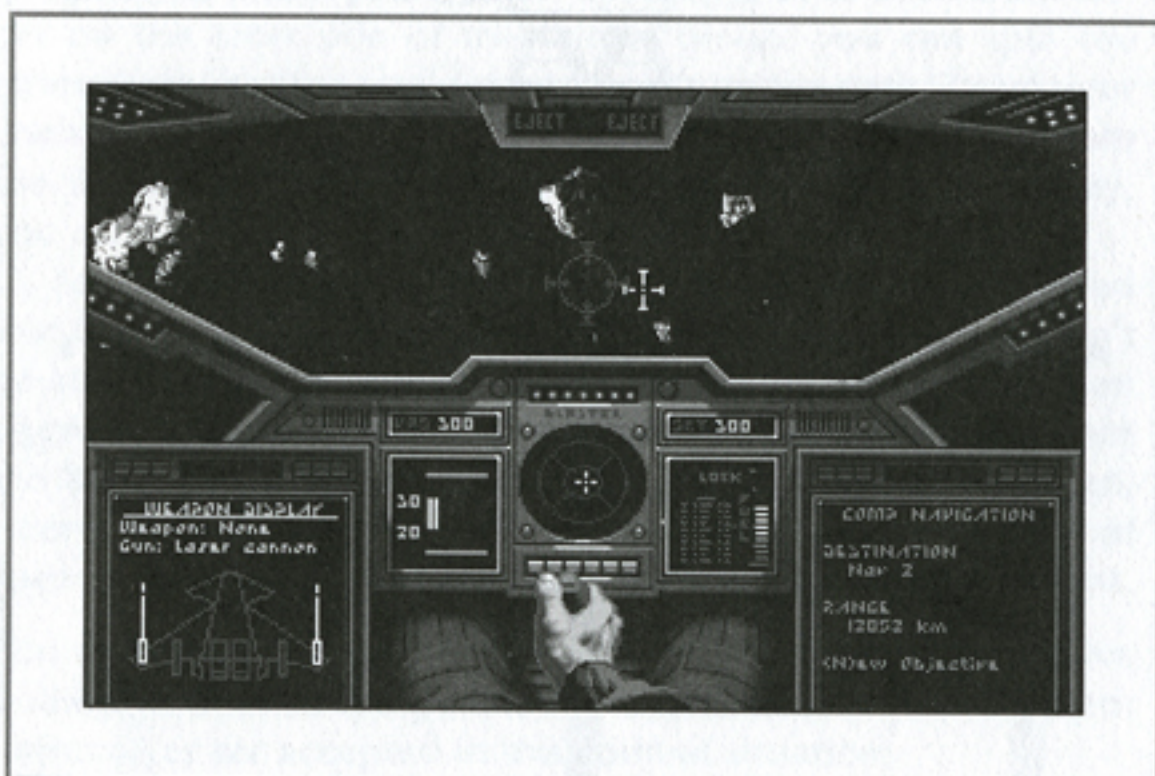
1. Begin approach beyond 4000 meters



You're cruising through an asteroid field or mined area. Maneuvering through a field of hurtling asteroids or mines isn't an easy task by any means, especially if enemy fighters lurk nearby. But, you can make the passage a little easier if you fly at speeds between 280 and 300 kps and follow this tip:

Position your ship so that the navigational crosshair appears in the far left section of the screen. Hold this position for approximately three seconds, then shift so that the crosshair moves to the far right. Continue alternating and holding your position until you pass through the field. If enemy ships lurk within the asteroids, you can fight them there or pull them out of the field.

You can apply the previous tactic to mine fields as well. But, keep in mind that mines don't have to hit you to damage your ship. If you get close enough, they'll explode. Constant minor shifts in direction should keep you out of harm's way.



LAST NOTES

There's no sure way, no sure tactic, to keep you alive on a combat mission. You may be good, but so are the Kilrathi. Someone's got to win, and someone will probably die.

The book of flight regs, sneered at by up-and-coming aces, is nothing more than a tool that teaches you how to slant the odds in your favor. It says nothing more than this: "Protect your wingman and he'll protect you. Learn these tactics and they'll improve your chances." That's all.

And remember — You're not the only one who wants your chances to be improved. Your wingman does. Your commander does. Your family does. Ultimately, the entire Terran Confederation does. Because if we fail, our people and planets will end up "protected" by pilots who proved themselves better than us, fliers who showed they could beat us — the warriors of the Empire of Kilrah.

JOAN'S FIGHTING SPACECRAFT

VEGA SECTOR SUPPLEMENT FOR 2654.092

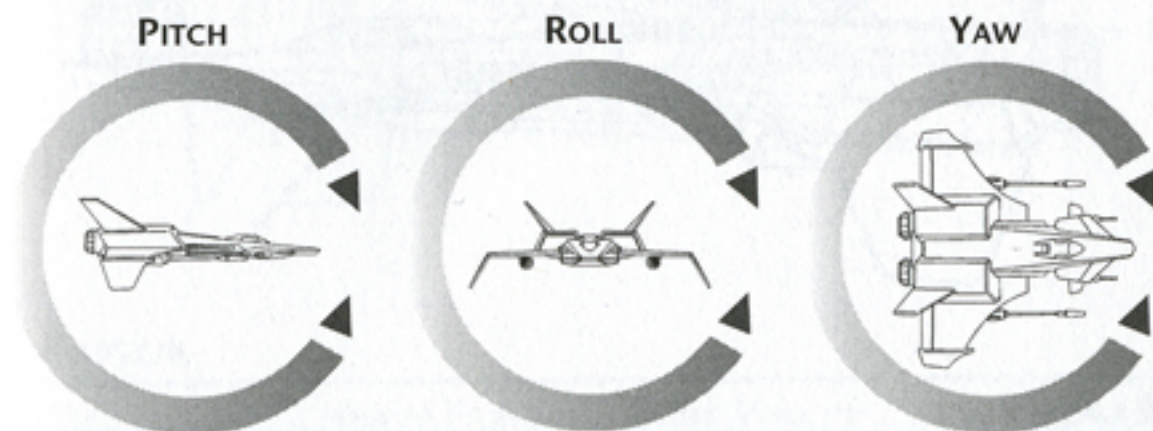
This is the latest update for Joan's fighting spacecraft, specifically revised for Terran personnel in the Vega Sector. This supplement contains the latest specifications on both Terran and Kilrathi spacecraft, particularly the types of craft most commonly encountered in this sector.

All servicemen are urged to familiarize themselves with these specifications. Computer files of this material are available in the ship's library, under >>REFERENCE>>TECHNICAL>>HARDWARE>>JOANS>>. Here's a quick guide for those of you unfamiliar with the Joan's system of evaluation:

Maximum Velocity/Cruise Velocity. These are the settings to which a ship's speed governor is set. The ship's computer automatically sets velocity relative to (a) the flagship, (b) an escorted vessel, (c) a nearby planetary body, (d) a Confederation beacon or (e) a value derived from radar positions of all visible ships. The velocity is expressed in clicks per second (kps).

Acceleration. This shows Joan's evaluation of the ship's acceleration rate, described as Bad, Poor, Average, Good or Excellent.

Maximum Pitch, Roll and Yaw. These characteristics are expressed in degrees per second (dps). Here's a brief review on maneuvering vectors:

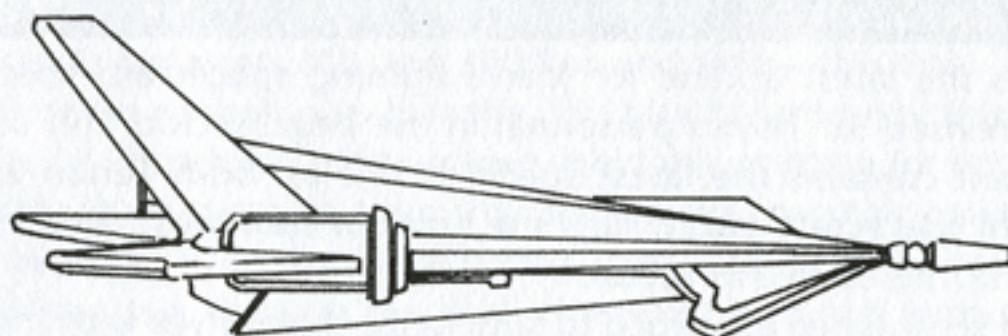


Pitch. Ability of a ship to change direction up or down.

Roll. Ability of a ship to rotate along an imaginary axis extending through the nose and tail.

