

More Just Flight add-ons for Microsoft Flight Simulator













AT







PA-28R ARROW III





Operations Manual

Please note that Microsoft Flight Simulator must be correctly installed on your PC prior to the installation and use of this FS Traffic software.

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INTRODUCTION

Welcome to FS Traffic – the most immersive AI Traffic program you can buy for Microsoft Flight Simulator!

Over twenty years of Flight Simulator have flown by since Just Flight published the first instalment in the legendary Traffic series and now FS Traffic is the latest version to make the simulated skies 'as busy as it gets' and once again sets the bar for AI (Artificial Intelligence) traffic expansions.

FS Traffic for Microsoft Flight Simulator (MSFS) ushers in a new era of AI traffic for flight simulation, providing previously unthinkable immersion thanks to a large selection of the highest quality AI models and liveries ever developed for a product of its type, real-world flight plans that vary depending on the time, day and year selected in the simulator and a plethora of customisation options. FS Traffic includes all those features yet still achieves fantastic FPS/performance.



The product includes over 45 aircraft models and over 700 liveries which cover more than 270 airlines from all corners of the globe. Each livery is supplied with 4096x4096 textures as standard and a detailed, layered paint kit is provided.

The aircraft included range from small regional aircraft such as the Dash 8 and E190 to the narrow-body 737 and A320 and right up to the world's largest airliners, the 747-8i and A380. You'll also see the world's newest and most advanced airliners such as the 787, A350 and A220 in your virtual skies! These aircraft can be seen in the air, taking off, landing, taxiing and parking at airports around the world.

INSTALLATION, UPDATES AND SUPPORT

You can install this FS Traffic software as often as you like on the same computer system:

- 1. Log in to your <u>Account</u> on the Just Flight website.
- 2. Select the 'Your Orders' button.
- 3. A list of your purchases will appear and you can then download the software you require.

Uninstalling

To uninstall this product from your system, use one of the Windows App management features:

Control Panel > Programs and Features

or

Settings > Apps > Apps & features

Select the product you want to uninstall, choose the 'Uninstall' option and follow the on-screen instructions.

Uninstalling or deleting this product in any other way may cause problems when using this product in the future or with your Windows set-up.

Updates and Technical Support

For technical support (in English) please visit the Support pages on the Just Flight website.

As a Just Flight customer, you can get free technical support for any Just Flight product.

If an update becomes available for this product, we will post details on the Support page and we will also send a notification email about the update to all buyers who are currently subscribed to Just Flight emails.

Regular News

To get all the latest news about Just Flight products, special offers and projects in development, <u>subscribe</u> to our regular emails.

We can assure you that none of your details will ever be sold or passed on to any third party and you can, of course, unsubscribe from this service at any time.

You can also keep up to date with Just Flight via Facebook and Twitter.

QUICK START GUIDE

The following step-by-step guide covers the essential steps required to set up FS Traffic as quickly as possible. For more in-depth information on each of these steps, and for further information about how the MSFS Traffic settings effect the functionality of FS Traffic, please refer to the later sections of this manual.

- 1. Download and run both the main FS Traffic installer and the FS Traffic Fleet installer.
- 2. Launch MSFS and navigate to Options > General Options > Traffic.
- Set the MSFS Traffic Options to the recommended settings: AIRCRAFT TRAFFIC TYPE: OFF AIRPORT VEHICLE DENSITY: 1-100 (any setting other than 0) GROUND AIRCRAFT DENSITY: 0

AVIATION TRAFFIC			
AIRCRAFT TRAFFIC TYPE		OFF	>
AI AIRCRAFT TRAFFIC DENSITY			— 100
SHOW TRAFFIC NAMEPLATES		OFF	>
AIRPORT LIFE			
AIRPORT VEHICLE DENSITY	•		1
GROUND AIRCRAFT DENSITY	0	_	0
WORKER DENSITY	•		0

4. Return to the world map and set your departure airport in the MSFS main menu.

Airbus A320neo	FROM	
	¢ EGLL Heathrow, London	🛛 🔽
C. pa	RUNWAY (27L)	
Marine State		5
SELECT ARRIVAL		-
RUNWAY		_

5. Once the flight is loaded, open the FS Traffic in-game menu via the MSFS toolbar and enter the four-letter ICAO code of your destination airport. Once this is entered, press CONFIRM.

FS TRAFFIC		_	C ×
DESTINATION ICAO			EGLL
CONFIRM			
TRAFFIC DENSITY (%)	<	100%	>
REGENERATE TRAFFIC			
REMOVE TRAFFIC			

6. You are all set! Al Traffic will now be generated at the departure airport, on your route and at the destination airport.

FS TRAFFIC OVERVIEW

FS Traffic is a combination of traffic inside the simulator and tools outside of the simulator, allowing for a fully immersive and customisable traffic experience.

There are four main elements of FS Traffic:

- Traffic Control Centre
- Traffic Module
- In-game menu
- Traffic Fleet

Each of these elements has their own folder in the MSFS Community folder and each one is responsible for different elements of the FS Traffic product. There is a brief overview of each of them below and they are discussed in more depth later in this manual.

Traffic Control Centre

The Traffic Control Centre is the main tool for viewing and modifying the FS Traffic experience. It provides options to view, edit and delete flight plans, import third-party flight plans, liveries and models, and to modify various core settings in FS Traffic. All of this is achieved completely independently from the host simulator, meaning that the Traffic Control Centre does not need to be open for FS Traffic to function.



Traffic Module

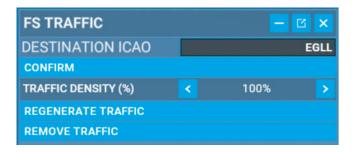
The Traffic Module is the brains behind FS Traffic's operation and is responsible for generating a realistic amount of AI traffic in MSFS.

The module takes flight plans from the FS Traffic database, which has tens of thousands of scheduled flights flown by more than 200 different aircraft types and more than 7,000 airlines connecting international airports worldwide, and then injects them into the simulator. Aircraft models and liveries from the Traffic Fleet are then assigned to each of these flight plans, filling up your MSFS skies and airports with an accurate level of traffic.

Certain parameters of the Traffic Module can be edited in the Traffic Control Centre.

In-game menu

The in-game menu is a pop-out menu which is accessed via the MSFS toolbar and provides options to set a destination airport for your flight plan, adjust the level of traffic density and remove and regenerate traffic. All of this is achieved within the simulator and therefore does not require time-consuming restarts of the simulator between changes.



Traffic Fleet

The Traffic Fleet is where all the aircraft models and liveries are stored. It is comprised of over 45 aircraft models, custom-built from the ground up to ensure both the highest quality and performance friendliness. The models feature animated control surfaces, landing gear, propellers, engine fans and thrust reversers as well as a multitude of custom effects and transparent cockpit windows. All models are painted in real-world airline liveries and have real aircraft registrations.

All FS Traffic aircraft are also set up to work seamlessly with the MSFS ground services. Pushback tugs, baggage loaders, stairs and jetways will automatically connect to the aircraft during their pre-flight routine.



A complete list of aircraft models included in FS Traffic:

- 737-700 (blended winglets)
- 737-800 (blended winglets)
- 737-900 (blended winglets)
- 747-400 (GE)
- 747-400 (PW)
- 747-400 (RR)
- 747-8i
- 777-300ER
- 787-8 (GE)
- 787-8 (RR)
- 787-9 (GE)
- 787-9 (RR)
- A220-100
- A220-300
- A319 (CFM)
- A319 (CFM sharklets)

- A319 (IAE)
- A319 (IAE sharklets)
- A319 (NEO)
- A320 (CFM)
- A320 (CFM sharklets)
- A320 (IAE)
- A320 (IAE sharklets)
- A320 (NEO)
- A321 (CFM)
- A321 (CFM sharklets)
- A321 (IAE)
- A321 (IAE sharklets)
- A321 (NEO)
- A330-200 (GE)
- A330-200 (PW)
- A330-200 (RR)

- A330-300 (GE)
- A330-300 (PW)
- A330-300 (RR)
- A350-900
- A380-800 (EA)
- A380-800 (RR)
- ATR-42
- ATR-72
- CRJ-700
- CRJ-900
- CRJ-1000
- Dash 8-400
- ERJ-145
- E170
- E190
- E195



Each of the aircraft models above has a selection of high quality, 4096x4096 textured liveries. In total there are over 700 liveries included in FS Traffic, covering over 270 airlines.

