

## The Flight Shop Converter for Microsoft Flight Simulator

The Flight Shop Converter for Microsoft Flight Simulator 98 is a Windows utility that allows owners of Microsoft Flight Simulator 98 to fly aircraft and adventures created in Flight Shop. To fly Flight Shop aircraft and adventures—even if they have already been converted—you must install the converter. However, you don't need to own Flight Shop.

Converting an aircraft or adventure is a simple, one-time procedure. Converted aircraft and adventures are ready to use when you click **Select Aircraft** on the **Aircraft** menu or click **Adventures** on the **Flights** menu in Flight Simulator 98.

**Important Note:** The Flight Shop Converter is provided "as-is" and is not supported by Microsoft AnswerPoint or Product Support Services.

## Description of Flight Shop

Flight Shop, originally developed by Bruce Artwick Organization (BAO) for Microsoft Flight Simulator version 5, is a suite of applications collectively referred to as Flight Shop (or FSFS). The Flight Shop suite includes the Aircraft Factory, the Flight Dynamics Editor, the ATC Workshop, and the APL and APLC. With Flight Shop, you can build, paint, and tune custom aircraft, and fly adventures of your own design.

**Note:** While you can continue to create aircraft and adventures using Flight Shop, it is not necessary that you own Flight Shop to convert and use Flight Shop aircraft and adventures in Microsoft Flight Simulator 98.

## Converted Files

The Flight Shop Converter for Microsoft Flight Simulator converts two sets of files: aircraft files and adventure files.

### **Aircraft Files**

	<b><u>File Extension</u></b>	<b><u>Example</u></b>
Aircraft file	.AIR	NW747.AIR
Aircraft texture file	.[0..9]AF	NW747.0AF
Aircraft visual model file (formerly part of the aircraft file, created during the conversion process)	.MDL	NW747.MDL

### **Adventure Files**

	<b><u>File Extension</u></b>	<b><u>Example</u></b>
Adventure file	.ADV	TIWTOPAE.ADV
Flight file (formerly referred to as a situation file)	.STN	TIWTOPAE.STN
Sound file	.WAV	T42565.WAV

The converter also installs several new files that represent different instrument panel configurations.

## Setting Converter Options

In most cases, you do not need to change the settings in the Flight Shop Converter for Microsoft Flight Simulator. When you install the converter, the setup utility sets some of these options based on where you installed Microsoft Flight Simulator 98.

### To Display the Options Dialog

Q From the Flight Shop Converter main window, click the **Options** button.

## General Options

### Flight Simulator Directory

Displays the location of Flight Simulator 98 on your system. This location is set automatically when you install the converter. To change this location, click the **Browse** button.

## Aircraft Converter Options

### Default Input Directory

Displays the location of the Flight Shop aircraft files that you want to convert. This location is set to C:\ when you install the converter. To change this location, click the **Browse** button.

### Copy Texture Files

To copy texture files associated with aircraft, select this check box. This check box is selected by default.

## Adventure Converter Options

### Default Input Directory

Displays the location of the Flight Shop adventures files to convert. This location is set to C:\ when you install the converter. To change this location, click the **Browse** button.

### Copy Sound Files

To copy sound files associated with adventures during conversion, select this check box. This check box is selected by default.

### Copy Situation Files

To copy situation files associated with adventures, select this check box. This check box is selected by default.

### Show Details While Converting

To display status information about aircraft and adventures, select this check box. This check box is not selected by default.

## Converting Aircraft Files

Flight Shop Converter for Microsoft Flight Simulator converts aircraft files created with Flight Shop. It will not convert aircraft files that have been altered or otherwise customized beyond the design limitations of the Flight Shop application suite.

### To Convert Aircraft Files

- 1 In the converter main window, click **Aircraft Files**.
- 2 Click the aircraft files you want to convert. To select multiple aircraft files, hold down **CTRL** as you click each file. If you're using Windows NT, the number of files you can convert simultaneously is limited by the total number of characters in all the selected file names. The total character count cannot exceed 255 characters.
- 3 To start converting aircraft files, click **Open**.

The converter displays a message when it finishes converting the files.

## Converting Adventure Files

Flight Shop Converter for Microsoft Flight Simulator converts adventure files created with Flight Shop. It will not convert adventure files that have been altered or otherwise customized beyond the design limitations of the Flight Shop application suite.

### To Convert Adventure Files

- 1 In the converter main window, click **Adventure Files**.
- 2 Click the adventure files you want to convert. To select multiple adventure files, hold down **CTRL** as you click each file. If you're using Windows NT, the number of files you can convert simultaneously is limited by the total number of characters in all the selected file names. The total character count cannot exceed 255 characters.
- 3 To start converting adventures, click **Open**.