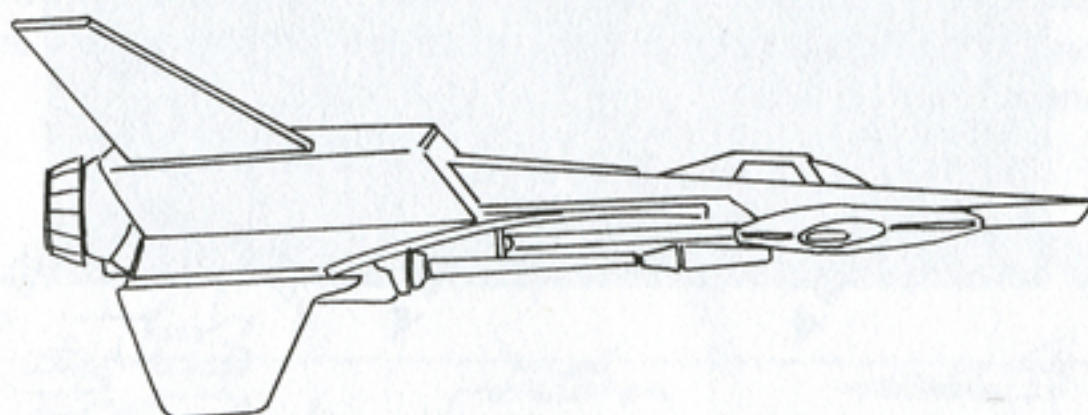
Yaw. Ability of a ship to turn to the right or left without changing its vertical orientation. It is generally more efficient to turn using both pitch and roll to than to turn purely through yaw.

Ship's Armor. Joan's evaluation of a ship's defensive armor is expressed in centimeters thickness of Durasteel. Fore and Aft Shield values are given in values equivalent to centimeters thickness of Durasteel. The higher the number, the more effective the armor.



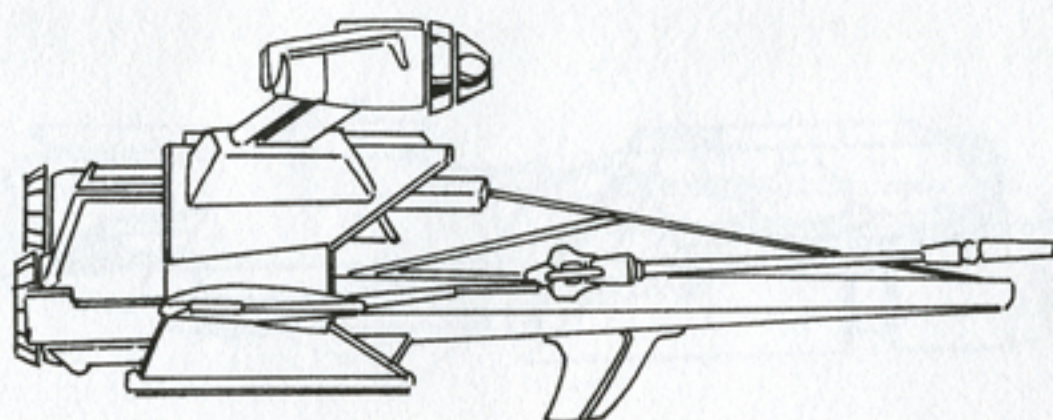
HORNET

<i>Class</i>	Light Fighter	<i>Cruise Velocity</i>	300 kp
<i>Length</i>	20 meters	<i>Acceleration</i>	Good
<i>Mass</i>	12.5 tonnes	<i>Max. YPR</i>	8/9/8 dps
<i>Max. Velocity</i>	420 kps		
<i>Weapons</i>	Laser Cannon (2)		
	Dumb-Fire Missile (2)		
	Heat-Seeking Missile (1)		
<i>Armor</i>	Fore and Aft Shields ...3 cm equivalent each		
	Front and Rear		
	3 cm each		
	Right and Left		
	3 cm each		



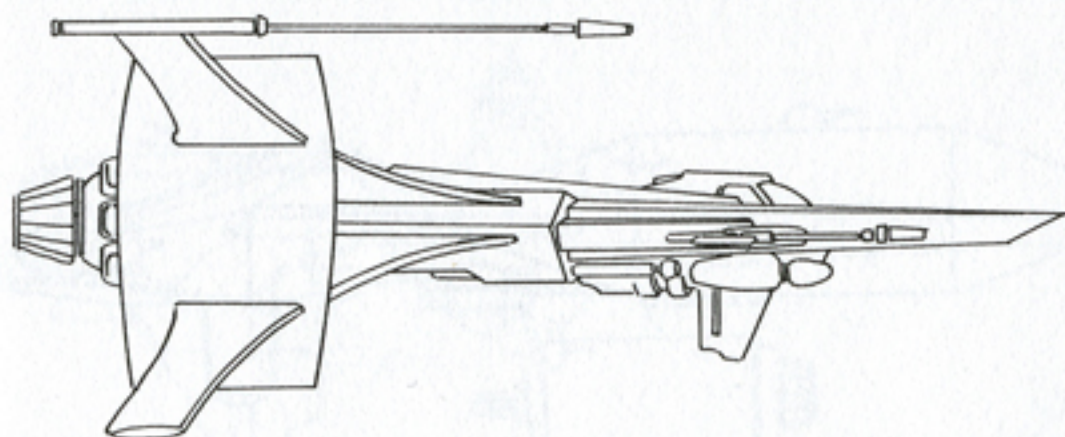
RAPIER

<i>Class</i>	Medium Fighter	<i>Cruise Velocity</i>	250 kp
<i>Length</i>	24 meters	<i>Acceleration</i>	Excellent
<i>Mass</i>	13.5 tonnes	<i>Max. YPR</i>	10 dps
<i>Max. Velocity</i>	450 kps		
<i>Weapons</i>	Laser Cannon (2)		
	Neutron Guns (2)		
	Dumb-Fire Missiles (2)		
	Friend-or-Foe Missiles (2)		
	Image-Recognition Missile (1)		
<i>Armor</i>	Fore and Aft Shields ...7 cm equivalent each		
	Front and Rear		
	5/4 cm		
	Right and Left		
	3 cm each		



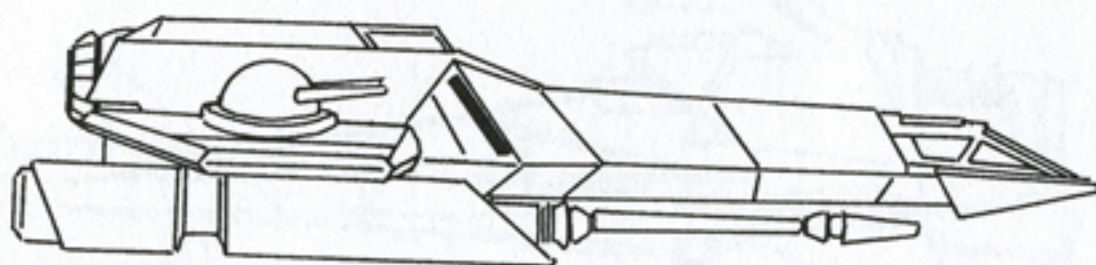
SCIMITAR

<i>Class</i>	Medium Fighter	<i>Cruise Velocity</i>	150 kps
<i>Length</i>	25 meters	<i>Acceleration</i>	Good
<i>Mass</i>	16 tonnes	<i>Max. YPR</i>	6/6/7 dps
<i>Max. Velocity</i>	360 kps		
<i>Weapons</i>	Mass Driver Cannon (2) Dumb-Fire Missiles (2) Heat-Seeking Missiles (3)		
<i>Armor</i>	Fore and Aft Shields ...4 cm equivalent each Front and Rear6 cm each Right and Left5 cm each		



