

IN A HURRY?

TOC

This chapter helps you get off the ground and into the air.

[Choose Activity Screen](#) explains the options available from that screen and where to go to find more information about each.

[The ATF Interface](#) explains how to use menus, switches, buttons and text buttons.

[Quick, Single Mission Options](#) can get you up in the air quickly by explaining the Play Single Mission and Create Quick Mission features of *ATF*.

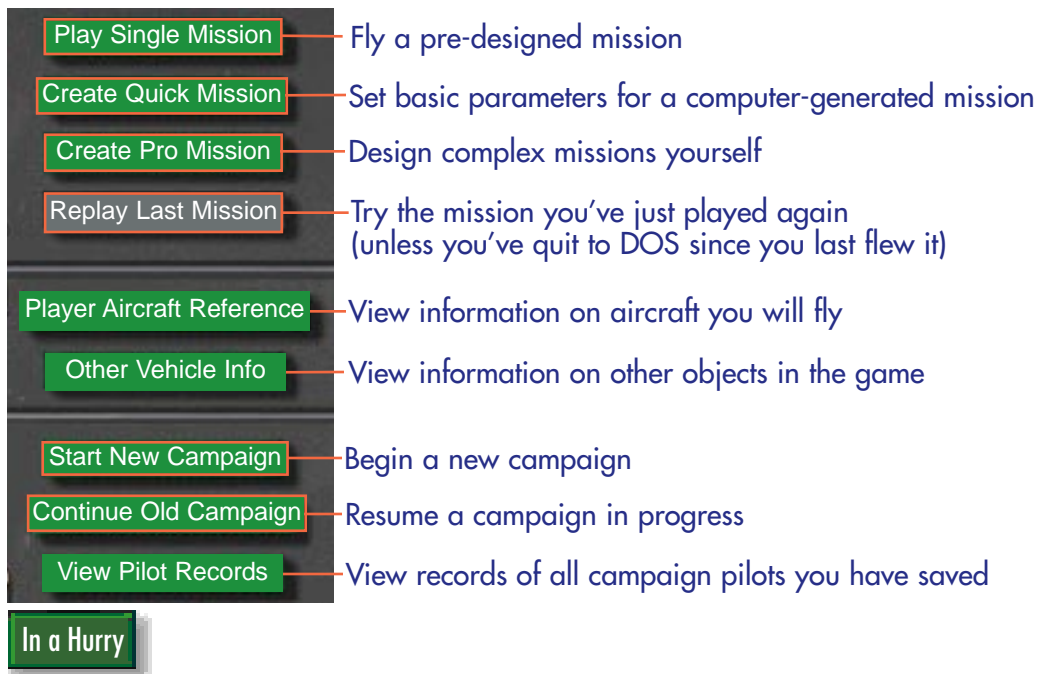
[Quick Mission Tutorial](#) covers basic flight, including weapon and sensor use.

[Multi-Player Connections](#) explains how to set up network, modem and direct-serial (null-modem) connections.

[Multi-Player Missions](#) explains how to choose missions, scoring parameters and aircraft once you have a multi-player connection.

CHOOSE ACTIVITY SCREEN

The *Choose Activity* screen acts as a main menu for the rest of the game. Choose an option by clicking its button.



The image shows a screenshot of the 'Choose Activity' screen from a game. The screen has a dark, textured background with several buttons arranged vertically. Each button is highlighted with a green border and a red outline. Red lines connect each button to a descriptive text block on the right. The buttons and their descriptions are as follows:

- Play Single Mission** — Fly a pre-designed mission
- Create Quick Mission** — Set basic parameters for a computer-generated mission
- Create Pro Mission** — Design complex missions yourself
- Replay Last Mission** — Try the mission you've just played again (unless you've quit to DOS since you last flew it)
- Player Aircraft Reference** — View information on aircraft you will fly
- Other Vehicle Info** — View information on other objects in the game
- Start New Campaign** — Begin a new campaign
- Continue Old Campaign** — Resume a campaign in progress
- View Pilot Records** — View records of all campaign pilots you have saved

At the bottom left, there is a button labeled **In a Hurry**.

THE ATF INTERFACE

Menu Bars

All screens have pull-down menu bars along the top edge of the screen. On in-flight screens, this bar is hidden for greater realism, but can be called up (or hidden again) at any time by pressing Esc.



To access menu bar options:

1. Move the cursor to a menu and hold down the left mouse button.
 2. When the options appear, drag the highlighted bar down to the option you want and release the mouse button.
- ◆ A check mark next to an item means that the feature is active; selecting it again deactivates the feature and removes the check mark.

Buttons

Click blue OK buttons to confirm any choices you've made and move to the next screen. The keyboard equivalent for these buttons is **[Enter]**.

Green CANCEL buttons allow you to return to the previous screen. The keyboard equivalent for these buttons is **[Esc]**.



Text Buttons

You are flying over Egypt.

Clicking on a text button reveals a menu of available options, or cycles through these options inside the text box.

If a menu appears, click on the option you want, then click OK.

When cycling through options within the text box, continue clicking until the option you want appears. (The left mouse button cycles in one direction; the right mouse button goes in the other.)



Switches and Dials

Labels next to switches and dials indicate what each particular position does. Select a position by clicking on it with your mouse.



Objects You Can Drag

Map objects on the Mission Map screen and weapons on the Load Ordnance screen can be moved from one part of the screen to another. Click-and-hold on the desired object to select it, and then drag the cursor to a new location.