Note: This list is accurate at the time of FS Traffic's release. More aircraft models and liveries will be added as free updates post-release.

SET-UP GUIDE

This section of the manual provides a detailed summary of the settings required to set up and use FS Traffic in Microsoft Flight Simulator.

MSFS AI traffic settings

With FS Traffic, the amount of traffic generated in the simulator is controlled via a combination of the TRAFFIC DENSITY (%) feature in the in-game menu and the Options page in the Traffic Control Centre. However, some of the MSFS traffic settings will still influence AI traffic operation, so it is imperative that these are set as per our recommendations to ensure FS Traffic will function as intended.

To set the recommended traffic options within the simulator, launch MSFS and navigate to Options > General Options > Traffic.

We would then recommend adjusting the following:

AIRCRAFT TRAFFIC TYPE

FS Traffic can be used on its own or alongside either of the simulator's default traffic options. To experience FS Traffic in its intended state, however, it is recommended that this option is set to **OFF**.

Note: This is a deliberate action and FS Traffic will continue to generate traffic even when the simulator's main traffic setting is set to OFF.

AI AIRCRAFT TRAFFIC DENSITY

This option has no effect on AI traffic generated by FS Traffic, regardless of the AIRCRAFT TRAFFIC TYPE selected.

SHOW TRAFFIC NAMEPLATES

This option has no effect on AI traffic generated by FS Traffic and nameplates will not appear above FS Traffic aircraft regardless of this setting.

AIRPORT VEHICLE DENSITY

This option controls how many airport vehicles are spawned at an airport (pushback tugs, baggage conveyers, stairs etc.). If an AI aircraft is attended to by airport vehicles, the AI will cycle through various loading and boarding states before beginning pushback. This option must be set between **1 and 100** to allow AI aircraft to push back from the gates. We recommend setting this slider at **1** for the best performance.

Note: A higher setting may impact performance and significantly increase the object count in the simulator.

GROUND AIRCRAFT DENSITY

This option controls the amount of default MSFS AI traffic that appears at an airport. We recommend setting this slider to **0**.

WORKER DENSITY

This option has no effect on AI traffic generated by FS Traffic. We recommend setting this slider to **0** for the best performance.

Note: A higher setting may impact performance and significantly increase the object count in the simulator.

LAND AND SEA TRAFFIC

All options under this heading have no effect on Al traffic generated by FS Traffic. We recommend setting these sliders at **0** for the best performance.

Note: A higher setting may impact performance and significantly increase the object count in the simulator.

AI AND MULTIPLAYER TRAFFIC DETAIL

All options under this heading have no effect on AI traffic generated by FS Traffic. However, these settings will affect how multiplayer traffic appears if used in conjunction with FS Traffic.

IMPORTANT! Al traffic may be invisible if the simulator's maximum object count is exceeded. If you plan on using FS Traffic in conjunction with highly detailed third-party airports, or when using third-party ground service add-ons that add clutter (cones, people, stairs etc.) to airports, we highly recommend reducing all MSFS traffic options to their lowest levels to minimise this risk.

Note: AIRPORT VEHICLE DENSITY must always be set to at least 1 to allow AI traffic to push back from the gate.

AVIATION TRAFFIC			
AIRCRAFT TRAFFIC TYPE		OFF	>
AI AIRCRAFT TRAFFIC DENSITY			
SHOW TRAFFIC NAMEPLATES		OFF	
AIRPORT LIFE			
AIRPORT VEHICLE DENSITY	0		- 1
GROUND AIRCRAFT DENSITY	•		0
WORKER DENSITY	0		0
LAND AND SEA TRAFFIC			
LEISURE BOATS	0		0
ROAD VEHICLES	0		0
SHIPS AND FERRIES	•		0
FAUNA DENSITY	•		- 0
AI AND MULTIPLAYER TRAFFIC DETAIL			
USE GENERIC AIRCRAFT MODELS (AI TRAFFIC)		ON	
USE GENERIC AIRCRAFT MODELS (MULTIPLAYER)		ON	
SHOW MULTIPLAYER AIRCRAFT IN CLOSE PROXIMITY		ON	
TRAFFIC VARIETY		ULTRA	

Seeing the AI traffic in operation

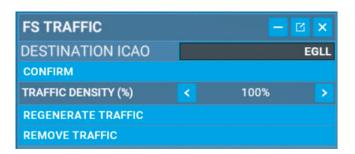
Once FS Traffic is installed and all MSFS traffic options have been set to those recommended above, Al traffic will be automatically generated when you load a flight in MSFS. Al aircraft will be seen in action when loading a flight at any busy airport in the world.

Note: Depending on the AIRPORT VEHICLE DENSITY setting, it may take 10-15 minutes for traffic to build up to full operation.

For AI traffic to be generated at your flight's destination airport, FS Traffic must be told which airport you are flying to. There are two methods of setting your destination airport:

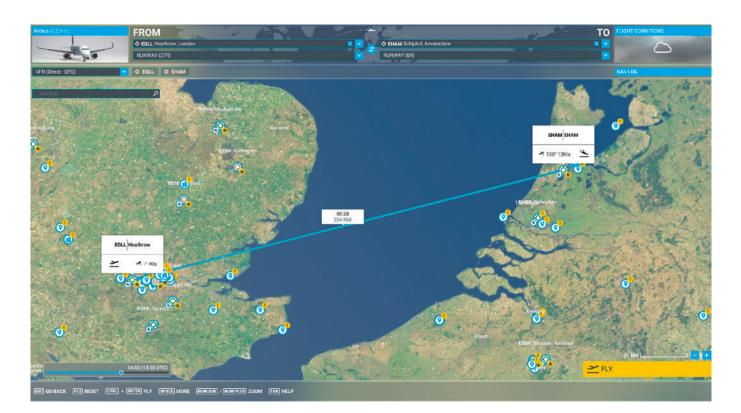
Method 1 – setting the destination via the in-game menu:

- 1. Load MSFS and go to the World Map.
- 2. Select your departure airport and then click the FLY button.
- 3. Once loaded into the flight, open the FS Traffic in-game menu.
- 4. Type the four-letter ICAO code of your destination airport into the DESTINATION ICAO field (for example, EGLL for London Heathrow, EHAM for Amsterdam etc.).
- 5. Press CONFIRM.



Method 2 – setting the destination via the MSFS main menu:

- 1. Load MSFS and go to the World Map.
- 2. Select your departure and arrival airports and then click the FLY button.
- 3. Once loaded into the flight, open the FS Traffic in-game menu.
- 4. Confirm that the four-letter ICAO code of your destination airport is in the DESTINATION ICAO field.



IMPORTANT! The FS Traffic in-game menu must be opened once every flight to set your destination airport. If the in-game menu is not opened, traffic will not be generated at the destination airport. A destination airport has been detected if the FS Traffic in-game menu has been opened and a four-letter ICAO code is displayed.

The FS Traffic in-game menu can be opened at any time during a flight to set the destination, but opening it to set the destination when you are in close proximity to the destination airport may prevent destination traffic from generating fully before you arrive.

If you are flying an aircraft equipped with an FMS or GPS that can connect to the MSFS internal flight plan system (e.g. the default MSFS aircraft), FS Traffic will be able to read the destination that is set in the FMS/GPS. This removes the requirement for a flight plan to be manually set in the FS Traffic in-game menu or the MSFS main menu, but the FS Traffic in-game menu must still be opened to allow the destination airport to be detected.

Hearing the AI traffic in operation

The AI traffic will communicate with ATC, using the callsign and flight number listed in the FS Traffic schedules. To hear ATC chatter from the AI traffic, the correct ATC frequency must be active either in the aircraft you are flying or in the MSFS ATC window.

To open the MSFS ATC window, move your mouse to the top of the screen and then click the Air Traffic Control icon. Once the ATC menu is open, follow the on-screen prompts to tune the radios to the desired frequency.

To adjust sound options in MSFS, navigate to Options > General Options > Sound. All options in this menu can be customised to the user's preferences. The only setting in this menu which affects the audio of FS Traffic aircraft is the OTHER AIRCRAFT slider. This slider directly controls the volume of the AI aircraft.