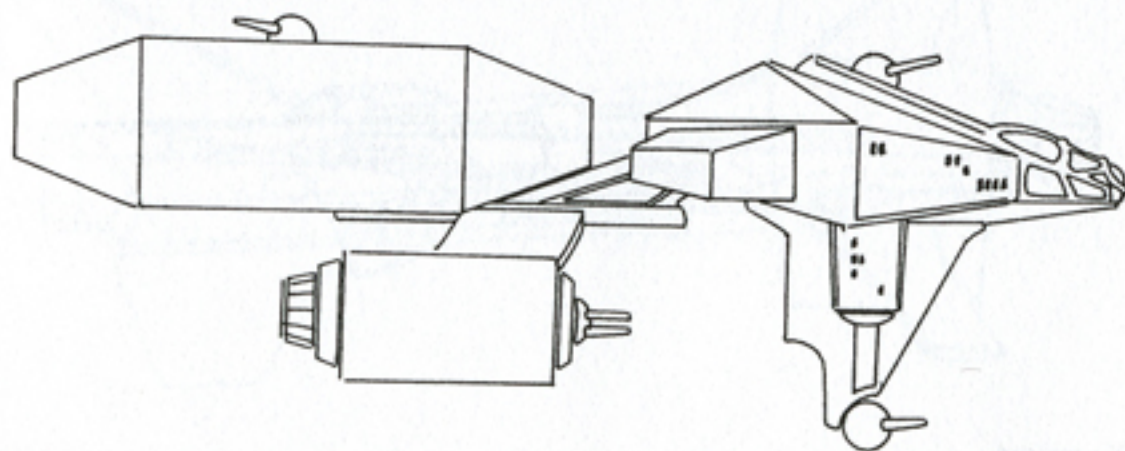
RAPTOR

<i>Class</i>	Heavy Fighter	<i>Cruise Velocity</i>	250 kps
<i>Length</i>	36 meters	<i>Acceleration</i>	Good
<i>Mass</i>	20 tonnes	<i>Max. YPR</i>	6/5/6 dps
<i>Max. Velocity</i>	400 kps		
<i>Weapons</i>	Mass Driver Cannon (2) Neutron Guns (2) Heat-Seeking Missiles (2) Image-Recognition Missiles (2) Friend-or-Foe Missile (1) Porcupine Mine (1)		
<i>Armor</i>	Fore and Aft Shields ...7 cm equivalent each Front and Rear8 cm each Right and Left6 cm each		



VENTURE

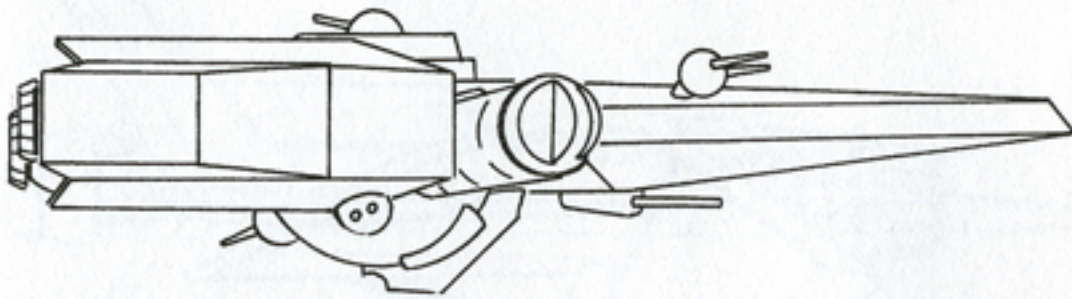
<i>Class</i>	Corvette	<i>Cruise Velocity</i>	150 kps
<i>Length</i>	80 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	1,000 tonnes	<i>Max. YPR</i>	3 dps
<i>Max. Velocity</i>	200 kps		
<i>Weapons</i>	Laser Cannon (2) Friend-or-Foe Missile (1) Heat-Seeking Missiles (2)		
<i>Armor</i>	Fore and Aft Shields ...10 cm equivalent each Front and Rear		
	9/8 cm each		
	Right and Left		
	8 cm each		



DRAYMAN

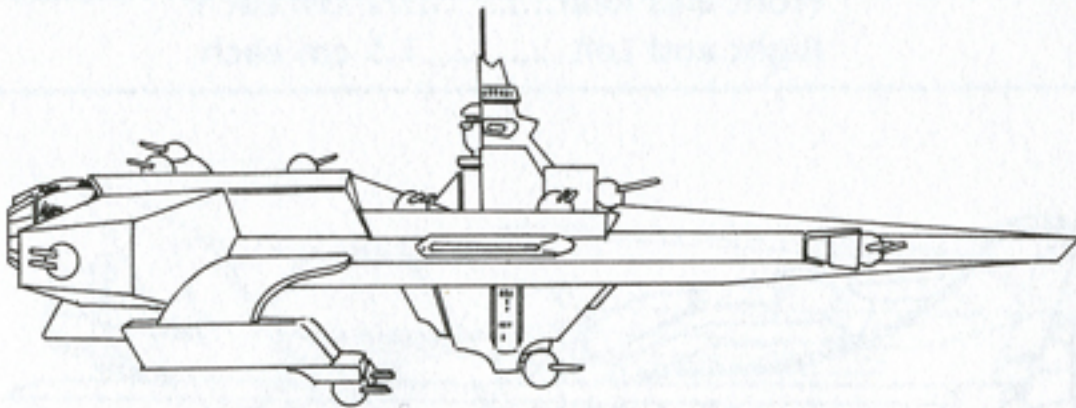
<i>Class</i>	Transport*	<i>Cruise Velocity</i>	100 kps
<i>Length</i>	96 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	2,000 tonnes	<i>Max. YPR</i>	2 dps
<i>Max. Velocity</i>	150 kps		
<i>Weapons</i>	Turreted Laser (1)		
<i>Armor</i>	Fore and Aft Shields ...9 cm equivalent each Front and Rear		
	8 cm each		
	Right and Left		
	6 cm each		

*(configurable as either Freighter or Tanker)



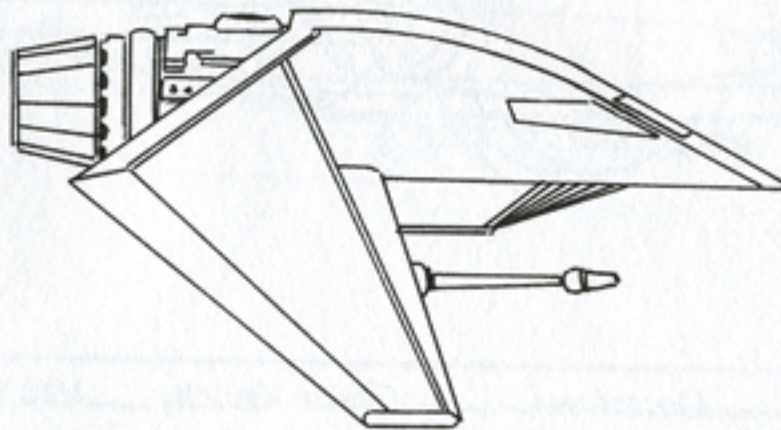
EXETER

<i>Class</i>	Destroyer	<i>Cruise Velocity</i>	100 kps
<i>Length</i>	360 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	8,000 tonnes	<i>Max. YPR</i>	2 dps
<i>Max. Velocity</i>	150 kps		
<i>Weapons</i>	Image-Recognition Missile (1)		
	Turreted Lasers (4)		
<i>Armor</i>	Fore and Aft Shields ...25 cm equivalent each		
	Front and Rear		
	22/20 cm each		
	Right and Left		
	20 cm each		



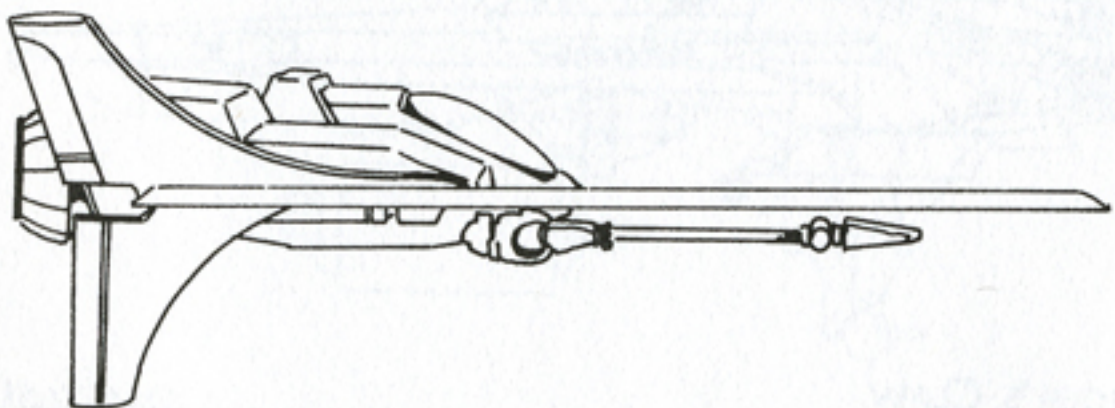
TIGER'S CLAW

<i>Class</i>	Bengal Strike Carrier		
<i>Length</i>	700 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	80,000 tonnes	<i>Max. YPR</i>	1 dps
<i>Max. Velocity</i>	130 kps	<i>Fighter Complement</i> ...	104
<i>Weapons</i>	Turreted Lasers (8)		
<i>Armor</i>	Fore and Aft Shields ...21 cm equivalent each		
	Front and Rear		
	24/20 cm each		
	Right and Left		
	25 cm each		



