

F-19 STEALTH FIGHTER

Technical Supplement
Atari ST & Commodore Amiga

Seventh Draft: 6.6.90



F - 19 STEALTH FIGHTER. GETTING STARTED.

Required Equipment

Please note that this simulation requires a minimum of 512 K of RAM. A colour monitor or television is required for the ST version.

This simulation can be run entirely from the keyboard, with mouse and keyboard, or with joystick and keyboard. A joystick greatly improves the "feel" and realism, and is therefore strongly recommended.

Installation

The F-19 Stealth Fighter manual asks you to install the simulation onto back-up Floppy Disks. This is only necessary for IBM PC compatible versions. You do not need to install Atari ST or Commodore Amiga versions.

Your pilot records will be automatically saved to disk A, provided that it is write-enabled prior to loading.

Atari ST

Turn off your computer and remove all unnecessary peripherals. Insert Disk A into the internal drive and switch on the computer. The program will auto-load. Please follow any on-screen prompts. (If you have an additional external drive, disk B may be inserted into this drive, and will be automatically accessed by the computer when necessary).

Commodore Amiga

Turn off your computer and remove all unnecessary peripherals. Insert Disk A into the internal drive and switch on the computer. The program will auto-load. Please follow any on-screen prompts.

WHAT IF MY GAME FAILS TO LOAD ?

In the vast majority of cases a loading problem is not because of faulty software, but either an incorrect loading procedure or a hardware fault.

Please ensure that the loading instructions have been correctly executed. The commonest hardware failures are due to a misalignment of the heads in the disk drive. Such faults may be detected by loading the game on another computer. (Either use a friend's machine or ask the software store from which the game was purchased to test it).

Alternatively, a virus may have transferred into your hardware from another piece of software. Pirated copies of games are an incredibly common source of viruses. It always pays to own original software.

In the unlikely event of a software fault, please return the complete package, with receipt to the place of purchase. MicroProse regret that goods cannot be replaced unless bought from the company directly.

If you have any difficulty whilst loading F-19, or need help whilst running the simulation, MicroProse will be happy to help you on the Helpline. Please ring (0666) 504399.

FACT OR FICTION ? : THE DEVELOPMENT OF "F-19 STEALTH FIGHTER"

NEWSFLASH

*From the Department of
Defense, Office of the
Assistant Secretary (Public
Affairs)*

November 10, 1988 (Washington D.C.): Today the U.S. Air Force announced the existence of an operational stealth fighter aircraft. This single seat, dual-engine jet was constructed by the Lockheed Corporation. built with bipartisan congressional support, it has been operational since 1983 with the 4450th Tactical Group, based on the Tonopah Airfield at Nellis Air Force Base, Nevada.

Technical specifications, possible missions, and operations have not been disclosed. However, design features and the use of A-7 trainers suggest that the plane is intended for clandestine reconnaissance, ground attack, and air-to-air ambushes. In short, the US Air Force's actual stealth fighter is amazingly similar to MicroProse's "F-19 Stealth Fighter" simulation, published for IBM PC compatible machines twelve months prior to the actual plane's disclosure. It is known that the Air Force uses the designation "F-117A" instead of "F-19".

Stealth Fighter

- 1978:** Lockheed receives the program "go ahead" from the U.S Department of Defense.
- 1981:** Lockheed test-flies the new Stealth Fighter.
- 1983:** The U.S. Air Force accepts delivery of the first fighters and the 4450th TG becomes an operational unit.
- 1986:** A fatal Stealth Fighter crash in Bakersfield, California is hushed up by the Air Force before the news media discovers what happened.
- 1987:** MicroProse first publishes a Stealth Fighter computer simulation for IBM PC compatible machines.
- 1988:** The U.S. Air Force admits that Stealth Fighters

have been operational for the last five years.

1989: MicroProse begin work in the UK on "F-19 Stealth Fighter" for Atari ST and Commodore Amiga machines. The decision is taken to retain the original characteristics of MicroProse's "F19 Stealth Fighter", as a testament to the accuracy of MicroProse's research, and to enhance the simulation by including an option to see the actual F-117A plane in external 3-D views.

