PROJECT STEALTH FIGHTER™

LOADING INSTRUCTIONS

CBM 64/ 128:

Project Stealth Fighter includes two tapes. Tape A has sides 1 and 2, while B has sides 3 and 4. To play the full game, load side 4 first, then sides 1, 2 and 3 in that order. After that, you're prompted for just sides 1, 2 and 3 for additional mission.To load the game quickly, ignore side 4 and begin loading with side 1, then side 2 and side 3.

Project Stealth Fighter requires a C64, C64C or C128 with a computer cassette tape deck, joystick, and either a TV screen or computer monitor. To load and start the game, follow these steps:

- **Turn off your computer.**
- **Unplug all cartridges and devices** from your computer. This includes disconnecting any disk drives, printers, modems, light pens, etc.
- **Attach one joystick in port #2.** DO NOT leave a joystick in port #1 (a joystick there can scramble the controls).
- **Plug the cassette tape deck** into your computer.
- **Insert the tape into your cassette deck.**

Note: Side 4 is an optional graphic title sequence. It is very attractive, but not necessary to the game.

- **Turn on your computer.** If you have a C128, hold down the Commodore (**C=**) key as you switch on the computer.
- **Load the program** by holding down the **SHIFT** key and tapping the key marked **RUN /STOP**. Then, as prompted on the screen, rewind the tape and press **PLAY** on the tape cassette deck. Later you will be prompted to place different tape sides in the cassette deck, rewind them, and press **PLAY** again.
- **Select "No Crashes".** The first few times you play, we urge that you select the "No Crashes" flight option. This allows you to learn to fly without the agony of reloading from tape after each crash.
- **Have a spare tape handy.** To save your pilot's record, you need a separate, blank tape. You cannot save pilot records onto either game tape. Only use game tapes for playing game data. NEVER record on the game tapes.

Perpetual "Play" on the Tape Cassette Deck

When instructed to press "PLAY" on your cassette deck, you normally leave the **PLAY** key down, even if the game isn't reading data. This is especially important when Sides 1 and 3 are in the deck. However, when Side 2 is in the deck, and the cockpit screen has loaded completely into the computer (i.e. you can begin flying), you can press **STOP** while airborne. However, you MUST press **PLAY** again when prompted (after flying ends). If you don't, the program will malfunction or crash. Therefore, most players prefer to leave PLAY down all the time.

SPECTRUM 48/ 128K

Reset your machine and insert the tape . If you have a 48k machine type; **LOAD""** and press **RETURN/ ENTER**. If you have a 128k machine just press **RETURN/ ENTER**. Press **PLAY** on the tape deck and now follow all on screen prompts. The game will continue to load. **Always remember to have a blank cassette ready to save your pilots log.**

Special note from the Wing Commander: When your program reaches the stage that the whole cockpit appears, please stop your cassette deck from running. Pilots who leave their datasettes running, just end up getting an upgraded debriefing.

Special Note:

1. Both the 128k and 48k versions of F-19 are incorporated in the product you have now purchased.
2. The data for these two individual programs is recorded on the opposite side of the cassette.

Loading Problems?

If the program does not load or run correctly, turn off your computer, leave it off for at least 10 seconds, then try again. Tapes sometimes load incorrectly.

If Project Stealth Fighter repeatedly fails to load or run correctly, make sure all other equipment is disconnected. Disk drives, printers, modems, etc. can prevent the game from loading or running properly. The next step is to try to load the program on another machine. If it loads correctly on that machine, your difficulties are in your hardware. You must have your equipment repaired or replaced. If you have trouble loading on other machines, as well as on your own, you may have a defective tape. Defects are often caused by careless handling. The data on these tapes is stored magnetically. Any magnet or strong electrical field can damage it. This includes most television screens and computer monitors. Never put a tape or other piece of computer equipment on top of your TV or monitor. Do not hold a tape (or disk) against the screen.