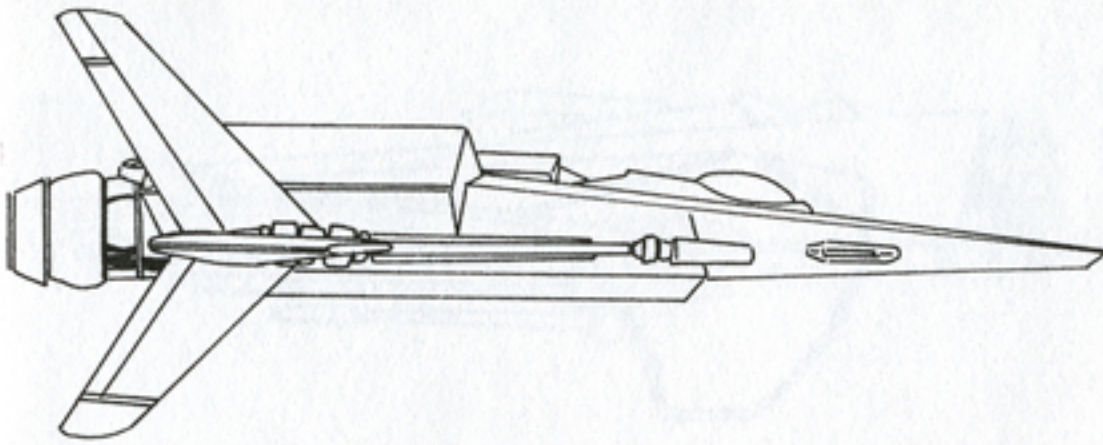
SALTHI

<i>Class</i>	Light Fighter	<i>Cruise Velocity</i>	300 kps
<i>Length</i>	24 meters	<i>Acceleration</i>	Excellent
<i>Mass</i>	12 tonnes	<i>Max. YPR</i>	14/12/12 dps
<i>Max. Velocity</i>	480 kps		
<i>Weapons</i>	Laser Cannon (2)		
	Dumb-Fire Missile (1)		
<i>Armor</i>	Fore and Aft Shields ...	3.5 cm equivalent each	
	Front and Rear.....	3/2 cm each	
	Right and Left.....	1.5 cm each	



DRALTHI

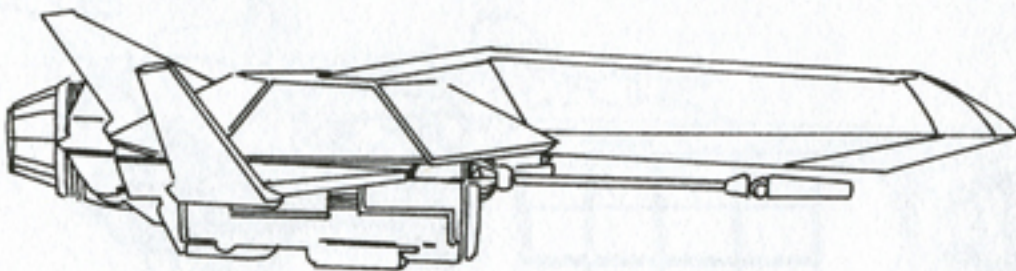
<i>Class</i>	Medium Fighter	<i>Cruise Velocity</i>	230 kps
<i>Length</i>	28 meters	<i>Acceleration</i>	Good
<i>Mass</i>	14 tonnes	<i>Max. YPR</i>	10/14/10 dps
<i>Max. Velocity</i>	400 kps		
<i>Weapons</i>	Laser Cannon (2)		
	Porcupine Mines (3)		
	Heat-Seeking Missiles (2)		
<i>Armor</i>	Fore and Aft Shields ...	5 cm equivalent each	
	Front and Rear.....	4.5/3.5 cm each	
	Right and Left.....	3 cm each	



45

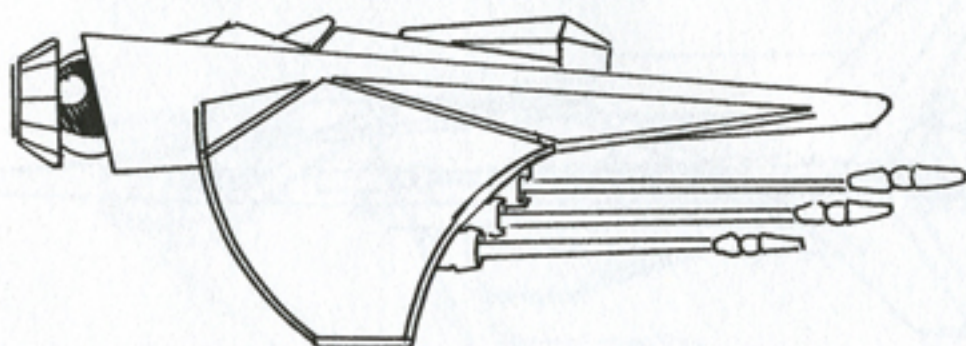
KRANT

Class	Medium Fighter	Cruise Velocity	200 kps
Length.....	32 meters	Acceleration.....	Good
Mass	16.6 tonnes	Max. YPR.....	7/10/7 dps
Max. Velocity	360 kps		
Weapons	Laser Cannon (2)		
	Friend-or-Foe Missile (1)		
	Heat-Seeking Missiles (3)		
Armor.....	Fore and Aft Shields ...8 cm equivalent each		
	Front and Rear.....9/10 cm each		
	Right and Left.....8 cm each		



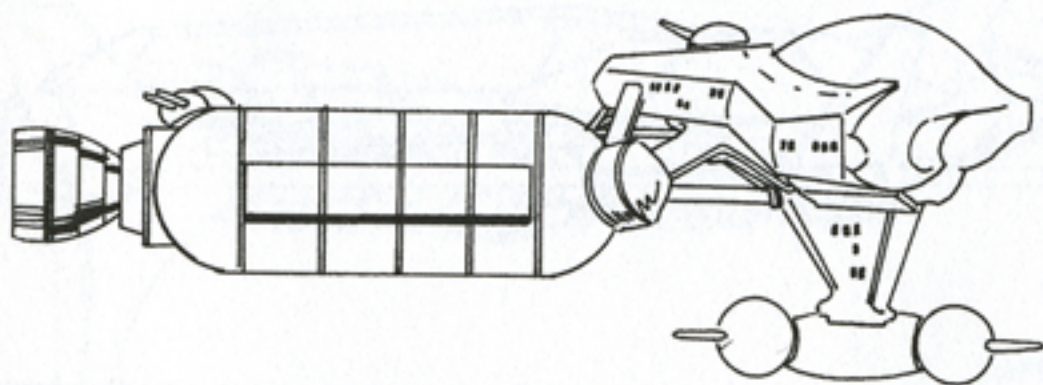
GRATHA

Class	Heavy Fighter	Cruise Velocity	200 kps
Length.....	36 meters	Acceleration.....	Average
Mass	18 tonnes	Max. YPR.....	6 dps
Max. Velocity	320 kps		
Weapons	Laser Cannon (2)		
	Mass Driver Cannon (2)		
	Image-Recognition Missile (1)		
	Heat-Seeking Missiles (3)		
	Porcupine Mines (2)		
Armor.....	Fore Shield.....11 cm equivalent		
	Aft Shield		
	Front and Rear.....15/14 cm each		
	Right and Left.....10 cm each		



JALTHI

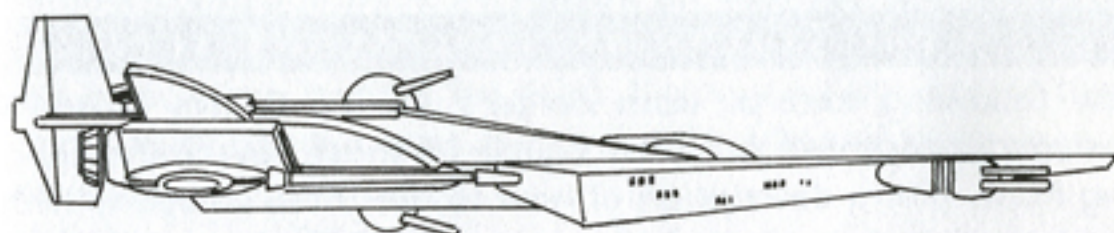
Class	Heavy Fighter	Cruise Velocity	200 kps
Length.....	32 meters	Acceleration.....	Average
Mass	22 tonnes	Max. YPR.....	5 dps
Max. Velocity	280 kps		
Weapons	Neutron Guns (3)		
	Laser Cannon (3)		
	Friend-or-Foe Missiles (2)		
	Heat-Seeking Missile (1)		
Armor.....	Fore and Aft Shields ...16 cm equivalent each		
	Front and Rear.....20/10 cm each		
	Right and Left.....17 cm each		