1990: Atari ST and Commodore Amiga versions are released.

Diagrams of F-19 and F-117A



F-19



F-117A

ADDITIONAL FEATURES for ATARI ST and COMMODORE AMIGA VERSIONS

Pre-Flight Options

Method of Control

Once the game has loaded, you will be asked to select your method of control, by pressing one of the numeric keys on the keyboard, as follows;

- 1. Mouse**
- 2. Joystick**
- 3. Keyboard**

The Pilot Roster

The original pilot roster will be automatically updated after each mission, provided that you have write-enabled your disk A. You do not have to 'install' the simulation onto back-up Floppy Disks.

Intelligence Briefing

Move the Controller up and down the list of options to highlight one, and press the Selector to toggle that option on and off.

To receive specific data on an item displayed on the map, move the Controller over that item on the map.

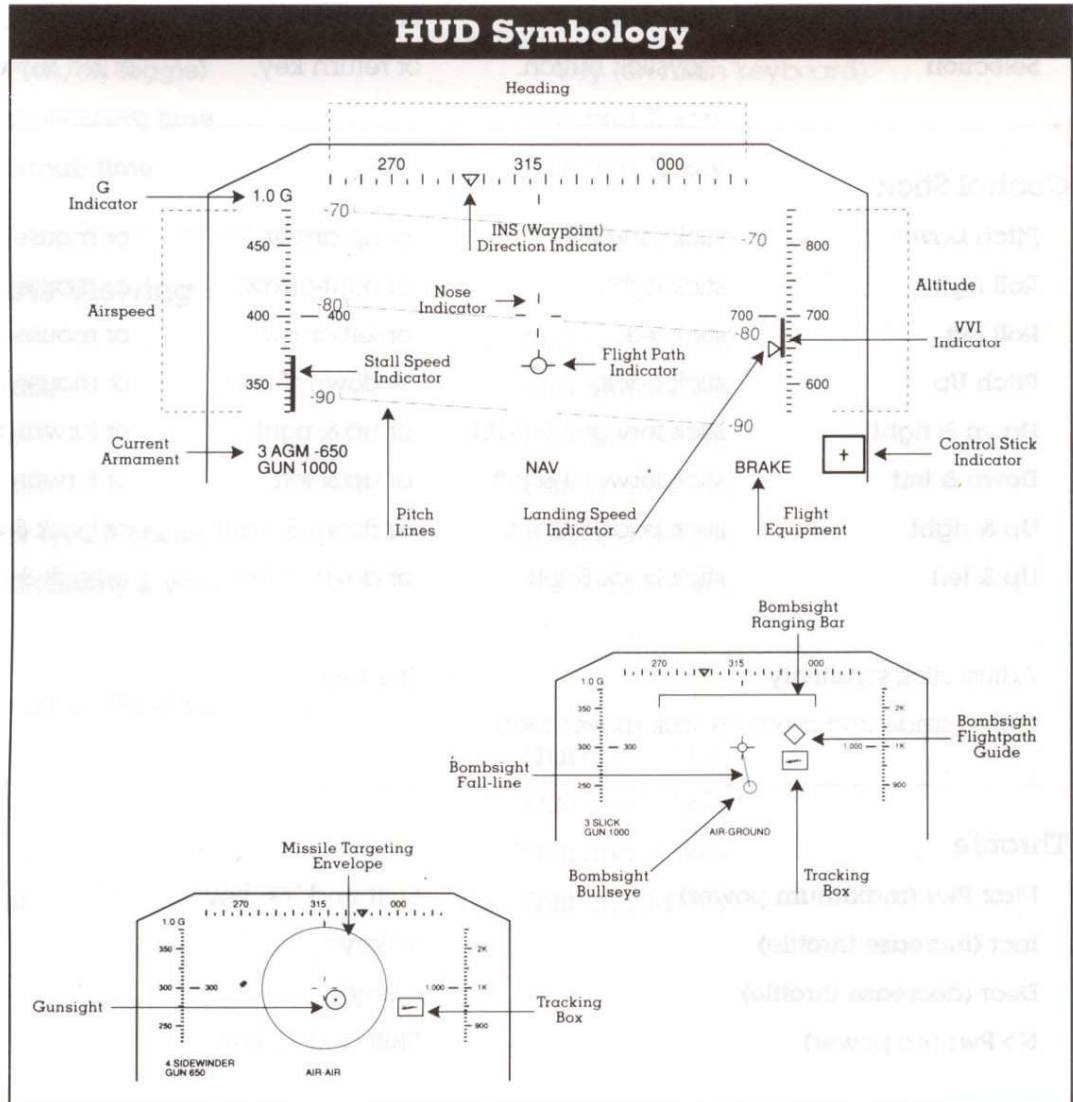
External Aircraft Views

As explained on the previous page, MicroProse's Software Engineers have added the option to view your plane in Slot View, Chase Plane, Side View, Tacti View or Inverse Tacti View, as either the F-19 or F-117A.

Your choice of plane is made immediately after the Mission Briefing, and before choosing the armaments for your mission.

In-Flight

The star system has been accurately mapped and is visible during night missions. It appears on screen as it would according to your actual position and heading. It is therefore possible to navigate by the stars!



CONTROLS

Preflight & PostFlight Options

| | | | |
|-------------------|------------------|----------------|----------------------|
| Controller | joystick, | or arrow keys, | or mouse |
| Selection | joystick button, | or return key, | or left mouse button |

Control Stick

| | | | |
|-------------------------|------------------------|------------------|--------------------|
| Pitch Down | stick forward, | or up-arrow, | or mouse forward |