COCKPIT CONTROLS

Where different, Spectrum keys are shown in brackets '( )'

HUD Targeting Colours

White Rectangle	Enemy target can be identified, poor accuracy.
White Oval	Enemy target in firing range, good accuracy.
Black / Red Oval	Enemy target in close range, excellent accuracy. (colour varies in day and night)

Threat Display Colours

Flashing Red Dot	Enemy missile radar
Red Dot	Other enemy search radar
Blue Plane	Enemy aircraft radar - at higher altitude
Green Plane	Enemy aircraft radar - at lower altitude
White Dot	Enemy missile in flight

RWR & IWR Warning Light Colours

RWR = Radar Warning Receiver
IWR = Infrared Warning Receiver

Dark Grey	Off
Blue	Search warning
Yellow	Search detection
Red	Enemy fire control tracking you
Flashing Red	Enemy missile flight guidance

Strategic Map Symbols

Pulsing White	Your position
Flashing Yellow	Active INS waypoint
Solid Yellow	Other INS waypoint

Flight Controls: Speed

6 key	(E key)	Engines On/Off
+ key	(K key)	Increase Throttle
- key	(J key)	Decrease Throttle
5 key	(H key)	Accelerated Time
RunStop key		Pause
(Caps Shift)		

Flight Controls: Aerodynamics

Joystick		Control Stick
0 key	(B key)	Speed/Gear Brakes
9 key	(F key)	Flaps Extended/ Retracted
8 key	(G key)	Landing Gear up/Down
Left shift key (Sym Shift)		Pilot Ejection

Flight Controls: Visibility & Navigation

ClrHome	(V key)	Look Ahead
£	(V key)	Look Left
InstDel	(V key)	Look Right
X	(W key)	INS Set-mode On/Off
C	(X key)	Switch INS Nav Waypoints
Y	(L key)	Strategic Map
B	(L key)	Tactical Map

Combat Systems Controls: Tracking

Right shift key	Change Threat Display Scale
N key	Switch Tracking Mode
M key	ID Target
Space bar	Switch Targets
,< key	Display Weapon

Combat Systems Controls: Arming & Firing

F1 key	(1 key)	Weapons Bay #1 Armed
F3 key	(2 key)	Weapons Bay #2 Armed
F5 key	(3 key)	Weapons Bay #3 Armed
F7 key	(4 key)	Weapons Bay #4 Armed
Up/down Crsr key	(5 key)	20mm Cannon Armed
Return/	(W key)	EMCON Weapons Shutdown

B&W CRT Status Lights

E	Enemy aircraft ID displayed
S	Systems damage & defences left
R	Radio message displayed
W	Weapons data displayed
I	INS Nav System engaged

EMV Bar Gauge Colours

Blue	Low EMV	(1-3 lights on)
Yellow	Moderate EMV	(4-6 lights on)
Red	High EMV	(7-10 lights on)
Fire(Return)	Fire/Launch/Drop Weapon	

Combat Systems Controls: Defense

2	(D key)	Drop Decoy
1	(I key)	IR Jammer On/Off
=	(R key)	Radar Jammer On/Off
4	(U key)	Bay Doors Open/Close
,<	(S key)	Display System Status

Simulation optionsbefore & after mission

Joystick	Controller
Fire Button	Selection

OPERATING INSTRUCTIONS

Preflight Briefing

To make choices in the Preflight Briefing, move the controller to highlight your choice. Then press **Selection** to make your selection.

Aircraft Identification

To choose your own mission assignment, you must correctly identify an aircraft. Find the drawing which matches the screen illustration. Observe carefully the shape of the wings, fuselage, nose and cockpit for accurate identification. Select the correct name.

Region of the World

You can select one of five regions for your next mission. LIBYA TRAINING is a training simulator of Libya. Enemy hits do not damage your aircraft. Crashing into the ground has the normal effect, depending on what options you select.

LIBYA (the "real" world) is the least difficult of the four major regions. The PERSIAN GULF is the next least difficult. The NORTH CAPE and finally CENTRAL EUROPE are the most difficult regions.

Level of Conflict

You can fly in an everyday 'cold' war situation or you can ask for a mission in a war zone. LIMITED WAR situations are less dangerous than conventional war deployments. In cold war missions you must minimise collateral damage. In limited and conventional warfare you are rewarded for additional damage.

Type of Mission

In "real" regions you may select the general category of mission you desire (Airborne, Tactical or Strategic targets). Your commanding officer then makes a specific mission assignment. In "real" region missions, Strike Missions send you against surface targets on land and sea. Photo recon missions are most common in Cold War, fairly frequent in Limited War and rare in Conventional War. Target destruction missions are the reverse. "Air-Air" Missions involve intercepting and destroying specific enemy aircraft.