DORKIR

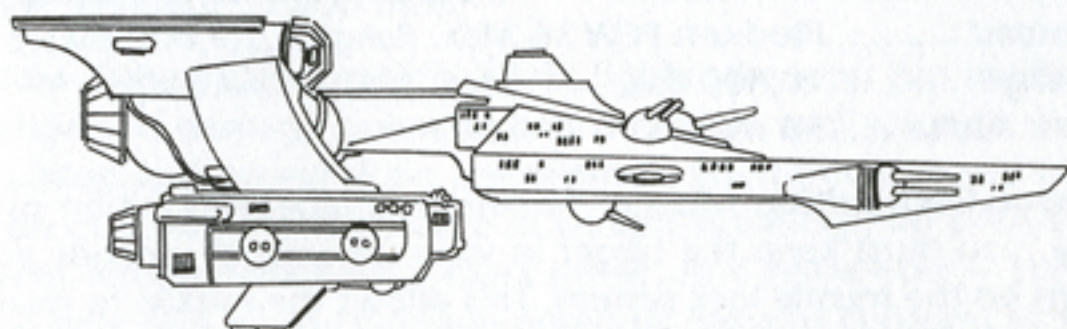
Class	Transport*	Cruise Velocity	100 kps
Length.....	104 meters	Acceleration.....	Bad
Mass	2000 tonnes	Max. YPR.....	2 dps
Max. Velocity	150 kps		
Weapons	Turreted Laser (1)		
	Porcupine Mines (3)		
Armor.....	Fore and Aft Shields ...17/10 cm equivalent each		
	Front and Rear.....9/6 cm each		
	Right and Left.....9 cm each		

*(configurable as either Freighter or Tanker)



RALARI

<i>Class</i>	Destroyer	<i>Cruise Velocity</i>	100 kps
<i>Length</i>	344 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	18,000 tonnes	<i>Max. YPR</i>	2 dps
<i>Max. Velocity</i>	150 kps		
<i>Weapons</i>	Turreted Lasers (6)		
	Porcupine Mine (1)		
<i>Armor</i>	Fore and Aft Shields ...20/12 cm equivalent each		
	Front and Rear		
	20/9 cm each		
	Right and Left		
	18 cm each		



FRALTHI

<i>Class</i>	Cruiser*	<i>Cruise Velocity</i>	120 kps
<i>Length</i>	500 meters	<i>Acceleration</i>	Poor
<i>Mass</i>	20,000 tonnes	<i>Max. YPR</i>	2 dps
<i>Max. Velocity</i>	180 kps	<i>Fighter Complement</i>	20**
<i>Weapons</i>	Turreted Lasers (6)		
<i>Armor</i>	Fore and Aft Shield		
	27/17 cm equivalent each		
	Front and Rear		
	28/14 cm each		
	Right and Left		
	26 cm each		

* (configurable as Cruiser or Light Carrier)

** (if configured as a Light Carrier)

WEAPONS

OF THE TERRAN AND KILRATHI FLEETS

The following excerpt from *Borger's All The Sectors Weapons Systems* is presented as a crash course for those new to the fighting front. (For a description of how to use these weapons with the targeting and missile lock systems, see **Missile Lock**, p.13.)

Dumb-Fire Missile. The dumb-fire missile is a point-and-shoot weapon that doesn't require a missile lock — just aim it at a target and launch it. With no homing capability, a dumb-fire is most effective in the hands of a pilot who can anticipate the target's reactions. When possible, reserve it for use in close quarters or against slow-moving targets.

Length.....	2.6 meters	Effective Range ..	2,000 meters
Payload.....	Illudium PEW 36	Max. Range	10,000 meters
Strength	11,000 ESK	Max. YPR.....	10 dps
Blast Radius	50 meters		

Heat-Seeking Missile. The engines of a modern fighter or capital ship generate a lot of heat, a fact that the heat-seeking missile uses to great advantage. All you do is park yourself on an enemy's tail, wait for the heat-seeker to lock, and then fire. If the target shakes off the heat-seeker, the missile locks onto the nearest heat source, perhaps even the ship that originally fired it.

Length.....	2 meters	Effective Range ..	6,000 meters
Payload.....	Illudium PEW 36	Max. Range	9,000 meters
Strength	10,500 ESK	Max. YPR.....	10 dps
Blast Radius	50 meters		

Image-Recognition Missile. To fire an image-recognition missile, you must keep the target in view for several seconds and turn on the missile lock system. This allows the missile to memorize the ship type. Tail the enemy and fire when you gain a missile lock.

Length.....	2.2 meters	Effective Range ..	6,000 meters
Payload.....	Illudium PEW 36	Max. Range	8,000 meters
Strength	9,500 ESK	Max. YPR.....	10 dps
Blast Radius	50 meters		

Friend-or-Foe Missile. The friend-or-foe missile locks onto the nearest enemy ship. Capable of identifying the distinctive signal broadcast by all Terran ships, the friend-or-foe makes a beeline for the nearest ship that isn't broadcasting. This weapon will target friendly ships whose communications systems are damaged. Even the firing ship is not safe!

Length.....	2.2 meters	Effective Range ..	8,000 meters
Payload.....	Illudium PEW 36	Max. Range	12,000 meters
Strength	9,500 ESK	Max. YPR.....	10 dps
Blast Radius	50 meters		

Porcupine Mine. This deadly device has limited homing capabilities and built-in proximity sensors — detonation doesn't require contact. If there's a Kilrathi on your tail, just open your rear doors and drop a Porcupine in his path. He'll be off your tail in no time, or he'll be dead. If you ever see one of these mines hurtling your way, punch the throttle and steer clear.

Blast Radius20 meters

Velocity20 mps

Laser Cannon. Lasers don't do a lot of damage. Still, nearly all pilots have at least one story in which the long range of the laser allowed them to get first strike on a foe. Despite their low damage potential, lasers are reliable, versatile and effective. In fact, they probably account for more enemy kills than any other weapon.

Blast Radius50 meters

Max. Range.....4,800 mrrs*

Neutron Gun. Neutron guns do heavy damage, but only at close range. No other projectile weapon provides an equivalent level of destructive capability. The down side is that neutron guns heat up rapidly and eat up power at an alarming rate. Also the neutron gun's lack of range had led many foolhardy or underskilled pilots into close-quarter combat for which they were ill-prepared. Some of these pilots never made it home.

Blast Radius50 meters

Max. Range.....2,500 mrrs*

Mass Driver Cannon. This basic fighter weapon has medium range and damage potential and is reliable and accurate. Heat buildup and power drain are minimal. Though lasers and neutron guns are more effective in certain situations, no pilot ever went wrong activating a mass driver. And remember — this is the only gun whose damage potential remains constant within a range of 3,000 meters.

Blast Radius50 meters

Max. Range.....3,000 mrrs*

Turreted Laser. Terran and Kilrathi destroyers, cruisers, carriers and bases are equipped with heavy, turreted lasers linked to advanced targeting systems. Only the most maneuverable ships have any chance of surviving concentrated fire from these formidable weapons.

Blast Radius50 meters

Max. Range.....4,800 mrrs*

*(meters relative to range and speed)

COMRADE CLIPS

Even though we all work and live together 24 hours a day, we don't always take the time to get to know everyone on board. Well, now's your chance! All dedicated readers of Claw Marks look forward to our monthly pilot profiles, colorful interviews that reveal the backgrounds and personalities of our fellow comrades. This time around, our computers randomly picked eight pilots from the carrier's database. After an interview with each of them, here's what we learned:

LOOSE CANNON ON DECK

Captain Ian St. John, *Hunter* to the space crews, is one of the best pilots in the service and has racked up 64 kills in the



The friendly 27-year-old from Brisbane, Australia, is sometimes accused of excessive independence and a casual atti-

years he has been stationed on the *Tiger's Claw*. He's known as a seat-of-the-pants flier, and Kilrathi opponents tend to be baffled by his spontaneous flying style.

"Notice I say 'push to the limit' an' not 'break.' Maybe there's not much difference, but it's usually the difference 'tween dusting a furball an' sucking vacuum!"

tude toward regulations. "Maybe so," he explains, "but I'd never leave my wingleader flying solo. But, all the [expletive deleted] things we're given — ships, weapons training an' standing regs — are there for us to push to the limit, an' maybe a little further, if we're going to get the job done. Notice I say 'push to the limit' an' not 'break.' Maybe to some there's not much difference, but it's usually *the* difference 'tween dusting a furball an' sucking vacuum!"

THE UNSTOPPABLE FORCE

First Lieutenant Tanaka Mariko goes by the tag of *Spirit* — a rough translation of *Kami*, as she is called by the Japanese



pilot instructors responsible for her initial training. In the cockpit, *Spirit* is known for her deceptive, defensive piloting, her ability to sense and avoid incoming fire and her habit of creeping in as close as possible to a target before cutting loose with her ship's weaponry.