MAIN DEVICE OUTPUT SELECTION	SYSTEM	S DEFAULT DEVICE			
COMMUNICATION DEVICE OUTPUT SELECTION	SYSTEM'S DEFAULT DEVICE				
HEADPHONE SIMULATION		OFF	>		
WARNING SOUNDS IN EXTERNAL VIEW		ON	>		
VHF SIGNAL DEGRADATION		ON	>		
ACTIVE SPATIAL SOUND		OFF	>		
CONVERT AUDIO TO MONO		OFF	>		
ATC TEXT-TO-SPEECH SETTINGS		AZURE	>		
MUSIC SELECTION		COLOR 1	>		
MUTE AUDIO IN BACKGROUND		OFF	>		
VOLUME LEVELS					
MASTER			0 100		
VOICES					
AIRCRAFT ENGINES			- 100		
AIRCRAFT MISCELLANEOUS			- 100		
COCKPIT			- 100		
WARNINGS			- 100		
OTHER AIRCRAFT			- 100		
ENVIRONMENT			0 100		
USER INTERFACE			- 100		
MUSIC			- 100		

TRAFFIC CONTROL CENTRE

The Traffic Control Centre gives you full access to customise and expand your AI traffic in a comprehensive and easy-to-use fashion. You can add and remove flight plans, add and remove third-party liveries and models and adjust a vast selection of FS Traffic's core settings. All of this is achieved completely independently from the host simulator, meaning that the Traffic Control Centre does not need to be open for FS Traffic to function.

IMPORTANT! Any changes made in the Traffic Control Centre will only take effect the next time you load MSFS. If changes are made while MSFS is running, a restart of the simulator is required for these changes to take effect.

Accessing the Traffic Control Centre

To access the Traffic Control Centre app, click the 'Start' button on the Windows taskbar, and then navigate to Just Flight (MSFS) > Traffic Control Centre. Left-click on the entry named 'Traffic Control Centre' and this will open the application.

The Traffic Control Centre is also located in the following directory in the MSFS Community folder: ...Community\ justflight-fstraffic-controlcentre\Data\TrafficControlCentre.

Once the Traffic Control Centre has loaded, the main screen will appear with five tabs running along the top of the page:

- Home
- Flight Plan Manager
- Aircraft Manager
- Route Manager
- Options

Home

The Home page is displayed whenever the Traffic Control Centre app is launched.

From this page the product manual, Just Flight Support and Just Flight social media pages can be quickly accessed via the respective icons at the bottom of the page. A version number is also visible here, showing which version of FS Traffic is currently installed.

An embedded Quick Start Guide video also serves as an alternative guide to setting up FS Traffic to function as intended.



Flight Plan Manager

The Flight Plan Manager will probably be the page where you spend most of your time in the Traffic Control Centre app. This page allows for the viewing and editing of the flight plan data for a particular airport, as well as allowing you to create new flight plans and add them to the existing list.

Viewing flight plans

A brief example of how to use the Flight Plan Manager to view the flight plans is outlined below:

- 1. Enter an airport's details in the box immediately below the 'Flight Plan Manager' tab. Searches can be performed either by inputting the airport's name, its three-letter IATA code or its four-letter ICAO code.
- 2. The search results are displayed in the list immediately below the search field.
- 3. To confirm your choice, left-click the desired entry in the list; this will populate the box immediately to the right of the search field.
- 4. Once the correct name is displayed, press the Confirm button to load the flights on the right side of the page.
- 5. The drop-down list below the Confirm button can be used to filter the flights for a particular day of the week. With Monday selected, for example, only flights that operate on a Monday will be shown. The day of the week is automatically set based on the time and date on your system.
- 6. Left-clicking a flight in the list will highlight the flight and the details of the highlighted flight will be displayed in the 'Flight Details' section at the bottom left of the page, along with a map of the route.

FS Traffic Control Centre							FSTra	affic.
me Flight Plan Manager Aircraft Manag		Departures						
EGLL London Heathrow Airport (EGLL)	London Heathrow Airport	Departure Time (local)	Destination ICA0	Carrier	Aircraft	Flight Number	Callsign	Days
	Wednesday 🗸	0600	LOWW	AUA	320	458	AUSTRIAN	123457
		0600	LSZH	SWR	223	345	SWISS	23467
E.		0600	LPPT	TAP	32N	1363	AIR PORTUGAL	136
		0610	LEBL	BAW	320	472	SPEEDBIRD	3
	North Sea	0620	LFPG	AFR	320	1381	AIRFRANS	3
	Denmark	0620	LEMD	BAW	320	456	SPEEDBIRD	34
United Kingdom	Denmark	0630	LKPR	BAW	32B	854	SPEEDBIRD	35
		0630	ЕНАМ	KLM	73H	1000	KLM	134567
Ireland	Netherlands o	0630	EDDF	DLH	32N	921	LUFTHANSA	123456
	Germany	0640	EIDW	EIN	320	149	SHAMROCK	12345
	Belgium	0640	ЕНАМ	BAW	319	428	SPEEDBIRD	3
	Paris Czec	0640	LEPA	BAW	320	2570	SPEEDBIRD	3
	Austria	0640	ESSA	SAS	32N	1530	SCANDINAVIAN	2357
	France	0645	LIML	AZA	319	229	ALITALIA	1234567
	Croatia	0645	EKCH	SAS	32N	500	SCANDINAVIAN	12345
	Italy	0645	LTFM	THY	321	1988	TURKISH	1234567
2023 Google - Map data ©2023 Tele Atlas, Ima	agery ©2023 TerraMetrics @Rome	0650	LEMG	BAW	32A	2712	SPEEDBIRD	3
Flight Details		0650	LGSA	BAW	32A	660	SPEEDBIRD	3
Departure Point: London Heathrow Airp	oort	0650	EBBR	BEL	320	2104	B-LINE	3
Destination: Vienna International A	irport	0655	EDDM	BAW	319	948	SPEEDBIRD	23
Carrier: Austrian		0655	EDDM	DLH	32N	2483	LUFTHANSA	236
Aircraft: Airbus A320		0700	FGCC	RAW	32N	1382	SPEEDBIRD	3

Seven columns of information are present for each of the flights displayed on the Flight Plan Manager page:

Departure Time – the local time at which the flight will depart from the selected airport.

Destination ICAO – the four-letter ICAO code of the airport that the flight will fly to. When a flight is selected, the full name of the airport is displayed in the Flight Details box at the bottom left of the page.

Carrier – the three-letter ICAO code for the airline operating the flight. When a flight is selected, the full name of the airline is displayed in the Flight Details box at the bottom left of the page.

Aircraft – the four-letter/digit ICAO code for the aircraft type operating the flight. When a flight is selected, the full name of the airline is displayed in the Flight Details box at the bottom left of the page.

Flight Number – the flight number for a specific flight. This is also used by the MSFS ATC system.

Callsign – the callsign of the airline operating the flight. This is also used by the MSFS ATC system.

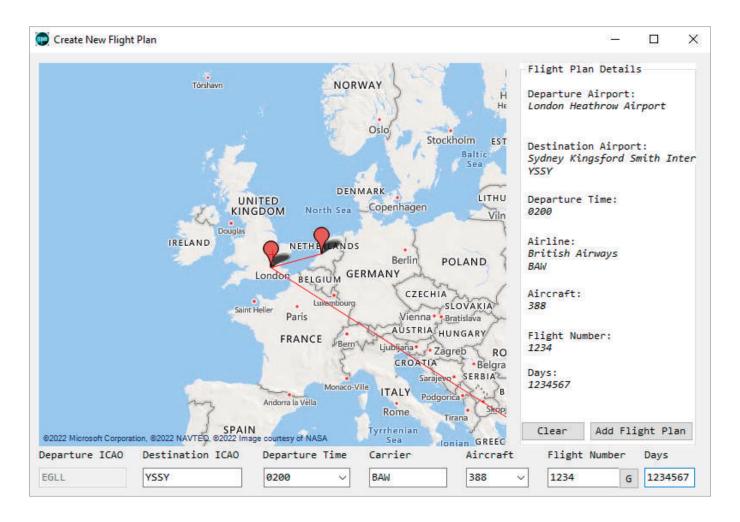
Days – indicates the days of the week on which a specific flight operates. 1 = flight only operates on a Monday. 1234567 = flight operates daily.