QUICK, SINGLE MISSION OPTIONS

There are three options in *ATF* that allow you to fly a single mission (as opposed to a mission embedded inside a campaign). Flying one of these missions is the fastest way to get off the ground and start shooting, and they can be great practice — if you are currently in a campaign, the outcomes of these single missions do not affect your progress through the campaign.

A green rectangular button with a thin orange border and the text "Play Single Mission" in a light green, sans-serif font.

Fly a pre-designed mission — either one included with the game, or one that you have designed with the [Pro Mission Creator](#).

A green rectangular button with a thin orange border and the text "Create Quick Mission" in a light green, sans-serif font.

Have the computer generate a custom mission based on general parameters you set.

A gray rectangular button with a thin orange border and the text "Replay Last Mission" in a light gray, sans-serif font.

Replay your last mission. If you've quit to DOS since you flew this mission, it is no longer available and the **REPLAY** button is grayed out.

A green rectangular button with a thin orange border and the text "In a Hurry" in a light green, sans-serif font.

Play Single Mission

Click on a mission box to select the one that you want to fly.

Click CANCEL to return to the *Choose Activity* screen.

This switch cycles through available missions.

Click OK to select the mission.

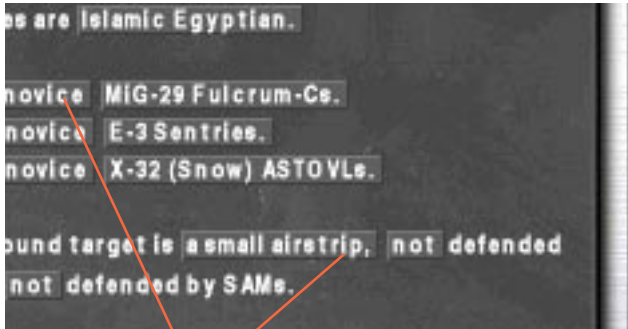


When you click ok, you will progress through some of the Pre-Flight Screens — *Mission Brief*, *Mission Map*, *Aircraft Selection* and *Load Ordnance* — and on to your mission. (You may not see all of the pre-flight screens in some missions.)

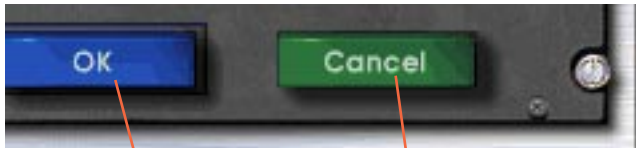
Quick, Single Missions

Choose Activity Screen

Create Quick Mission



Click on text buttons to set mission parameters



Fly the mission

Return to the *Choose Activity* screen



Related topics:

[Quick Mission Parameters](#)

[Replaying Quick Missions](#)

[Editing Quick Missions](#)

[Quick Mission Tutorial](#)

Quick Mission Parameters

Friendly Situation

This panel sets the conditions that you and the airplanes that fly with you will fight under.

Friendly forces are American.

- ◆ Select your **nationality**. (This doesn't limit your choice of aircraft.)

Wing 1: 2 average F-22As.

- ◆ Select the **number** of aircraft for each wing (up to five). (Select 0 to deactivate a wing.) You fly the first aircraft in Wing 1.
- ◆ Select ACE, EXPERIENCED, AVERAGE OR NOVICE **skill level** for each wing. This skill level is the average for that wing; exact skill levels for pilots are randomly set by the Quick Mission Generator.
- ◆ Choose the **type of aircraft** each wing flies. (Note that all pilots in Wing 1 must fly one of the 14 single-player aircraft.)

Create Quick Mission



You are flying over Egypt.

- ◆ Choose the **terrain** you will fly over — EGYPT, THE VLADIVOSTOK PENINSULA OR FRANCE.

You are at 5,000 feet.

- ◆ Specify a starting **altitude** (between 5,000 and 40,000 feet).

It is clear.

- ◆ Set **visibility** conditions: DAWN, CLEAR, CLOUDY, OVERCAST, FOGGY, SUNSET OR NIGHT.

Your situation is neutral.

- ◆ Specify the battle **situation** for friendly forces:

ADVANTAGE	You are behind the enemy fighters, on their tail.
NEUTRAL	You are approaching enemy fighters head-on.
DISADVANTAGE	Enemy fighters are behind you, on your tail.



You are 5 miles from enemy forces.

- ◆ Set the initial **separation** between friendly and hostile forces (between 1 and 50 nautical miles).

You are carrying a custom weapons load.

- ◆ Choose STANDARD to carry a default **loadout** and go straight into flight. Choose CUSTOM to select weapons from the *Load Ordnance* screen before flight.

Air combat is with guns and missiles.

- ◆ Choose whether **weapons** are GUNS ONLY or GUNS AND MISSILES. (Note that GUNS ONLY means no air-to-air missiles. Air-to-ground missiles are still allowed so you can attack a ground target if you've specified one.)



Enemy Situation

In this panel you can specify the number and type of enemies and give yourself an enemy ground target.

Enemy forces are Islamic Egyptian.

- ◆ Specify the **nationality** of enemy forces. (This does not limit aircraft type.)

Wing 1: 2 novice MiG-29 Fulcrum-Cs.

- ◆ Select the **number** of aircraft for each wing (up to five).
Select 0 to deactivate a wing.
- ◆ Select ACE, EXPERIENCED, AVERAGE OR NOVICE **skill level** for each wing. This skill level is the average for that wing; exact skill levels for pilots are randomly set by the Quick Mission Generator.
- ◆ Choose the **type of aircraft** each wing flies.