"I did not join the armed forces for revenge. ... It is a matter of tradition and duty."

A native of Sapporo on the Japanese island of Hokkaido, Tanaka is a third-generation military pilot. Her father, Major Tanaka Shun (affectionately remembered as *Go-Devil*), died 20 years ago in the brutal McAuliffe Ambush of '34.

The 24-year-old ace explains, "I did not join the armed forces for revenge.

I have no fantasies of personally gun-

ning down the pilot who killed my father. It is a matter of tradition and duty.

"...there is nothing to keep a modern pilot, Japanese or not, from trying to adhere to the best elements of the warrior codes of the past."

"The tradition is my family's, and the duty is to the Earth. I am often asked if I think of myself as a modern *samurai*. The answer is no. I am a military pilot, not a feudal retainer. But there is nothing to keep a modern pilot, Japanese or not, from trying to adhere to the best elements of the warrior codes of the past — the code of the *samurai*, the code of the knight-errant, any code of honor and service."

"When I was young — er,  younger — they called me *Ripper*, my old friends still do. I was a lot like Hunter,

pushing everything to the limit. But I might have been a little too good, or at least lucky, at it. Replacement crews coming in, bright young second looies, took my lead... and got themselves shot to hell. When I started burying young pilots who had been killed for behaving like me, I decided to give them an example

start coming to you for advice. That is when they started calling me Bossman. I do not regret all of these changes... but there are some times that I miss the old days."

"I do not regret all of these changes... but there are some times that I miss the old days."

ACE OF ACES

Major Michael Casey, *Iceman* to most of the crews, has racked up more confirmed kills while serving on the *Tiger's*



Claw than any other pilot in the carrier's history. In the cockpit, he is known for his calm under fire, letter-perfect flying technique and deadly aim with ships' weapons — a combination that spells disaster for Kiltrathi opponents. In fact, according to the flight recorder records, he once downed three Salthi fighters single-handed with lasers as his only weapon.

"You must learn to listen for Iceman. On the comm unit, in a large engagement, everyone is either shouting or at least very excited; Iceman is whispering. You have to strain your ears to hear him." — Angel

Despite his Stern presence in Battle, *Iceman* is surprisingly softspoken.

Angel, frequently a wingman for *Iceman*, describes flying with him: "You must learn to listen for *Iceman*. On the comm unit,

"I will tell you: he talks ten times as much in the cockpit as he ever talks on the carrier." — Angel

in a large engagement, everyone is either shouting or at least very excited; *Iceman* is *whispering*. You have to strain your ears to hear him. It's always a terse little statement like 'Moving in,' 'Rolling right,' 'Target in sight,' 'Objective accomplished,' 'Head for home.' And I will tell you: he talks ten times as much in the cockpit as he ever talks on the carrier."

Iceman is 31, a native of Vancouver, British Columbia.

BY THE BOOK, OR ELSE!

"I cannot stand rebels or hot-doggers, or any of these so-called intuitive know-it-alls," quickly explains



Captain Jeannette Devereaux, who goes by the cockpit moniker of *Angel*. "We have used flying craft in warfare since 1914. As a race, we have nearly *eight centuries* of combat flying experience to define, refine and perfect the rules by which we fly. These are rules designed to keep us alive, keep our wingmen alive and win our war, *n'est-ce pas?*

"I cannot stand rebels or hot-doggers, or any of these so-called intuitive know-it-alls."

"But every class that comes out of the Academy is stuffed full of these talented fliers who think that because they can do new and interesting things with their machines, they must be

smarter than eight centuries of military thinkers ... and so the rules don't apply to them. They shut up quickly when

they start seeing their classmates eat missiles. It is at *that* point that they join the human race and begin to help win this war."

"They shut up fast when they start seeing their classmates eat missiles. It is at that point that they join the human race and begin to help win this war."

The 28-year-old Devereaux is a native of Brussels, Belgium. She is widely known for her marksmanship and rate of ship survival — she's never had to eject. Her accomplishments with her ship's weapons dot the performance records of the *Tiger's Claw*.

CAPTAIN JEANNETTE DEVEREAUX, ANGEL

NEW KID ON THE BLOCK

Fresh up from the Academy is Second Lieutenant Todd Marshall, better-known as *Maniac* by his graduating class.



Marshall, 23, tries hard to live up to his moniker.

"Plodding along with your joystick in one hand and a copy of the naval regs in the other is not going to impress the Kilrathi."

"Plodding along with your joystick in one hand and a copy of the naval regs in the other is not going to impress the Kilrathi," he says. "They know our regs. They know the Book, they know how we do things. If we're going to put them on the ropes, we have to adapt our rules, tactics and flying styles. We have to outfly them, outfight them ... we've got to want it more. And I want it."

"I'm a Proxie — my homeworld is Leto, Proxima Centauri IV. When the colonization started, anyone with any brains or

skills high-tailed it off Earth, and most of them ended up on Leto. That's why Proxies always kick homeborn Terrans around in the ratings."

"If we're going to put them on the ropes, we have to adapt our rules, tactics and flying styles. We have to outfly them, outfight them ... we've got to want it more. And I want it."

Despite his creative interpretation of colonial history and comparative Naval Academy standings, Marshall was one of the highest-rated Academy graduates of the '54 class and promises to be a worthy addition to the *Tiger's Claw* pilot roster.

SECOND LIEUTENANT
TODD MARSHALL, MANIAC

ALWAYS PROFESSIONAL

"The laddies coming out of th' Academy t'ink that I was born old," chuckles Major James Taggart, who is known as



Paladin to the spacecrews. "Bu' when I took me commission — not ta long after we *discovered* the Empire of Kilrah — I was j'st a kid charged up on stories of knight-errantry, on *The Death of Art'ur* and *The Song of Roland*. S' when we ran into the Kilrathi, I knew I was going ta grab a lance, 'op into a cockpit, an' change the course of history. An' naturally," he jokes, "I did!"

Taggart, 45, is a native of Ares, the self-sufficient space station built in permanent orbit around the planet Venus; his parents were terraforming engineers from Wick, Scotland.

Though an effective wing-leader, Taggart is especially appreciated for his wingman skills. He has a reputa-

tion for protective-ness when flying wing. On an average of three times per year, pranksters get to his space-

craft, scrape "Paladin" from his cockpit and replace it with "Mother Hen."

"I was j'st a kid charged up on stories of knight-errantry, ... when we ran into the Kilrathi, I knew I was going ta grab a lance, 'op into a cockpit, an' change the course of history."

"Appreciate it while ya' can," he grins. "Combat flyin' is a young man's game, and I'm 'aving trouble convincin' the medics t'at I'm still 25. I'll be flyin' a desk before too long... if I can find one wi' afterburners and smart missiles."

MAJOR JAMES TAGGART, *PALADIN*

RELIABILITY UNDER FIRE

Captain Joseph Khumalo, known to the crews as *Knight* admits that his piloting accomplishments don't dot the



record books. "I'm not a cockpit genius like Hunter or a marksman like Angel. I'm an ordinary man, a pilot. It's my job."

"I just fired as fast as I could and got lucky. I was an ace coming out of that pack."

Yet wingleaders tend to breathe a sigh of relief when they draw Khumalo as wingman. Knight has a reputation of utter reliability in combat. "I got my nickname in the Enyo engagement. The Kilrathi were swarming like flies. I was a second looie assigned as wingman to Captain Maria Alvarez, callsign *La Doña*. We were hugging the deck of this transport and strafing it, did a tight turn going from its back to its belly, and ran

right through a swarm of fighters headed the other way. Any defensive maneuvering in those close quarters would've cut

me off from *La Doña*, so I just fired as fast as I could and got lucky. I was an ace coming out of that pack and had picked off a couple of fighters going after my wingleader. *La Doña* put on her thickest accent and cooed, 'Ooh, eet's my White Knight,' and the name stuck.

"I'm not a knight. I'm just a soldier. Not all of us can be geniuses ... but I'm going to do the best I can with what I can."

"But honestly, I don't feel that way. I'm not a knight. I'm just a soldier. Not all of us can be geniuses ... but I'm going to do the best I can with what I can." Khumalo, 36, hails from Kroonstad, South Africa.

KNOW YOUR ENEMY

As we all know, the Tiger's Claw lost two top pilots to the Kilrathi last month. To help prepare you for combat against some of their better known aces, Commander Halcyon has procured confidential files from the Terran Intelligence Council. For the first time ever, inside information about top Kilrathi pilots is available to military personnel. So, read about your enemy, memorize his weaknesses and use them to your advantage. Computer files containing additional detailed information are archived in the ship's library, under >>REFERENCE>>TECHNICAL>>KILRATHI>>PILOTS>>.