In the Libya Training, BOMBING PRACTICE sends you to the Gulf of Sirte, with no active aircraft or SAM defenses, to practice weapon release runs. In AIR- AIR PRACTICE you are sent to Benghazi, an area protected by simulated Libyan fighters. In DRESS REHEARSAL you are sent to Tripoli, an area with both SAM and aircraft defenses.

Opponent Quality

You can select the quality level of the enemy forces. Green have no tactical skill or sophistication. REGULAR opponents are faster reacting and show some tactical skill.VETERAN opponents react with combat-honed reflexes and will use their battlewise experience against you. Higher quality enemy forces will tend to have better equipment. The state of war will also effect the equipment and reaction time of the enemy.

Flight Performance

You can select the level of F-19 flight performance you desire: No Crashes, EASY LANDINGS OR; REALISTIC LANDINGS.

Flight performance affects the damage you suffer from enemy gun and missile hits. NO CRASHES means each enemy hit does very little damage, EASY LANDINGS means hits are less effective and REALISTIC LANDINGS means hits are fully realistic (slightly more effective than easy flight).

Mission Briefings

After selecting your options, you can:-

GO ON LEAVE: Reject all choices and restart with a new pilot.

SELECT NEW MISSION: This retains the current pilot and region, but restarts the other selection options.

MISSION BRIEFING: See detailed instructions about your mission.

INTELLIGENCE BRIEFING: This instructs you on the enemies you will face.

ARM YOUR PLANE: This sends you to the armament options screen.

Armaments

A default armament for each bay is suggested. However, you can change armament in any bay to a new weapon by selecting a new bay , then moving the highlight pointer to select a new weapon. In addition, you can also use the keyboard to select a new bay directly.

CONTROLS

Head-Up Display (HUD)

The HUD is designed to provide the pilot with all critical flying and weapon targeting information, in a graphic format. This is projected on a clear pane in the front of the cockpit. The pilot can look " through" the HUD to see the situation outside his craft.

Airspeed: The vertical scale on the left is your airspeed in knots. The black section of the scale represents stall speed. If your speed drops to the black range, you will lose control.

Altitude: The vertical scale on the right is your altitude in feet. At 1,000' and higher the scale changes to thousands. ("2K" means 2,000' altitude, "13K" means 13,000' altitude, etc).

Heading: The horizontal scale across the top is your heading in degrees. The black mark on the scale shows the heading you should fly to reach the currently selected INS point.

Plane Indicator: This is a reference mark in the centre of your HUD, showing what direction your nose points. The plane is level when the top of the indicator touches the horizon. However, don't confuse this with *Level FLight*. To achieve level flight, you may need to pitch up or down somewhat, depending on your throttle setting and altitude.

Pitch: This describes the vertical facing of the aircraft, in degrees. Positive pitch means nose up, negative pitch means nose down.

Roll: This shows left-right motion around the aircraft's axis. Roll to the right is positive, roll left is negative.

Target Box/ Oval: Your tracking system is constantly functioning, picking up potential targets within view of your HUD. A potential target is outlined by a box on the HUD.When using guided missiles or bombs, the tracking box changes to oval when the weapon locks on. If the lock-on is maintained and the range is reduced, accuracy increases further, indicated by the oval changing colour.

Gunsight: When the cannon is active, the gunsight circle appears on the HUD. WARNING: Guns are only effective at ranges of 2.5 miles or less.

Bombsight: When unguided bombs are active, the bombsight appears as a line extending from the plane indicator with a circle at the end. The line represents the fall of the bomb and the centre of the circle, its impact point.

135mm/IR Camera Frames: When the 135mm/IR cameras are active, two indicators appear at the top of the HUD. The film indicator on the left indicates the amount of film left in the camera. The frame indicator on the right corresponds to the number of good frames taken in the target area. At least 300 frames of the target are required for success.

Range to Target: This shows the distance to the current target in miles.

COCKPIT CONTROL PANEL

Monochrome Text CRT: This screen displays incoming radio messages automatically. It can be switched to show the status of your weapons/internal systems or to identify targets.