Departure Time (local)	Destination ICAO	Carrier	Aircraft	Flight Number	Callsign	Days	ł
0600	LOWW	AUA	320	458	AUSTRIAN	123457	
0600	LSZH	SWR	223	345	SWISS	23467	
0600	LPPT	TAP	32N	1363	AIR PORTUGAL	136	
0610	LEBL	BAW	320	472	SPEEDBIRD	3	
0620	LFPG	AFR	320	1381	AIRFRANS	3	
0620	LEMD	BAW	320	456	SPEEDBIRD	34	
0630	LKPR	BAW	32B	854	SPEEDBIRD	35	
0630	EHAM	KLM	73H	1000	KLM	134567	
0630	EDDF	DLH	32N	921	LUFTHANSA	123456	
0640	EIDW	EIN	320	149	SHAMROCK	12345	
0640	EHAM	BAW	319	428	SPEEDBIRD	3	
0640	LEPA	BAW	320	2570	SPEEDBIRD	3	
0640	ESSA	SAS	32N	1530	SCANDINAVIAN	2357	
0645	LIML	AZA	319	229	ALITALIA	1234567	
0645	EKCH	SAS	32N	500	SCANDINAVIAN	12345	
0645	LTFM	THY	321	1988	TURKISH	1234567	
0650	LEMG	BAW	32A	2712	SPEEDBIRD	3	
0650	LGSA	BAW	32A	660	SPEEDBIRD	3	
0650	EBBR	BEL	320	2104	B-LINE	3	
0655	EDDM	BAW	319	948	SPEEDBIRD	23	
0655	EDDM	DLH	32N	2483	LUFTHANSA	236	
0700	FGCC	RAW/	32N	1382	SPEEDBIRD	3	

Creating new flight plans

Flight plans can be added to the existing list of flight plans by using the Create New Flight Plan feature. This is how to use the Flight Plan Manager to create new flight plans and add them to the existing list:

- 1. Select a departure airport by following the instructions in the Viewing flight plans section.
- 2. Click the Create New Flight Plan button at the bottom of the page.
- 3. A new window will now open, allowing flight details to be entered.



4. Enter the desired destination airport's ICAO code, departure time, carrier, aircraft, flight number and days operated.

Note: 'Days' refers to which days of the week the flight will operate on, 1 being a Monday and 7 being a Sunday. If you would like a flight to operate every day of the week, enter 1234567.

- 5. When all flight details are entered, click the Add Flight Plan button.
- 6. The window will then close and you will be redirected back to the Flight Plan Manager page. Your newly created flight will now be visible in the list of flights for the departure airport selected.
- 7. Press the Save Changes button to save the new flight plan.
- 8. The next time MSFS is launched, an Al aircraft will then be seen flying that flight at the times and between the airports you have entered.

Note: Flight plans created via this method will only be created if a route between departure and destination airports already exists in the FS Traffic schedules. If you are creating a new route between two airports that does not already exist in the schedules, you must first create a route via the **Route Manager** page.

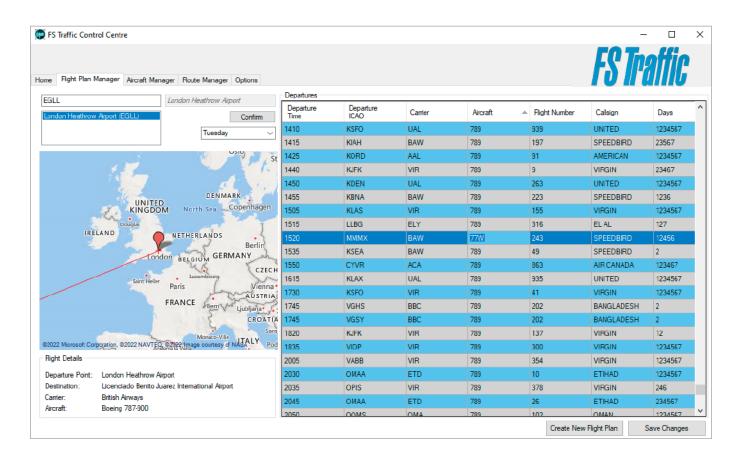
Modifying existing flight plans

The Flight Plan Manager also allows you to modify existing flights. The various fields on the Flight Plan Manager page can all be manually edited by double-clicking on the relevant box and typing in new values. For example, if a British Airways flight is operated by a 787-9 Dreamliner (789) and you want to change it so the flight is operated by a 777-300ER (77W), you can easily change that using the following method:

- 1. Double-click on the Aircraft field labelled '789' and type in the replacement aircraft's three-digit IATA code: '77W'.
- 2. Press the Save Changes button to save any changes prior to leaving the current screen.

Any modifications made to the flight plans will take effect the next time MSFS is launched.

This process can be performed for any of the data fields on the Flight Plan Manager page. This lets you quickly change the time, destination, carrier, aircraft type, flight number, callsign and days operated of any flight in the FS Traffic database, without having to create a new flight plan.



Deleting flight plans

Flight plans can be deleted from the list of schedules, either for a specific day of the week or from the schedules entirely. To delete a flight plan:

- 1. Right-click on the flight plan you wish to delete.
- 2. Click 'Delete Flight Plan from today's schedules' to delete the flight plan from the currently selected day's schedules or click 'Delete Flight Plan from all schedules' to delete the flight from the schedules entirely.
- 3. Press the Save Changes button to save any changes prior to leaving the current screen.

The deletion of any flight plans will take effect the next time MSFS is launched.

FS Traffic Control Centre							-	
ne Flight Plan Manager Aircraft Mana	ager Route Manager Options						FSTA	affic,
EGLL	London Heathrow Airport	Departures						
London Heathrow Airport (EGLL)	Confim	Departure Time	Departure	Canier	Aircraft	Flight Number	Callsign	Days
	Tuesday	0600	LSZH	SWR	223	345	SWISS	23467
	Tuesday	0600	LPPT	TAP	32Q	1363	AIR PORTUGAL	2457
	USIO	St 0610	LEBL	BAW	320	472	SPEEDBIRD	2
12	The second se	0620	LFPG	AFR	319	1381	AIRFRANS	2
14 <u>.</u> 77	al in	0620	LEMD	BAW	320	456	SPEEDBIRD	2
UNITED	DENMARK	0630	LKPR	BAW	32B	854	SPEEDBIRD	2
KINGDOI		0630	EHAM	KLM	73H	1000	KLM	2
Douglas		0630	CDIALA	IOT	7640	286	LOT	124567
IRELAND	NETHERLANDS	0630	-	from today's sched	ules	921	LUFTHANSA	123456
Lond	OR BELCHIN GERMANY	0640	Delete Flight Plan	from all schedules		149	SHAMROCK	12345
Lond	BELGIUM GERMANY	0640	EHAM	BAW	32A	428	SPEEDBIRD	12
Saint Helier	Luxembourg	0640	ESSA	SAS	32N	1530	SCANDINAVIAN	2357
	Paris Vienn AUSTR	0045	LIML	AZA	319	229	ALITALIA	1234567
	FRANCE Bern Ljubljara	0645	EGCC	BAW	319	1382	SPEEDBIRD	25
	CROAT	TA 0645	EKCH	SAS	32N	500	SCANDINAVIAN	12345
and a		ara 0645	LTFM	THY	321	1988	TURKISH	1234567
2022 Microsoft Corporation, ©2022 NAVTEO	©2022 Image courtesy of NASALY F	0650	EIDW	BAW	319	832	SPEEDBIRD	2
Flight Details		0650	LEMG	BAW	320	2712	SPEEDBIRD	2
Departure Point: London Heathrow Air	port	0650	LSZH	BAW	32N	710	SPEEDBIRD	2
Destination: Warsaw Chopin Airpo	ort	0650	EBBR	BEL	320	2104	B-LINE	2
Carrier: LOT Polish Airlines	.0	0655	EDDM	BAW	319	948	SPEEDBIRD	23
Aircraft: Boeing 737 MAX 8 (w	wj	0655	EDDM	ЫН	32M	2//83	ΙΠΕΤΗΔΝΙSΔ	1245

Aircraft Manager

The Aircraft Manager page provides options related to the aircraft models and liveries. Three tabs along the top of the page labelled Liveries, Ground Services and Model Matching provide options to assign liveries to specific aircraft types, select what ground equipment interacts with the aircraft models and to compile a custom VMR file for use with VATSIM.