****WARNING! THIS INFORMATION HAS BEEN CLEARED FOR MILITARY USE ONLY. DO NOT RELEASE THESE FILES TO UNAUTHORIZED PARTIES.****

FILE #83542: SALTHI FIGHTER

BHURAK "STARKILLER" NAR CAXKI

Best known among the Kilrathi aces is Bhurak, dubbed "Starkiller." He is regarded as the best living pilot among the Kilrathi in this sector and flies a *Salthi* light fighter.

Strengths. Bhurak's an excellent pilot and shot. He has optimal reflexes and no serious weaknesses can be detected in his flying style.

Weaknesses. Psych profiles indicate that Bhurak is probably addicted to speed, thrills and sport. Though a courageous pilot, he is not without a survival instinct. A sufficient number of opponents or a sudden turn in fortune can convince him to retreat.

Tactics. Bhurak likes to dogfight. He prefers a maneuverable foe and standard dogfight tactics. He almost always uses his ship's laser cannon, reserving his dumb-fire missile for stationary targets.

Recommendation. If possible, put several pilots on him at once; deny him a fair fight or anything he would consider fun. He might become disgruntled and choose another target or route. If you're forced into single combat with him, don't try to outfly him. You might do best by going stationary, spinning to keep him in your sights and trading licks. He doesn't appear to enjoy that and may choose a new objective.

FILE #16982: KRANT FIGHTER**KHAJJA "MACHINE" NAR JA'TARGK**

Khajja the Fang is not-so-affectionately called "Machine" by Terran intelligence. He is the most efficient, mission-oriented pilot the Kilrathi have. He pilots a *Krant* medium fighter.

Strengths. Khajja's greatest asset is his clear thinking. He never panics or falters and appears to have utter confidence in his wingmen. He is not vulnerable to taunts, goads or insults.

Weaknesses. Khajja's faith in his wingmen may be misplaced. Analysis indicates that some Kilrathi pilots may be afraid of him. He will single-mindedly ignore incoming ships in order to concentrate on a strike objective, meaning that he might ignore *you*.

Tactics. Khajja prefers straight-in, straight-out strafing approaches. He uses his laser cannon for most encounters, saves his heat-seekers for mission objectives or particularly troublesome enemies, and saves his friend-or-foe missile for emergencies.

Recommendation. If he's approaching a mission objective, you might get a free shot by eluding his wingmen. If he's moving in on you, use classic dogfight tactics. Try to outfly and outshoot him, or lead him toward unengaged friendlies. He doesn't like bad odds.

CAT BITES - HISTORY OF THE TERRAN/KILRATHI CONFLICT

On 2629.105 (March 15, 2629 Terran time) the exploration ship *Iason* encounters a spacecraft of unknown origin. *Iason* commander Jedora Andropolos beams the standard wide-band non-verbal greeting designed by the Committee for Interaction with Alien Intelligences. Captain Andropolos keeps *Iason* motionless for twenty-two minutes standard while the alien vessel waits. Finally, the alien vessel opens up with all guns, utterly destroying *Iason* and all hands.

On 2634.186, war is formally declared by the Terran Confederation on the Empire of Kilrah for countless acts of piracy and unwarranted assault.

CAT BITES - HISTORY OF THE TERRAN/KILRATHI CONFLICT

On 2634.228, Confederation cryptographer Ches M. Penney partially decodes the current Kilrathi cipher. The intercepted message refers to a punitive strike being launched against the Confederation, starting with the colony on McAuliffe and the space station *Alexandria* in orbit around it. Confederation High command launches a counteroffensive twice the size of the anticipated enemy fleet; it is to reach McAuliffe first and ambush the attackers.

FILE #72639: DRALTHI FIGHTER

DAKHATH "DEATHSTROKE" NAR SIHKAG

Dakhath, whose name translates literally as "Deathstroke," is one of the most dangerous pilots alive. According to our incomplete records, he has at least 55 confirmed kills. He pilots a *Dralthi* medium fighter.

Strengths. Dakhath appears to be utterly without fear. He never retreats from an engagement until every enemy within 1,000 clicks is destroyed and will not abandon a wounded enemy until that enemy is destroyed. This courage and lack of self-preservation instincts make him particularly dangerous. So does his apparent affection for inflicting pain.

Weaknesses. Dakhath lives only to kill and will not retreat or change targets until his first target is dead. If at all possible, use his single-mindedness against him ... if only by leading him away from a strategically important target so that he can concentrate on *you*.

Tactics. Dakhath launches his missiles at maximum range (he appears to like explosions), then closes for the kill on one target. He will cling to that target until he destroys it, then choose another, as methodical as a clock circuit.

Recommendation. It might be possible to lead him into a friendly ship's path of fire, and it is equally possible that he won't notice new pursuit on him until it's too late. (*Important note:* If your ship takes a lot of damage and looks shaky, do not eject if you're in Dakhath's vicinity. One of his hobbies is target practice against ejected pilots.)

FILE #67198: JALTHI FIGHTER**BAKHTOSH "REDCLAW" NAR KIRANKA**

Bakhtosh "Redclaw" is a rash on the comm units; he is best known for extremely sarcastic gloating during combat engagements. It appears that he belongs to an aristocratic Kilrathi family and has been trained in the politics of superiority from birth. He flies a *Jalthi* heavy fighter.

Strengths. Bakhtosh is the best Kilrathi shot in Vega Sector, bar none. His accuracy with ship's guns is becoming legendary even among Terran pilots, which is another strength. Some Terrans feel intimidated when confronting the legendary Bakhtosh, and consequently, their flying suffers. Additionally, he is a master of the crowning insult, the patronizing remark and the racial slur. He often goads Terran fighters into making tactical errors.

Weaknesses. Bakhtosh's piloting is nothing special. Like one legendary figure of Terran combat aviation, the Red Baron, he is an excellent marksman but a mediocre flier. Additionally, his insults and better-than-thou attitude are *not* poses; he believes himself to be superior to most Kilrathi, as well as all humans.

Tactics. Bakhtosh prefers to fire from a distance. He will move within the maximum effective range for his weapons and chew his target to pieces. The extra distance allows him a little time to cope with the maneuvers of superior fliers. If forced to close with a foe, he will launch one of his missiles.

Recommendation. Close in, firing continuously, then try to outfly him in standard fashion. Do *not* be daunted by his substantial reputation.

CAT BITES - HISTORY OF THE TERRAN/KILRATHI CONFLICT

On 2634.235, the Kilrathi fleet arrives at McAuliffe. It is four times the predicted size; the incomplete translation of the intercepted message had underestimated the size of the Kilrathi offensive. So begins the McAuliffe Ambush engagement. In several days of bloody combat, the Terran fleet is all but obliterated, leaving a still-sizable force of functional Kilrathi spacecraft.

CAT BYTES - HISTORY OF THE TERRAN/KILRATHI CONFLICT

On 2639.033, Kilrathi occupation forces land on the human-occupied world Enyo, hold a quarter of a million humans hostage under orbital guns and await Terran reprisals. This triggers the Enyo Engagement, a tactical situation made difficult by the presence of so many hostages.

Phase One of the Enyo Engagement involves bringing in an attack force against the Kilrathi fleet at Enyo. The attack force consists principally of *Raptor*-class heavy fighters reconfigured to carry extra Porcupine Space Mines and practically no missiles. The force is small enough that Kilrathi forces at Enyo are certain of victory.

Phase One forces drop their mines in one region of space near Enyo and engage the enemy. Kilrathi ships maneuver to get out of the mined region and turn their attention to destroying the invaders.

By the time the Kilrathi navigators realize that the mined region corresponds to Enyo's principal jump point, it is too late: Phase Two has begun. A single radio signal detonates all the specially modified Porcupines mines, and moments later the remainder of the Terran fleet appears at that jump point, in the middle of the engagement.

The Terran fleet makes its first strike against the gunships threatening the human colonies. The enemy ships are destroyed, with minimal loss of life among the colonists. Then the two fleets settle in for a pounding match.

The Enyo Engagement ends with the Kilrathi in retreat. Losses have been nearly identical between the two fleets, but the Kilrathi have been forced to abandon a strategic position.