Friendly ground target is a small airstrip, not defended by AAA and not defended by SAMs.

- ♦ Select a **ground target** for your forces (if you want one). Additionally, you can determine how heavily **SAMs** and **AAA defend** the target.



Replaying Quick Missions

- ◆ If you haven't quit to DOS since you played the mission, click REPLAY LAST MISSION on the *Choose Activity* screen.
- ◆ If you have quit to DOS, your **most recent** quick mission is still saved as a single mission option. Click PLAY SINGLE MISSION on the *Choose Activity* screen and cycle through the pages until you see QUICK MISSION.

Editing Quick Missions

You can load your **most recent** quick mission into the Pro Mission Creator and add objects to them, change waypoints, etc.

1. Click CREATE PRO MISSION on the *Choose Activity* screen.
2. From the **FILE** menu on the *Mission Creator* screen, choose LOAD MISSION.
3. Cycle through the choices until you see QUICK MISSION, and click the box next to it.



Create Quick Mission

QUICK MISSION TUTORIAL

Designed for new pilots, this section teaches you how to maneuver in flight with a sample Quick Mission. You'll learn how to use your radar and IR sensor systems to detect both air and ground targets, and how to fire guided missiles.

[Quick Mission Tutorial Setup](#)

[In the Air](#)

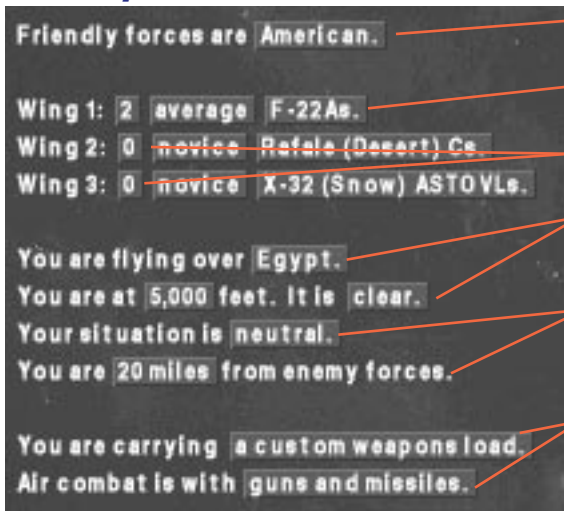
In a Hurry

Create Quick Mission

Quick Mission Tutorial Setup

To create this tutorial mission, go to the *Choose Activity* screen and select CREATE QUICK MISSION. Click on the text boxes in each panel until they look like the panels on these pages.

Friendly Situation



Make friendly forces **American**

Set Wing 1 to **2 average F-22As**

Set Wings 2 and 3 to **0**

Fly over **Egypt** at **5000** feet in **clear** weather

The situation is **neutral** and you are **20 miles** from your enemy

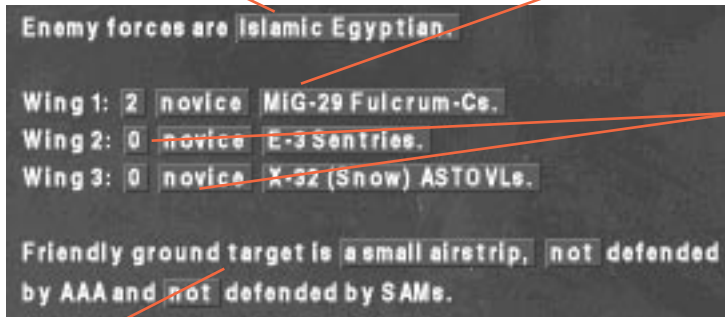
Take a **custom weapons load** and fight with **guns and missiles**



Enemy Situation

Make enemy forces
Islamic Egyptian

Set Wing 1 to **2 novice MiG-29 Fulcrum-Cs**



Set Wings 2
and 3 to **0**

Give yourself a **small airstrip** to bomb that is **not** defended by AAA or SAMs.

Clicking ok brings you to the *Load Ordnance* screen since you selected a custom weapons load. Choose the loadout on the next page.



**M-61 Vulcan
Cannon**

(built-in;
cannot be
unloaded)



**AIM-120
AMRAAM**

(Air-to-Air,
radar-guided)

AGM 56 Maverick

(Air-to-Ground, IR-guided)

FLIR pod

(Infrared detection system)

You do not need to adjust your fuel.

When you've completed your loadout, click FLY to go into flight.



Cheats

As soon as you go into flight, press **[Esc]**. On the menu bar at the top of the screen, activate some cheats to make your first flight a little easier. Left-click on the **CHEAT** menu, drag the cursor down and highlight each of the options below, one by one. A check mark will appear next to the options if they are active — make sure everything below is checked, then press **[Esc]** to return to flight.

UNLIMITED AMMO

Restock your missile/bomb/ammo supply during flight.

SHOW TARGET INFO

Display target information below all objects in view.

INVULNERABILITY

Make your aircraft invulnerable to damage.

NO CRASHES

Keep flying even if you crash into the ground.

IGNORE MID-AIR COLLISIONS

Turn off collisions with other aircraft.