The converter displays a message when it finishes converting the files.

## Key Combinations for Flight Shop Adventures

The following table lists the special CTRL key combinations that you can use when flying adventures. The first column shows the action if you press the key combination while flying an adventure supplied with Flight Simulator 98. The second column shows the default action for adventures created in Flight Shop.

<b><u>Flight Simulator Adventures</u></b>	<b>Flight Shop Adventure Defaults</b>
CTRL+; = Ends the Adventure, resets the situation	Same
CTRL+M = Repeat the Last Message	N/A
CTRL+R = Restarts Adventure	Repeats Last Message
CTRL+U = Exits the Adventure	N/A
CTRL+W = Voice only	Same
CTRL+X = (When ADV begins) Provides summary of special keys	Same
CTRL+X = Text only	Same
CTRL+Y = Both Text and Voice	Same

**The following additional keys are available by default in Flight Shop adventures:**

- CTRL+\ = Radar check
- CTRL+E = Turns FPAP (Flight Plan Auto Pilot) off
- CTRL+F = Turns FPAP (Flight Plan Auto Pilot) on
- CTRL+G = When on final requests a missed approach
- CTRL+I = (When tuned to FSS) toggles IFR or VFR flight
- CTRL+K = Radio Contact
- CTRL+W = When tuned to an FSS gives weather conditions

## Troubleshooting

### Converted Aircraft Don't Have Instrument Panels

Some converted Flight Shop aircraft may not have an instrument panel if you try to run them in Flight Simulator 98 without first installing the Flight Shop Converter. As part of its setup process, the converter installs a set of instrument panels specifically designed for aircraft created with Flight Shop.

To use these converted aircraft, make sure you install the Flight Shop Converter.

### Converted Aircraft Fly Erratically

Some converted Flight Shop aircraft may be uncharacteristically sensitive or erratic when flown in Flight Simulator, either manually or when using the autopilot. The flight model in Flight Simulator 98 has been improved and now takes advantage of 32-bit computations. The higher precision and accuracy in Flight Simulator 98 mean that the flight model is less forgiving of unstable and incorrect designs in the Flight Shop Flight Dynamics Editor.

To resolve this problem, edit and resave the original aircraft in Flight Shop with tighter design tolerances, and then run the Flight Shop Converter again. Consult the Flight Shop Manual and README file for tips on tuning and modifying airplane designs. The following suggestions may help you tune aircraft:

- Q Make sure the original aircraft is made from the template aircraft that is closest in size and performance.
- Q Verify that your aircraft's geometry, weight, engines, and fuel match that of the airplane being modeled.
- Q Adjust the moments of inertia for the axis in which instability is a problem.
- Q Adjust the control scalar and/or stability scalar for the axis in which instability is a problem.

If the aircraft is equipped with an autopilot, you may also find that activating the yaw damper improves stability. To turn the yaw damper on or off, press **CTRL+D** or select the **Yaw Damper** option in the **Autopilot** dialog box.

### Sounds in Converted Adventures Are Difficult to Hear

The original sound (.WAV) files shipped in Flight Shop were created at a lower volume than the sounds in Flight Simulator 98. As a result, it may be difficult to hear sounds associated with converted Flight Shop adventures.

Microsoft provides a set of replacement Flight Shop adventure sounds. These replacement sounds are available for download at <http://www.microsoft.com/games>.

### Flight (.STN) or Sound (.WAV) Files Not Found

When converting Flight Shop adventures, the converter may not locate some files associated with a Flight Shop adventure. If the converter cannot find these files, it will display an error message.

To resolve this problem, first make sure that all of the appropriate Flight Shop files exist. A Flight Shop adventure includes the following files:

- Q An adventure file (.ADV)
- Q A flight file (.STN), if used
- Q Sound files (.WAV), if used



If all of the required files exist, then the Flight Shop Converter could not locate the files where it expected to find them. For flight files, the converter looks in the following folders:

- 1 Same folder as the adventure file
- 2 The folder path found in the adventure file relative to the Flight Simulator folder
- 3 The Flight Simulator \situation folder
- 4 The Flight Simulator \pilots folder
- 5 The absolute folder path found in the adventure file

For sound files, the converter looks in the following places:

- 1 Same folder as the adventure file
- 2 The Flight Simulator \adv\wave (\advwave in Flight Simulator 5.x) folder
- 3 The folder path found in the adventure file relative to the Flight Simulator folder
- 4 The absolute folder path found in the adventure file

If the converter still cannot locate all the files associated with the Flight Shop adventure file, copy all the related files into a single folder, and then try converting the adventure again.