Liveries

The Liveries page displays which liveries have been allocated to a specific aircraft type and allows for the importing and allocation of custom aircraft models and liveries. With an aircraft type selected, a table will appear showing a list of airlines which operate that aircraft type. The table has four columns:

Carrier Name - the name of the airline.

IATA – the airline's two-letter/digit IATA code.

ICAO - the airline's three-letter ICAO code.

Livery 1, Livery 2 etc. – these fields show which livery is assigned to an aircraft and airline combination. Entries in these files are in the same format as the 'Title=' entry in the respective aircraft's aircraft.cfg file. Liveries and models can be assigned here simply by copying and pasting the 'Title=' entry line from any aircraft.cfg folder in your Community folder (e.g. in the aircraft.cfg for the FS Traffic British Airways A320, the 'Title=' entry is 'JustFlight_AI_A320_BritishAirwaysBAW_IAE').

If this field is left blank, no livery will be assigned to that aircraft and airline combination and it will instead use the Fallback Aircraft listed on the left side of the page.

The aircraft.cfg file for any aircraft in the FS Traffic fleet can be found in the respective aircraft folder at the following file directory: ...Community\justflight-aircraft-traffic-fleet\SimObjects\Airplanes\...

The aircraft.cfg file for other third-party aircraft will follow the same basic file structure as the FS Traffic aircraft but will use different folder names reflecting their product name and models.

FS Traffic Control Centre	e						—
							FS Traffi
ome Flight Plan Manager	Aircraft Manage	Route Manager	Options				
Liveries Ground Services	Model Matching						
Select Aircraft							
320	~	Carrier Name	IATA	ICAO	Livery 1	Livery 2	Livery 3
Aircraft Details		Aegean Airlines	A3	AEE	JustFlight_AI_A320_AegeanAirlinesAEE		
Airbus A320		Aer Lingus	EI	EIN	JustFlight_AI_A320_AerLingusEIN		
ICAO: A320		Aero Contractors	N2	NIG			
Fallback Aircraft:		Aeroenlaces Nac	VB	VIV	JustFlight_AI_A320_AeroenlacesNacion		
JustFlight_AI_A320SL_Whi	ite	Aeroflot	SU	AFL	JustFlight_AI_A320_AeroflotAFL		
		Afriqiyah Airwaye	8U	MAA			
Add New Aircraft Type		Air Arabia	G9	ABY	JustFlight_AI_A320SL_AirArabiaABY_SL		
		Air Arabia Egypt	E5	RBG			
		Air Arabia Maroc	30	MAC			
		Air Asia (India) Pri	15	IAD	JustFlight_AI_A320_AirAsia(India)Private		
		Air Astana	KC	KZR	JustFlight_AI_A320NEO_AirAstanaKZR		
		Air Busan	BX	ABL	JustFlight_AI_A321_AirBusanABL_IAE		
		Air Cairo	SM	MSC			
		Air Canada	AC	ACA	JustFlight_AI_A320_AirCanadaACA		
		Air China Limited	CA	CCA	JustFlight_AI_A320_AirChinaLimitedCCA		
		Air Corsica	ХК	CCM			
		Air Cote D'Ivoire	HF	VRE			
		Air Europa	UX	AEA			
		Air France	AF	AFR	JustFlight_AI_A320_AirFranceAFR		
		Air Gulin Co. Ltd.	GT	CGH			
		<	1	1	1	i	i .

Here is a brief example of how to use the Aircraft Manager page to view, edit and add liveries:

- 1. Select an aircraft by using the Select Aircraft drop-down list on the left side of the page. This threeletter IATA code corresponds to the entry in the 'Aircraft' column of the Flight Plan Manager display. For example, 32N refers to an A320 NEO.
- 2. The data in the Aircraft Details box should confirm the details of the aircraft selected.
- 3. The Fallback Aircraft box includes the aircraft model and airline livery that will be used when there isn't a livery assigned to an airline. By default, the fallback aircraft is a white-liveried aircraft of the same type. If that type does not exist in FS Traffic's traffic fleet, a similar aircraft will be chosen. The fallback aircraft can be edited by entering the 'Title=' entry from a desired aircraft's aircraft.cfg file.
- 4. To add a third-party livery to the FS Traffic fleet, enter the 'Title=' entry from the aircraft.cfg file of the desired aircraft into one of the empty livery boxes to the right of the airline's name. With the 'Title=' name entered, that aircraft and livery will then be used by the FS Traffic system and will take effect the next time MSFS is launched.
- 5. After making any changes, ensure the Save Changes button is pressed before exiting the current tab.

PS Traffic Control Centre							- ×
Home Flight Flan Manager Alicraft Manage	er Route Manager	Options				FS Trafi	İÇ
Liveries Ground Services Model Matching	1						
Select Aircraft 320 ~			10.10				
		IATA	ICAD	Livery 1	Livery 2	Livery 3	^
	Aegean Airlines	A3	AEE	JustFlight_AI_A320_AegeanAirlinesAEE			
Airbus A320	Aer Lingus	EI	EIN	JustFlight_AI_A320_AerLingusEIN	JustFlight_AI_A321NEO_AerLingusEIN		
ICAO: A320	Aero Contractors	N2	NIG				
Fallback Aircraft:	Aeroenlaces Nac	VB	VIV	JustFlight_AI_A320_AeroenlacesNacion			
JustFlight_AI_A320SL_White	Aeroflot	SU	AFL	JustFlight_AI_A320_AeroflotAFL			
	Afriqiyah Airways	8U	AAW				
Add New Aircraft Type	Air Arabia	G9	ABY	JustFlight_AI_A320SL_AirArabiaABY_SL			
	Air Arabia Egypt	E5	RBG				
	Air Arabia Maroc	30	MAC				
	Air Asia (India) Pri	15	IAD	JustFlight_AI_A320_AirAsia(India)Private			
	Air Astana	KC	KZR	JustFlight_AI_A320NEO_AirAstanaKZR			
	Air Busan	BX	ABL	JustFlight_AI_A321_AirBusanABL_IAE			
	Air Cairo	SM	MSC				
	Air Canada	AC	ACA	JustFlight_AI_A320_AirCanadaACA			
	Air China Limited	CA	CCA	JustFlight_AI_A320_AirChinaLimitedCCA			
	Air Corsica	ХК	CCM				
	Air Cote D'Ivoire	HF	VRE				
	Air Europa	UX	AEA				
	Air France	AF	AFR	JustFlight_AI_A320_AirFranceAFR			
	Air Guilin Co. Ltd.	GT	CGH				
	<	-		· ·	·		>
L						Save cha	nges

If an aircraft type is not featured in the Select Aircraft list, a new aircraft type can be added by using the Add New Aircraft Type feature:

- 1. Click the Add New Aircraft Type button.
- 2. A new window will appear where various details about the new aircraft type can be entered.

Create New Aircraft File	x
Look Up Aircraft	
Aircraft Name IATA Code ICAO Code	
Avro RJ85 Avroliner V RJ85 V AR8 V	
Fallback Livery (Optional) Save	
Enter Code Manually	
IATA Code: Aircraft Code	
Fallback Livery (Optional) Save	

- Use the drop-down lists to choose an aircraft type to add or enter the aircraft's three-letter/digit ICAO code manually. A Fallback Livery can also be added here using the 'title=' entry from the respective aircraft.cfg file.
- 4. Once the aircraft details are entered, ensure the Save button is pressed before exiting the pop-out window.
- 5. Ensure the Save Changes button is pressed before exiting the current tab.

Models and liveries can be imported into FS Traffic from other third-party traffic programs using the same methods outlined above.

IMPORTANT! We strongly advise against using high-fidelity player aircraft as AI Traffic. High-fidelity player aircraft are not designed to be used as AI aircraft and they will negatively impact performance.

Ground Services

The Ground Services page allows full customisation of the ground services which interact with the FS Traffic aircraft models. Fuel Truck, Baggage Loader, Catering Truck, Boarding Ramp (Stairs), GPU, Pushback Tug Type, Marshaller and Jetway can all be toggled on or off here, depending on your personal preferences.