In the Air

This fly-through is divided into sub-sections, each of which deals with a specific aspect of flight:





- ◆ Maneuvering the Aircraft
- ◆ Communicating with Your Wingman
- ◆ Using the Radar
- ◆ Targeting a Ground Object with FLIR
- ◆ Firing Air-to-Ground Missiles
- ◆ Finding an Air Target with Radar
- ◆ Evading Missiles
- ◆ Firing Air-to-Air Missiles







Use **[Esc]** or **[Ctrl][P]** to pause the game at any time. (**[Ctrl][P]** allows you to open and close windows and change views while paused, **[Esc]** gives you access to the *In-Flight* menu bar.)



Maneuvering the Aircraft

DETAILS: Pitch, Roll & Yaw

You begin the mission airborne. Try out some of the aircraft's controls. Use a joystick if you have one; otherwise, press , ,  and  on the keyboard.

-  Pull the joystick toward you to pitch your nose up. Watch your pitch ladder and your altitude tape, and notice that you are climbing.
-  Push the joystick forward to dive.
-   Push the joystick left (or right). This dips the left (or right) wing and causes the aircraft to roll about its nose-tail axis. Note that the pitch ladder tilts accordingly.
-  +  Now, combine pitch and roll by pulling the joystick toward you and pushing it left. This causes you to turn, or **bank**.



Bring the aircraft back to level flight. (You'll know you're flying level when the pitch ladder is level with the bottom of your screen.)

- [1], [3] (Numpad keys) Move the rudder from side to side to induce yaw. Notice that the heading tape scrolls left (or right), but that your pitch remains constant. (Or, use [Pg Dn](#) and [Pg Up](#) if num lock is turned off.)
- [F10] View the exterior of your aircraft. Move the joystick and watch how your craft responds.
- [F1] Return to the normal front view.

(Other view keys are listed under [View Controls](#).)



Communicating with Your Wingman

Aircraft work in groups (usually pairs) for mutual support and protection. You are always the wingleader in the game, and your wingman remains in formation with you and follows your moves.

You can send commands to your wingman during flight. For this mission, you'll send only two:

- Alt C** Give your wingman a “medium” formation scope. This means that he'll stay in formation until you direct him to a target.
- Alt P** Instruct your wingman to engage any enemy aircraft that may threaten you later.

(Other communication commands are listed under [Wingman Communication.](#))



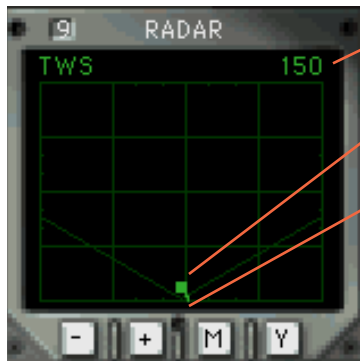
Using the Radar

DETAILS: [Radar Window](#), [Active Radar](#)

Radar is used to detect and acquire air targets, which appear as squares on the screen), and to guide some missiles.

[R], then Activate your radar ([R]), then bring up your radar screen
[Shift][9] ([Shift][9]).

[<], Increase the radar's range. (Decrease it with [>].)



Range

Contact

Your position

We'll revisit radar later — for now, let's move on to ground targets, which require a different detection system.



Targeting a Ground Object with FLIR

DETAILS: Weapon Guidance Systems

- [I] Turn off your active radar and activate your FLIR infrared pod. Information from the FLIR now appears in the Radar Window, and IR appears at the top of the display. FLIR is used to detect heat sources, and “hot” ground targets display as dots.
- ◆ Bring the airfield into view.
(It should be directly in front of you. If not, turn around.)
- [T] When dots appear on your Radar Window, acquire a target. (Use your mouse to click on a contact in the Radar Window, or press [T]). Vertical brackets around a contact identify the current target.

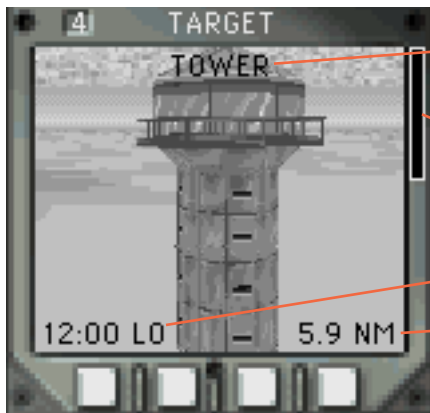


[Shift] 4 Activate the Target Window.

[T] Cycle through ground targets until you see “Tower” in the Target Window. This will be your first ground target.

Normally, you would attack air targets first. However, this mission covers ground targets first, because it's often hard to locate a ground target after an air battle.

Note: If the windows are taking up too much room, deactivate LARGE WINDOWS? under the **PREF** menu.



Target type

Damage bar

completely black = no damage

completely white = near destruction

Target's position

Range to target



Firing Air-to-Ground Missiles

DETAILS: Weapons Mode Features: Guided Missiles

- (Shift) 8** Activate your Weapon Window. This lists the weapons you loaded earlier (guns, then missiles/bombs).
- (I), (I)** Cycle through weapons until AGM-65 is highlighted. The Maverick is now your currently selected weapon.

The Maverick is an IR-guided, air-to-ground missile. To fire it, you must have your Radar Window open **(Shift) 9** and in IR mode **(I)**.



- ◆ Watch the range in the bottom of the Target Window. When you're within 10nm of the target, you're within the weapon's range. A solid box appears around your target on your HUD.
- ◆ Look at the hit probability in the HUD. When it exceeds 70%, you're ready to fire the missile.
- Enter Release the missile (joystick trigger also releases missiles).
- ◆ Veer away — the Maverick's internal IR guidance system will take over and steer it toward the target.
- ◆ Attack other ground targets (such as runways and parked aircraft) if you need more practice.