Monochrome CRT Status Lights: Below the monochrome CRT are a row of status lights, showing which function is currently active on the CRT. They are as follows:

E	= Enemy ID being displayed
R	= Radio message being displayed
W	= Weapons data being displayed
S	= Systems info and damage being displayed.
I	= Inertial Navigation System (INS) Set-mode on

In addition, to the right of the CRT are weapons selection lights. These show which weapon is active.

Colour CRT: This shows the INS strategic and tactical maps. These maps are always orientated so North is the top of the map, East is right, South is down and West is left.

EMV Bar Gauge: This shows the Electro- Magnetic Visibility of the F-19. One light indicates very low visibility, while all ten indicates maximum visibility. The gauge also changes colour as an additional reminder.

Defenses Status Lights: Beneath the EMV are three status lights showing the status of your defensive systems. When a light is off, that defence is inactive. A bright light indicates the defence is active and running. A dim light means that the defence is inactive and cooling down. Only ECM and IRJ jammers require cooling and cannot be activated while doing so. The lights are labelled as follows:

ECM	=Radar Jammer status light
IRJ	=Infrared Jammer status light
DCY	= Decoy status light

Note: You only have a limited number of decoys.

Threat Display: This shows enemy radar and thermal sources. Enemy ground radars and missiles are dots of different colours. Enemy aircraft are small aircraft symbols. The aircraft symbol changes colour, depending on whether the enemy plane is above or below you. The display has three scales: 12, 25 and 100 miles.

Warning Lights: These prominent lights, below the threat display, warn of enemy radar and Infrared homing threats. The colour of the light determines the level of threat.

Below is a list of conditions for the radar warning receiver. Warning light colours vary;

Warning Light	*Typical Colour*	*Meaning*
Off	Black	No enemy radar in range
Search Warning	Blue	Enemy radar in range, has not seen you
Search Detection	Yellow	Enemy search radar has found you
Firing warning	Red	SAM radar tracking you
Firing detected	Flashing Red	SAM launched and flying at you

Throttle: This indicator shows the current throttle position. The top position represents maximum throttle. The bottom position represents engine idling power.

Fuel Supply Bar Gauge: This bar guage shows the fuel supply remaining in the main tanks. It changes colour when fuel is low. The bar guage only shows the main fuel tanks. If the plane carries extra fuel in a weapons bay, this extra fuel is not shown until transferred to a main tank.

Fuel Consumption Bar Guage: This gauge shows the rate of fuel consumption. The taller the bar, the faster the fuel is being consumed.

VVI (Vertical Velocity Indicator) Bar Gauge: This guage shows the rate of climb or descent. If the bar is invisible, you are flying level, at a constant altitude.

Avionics Status Lights: These lights, above the colour CRT, show the status of your avionics systems, as follows:

A	= Acceleration warning, you are flying in accelerated flight mode
T	= Tracking Mode*
G	= Gunsight for cannon on HUD
B	= Bombsight on HUD
M	= Missile system active on HUD

* The colour shows whether you are tracking a **ground (Green)** or **air (Blue)** target.

Flight Control Status Lights

WB	= Weapon bay doors are open
LG	= Landing gear down
SB	= Speed brake extended
FLP	= Flaps extended

FLIGHT CONTROLS

Engines ON/OFF: Toggles your jet engines on or off.

Control Stick: Controls the pitch and roll of your aircraft.

Increase Throttle: Increases engine power.

Decrease Throttle: Decreases engine power

Look Ahead: Viewing through the HUD.

Look Left: Look out of cockpit's left side.

Look Right: Look out of cockpit's right side.

Speed/Gear Brakes: In flight, toggles between speed brake extended and retracted. On the ground, automatically activates the landing gear brakes as needed.

Flaps Extended/Retracted: Extending the flaps increases lift but slows the aircraft down, thus reducing the stall speed.

Landing Gear Up/Down: As a safety feature, the landing gear cannot be lowered at speeds of over 350 knots.

INS Set- mode ON/OFF: When turned on, the control stick is disconnected from flight control. Instead it is used to control the position of your navigation waypoints on the strategic map.

Switch INS Nav Waypoints: This switch *toggles* between waypoints. The active one flashes on the strategic map.

Strategic Map: The overall regional map that is displayed on the colour CRT.

