**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.

<table>
<thead>
<tr>
<th>Atari ST</th>
<th>Commodore Amiga</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
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.
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".

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>Lockheed receives the program &quot;go ahead&quot; from the U.S Department of Defense.</td>
</tr>
<tr>
<td>1981</td>
<td>Lockheed test-flies the new Stealth Fighter.</td>
</tr>
<tr>
<td>1983</td>
<td>The U.S. Air Force accepts delivery of the first fighters and the 4450th TG becomes an operational unit.</td>
</tr>
<tr>
<td>1986</td>
<td>A fatal Stealth Fighter crash in Bakersfield, California is hushed up by the Air Force before the news media discovers what happened.</td>
</tr>
<tr>
<td>1987</td>
<td>MicroProse first publishes a Stealth Fighter computer simulation for IBM PC compatible machines.</td>
</tr>
<tr>
<td>1988</td>
<td>The U.S. Air Force admits that Stealth Fighters</td>
</tr>
</tbody>
</table>
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 "F-19 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.

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Diagrams of F-19 and F-117A

- F-19
- F-117A
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.

HUD Symbology

- Heading
- G Indicator
- Airspeed
- Current Armament
- Stall Speed Indicator
- INS (Waypoint) Direction Indicator
- Nose Indicator
- Flight Path Indicator
- Altitude
- VVI Indicator
- Control Stick Indicator
- Pitch Lines
- Landing Speed Indicator
- BRAKE
- Flight Equipment
- Bombsight Ranging Bar
- Bombsight Fall-line
- Bombsight Flightpath Guide
- Bombsight Bullseye
- Tracking Box
- Missile Targeting Envelope
- Gunsight
- Tracking Box
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

<table>
<thead>
<tr>
<th>Max Pwr (maximum power)</th>
<th>Shift and ‘+’ key</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incr (increase throttle)</td>
<td>‘=’ key</td>
</tr>
<tr>
<td>Decr (decrease throttle)</td>
<td>‘-’ key</td>
</tr>
<tr>
<td>No Pwr (no power)</td>
<td>Shift and ‘-_’ key</td>
</tr>
</tbody>
</table>
### Other Flight Controls

<table>
<thead>
<tr>
<th>Control</th>
<th>Keyboard Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear (landing gear toggle)</td>
<td>'6' key (on main keyboard)</td>
</tr>
<tr>
<td>Flaps (extend/retract toggle)</td>
<td>'9' key (on main keyboard)</td>
</tr>
<tr>
<td>Brakes (on/off toggle)</td>
<td>'0' key (on main keyboard)</td>
</tr>
<tr>
<td>Autopilot (on/off toggle)</td>
<td>'7' key (on main keyboard)</td>
</tr>
<tr>
<td>Accel (accelerated) time</td>
<td>Shift and 'Z' key</td>
</tr>
<tr>
<td>Norm (normal) time</td>
<td>Shift and 'X' key</td>
</tr>
</tbody>
</table>

### Out-of-Plane Viewing

<table>
<thead>
<tr>
<th>View</th>
<th>Keyboard Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slot View</td>
<td>Shift and 'F1' key</td>
</tr>
<tr>
<td>Chase Plane</td>
<td>Shift and 'F2' key</td>
</tr>
<tr>
<td>Side View</td>
<td>Shift and 'F3' key</td>
</tr>
<tr>
<td>Missile View</td>
<td>Shift and 'F4' key</td>
</tr>
<tr>
<td>Tacti view (you &amp; enemy)</td>
<td>Shift and 'F6' key</td>
</tr>
<tr>
<td>Invrs tacti (enemy &amp; you)</td>
<td>Shift and 'F7' key</td>
</tr>
</tbody>
</table>

### Out-of-Cockpit Viewing

<table>
<thead>
<tr>
<th>View</th>
<th>Keyboard Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>View ahead</td>
<td>Shift and '?' key</td>
</tr>
<tr>
<td>View rear</td>
<td>Shift and '&gt;.' key</td>
</tr>
<tr>
<td>View left</td>
<td>Shift and '&lt;.' key</td>
</tr>
<tr>
<td>View right</td>
<td>Shift and 'M' key</td>
</tr>
</tbody>
</table>
Other View Keys
- Zoom (view or map)
- Unzoom (view or map)
- View Angle (narrow or wide)
  - 'z' key
  - 'x' key
  - 'c' key