These ground services not only visually enhance the airport scene, but also affect the time it takes for an aircraft to complete its pre-flight routine. The more ground services that are enabled, the longer the aircraft will take to complete its pre-flight routine.

Three presets are available on the left side of the page. Clicking one of these presets, followed by the Save Changes button, will set the respective ground services the next time you load the simulator:

Set No Ground Services – removes all ground services from the FS Traffic aircraft. We recommend using this setting if you are using highly detailed third-party airport sceneries or airport ground service add-ons which add clutter such as cones, people, stairs etc. to airports. These products greatly increase the object count within the simulator and in extreme circumstances may exceed the MSFS maximum object count limit. If the MSFS object count is exceeded, this can cause the FS Traffic aircraft models to be invisible upon loading a flight.

Set For Fast Gate Turnarounds – removes the ground services which take the longest time to complete. With this preset selected, aircraft will push back from their gates in a shorter amount of time. It is recommended that this preset is used to ensure AI traffic is taxiing upon landing at your destination airport.

Set Standard Configuration – this is the default configuration of FS Traffic. All ground services are enabled and are accurately set per aircraft type. With this preset, traffic will spend the longest time at the gate running through their pre-flight routine.

FS Traffic Contro	l Centr									s To	affic
ome Flight Plan Ma		Aircraft Manager Route Manage	er Options							UII	
iveries Ground Ser	vices	Model Matching									
		Aircraft	Fuel truck	Bag Loader	Catering	Boarding Ramp	GPU	Pushback	Small Pushback	Marshaller	Jetway
Save Changes	+	Just Right 737-700									
Set No Ground		Just Flight 737-800		$\mathbf{\Sigma}$							\checkmark
Services		Just Right 737-900									
Set For Fast Gate		Just Flight 747-400									
Turnarounds		Just Flight 747-8i								M	
Manager 11 11		Just Right 777-300ER									
Set Standard Configuration		Just Flight 787-8					\checkmark				
		Just Right 787-9									
		Just Flight A220-100									
		Just Fight A220-300									
		Just Fight A319									2
		Just Right A319 NEO									
		Just Flight A319 SL									
		Just Fight A320									
		Just Right A320 NEO									
		Just Fight A320 SL									
		Just Fight A321									
		Just Right A321 NEO									
		Just Right A321 SL									
		Just Right A330-200									
		Just Right A330-300									
		Just Flight A350-900		N							

Model Matching

The Model Matching page focuses on the creation and editing of a VMR file that can be used with vPilot's custom model matching set-up and the VATSIM online network.

A VMR file is provided which features an extensive list of model matching rules already set up to utilise the FS Traffic fleet. The VMR file is located at the following file directory: ...Community\justflight-fstraffic-controlcentre\Data\trafficControlCentre\VMR.

The following tools are provided for creating and editing custom VMR files and templates:

Load Stock Template – scans all the aircraft and liveries in the FS Traffic fleet and generates a table showing the aircraft type, airline three-letter ICAO code and any liveries which are assigned to that combination. The liveries assigned to a specific aircraft can be edited by double-clicking on the relevant livery field and then entering the relevant 'Title=' entry from the aircraft.cfg file of the aircraft you would like to assign.

Load Custom Template – allows you to import a VMR template that has been stored locally on your PC. The template can then be edited using the same method outlined above.

Export Custom Template – allows you to export a VMR template and save it locally on your PC.

Compile VMR File – compiles a VMR file using the data entered in the model matching table. The VMR file can be stored locally on your PC and then imported into the vPilot software.

For further information on using VMR files with vPilot and VATSIM, please refer to their respective documentation.

e Fight Plan	Manager	Aircraft Manage	Route Manager Options			FS Traft
eries Ground	Services	Model Matching				
Load Stor Template		Export Custom Template	Load Custom Template	Compile VMR File		
TypeCode	CallSign	Prefix Live	ry 1		Livery 2	Livery 3
A21N	AAL	JustF	light_AI_A321NEO_American	AirlinesAAL_NEO		
A319	AAL	JustF	light_AI_A319_AmericanAirline	esAAL	JustFlight_AI_A319_AmericanAirlinesAAL_IAE	Just Flight_
A320	AAL	JustF	light_AI_A320_AmericanAirline	esAAL	JustFlight_AI_A320_AmericanAirlinesAAL_IAE	
A321	AAL	JustF	light_AI_A321_American Airline	esAAL_IAE	JustFlight_AI_A321SL_AmericanArlinesAAL_IAE_SL	
B738	AAL	JustF	light_AI_737 <mark>-800_</mark> AmericanAi	dinesAAL		
B77W	AAL	JustF	light_AI_777-300ER_America	nAirlinesAAL		
B788	AAL	JustF	light_AI_787-8_AmericanAirIn	esAAL_GE		
B789	AAL	JustF	JustFlight_AI_787-9_AmericanAirlinesAAL_GE			
CRJ7	AAL	JustF	light_AI_CRJ-700_AmericanAi	rlinesAAL		
CRJ9	AAL	JustF	Right_AI_CRJ-900_AmericanAi	rlinesAAL		
E145	AAL	JustF	JustFlight_AI_E145_AmericanAirlinesAAL			
E170	AAL	JustF	light_AI_E170_AmericanAirline	esAAL		
A19N	AAL	JustF	light_AI_A320_AmericanAirline	esAAL	JustFlight_AI_A320_AmericanAirlinesAAL_IAE	Just Flight_
A20N	AAL	JuetF	light_AI_A320_AmericanAirline	BBAAL	JustFlight_AI_A320_AmericanAirlinesAAL_IAE	Just Flight_
A318	AAL	JustF	light_AI_A320_AmericanAirline	esAAL	JustFlight_AI_A320_AmericanAirlinesAAL_IAE	Just Flight_
A332	AAL	JustF	light_AI_777-300ER_America	n Airlines AAL	JustFlight_AI_787-8_AmericanAirlinesAAL_GE	Just Flight_
A333	AAL	JustF	light_AI_777-300ER_America	nAirlinesAAL	JustFlight_AI_787-8_AmericanAirlinesAAL_GE	Just Flight_
A359	AAL	JustF	light_AI_777-300ER_America	AirlinesAAL	JustFlight_AI_787-8_AmericanAirlinesAAL_GE	Just Flight_
A388	AAL	JustF	light_AI_777-300ER_America	nAirlinesAAL	JustFlight_AI_787-8_AmericanAirlinesAAL_GE	Just Flight_
B732	AAL	JustF	light_AI_737 <mark>-800</mark> _AmericanAi	dinesAAL		
B733	AAL	JustF	light_AI_737-800_AmericanAi	dinesAAL		

Route Manager

The Route Manager displays which route is used on any particular flight plan and allows for new routes to be added to the schedules.

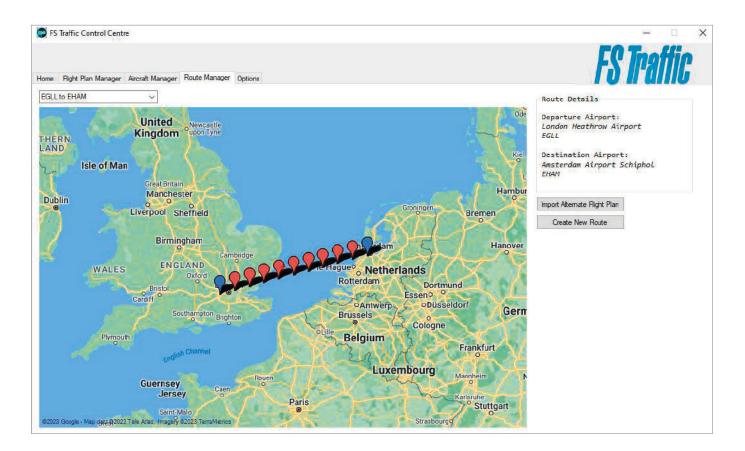
To view a flight plan, search for a particular route in the drop-down list at the top left of the page. To find a route, either scroll through the list or type the airport ICAO codes for the departure and arrival airports. For a flight from London Heathrow to Amsterdam Schiphol, for example, type 'EGLL to EHAM'.