Finding an Air Target with Radar

DETAILS: [Head-Up Display](#), [RWR Window](#), [Finding the Enemy](#)

- (R) Turn off FLIR and activate radar.
- (Shift)5 Open your Radar Warning Receiver (RWR). This device scans the area for aircraft or incoming missiles that are tracking you with radar.
- <, Increase the RWR's range to 50nm.



RWR range

Enemy aircraft

Friendly aircraft
(your wingman)

Your aircraft is in the center of this display.

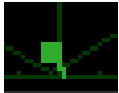


Aircraft won't show up on the RWR unless they are using radar. However, since the RWR can see 360° around you, it can still be a useful sensor device.

- ◆ Fly a sweeping circle. (This is the easiest way to scan an area for enemy contacts.)
- ◆ When dots appear in your RWR Window, maneuver so that one is near the top center of the RWR Window. Your target should now also appear in your Radar Window.
- Ⓣ Target an aircraft as soon as the contact is visible in the Radar Window. Vertical brackets appear around the contact on the display, and a box appears around the target on the HUD.
- ◆ Maneuver so that the target is out of view and look for an “XX” on the perimeter of your viewscreen. Fly toward this offscreen target marker to bring the target back into view.



- ◆ Look in your Radar Window and locate the target that has vertical brackets. (If you don't see it, your current target is out of your radar's cone of vision, and you'll need to turn to bring it back into sight.)



A small flag on a contact indicates its heading relative to you. You are at the bottom of the screen, so if the flag is pointing down, the aircraft is flying toward you.

- ◆ Check target range in the bottom of the Target Window. When you're within 24nm, you're within firing range.



Evading Missiles

DETAILS: Defenses and Countermeasures

- ◆ Keep a close watch on the lower right corner of your RWR Window for a flashing “I” or “R.”
- Ins If you see a blinking “R,” a radar-guided missile is tracking you. Drop three or four chaff cartridges as you make a hard turn. (Chaff is metallic material that distorts radar reflections received by the enemy.)
- Del If the “I” flashes, an infrared missile is tracking you. Release flares as you make a hard turn. (Flares are pyrotechnic devices that emit heat in order to attract heat-seeking IR missiles.)



Firing Air-to-Air Missiles

DETAILS: [Using Weapons](#),
[Weapons Mode Features: Guided Missiles](#)

[I], [J] Cycle through weapons until AIM-120 is highlighted.

Unlike the Maverick you fired earlier, the AIM-120 is radar-guided and requires active radar. Your radar should still be on (if not, press [R] to turn on your radar and [Shift][9] to open the Radar Window), and you should still have a target selected.

Now that your air-to-air missile is active, a floating diamond appears on the HUD. This symbol indicates that your missile seeker is trying to gain a lock.

- ◆ When the diamond centers itself over the Target Designator box , an intermittent lock tone sounds.
- ◆ Watch the hit probability reading in the HUD. When it exceeds 70%, you're ready to fire the missile.



Enter Release the missile, then veer away. (Pressing the joystick missile-fire button also releases missiles.)

The AIM's internal radar guidance system will steer it toward the target. As long as you have your Target Window active, you'll be able to tell whether the missile hits the target or not.

- ◆ Attack the other air target in the same manner.
- ◆ When you've eliminated all mission objectives, you've completed the mission. Choose END MISSION from the ? menu.



MULTI-PLAYER CONNECTIONS

Advanced Tactical Fighters supports network play (up to eight players), and modem and direct serial play (two players).

To set up a multi-player connection, select the following items from the **MULTI-PLAYER** menu or press the corresponding key.

X

Network

M

Modem

E

Direct Serial

D

Disconnect

(DISCONNECT is grayed out when you aren't connected to a multi-player game.)

If you have problems connecting with another player, refer to [Network Troubleshooting](#), [Modem Troubleshooting](#) or [Direct Serial Troubleshooting](#) and your network supervisor or hardware/modem documentation.

Network

Advanced Tactical Fighters connects network players by placing them in common “groups.” Up to ten groups can exist concurrently on the same network. The initiating player creates a game, and then up to seven other players join it. Multiple sessions of the game can run concurrently on a network without disrupting normal network activity. (During peak network hours, however, the game may run more slowly.)

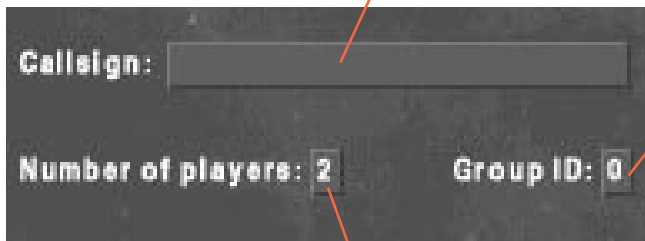
IMPORTANT: You must load your network drivers when you boot your machine. (The game supports Novell IPX or a compatible network. Sample driver names include LSL, IPX, IPXODI and 3c5x9.)

From the *Choose Activity* screen, left-click on the **MULTI-PLAYER** menu and select NETWORK, or press .



1. Setting Up for Net Play.

Click this box to enter your **callsign**. Type it in with the keyboard, using Bksp, ← and → to erase and change letters.