Tactical Map: This displays a close-up map of the local area on the Colour CRT. The INS system is *not* linked to this map.

Pilot Ejection: Ejects you from your aircraft.

Accelerated Time: Helps long flights pass quickly. Automatically stops when an enemy is encountered, you activate weapons, or your landing gear is down.

Pause: Pauses the game.

COMBAT CONTROLS

Change Threat display scale: Toggles between 100, 25 and a 12 mile range.

Switch Tracking Modes: Toggles between air and ground tracking. Note: If weapons are active, tracking mode cannot be switched.

ID Target: Name of current target, displayed on the Monochrome CRT.

Switch Target: Toggles through all ground and air targets but does not change the tracking mode.

Display Weapons: Displays weapons and ammunition currently available.

Weapons Bay #1, #2, #3 or #4 Armed: Opens weapons bay doors and activates the appropriate bay. Tracking mode automatically switches to accommodate the weapon contained within the bay doors.

Cannon Armed: Activates guns and gunsight.

Fire/Launch/Drop Weapon: Fires/Launches or drops the currently active weapon.

Drop Decoy: Drops one general purpose decoy, suitable for use against both IR and Radar guided missiles.
IR Jammer ON/OFF: When running, confuses infrared homing missiles.
Radar Jammer ON/OFF: When running, confuses radar homing missiles.
Bay Doors Open/Close: Toggles your weapon bay doors open or closed.
Weapons Shutdown: Automatically closes the weapon bay doors and switches to ground tracking.
Display Systems Status and Damage: Shows the status of your aircraft and its defenses.

BASIC FLYING

Take-off

The preflight checklist for your F-19 Stealth Fighter is:

1. Set INS System: The standard technique for using the INS is to set one point at the target, the other at your return destination. This is the default set up when you begin a mission.
2. Check Armament: Display your weapons on the Monochrome CRT.
3. Light Off the Engines: Turn on your engines.
4. (Sea): If you are on an aircraft carrier, follow this procedure:
- **a.** Extend your flaps.
- **b.** Increase throttle to maximum.
- **c.** Release brakes to fire catapult.
- **d.** Just before you cross the bow, pull back to pitch up in an 8 to 20 degree climb.
- **e.** Retract your flaps.
- **f.** Retract your landing gear.
- **g.** Turn onto course. Avoid rolls more than 25 degrees until airspeed passes 400 kts.

4. (Land): If you are on a runway, follow this procedure:
- **a.** Release brakes.
- **b.** Increase throttle to maximum.
- **c.** When speed reaches 200 kts, pull back in an 8 to 20 degree climb.
- **d.** Retract landing gear.
- **e.** Turn onto course. Avoid rolls of more than 25 degrees until airspeed passes 400 kts.

PROMOTIONS AND DECORATIONS

Ratings: Your commander is always pleased when you accomplish the mission. All else is secondary. If you perform the mission and get the plane home safely he'll be happy. How much incidental destruction and mayhem you performed is ALWAYS of lesser importance.
In COLD WAR situations, you get little credit for other targets destroyed. Sometimes you may need to destroy a SAM here or an enemy aircraft there.
In LIMITED and CONVENTIONAL WAR situations, you are rewarded for additional enemy ground and air targets destroyed. However, these rewards almost never compensate for failing to achieve your assigned mission.
Stealth Percentage: Your flight recorder maintains a record of all enemy radar signals received, and their strength. This is translated into a 'stealth percentage'. The higher your percentage, the more successful you were in using the stealth of your aircraft. The lower the percentage, the more you were seen by the enemy. The five possible decorations, from easiest to most difficult to achieve, are:

Decorations:

AM	Airman's Medal, recognising good performance.
BS	Bronze Star for Valour, for valour in combat.
SS	Silver Star for Valour, for heroism in combat.
DFC	Distinguished Flying Cross, for extreme heroism.
CMOH	Congressional Medal of Honour, America's highest military decoration.