5 Years Ago

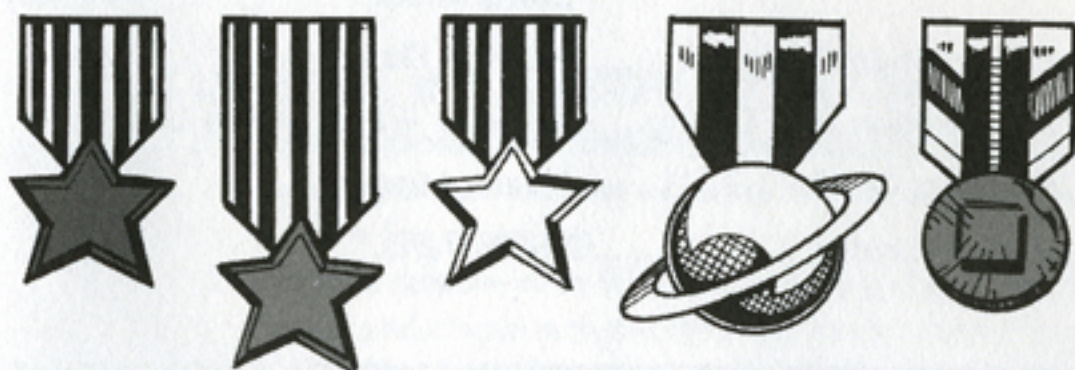
Terran ground forces launching an attack on a fortified Kilrathi colonial position are routed by unexpected Kilrathi fighter-craft support. The Terrans quickly reform and turn back toward Terran space, their lightly armed transports pursued by Kilrathi warships. TCS *Tiger's Claw* is detached from its previous station and sent to the Terran fleet's path.

Tiger's Claw fights a delaying action, subsequently called Custer's Carnival, to allow the Terran fleet time to reach Confederation-controlled space. Though swarmed and badly damaged by Kilrathi fighters, the carrier occupies the attention of the Kilrathi forces until the Terran fleet reaches safety.

NEW ON THE FLIGHT DECK

MEDAL RECOGNITION FOR NEW RECRUITS

Can you recognize, on sight, all the medals awarded by the Terran Confederation Navy? Don't be caught speechless when a senior officer tells you to identify all the "chicken guts" he's wearing. Instead, learn the medals and ranks shown below.



Bronze Star. Awarded for exceptional bravery under fire.

Gold Star. Awarded for exceptional bravery against hopeless odds.

Silver Star. Awarded for exceptional bravery against overwhelming opposition. When a recipient wins an additional Silver Star, an extra bar is affixed to the top of the ribbon area.

Terran Confederation Medal of Honor. Also nicknamed the "Pewter Planet," this is the highest medal awarded to military personnel.

Golden Sun. Awarded for surviving the destruction of one's ship. The Golden Sun is awarded only once. The subsequent loss of ships gets you only the requisite, especially intensive, debriefing sessions and performance evaluations.

UP AND COMING

TIGER'S CLAW PROMOTIONS

To Lieutenant: S.E. "Broadway" Sarasin

To Captain: Fatima "Cymbals" Haroud

TIGER'S CLAW AWARDS

Ace: Second Lieutenant Todd "Maniac" Marshall

Bronze Star: Captain Jeannette "Angel" Devereaux

15-Mission Ribbon: First Lieutenant Tanaka "Spirit" Mariko

CREDITS

SEGA CD GAME CREDITS

Sega CD version developed by Game Arts

ProducerAlan Gardner

Package Design.....Al Carnley, Jennifer Davis,
Craig Miller

Documentation DesignJennifer Davis

*Documentation and Editing.....*Tuesday Frase, David Ladyman

Q.A. Project LeaderAlvaro Moreno

Quality AssuranceMark Franz

ORIGINAL IBM PC GAME CREDITS

Producers.....Chris Roberts, Warren Spector

Lead ProgrammerChris Roberts

Programmers Steve Beeman, Ken Demarest III,
Paul Isaac, Herman Miller, Steve
Muchow

Dogfight Choreography Steve Beeman, Erin Roberts

3-D Space SystemChris Roberts

ORIGIN Graphic SystemJohn Miles, Chris Roberts

ORIGIN Sound System.....Herman Miller

ArtKeith Berdak, Daniel

Bourbonnais.

Glen Johnson, Denis Loubet,

John Watson

Writers Philip Brogden, Steve Cantrell,

Jeff George

*Music.....*Dave Govett, George A. Sanger

Sound EffectsMarc Schaefgen

Quality AssurancePhilip Brogden, Steve Cantrell,

Greg Paul Malone II, Erin

Roberts, Mike Romero,

Marc Schaefgen, Jeff Shelton,

Scott Shelton, Brian Tompkins,

John Watson

ORIGIN SYSTEMS, INC. LIMITED 90 DAY WARRANTY.

ORIGIN warrants to the original purchaser of this computer software product that the recording medium on which the software programs are recorded will be free from defects in material and workmanship for 90 days from the date of purchase.

If the recording medium is found defective within 90 days of original purchase, ORIGIN agrees to replace, free of charge, any such product upon receipt at its Factory Service Center of the produce, postage paid, with proof of date of purchase. This warranty is limited to the recording medium containing the software program originally provided by ORIGIN. This warranty shall not be applicable and shall be void if the defect has arisen through abuse, mistreatment or neglect. Any implied warranties applicable to this product are limited to the 90-day period described above. If failure of the software product, in the judgment of ORIGIN, resulted from accident, abuse, mistreatment or neglect, or if the recording medium should fail after the original 90-day warranty period has expired, you may return the software program to ORIGIN, at the address noted below, with a check or money order for \$5.00 (U.S. currency), which includes postage and handling, and ORIGIN will mail a replacement to you. To receive a replacement, you should enclose the defective medium (including the original product label) in protective packaging accompanied by: (1) a \$5.00 check (2) a brief statement describing the defect and (3) your return address. Canada and Foreign Orders Note: Only U.S. money orders are accepted.

Except as set forth above, this warranty is in lieu of all other warranties, whether oral or written, express or implied, including any warrant of merchantability or fitness for a particular purpose, and no other representation of claims of any nature shall be binding on or obligate ORIGIN. In no event will ORIGIN be liable for special, incidental or consequential damage resulting from possession, use or malfunction of this product, including damage to property and to the extent permitted by law, damages for personal injury, even if ORIGIN has been advised of the possibility for such damages. Some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of incidental or consequential damages, so the above limitation and/or exclusion or limitation of liability may not apply to you. This warranty gives you specific legal rights. You may have other rights that vary from state to state.

**FOR ASSISTANCE WITH QUESTIONS PLEASE CALL
ORIGIN PRODUCT SUPPORT AT (512)-335-0440.**

Patents: U.S. #'s 4,442,486/4,454,594/4,462,076/4,026,555; Europe # 80244; Canada #'s 1,183,276/1,082,351; Hong Kong # 88-4302; Germany # 2,609,826; Singapore # 88-155; U.K. # 1,535,999; France # 1,607,029; Japan #'s 1,632,396/82-205605 (Pending).

WING COMMANDER, SEGA CD REFERENCE CARD

3-BUTTON CONTROLLER

Pre-Flight Functions

- [D] Move the cursor to select option
- [A] Begin selected action
- [B] Skip entire conversation/animation
- [A] or [C] Skip one line of conversation
- [S] Start game/Pause

In-Flight Functions

- [D] Move the ship left, right, up and down
- [A] Fire gun
- [A][B] Launch missile
- [B][↑] or [B][↓] Speed up or slow down
- [B][←] or [B][→] Roll left or roll right
- [B] x 2 Apply afterburner burst (keep pressed the second time for continuous afterburners)
- [S][↑] or [S][↓] Cycle views (External views and Cockpit)
- [S][←] or [S][→] Cycle views (Starboard/Rear/Port/Cockpit)
- [S][A][B] Toggle Missile Camera (on/off)
- [B][C] Autopilot
- [S][B][C] Eject from ship

VDU Functions

- [S][A] Cycle through Left VDU modes (Weapon/Gun/Damage)
- [S][C] Cycle through Right VDU modes (Communications/Nav/Target)
- [C] Cycle through available options
- [S][B] Lock/Unlock target (If in Autotargeting mode)
- [S][B] Select Receiver/Send Message (If in Communications mode)
- [S][B] Display Nav map/pause game (If in Navigational mode)
- [A] Accept Nav point and return to cockpit (if in Nav map)

6-BUTTON CONTROLLER

- [X]
- [Z]
- [C]
- [Y]
- [Y]
- [Y]
- [Y]

Licensed by Sega Enterprises, Ltd. for play on the Sega CD™ System. Sega and Sega CD are trademarks of Sega Enterprises, Ltd. All rights reserved.

Produced by ORIGIN Systems, Inc., an Electronic Arts Company. Origin, We create worlds and Wing Commander are registered trademarks of ORIGIN Systems, Inc. Electronic Arts is a registered trademark of Electronic Arts.

© 1994 ORIGIN Systems, Inc. All rights reserved. ORIGIN Systems, Inc. P.O. Box 161750, Austin, TX 78716-1750.

Manufactured in the USA.