Callsign:

Number of players:

Group ID:

Click this box to choose your **group ID** number (between 0 and 9).

All players must choose the same number.

Click this box to enter the **number of players** in the game (between 2 and 8).

Note: All players must choose the same number, and this number must equal the number of computers attempting to make a connection; otherwise the computers will not find each other on the network.



2. Connecting With Other Net Players

Once you configure the *Network Connection* screen , you can find other players. One player acts as a host and calls other machines; the remaining players are slaves and answer the call from the host. (The person with the fastest computer should be the host.)

The **host** clicks **CALL**. His computer then attempts to add one or more players to the network game with his group ID number.



Slaves click **ANSWER**.
Their computers attempt to connect to the host.

(If more than one player clicks CALL or all click ANSWER, the computer assigns one player to be the host.)

As soon as all players are connected, “Successful Connection” appears in a message window in the upper right corner of the screen along with each player’s callsign.



Step 3 — Configuring the Mission

See [Multi-Player Missions](#).

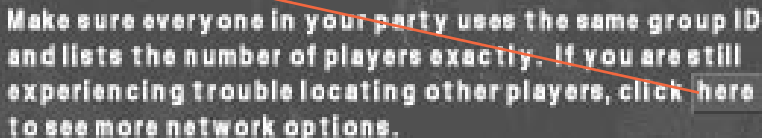
Network Troubleshooting

If your computer can't find other players on the network, make sure [network drivers](#) are loaded.

If you're still having problems, you may need to create an address book, which stores each player's exact net address.

To set up an address book:

Click the [HERE](#) button on the *Network Connection* screen.

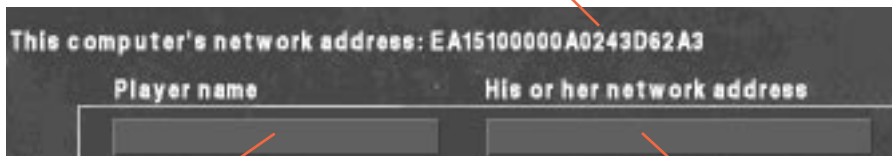


Make sure everyone in your party uses the same group ID and lists the number of players exactly. If you are still experiencing trouble locating other players, click [here](#) to see more network options.



This 20-digit, alpha-numeric code is **your computer's network address**.

Make a list off all players' net addresses using the codes listed on each person's screen.



The screenshot shows a dark interface with the text "This computer's network address: EA15100000A0243D62A3" at the top. Below this are two input fields. The first field is labeled "Player name" and the second is labeled "His or her network address". Red arrows point from the text above to the respective input fields.

Player name	His or her network address
<input type="text"/>	<input type="text"/>

Click on a box below **PLAYER NAME**. Type in another player's callsign using the keyboard, then press **Enter**.

Click the corresponding box below **HIS OR HER NETWORK ADDRESS**. Enter at least the first eight digits of that player's net address then press **Enter**.

Enter all players' addresses in this way and click OK or press **Enter**. Your system will save the player ID, and you can access it for future sessions.

Click **CALL** or **ANSWER** to try connecting again. If you still can't connect, try entering each player's **entire** network address.



Modem

You can play another player across a 14,400 baud or faster modem.

IMPORTANT NOTE: You must deactivate data compression and error correction to play across a modem! Refer to your modem documentation.

From the *Choose Activity* screen, select MODEM on the **MULTI-PLAYER** menu or press **[M]**.



1. Setting Up for Modem Play

Player name	Phone number
Zoot	5125552330
Babyface	5125555527

Enter the **names** and **phone numbers** of both players. Click on the text boxes and type in information with the keyboard, using [Bksp], [←] and [→] to erase and change letters.

Enter your **callsign**.

Callsign:	zoot	
Modem port:	COM 2	Baud rate:
		28800

Select your **com port** connection (1-4).

Choose your modem's **baud rate** from the menu.

Note: If you're not sure which com port to choose, check your modem documentation.



If none of the available modem port selections work, select 'Custom' and click **here** to set these options.

Choose a **custom** com port.

Ignore this button for now. Try to establish a connection first. If you are unsuccessful, see [Modem Troubleshooting](#) for an explanation of this option.

Enter **initialization strings** for your modem.

Click **here** if you need to change the AT command setup strings for your modem.

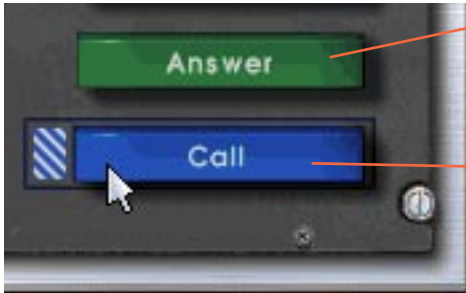
This may not be necessary for all users. Clicking this button sends you to the *AT Command Strings* screen. Click the **HERE** button in the center of this screen, and look for your modem in the list that appears. If you see it, select it. If not, enter in the strings needed for your modem (see your modem documentation) and click OK.

Advanced users can edit MODEMDB.TXT in the *ATF* directory. This file has a technical explanation of all command strings needed by this game. You can edit this file and add your modem and your string list to this file so that it will appear in the AT Command Strings screen later.



2. Connecting With Another Player

One player acts as the host and calls the other player; that player is the slave and answers the call. (The person with the fastest computer should be the host.) Either player can interrupt the connection attempt by pressing any key.



The **slave** should click **ANSWER**.