| Roll right | stick right, | or right-arrow, | or mouse right |
| Roll left | stick left, | or left-arrow, | or mouse left |
| Pitch Up | stick back, | or down-arrow, | or mouse back |
| Down & right | stick forward & right, | or up & right, | or forward & right |
| Down & left | stick forward & left, | or up & left, | or forward & left |
| Up & right | stick back & right, | or down & right, | or back & right |
| Up & left | stick back & left, | or down & left, | or back & left |

Adjust stick sensitivity
(tiny, small and medium stick movement)

'Ins' key

Throttle

| | |
|---------------------------------|-------------------|
| Max Pwr (maximum power) | Shift and '+' key |
| Incr (increase throttle) | '=' key |
| Decr (decrease throttle) | '-' key |
| No Pwr (no power) | Shift and '_' key |

Other Flight Controls

| | |
|-------------------------------|----------------------------|
| Gear (landing gear toggle) | '6' key (on main keyboard) |
| Flaps (extend/retract toggle) | '9' key (on main keyboard) |
| Brakes (on/off toggle) | '0' key (on main keyboard) |
| Autopilot (on/off toggle) | '7' key (on main keyboard) |
| Accel (accelerated) time | Shift and 'Z' key |
| Norm (normal) time | Shift and 'X' key |

Out-of-Plane Viewing

| | |
|---------------------------|--------------------|
| Slot View | Shift and 'F1' key |
| Chase Plane | Shift and 'F2' key |
| Side View | Shift and 'F3' key |
| Missile View | Shift and 'F4' key |
| Tacti view (you & enemy) | Shift and 'F6' key |
| Invrs tacti (enemy & you) | Shift and 'F7' key |

Out-of-Cockpit Viewing

| | |
|------------|--------------------|
| View ahead | Shift and '?/' key |
| View rear | Shift and '>,' key |
| View left | Shift and '<,' key |
| View right | Shift and 'M' key |

Other View Keys

| | |
|-----------------------------|---------|
| Zoom (view or map) | 'z' key |
| Unzoom (view or map) | 'x' key |
| View Angle (narrow or wide) | 'c' key |