Promotions: Your starting rank is 2nd Lieutenant. Ranks, from lowest to highest, are:

2nd. Lt	Second Lieutenant
1st. Lt	First Lieutenant
Capt.	Captain
Maj.	Major
Lt. Col	Lieutenant Colonel
Col.	Colonel
B. Gen.	Brigadier General

Promotion from 2nd to 1st Lieutenant requires some success and at least two missions experience. Promotion to Captain requires a better record and at least five missions total experience. After Captain, promotions require an improving record and increasing amounts of experience. After 99 missions you will be asked to retire from front line flying. If at this stage you have the rank of Colonel with an excellent record, you could be promoted to Brigadier General - the highest possible rank.

SAVING YOUR RECORD AND ENDING THE SIMULATION

To save your current pilot's record, continue past the scene in the officer's club bar. You'll return to the starting options, including the option to save your pilot. Do so. Once you have saved the pilot, you can begin another mission or exit the simulation.

ISTRUZIONI PER IL CARICAMENTO

Il Project Stealth Fighter richiede un'unità a nastro magnetico per cassette C64, C64C, oppure C128, un joystick e uno schermo televisivo oppure un monitor da computer.

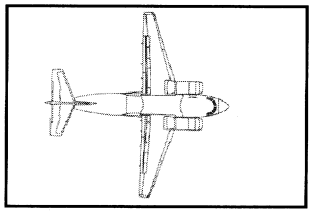
Il Project Stealth Fighter viene fornito di due cassette. La cassetta A ha i lati 1 e 2, mentre la B ha i lati 3 e 4.Per poter usare il gioco completo, caricare il lato 4 per primo, poi i lati 1, 2, e 3, nell'ordine specificato. Dopo di che vi verrà richiesto di caricare i lati 1, 2 e 3 per missioni supplementari. Per caricare rapidamente il programma, ignorare il lato 4 ed iniziare a caricare il lato 1, poi lato 2 ed infine il lato 3.

Caricare il programma tenendo premuto il tasto **SHIFT** e battendo il tasto **RUN/STOP**. Poi seguendo le istruzioni che appaiono sullo schermo, riavvolgere il nastro e premere il tasto PLAY, che si trova sull'unità a nastro magnetico. Poi vi verrà chiesto di inserire nell'unità magnetica lati diversi di cassette. Riavvolgere queste cassette e poi premere nuovamente il tasto PLAY.

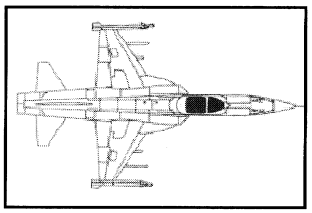
Nota: Il lato 4 è un titolo di sequenza grafica opzionale. È molto attraente ma non è necessario allo svolgimento del gioco.