His computer will attempt to connect to the host player's machine.

The **host** should click **CALL** after the slave chooses **ANSWER**.

His computer will dial the slave's phone number.

Once the modems connect, "Connection Established" appears on the screen and a message window with connection information and messages from other players displays in the upper right.



3. Configuring the Mission


See [Multi-Player Missions](#).

Modem Troubleshooting

If you're having problems connecting, you may have a hardware conflict (i.e., two devices may think they're occupying the same COM port). You may need to custom-set one of your serial ports to another COM port.

To set up a custom port:

1. Select **custom** for the com port in the *Modem Connection* screen.

2. Click this button. 

3. Click on the text buttons to specify a **COM port** location and an **IRQ address** for your modem.



Direct Serial (Null-Modem)

If you and another gamer don't own modems, you can use a serial connector cord to link two computers. Visit your local computer shop and purchase a null-modem connector (sometimes called a file transfer cable).

1. Hooking Up Your Machines

- ◆ Plug one end of the cable into a serial port on one machine, and the other end into a serial port on the second machine.
- ◆ Remember which COM port you plugged the cable into. You'll need to know this when attempting to connect to the other machine. (COM 1 is usually used by your mouse.) If you're not sure what port you're using, look on the back of your computer. Most ports have an identifying mark.

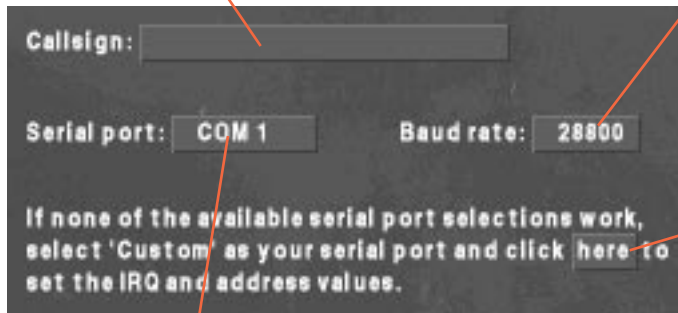
Now, you're ready to connect.



2. Connecting with Another Player

From the *Choose Activity* screen, select SERIAL from the **MULTI-PLAYER** menu, or press [E]. This displays the *Direct Serial Connection* screen.

Type in a **callsign** using the keyboard. Use [Bksp], [←] and [→] to erase and change letters.

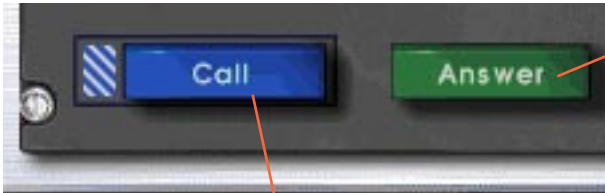


Choose the **COM port** number (1-4) you plugged the cable into.

It doesn't matter which **baud rate**, as long as you and your opponent both select the same one. (If you don't, your computers will not sync correctly.)

Ignore this button for now. If you are unable to connect, see [Direct Serial Troubleshooting](#) for an explanation of this option.





The **slave** should click **ANSWER**. His computer will attempt to connect to the host player's machine.

The **host** should click **CALL** **after** the slave chooses **ANSWER**. His computer will attempt to connect with the slave's machine.

3. Configuring the Mission

See [Multi-Player Missions](#).



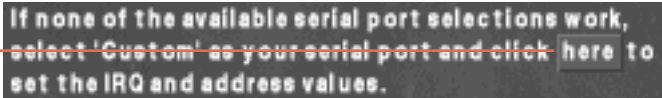
Direct Serial Troubleshooting

If you're having problems connecting, you may have a hardware conflict. (In other words, two devices may think they're occupying the same com port.) You may need to custom-set one of your serial ports to another com port.

To set up a custom port:

1. Select CUSTOM as your COM port in the *Direct Serial Connection* screen.

2. Click this button.



3. Enter the **address** of the COM port you plugged the serial cable into.
4. Enter the **IRQ** for that address.

If you don't know the address and IRQ for your serial COM port, consult your hardware documentation or manufacturer.



Disconnecting

If the **host** disconnects for any reason, so does everyone else. A **slave** can disconnect using (Ctrl)C without affecting the other player's connections.

You can disconnect from a multi-player game in several ways:

- ◆ Press any key during the connection process.
- ◆ Select DISCONNECT from **MULTI-PLAYER** menu.
- ◆ Exit to DOS ((Ctrl)C).
- ◆ Exit the mission ((Ctrl)Q). This ends the game for everyone, and can be used by either the host or a slave.

MULTI-PLAYER MISSIONS

As soon as everyone is connected, all players' screens return to the *Choose Activity* screen. (All players can see what the host is doing onscreen.)

The **host** will:

- ◆ Select a single mission or quick mission.
- ◆ Set quick mission and multi-player scoring parameters (if he chooses to set up a quick mission game).
- ◆ Select options from the **CHEAT** menu during flight.

All players will:

- ◆ Choose sides (FRIENDLY or ENEMY).
- ◆ Choose and arm their own aircraft.

Options that slaves cannot change are grayed out on their menus.

In a Hurry

Select Mission

Select/Arm Aircraft

Pausing/Dying

Identifying Others

Communicating

Selecting a Mission

Single Mission. The host chooses PLAY SINGLE MISSION from the *Choose Activity* screen, scrolls through the list of missions and selects one.