Currently the default flight plans are procedurally generated. To import a custom flight plan for a route, use the Import Alternate Flight Plan feature:

- 1. Select a route from the drop-down menu at the top left of the page. Ensure the Route Details box at the top right of the page shows the correct details for the flight being edited.
- 2. Click the Import Alternate Flight Plan button.
- 3. A File Explorer window will open to allow you to browse to a flight plan saved on your PC. Once the alternative flight plan file has been located, left-click on it, and then click Open.
- 4. A pop-up window will ask you to confirm that you would like to replace the current fight plan with your alternative flight plan. Click Yes to confirm.
- 5. The new flight plan will now be shown on the map and all AI aircraft on that route will now follow the new flight plan.

The map can be zoomed in and out by using the mouse wheel. You can pan around it by holding right-click and moving your mouse. The map provider can be changed via the Options tab in the Traffic Control Centre.

Note: Due to the large number of flight plan files included with FS Traffic, this page may take a few moments to populate and open.



Adding a new route to the FS Traffic schedules

A new route can be added to the FS Traffic schedules by using the Create New Route feature, for example:

- 1. Click the Create New Route button.
- 2. Enter the name or the four-letter ICAO code of the departure airport in the left box and the destination airport in the right box. Select the correct airport from the list generated in the box below.
- 3. If you wish to create a return flight, ensure a tick is present in the 'Also Create Return Plan' tickbox.
- 4. Click the Create Route button to create the route.

The new route will then be added to the schedules and flights can be assigned to this route via the **Flight Plan Manager** page.

Newcastle	Los Angeles
Newcastle Airport (EGNT) Newcastle Airport (FANC) Newcastle Airport (YWLM)	Los Angeles International Airpo
From:	To:
	Los Angeles International Airpor

Options

The Options page provides various options that can affect both the Traffic Control Centre and how the AI traffic is generated in the simulator:

FS Traffic Control Centre		- · ×
Home Right Plan Manager Arcraft Manager Route Manager	Options	FS Traffic
Detabase Selection 2019 2021 2022 Confirm Change Traffic Options Traffic Substitution Mode: Use fallback texture Alternate Livery No substitutione 120 Traffic Departure Value (Mins)	Performance Options LOD Setting Low Default High Texture Detail High Low Map Options Map Options Map Data Provider: Google Maps Bing Maps	
5 Time between cruise traffic spawn attempts (Mins) Enable / Disable FS Traffic Enabled Disabled Confim Change FS Traffic Module Enabled		

Database Selection – changes the year of the database currently in use. With the year 2022 selected, flight plans from Summer 2022 will be generated in both the Traffic Control Centre and in the simulator.

Note: If any of these options are greyed out, this indicates that those schedules have not yet been released for FS Traffic. Please keep checking the Support section on the Just Flight website and our social media pages for updates on when the additional schedules will be made available.

Traffic Options – this includes two settings which only affect traffic within the simulator: Traffic Substitution Mode and Time Before Departure Value (Mins). Traffic Substitution Mode controls how aircraft appear in the simulator if the livery in question is not included with the FS Traffic package. There are three options to choose from:

- Use fallback texture aircraft without a livery will use the fallback texture listed in the Aircraft Manager tab. By default, this will typically be a white-liveried aircraft.
- Alternative Livery aircraft without a livery will be substituted for a livery similar to the one that is missing. For example, an A320 missing a livery in the USA may be swapped for an American Airlines A320.
- No substitutions aircraft without a livery will not be substituted for any other aircraft. All aircraft with no liveries will not be generated in the simulator.

The Time Before Departure Value (Mins) option controls how long before departure an aircraft will occupy a gate. For example, with this set to 90 minutes, starting a flight at 10am will load in every aircraft that is due to depart from that airport until 11:30am, after which time there will be no further departures. A higher setting here will result in busier airports but may negatively impact performance.

Enable / Disable FS Traffic – enables or disables FS Traffic. With FS Traffic disabled, no traffic will be generated within the simulator.

Performance Options – includes settings to adjust the quality of the AI models should greater FPS/performance be required from the simulator:

 LOD Setting – controls the aircraft's LOD (level of detail). A lower setting (slider left) decreases the level of detail in the AI models, thus increasing FPS/performance. A higher setting (slider right) will increase the level of detail in the AI models, but this may impact performance.

Note: With a lower setting, you may see parts of the aircraft (such as the antennas) disappearing as they move away from you.

• Texture Detail – controls the quality of the textures on the AI models. Setting this option to Low will decrease the texture quality of the models, thus increasing FPS/performance. Setting it to High will increase the textures on the AI models but this may impact performance.

Map Options – allows you to choose between two different map providers. This corresponds to the maps used on the Flight Plan Manager and Route Manager pages.

IN-GAME MENU

FS Traffic's in-game menu is a useful tool built directly into the simulator. It gives you control over multiple traffic generation options in real time, without having to perform a lengthy, time-consuming restart of the simulator.

Accessing the in-game menu

The in-game menu is accessed via the MSFS toolbar. To access the toolbar, move your mouse to the top centre of the MSFS window. Once the toolbar appears, left-click on the FS Traffic icon to open the in-game menu.



Menu options

The in-game menu has the following options related to traffic generation:

DESTINATION ICAO – allows you to type the four-digit ICAO code of your destination airport. The ICAO code can be entered by left-clicking on the empty field and typing the ICAO code with your keyboard. Pressing CONFIRM will confirm your destination. If a flight plan has been set in the main menu, the ICAO code will be auto-filled when the in-game menu is opened. The destination ICAO can be changed at any time during a flight, allowing for flights to alternate airports.

IMPORTANT! The in-game menu must be opened before reaching your destination and the destination ICAO code must be displayed in order for traffic to be generated at your destination airport. (For further information, see the <u>Seeing the AI traffic in operation</u> section of this manual.)

TRAFFIC DENSITY (%) – adjusts the amount of traffic generated in the simulator between 0% and 200%. The default value is 100% and is the value that will generate the most realistic levels of traffic. After adjusting the traffic density you must remove and regenerate traffic in order for these changes to take effect.

IMPORTANT! If TRAFFIC DENSITY (%) defaults to 0% after loading a flight, this indicates that the FS Traffic module has crashed. Depending on PC specifications, this may occur if multiple flights are loaded in a single session. To minimise this risk, we recommend restarting the simulator at the end of every flight.

REMOVE TRAFFIC – removes all generated traffic in the simulator. Traffic must be removed before you regenerate traffic.

REGENERATE TRAFFIC – regenerates all previously removed traffic in the simulator. Requires traffic to first be removed.

FS TRAFFIC - 🗹				
DESTINATION ICAO			EHAM	
CONFIRM				
TRAFFIC DENSITY (%)	<	75%	>	
REGENERATE TRAFFIC				
REMOVE TRAFFIC				

LIVE TRAFFIC & ONLINE NETWORKS

FS Traffic is fully compatible with the MSFS Live Traffic feature as well as with other online multiplayer networks such as VATSIM.

MSFS Live Traffic

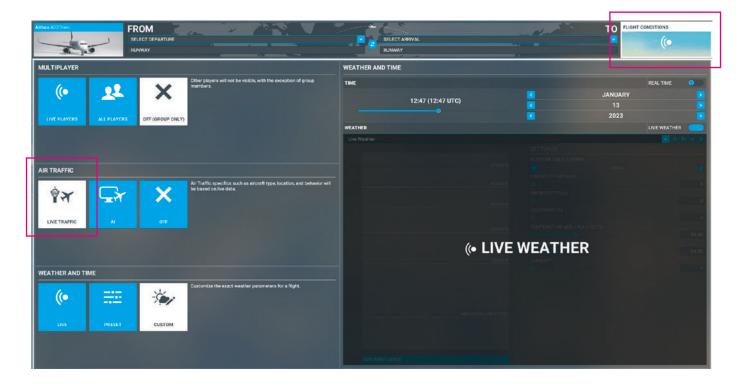
To use the MSFS Live Traffic feature, it must firstly be enabled in MSFS Settings.

To do this:

- 1. Navigate to Options > General Options > Data and set Live Real-World Air Traffic to **ON**.
- 2. Navigate to Options > General Options > Traffic and set Aircraft Traffic Type to Real-Time Online.
- 3. Finally, head back to the MSFS main menu, click the World Map box, then click FLIGHT CONDITIONS at the top right corner of the screen and confirm that the **LIVE TRAFFIC** square is highlighted white in the AIR TRAFFIC section.