AIRCRAFT IDENTIFICATION

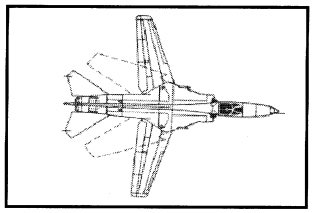
An-72 COALER



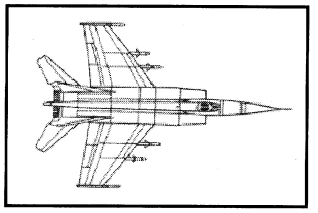
F-5E TIGER II



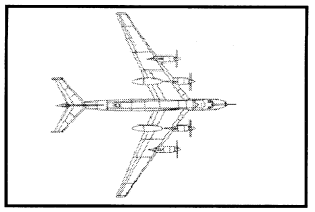
MiG-23 FLOGGER and MiG-27 FLOGGER



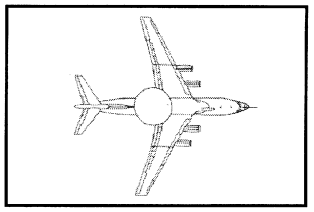
MiG-25 FOXBAT



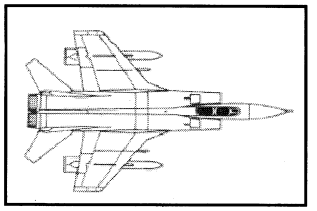
Tu-95D BEAR



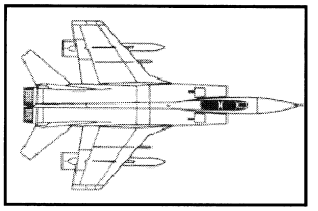
IL-76 MAINSTAY



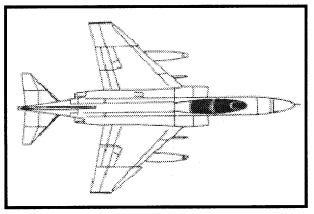
MiG-29 FULCRUM



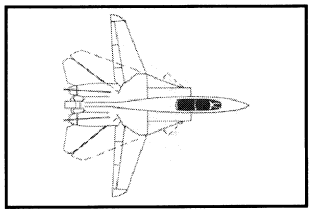
MiG-31 FOXHOUND



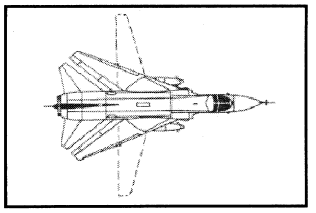
F-4E PHANTOM II



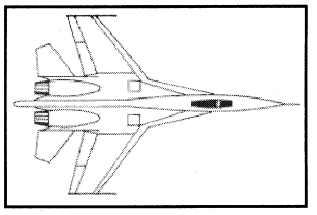
F-14D TOMCAT



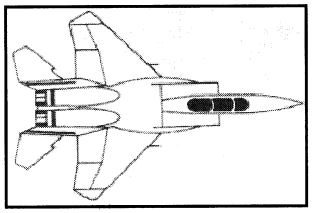
Su-24 FENCER



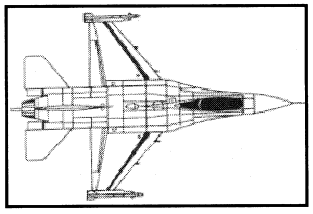
Su-27 FLANKER



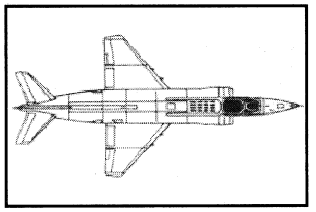
F-15C EAGLE



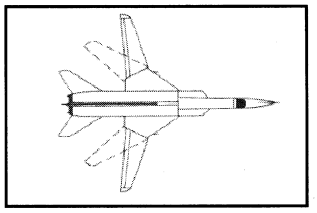
F-16C FALCON



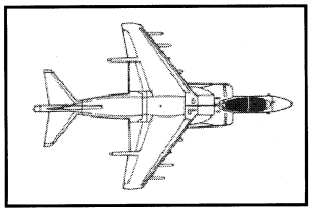
Yak-38 FORGER



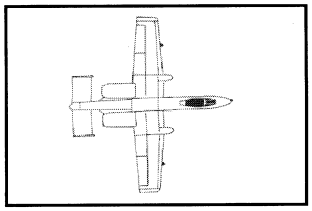
Tu-26 BACKFIRE



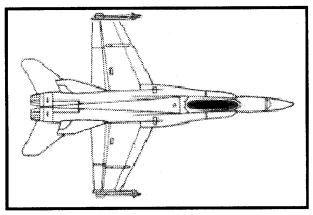
AV-8B HARRIER II



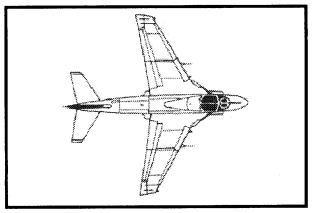
A-10A THUNDERBOLT II



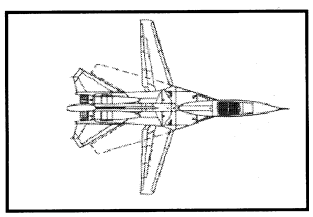
F/A-HORNET



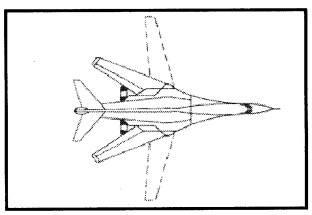
A-6E INTRUDER



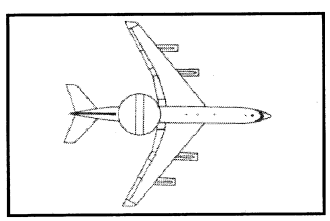
EF-11A RAVEN



B-1B BOMBER



E-3C SENTRY



MiG-21 FISHBED