Quick Mission. The host sets the normal quick mission parameters and additional multi-player scoring parameters with the text buttons on this panel.

For **both types** of missions, once the host has finished selecting or setting up the mission:

- ◆ All players must click FLY to start the mission.
- ◆ Each player is asked to choose a side in the conflict (FRIENDLY or ENEMY).
- ◆ The *Mission Map* screen appears. Everyone will select aircraft from this screen.

Multiplayer Missions

Select Mission

Select/Arm Aircraft

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Multi-player Scoring Parameters

- FIGHT TYPE** Tally player scores by points per friendly and enemy sides (DOGFIGHTING), or points per individuals (FREE FOR ALL).
- KILL TALLY** Determine whether player with the highest number of TOTAL KILLS, TOTAL DAMAGE (delivered to opponents), or KILL RATIO (kills-to-deaths) wins.
- Only kills and damage against airplanes and helicopters are counted — ships, tanks, or other ground-based targets won't affect scores. Killing a player before he ejects counts as two kills.
- TIME LIMIT** Set a time limit for the mission, from 1 - 30 minutes.
- KILL LIMIT** Set the maximum number of kills (1-10). When this limit is reached, the game ends.
- KILL OWNER** Set who must make the specified number of kills (TOTAL, BY ONE SIDE OR BY ONE PLAYER).

Select Mission



REVIVALS

Set how many lives each player gets (0-10, or UNLIMITED).

REVIVAL DELAY

Set the time delay between death and revival (0-5 minutes).

REVIVAL DISTANCE

Control how far away from the battle a rejoining player is revived (1-40 miles).

REVIVAL WEAPONS

Set what arms a player can use after being revived — WITH MISSILES, WITHOUT MISSILES (player keeps air-to-ground missiles), WITH BULLETS (player keeps only guns), with HALF BULLETS (player keeps only guns, with half the number of usual rounds).



Selecting Aircraft

Multi-player games allow you to fly any aircraft that exists in the game, including those not available in single-player missions. However, you don't use the *Aircraft Selection* screen to select which airplane you'll fly. Instead, you choose it from the *Mission Map* screen.

- ◆ Click an aircraft icon on the mission map.
- ◆ Click the **type of object** text button inside the text on the right side of the screen to view a menu of objects.
- ◆ Highlight the type of aircraft you want to fly and click ok.

Arming Aircraft

Each player arms his aircraft just as he would during normal games. (See [Load Ordinance Screen](#) for details.) Once armed, everyone must click FLY to start the mission. All players will begin in the air.

Pausing

Any player can pause a multi-player game by pressing **Ctrl** **P** or **Esc**.

Dying in Multi-Player Combat

Any player that dies can rejoin the fray at any time.

To re-enter battle, press **Enter**. You'll be placed in the same aircraft you were flying before, and you'll be positioned just outside the battle zone.

If you're playing a quick mission, keep in mind that the host may have limited the number of revivals each player gets and what weapons a revived player has.

(See [Multi-Player Scoring Parameters](#).)

Identifying Other Players

To avoid shooting airplanes that are on your side (i.e., another friendly if you're friendly, another enemy if you're on the enemy side):

- ◆ Watch the missile lock box when you target — an “X” appears in the middle of the box when you've targeted a teammate.
- ◆ Activate SHOW TARGET INFO on the **PREF** menu of the *In-Flight* menu bar to display players' callsigns beneath their aircraft.
- ◆ Select a target and send an IFF “squawk” (press **[U]**). This signal will return a “Friendly” message if you've targeted someone on your own side.

Communicating with Other Players

You can communicate with other players once you're connected. However, SEND TO ALL is the only option available before you go into flight. Once in the air, you can talk to any aircraft you can see. Messages will appear at the bottom of the cockpit. Pressing Esc to go to the In-Flight menu bar temporarily suspends messages.

[Sending Messages](#)

[Creating Your Own Message Files](#)

Multiplayer Missions

Select Mission

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Sending Messages

1. Press [~] to activate communications.
 2. Press [Tab] (or [↑], [↓]) to cycle through **send options**.
 3. Type your message using the keyboard, then press [Enter] to send.
- To abort a communication, press [Esc].

Send Options

SEND TO ALL ([~], default receiver)

All players receive

SEND TO FRIENDLIES (Left [Shift][~])

Only friendly players receive
(available once sides are chosen)

SEND TO ENEMIES (Right [Shift][~])

Only enemy players receive
(available once sides are chosen.)

SEND TO WING ([Alt][~])

Only your wingmen receive
(available during flight.)

SEND TO TARGET ([Ctrl][~])

Only your current target receives
(available during flight)

Communicating

Creating Message Files

To send messages quickly, you can create a text file that assigns text messages to the function keys (**F1** to **F12**) on your keyboard. Then, you can simply press a function key to send a particular text message.

1. Use a text editor (such as `NOTEPAD.EXE`, or a DOS editor) to edit the default messages in a file called **CHAT.TXT**, which you should find in the *ATF* directory on your hard drive.

Each line in this file will be a message, which is attached to a certain function key. You can have up to 12 lines — the top line corresponds to **F1**, the second line to **F2**, and so on.

2. To specify a recipient(s), type `SEND TO FRIENDLIES` (or `ENEMIES`, `WING`, or `TARGET`) followed by `\`. If you don't specify a recipient, the message will go to all players, unless you choose otherwise during flight.
3. Type in a message on a single line. Do not use spaces before or after the message, and press **Enter** at the end of each line.