Cockpit Controls

| | |
|-----------------------------------|---------------------|
| Cockpit View | F1' key |
| HUD Modes | F2' key |
| CRT Maps (toggles left-side CRT) | F3' key |
| Data (on right-side CRT) | F4' key |
| Ordnance (on right-side CRT) | F5' key |
| System Damage (on right-side CRT) | F6' key |
| ILS (on/off the HUD) | F9' key |
| Mission (on right-side CRT) | F10' key |
| Eject (bail out) | Shift and 'F10' key |

INS (Inertial Navigation System)

| | |
|-------------------------------------|--------------------------------------|
| Select Waypoint (on right-side CRT) | F7' key |
| Change Waypoint (on both CRTs) | F8' key |
| Reset Waypoint (all) | Shift and 'F8' key |
| Select/Change Previous Waypoint | Minus (-) key on numeric keypad |
| Select/Change Next Waypoint | Plus (+) key on numeric keypad |
| Move Waypoint Up (changing pt) | Up-arrow (numeric keypad '8') key |
| Move Waypoint Down (changing pt) | Down-arrow (numeric keypad '2') key |
| Move Waypoint Left (changing pt) | Left-arrow (numeric keypad '4') key |
| Move Waypoint Right (changing pt) | Right-arrow (numeric keypad '6') key |

Tracking Camera (appears on right-side cockpit CRT)

| | |
|-------------------------------------|----------|
| Cam Ahead | '/' key |
| Cam Rear | '\ ' key |
| Cam Left | 'm' key |
| Cam Right | '\ ' key |
| Select Target (in current view arc) | 'b' key |
| Designate New Target (ahead only) | 'n' key |

Armaments

| | |
|---------------------------------|--|
| Ordnance (on right-side CRT) | F5' key |
| Select Ordnance | space bar |
| Bay Doors (toggles open/closed) | '8' key (on main keyboard) |
| Fire Ordnance | or return key, or right mouse button |
| Fire Cannon joystick button, | or backspace key, or left mouse button |

Defences

| | |
|----------------------------|----------------------------|
| Flare (drop one cartridge) | '1' key (on main keyboard) |
| Chaff (drop one cartridge) | '2' key (on main keyboard) |
| IR Jammer (toggles on/off) | '3' key (on main keyboard) |
| ECM (radar jammer on/off) | '4' key (on main keyboard) |
| Decoy (drop one) | '5' key (on main keyboard) |

Simulation Controls

| | |
|--|-----------------|
| Pause (press any key to un-pause) | Alt and 'p' key |
| "Boss" (hides simulation) | Alt and 'b' key |
| Quit | Alt and 'q' key |
| Resupply (training only) | Alt and 'r' key |
| Change missions to training | Alt and 't' key |

Keyboard Control Stick Adjust

'Ins' key

keybd sensitivity 3 = keypress causes large stick movement

keybd sensitivity 2 = keypress causes moderate stick movement (default)

keybd sensitivity 1 = keypress causes small stick movement

Volume Adjust (4 sound levels)

Alt and 'v' key

sound level 3 = all sounds

sound level 2 = all sounds except engine background noise (default)

sound level 1 = firing and explosions only (no warning sounds)

sound level 0 = no sound

Detail Adjust (2 levels)

Alt and 'd' key

detail level 1 = maximum detail on Tactical and Track Cam displays

detail level 0 = normal detail on Tactical and Track Cam displays

Slew Controls (4 directions)

| | |
|----------------------------|-----------------|
| slew north (training only) | Alt and 'i' key |
| slew west (training only) | Alt and 'j' key |
| slew south (training only) | Alt and 'k' key |
| slew east (training only) | Alt and 'l' key |

Notes on Simulation Controls

Change Mission to Training (Alt and 't' key) Tapping this key converts your current mission into a training mission. This means that henceforth enemy weapons do no damage. Tapping Alt 't' again exits training.

Once a mission is converted to training you cannot score any points for it, even if you toggle training off again. However, the slew controls and resupply key only function when training is active.