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

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

<table>
<thead>
<tr>
<th>Control</th>
<th>Key Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pause (press any key to un-pause)</td>
<td>Alt and 'p' key</td>
</tr>
<tr>
<td>&quot;Boss&quot; (hides simulation)</td>
<td>Alt and 'b' key</td>
</tr>
<tr>
<td>Quit</td>
<td>Alt and 'q' key</td>
</tr>
<tr>
<td>Resupply (training only)</td>
<td>Alt and 't' key</td>
</tr>
<tr>
<td>Change missions to training</td>
<td></td>
</tr>
</tbody>
</table>

**Keyboard Control Stick Adjust**

- **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)**

- **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)**

- **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
<table>
<thead>
<tr>
<th>Black Rectangle</th>
<th>Ineffective Weapon (day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown Rectangle</td>
<td>Ineffective Weapon (night)</td>
</tr>
<tr>
<td>White Rectangle</td>
<td>Effective Weapon</td>
</tr>
<tr>
<td>White hexagon</td>
<td>Effective Weapon, locked on target</td>
</tr>
<tr>
<td>Red hexagon</td>
<td>Highly effective weapon, locked on target</td>
</tr>
</tbody>
</table>

### EMV Scale Colours
<table>
<thead>
<tr>
<th>Red line</th>
<th>Enemy Ground radar, has not detected you</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange line</td>
<td>Enemy Ground radar, has poor detection</td>
</tr>
<tr>
<td>Yellow line</td>
<td>Enemy Ground radar, which detected you</td>
</tr>
<tr>
<td>Light blue line</td>
<td>Enemy Aircraft radar, has not detected you</td>
</tr>
<tr>
<td>White line</td>
<td>Enemy Aircraft radar, which detected you</td>
</tr>
</tbody>
</table>

### Damage Tattletales
<table>
<thead>
<tr>
<th>Blue</th>
<th>System functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>System failure (damaged or destroyed)</td>
</tr>
</tbody>
</table>

### Autopilot Light
<table>
<thead>
<tr>
<th>White</th>
<th>Autopilot On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Autopilot Off</td>
</tr>
</tbody>
</table>
### Landing Gear Light

<table>
<thead>
<tr>
<th>Light</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Landing Gear Up</td>
</tr>
<tr>
<td>Flashing White</td>
<td>Landing Gear Down at too high a speed</td>
</tr>
<tr>
<td>White</td>
<td>Landing Gear Down</td>
</tr>
</tbody>
</table>

### Other Warning Lights

<table>
<thead>
<tr>
<th>Light</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright Colour</td>
<td>On</td>
</tr>
<tr>
<td>Black</td>
<td>Off</td>
</tr>
</tbody>
</table>

### Satellite/Radar Map

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing White Dot</td>
<td>Your Aircraft</td>
</tr>
<tr>
<td>Flashing Yellow-Red</td>
<td>Mission objective on ground</td>
</tr>
<tr>
<td>Blinking Red</td>
<td>Mission objective in air</td>
</tr>
<tr>
<td>Red Dot</td>
<td>Other Aircraft</td>
</tr>
<tr>
<td>Black Dot</td>
<td>Ground Radar</td>
</tr>
<tr>
<td>Yellow Dot</td>
<td>Enemy Radar</td>
</tr>
<tr>
<td>Dotted Line</td>
<td>Pulse Radar</td>
</tr>
<tr>
<td>Solid Line</td>
<td>Doppler Radar</td>
</tr>
<tr>
<td>White Dot</td>
<td>Takeoff and landing locations</td>
</tr>
</tbody>
</table>
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. Fighter 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:

Paul Hibbard - Publisher
Peter Moreland - Development Manager

The MicroProse UK Software Engineers
Adrian Scotney
"Tim"
Malcolm Hellon
and
Mark Scott - Graphic Artist
James Hawkins - 3-D Editing
Martin Moth - 3-D Editing

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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