Keyboard Control Stick Adjust ('ins' key) This regulates the amount of control stick movement a keypress causes. We recommend you use this key frequently when flying, and always set the sensitivity to "1" on your final approach to landing.

Detail Adjust (Alt and 'd' key) The detail displayed on the Tactical and Track Cam displays may be altered from normal (detail level = 0) to maximum (detail level = 1). The tactical display shows all the 16 km grid lines at maximum detail, and the Track Cam update will appear to be smoother.

Slew (Alt and 'i','j','k','l' keys) These keys function only in training. Tapping the key "teleports" your aircraft in that direction. The distance you're "teleported" varies with the current Zoom/Unzoom scale of the satellite/radar map. Slew is an excellent way to check out the region whilst training.

Display Colours

HUD Targeting Colours

Black Rectangle

Brown Rectangle

White Rectangle

White hexagon

Red hexagon

Ineffective Weapon (day)

Ineffective Weapon (night)

Effective Weapon

Effective Weapon, locked on target

Highly effective weapon, locked on target

EMV Scale Colours

Red line

Orange line

Yellow line

Light blue line

White line

Enemy Ground radar, has not detected you

Enemy Ground radar, has poor detection

Enemy Ground radar, which detected you

Enemy Aircraft radar, has not detected you

Enemy Aircraft radar, which detected you

Damage Tattletales

Blue

Red

System functioning

System failure (damaged or destroyed)

Autopilot Light

White

Black

Autopilot On

Autopilot Off

Landing Gear Light

Black

Landing Gear Up

Flashing White

Landing Gear Down at too high a speed

White

Landing Gear Down

Other Warning Lights

Bright Colour

On

Black

Off

Satellite/Radar Map

Flashing White Dot

Your Aircraft

Flashing Yellow-Red

Mission objective on ground

Blinking Red

Mission objective in air

Red Dot

Other Aircraft

Black Dot

Ground Radar

Yellow Dot

Enemy Radar

Dotted Line

Pulse Radar

Solid Line

Doppler Radar

White Dot

Takeoff and landing locations

Tactical Display

Grey squares

Yellow Radar Dish

Blue Boat

Grey Rectangle

Red Crossed Circle

Grey airplane

Grey outline

White Dots

Red & Yellow burst

Blue Plane

Light Red Plane

Yellow Plane

Yellow Line

Red Line

Yellow Line

White Line

White-boxed object

Colour-boxed object

16km grid

Ground Radar

Warship Radar

Airfield

Other Ground Targets

Your F-19

Decoy

Chaff

Flare

Plane at higher altitude

Plane at similar altitude

Plane at lower altitude

Radar-guided missile

IR-guided missile

Visually guided missile

Missile fired from F-19

Current target (in your tracking system)

Source of enemy radar signal

INS Waypoints Fuel Bar

Black region

White Region

Blue Regions

Yellow Region

Fuel consumed

Fuel for flight to current waypoint

Fuel for flight to other waypoints

Reserve Fuel

Tips to Pilots

When flying a mission don't expect the enemy to act randomly or stupidly. They have a surprising amount of intelligence. Fighters and AWACS planes patrol to cover radar weak spots, or protect especially important areas.

If you're spotted, interceptors are scrambled and vectored to your last known location. If they lose sight of your F-19, they investigate your last known position, but will eventually give up and go home. In addition, enemy aircraft and radar operators become more aggressive, sometimes even frantic, after they have repeated sightings, or have suffered a few losses.

The best way to get all the trouble you can handle is to engage "regular" or better enemies, and to loiter about the scene of a battle. Conversely, the best way to avoid trouble is to disappear from sight as quickly as possible. In general, trying to take on the entire enemy defence system with one F-19 is very unwise!

CREDITS

**F-19 Stealth Fighter is brought to the Atari ST and
Commodore Amiga thanks to:**

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**Many thanks to our colleagues in MicroProse USA for
producing the brilliant original. Full credits for their work can
be found in the manual.**

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