When using the MSFS Live Traffic feature, model matching will automatically assign FS Traffic aircraft in place of the default aircraft.

Note: Model matching when using MSFS Live Traffic is controlled entirely by the simulator and may therefore have some limitations.



MSFS Multiplayer

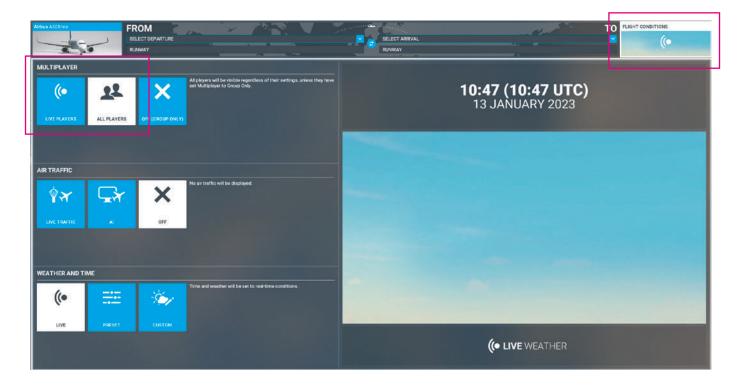
FS Traffic can be used in conjunction with MSFS Multiplayer, allowing you to fly with friends while still experiencing realistic AI traffic in your virtual skies.

To use FS Traffic with MSFS Multiplayer:

- 1. Navigate to Options > General Options > Data and set Multiplayer to **ON**.
- 2. Return to the MSFS main menu, click the World Map box, then click FLIGHT CONDITIONS at the top right corner of the screen and select the **LIVE PLAYERS** or **ALL PLAYERS** option in the MULTIPLAYER menu.

When using the MSFS Multiplayer feature, model matching will automatically assign FS Traffic aircraft in place of default aircraft.

Note: Model matching when using MSFS Multiplayer is controlled entirely by the simulator and may therefore have some limitations.



Online networks

FS Traffic is fully compatible with online networks such as VATSIM.

In order to prevent a duplicate amount of traffic being generated when you use online networks, the FS Traffic Module can be disabled (on the Options page of the Traffic Control Centre) so that only online traffic is generated in the simulator.

A VMR file is included for the vPilot software which features extensive model matching already set up to work with the FS Traffic fleet. The VMR file is located at the following file directory: ...Community\justflight-fstraffic-controlcentre\Data\trafficControlCentre\VMR.

For further information on using VMR files with the vPilot client and VATSIM, please refer to the documentation of the respective software.

FREQUENTLY ASKED QUESTIONS

Here is a comprehensive list of the questions most frequently raised during our extensive testing process. Due to the number of these FAQs, you may wish to use the search tool (press [Ctrl]+[F] on your keyboard) to search for keywords relating to any issues you may be experiencing.

If your question is not answered here, please contact the Just Flight <u>Support</u> team for assistance.

Al traffic – aircraft in the air

I don't see any aircraft. Why?

There are many reasons why you may not be seeing traffic appearing in your simulator.

As a first step, we recommend opening the FS Traffic in-game menu and clicking the REMOVE TRAFFIC button, followed by clicking the REGENERATE TRAFFIC button, ensuring that TRAFFIC DENSITY (%) is set to a percentage greater than 0%. If traffic is still not visible, we recommend restarting the simulator.

If traffic is not visible after restarting the simulator, open the Flight Plan Manager in the Traffic Control Centre to confirm that flights are scheduled to operate at the time and day currently selected in your simulator.

Why is the TRAFFIC DENSITY (%) defaulting to 0% when I load a flight?

If the TRAFFIC DENSITY (%) option in FS Traffic's in-game menu defaults to 0% when loading a flight, this indicates that the FS Traffic module has crashed.

Depending on your PC specifications, a module crash may occur when you attempt to load two or more flights in a single session without restarting the simulator between flights.

To reduce the risk of the module crashing, we recommend restarting MSFS after every flight.

The AI aircraft don't fly schedules which correspond exactly to the real-world schedule times. The times and the exact aircraft used are often not correct when compared to the real timetable. Why is this?

The schedules used by FS Traffic are real-world airline schedules taken from a specific week of the year and are accurate to the schedules during that period. As the schedules are based on one week of a specific year, they will not correspond 100% with the schedules you are seeing on popular flight tracking websites at the time you are reading this.

FS Traffic is predominantly an offline program with flight plans stored locally on your PC, but it does support model matching via the MSFS Live Traffic system if you would like to see our models with Live Traffic.

Why do AI aircraft often go-around?

Al traffic in MSFS loiter on the runway for an extended period of time both before starting their take-off roll and after landing. This, combined with the default MSFS ATC system causing aircraft to have inadequate separation on approach, leads to go-arounds.

Why does cruise traffic not communicate with ATC?

In order for cruise traffic to be present in FS Traffic, it has to be generated in such a way that makes ATC interaction not possible for these aircraft. Unfortunately this workaround is caused by a limitation of the default MSFS cruise traffic.

Al traffic - aircraft on the ground

Why am I not seeing any traffic generated at my arrival airport?

Your destination airport must be detected by FS Traffic in order for traffic to be generated at your destination.

There are two ways that FS Traffic can detect your destination airport:

Method 1 – setting the destination via the in-game menu:

- 1. Load MSFS and go to the World Map.
- 2. Select your departure airport and then click the FLY button.
- 3. Once loaded into the flight, open the FS Traffic in-game menu.
- 4. Type the four-letter ICAO code of your destination airport into the DESTINATION ICAO field (for example, EGLL for London Heathrow, or EHAM for Amsterdam.).
- 5. Press CONFIRM.

Method 2 – setting the destination via the MSFS main menu:

- 1. Load MSFS and go to the World Map.
- 2. Select your departure and arrival airports and then click the FLY button.
- 3. Once loaded into the flight, open the FS Traffic in-game menu.
- 4. Confirm the four-letter ICAO code of your destination airport is in the DESTINATION ICAO field.

IMPORTANT! The FS Traffic in-game menu must be opened once every flight to set your destination airport. If the in-game menu is not opened, traffic will not be generated at the destination airport. A destination airport has been detected if the FS Traffic in-game menu has been opened and a four-letter ICAO code is displayed.

Why am I not seeing any traffic when diverting to an alternate airport?

If you decide to change your destination mid-flight and fly to an alternate airport, you will need to enter a new destination in FS Traffic's in-game menu and then click the CONFIRM button.

Why am I seeing a lot of white aircraft at my local airport?

White aircraft would suggest that there are no liveries assigned to those aircraft in the FS Traffic fleet. You can check this by going to the Aircraft Manager page of the Traffic Control Centre and searching for that airline and livery combination.

The easiest solution for removing white aircraft is to head to the Options page of the Traffic Control Centre app and set the Livery Substitution Mode to Alternative Livery. This will replace any white aircraft with an alternative livery. The Livery Substitution Mode can also be set to No Substitutions, so that only aircraft with correct liveries will be generated in the simulator.

You can also add and assign liveries to a specific aircraft type using the Aircraft Manager page in the Traffic Control Centre. Further details on how to do this are listed in the <u>Aircraft Manager</u> section of this manual.

Why are aircraft not parking at their correct locations? For example, airline XYZ is parking at a gate where it would not be parking in reality.

The aircraft in FS Traffic have been set up with the correct dimensions and airline codes so that they park at the correct gates. However, the gates must also be set up by the scenery developer to have the correct dimensions and airline codes.

As FS Traffic is the first product of its type released for Microsoft Flight Simulator, many scenery developers may not have set their gates up to work correctly with traffic programs.

If you find an airport with this issue, we advise you to contact the scenery developer directly.

Why do I not see any A380s at passenger gates? For example, no A380s at Dubai.

The A380 is the largest aircraft in the FS Traffic package and has the largest wingspan, which means it requires at least one gate at an airport capable of accommodating an aircraft of its size.

Unfortunately, many airports in MSFS have incorrect gate sizes set, causing issues where certain aircraft cannot use the same gates they would in the real world (A380s at Dubai being one example of this).

If you find an airport with this issue, we advise you to contact the scenery developer directly.

Why are default MSFS aircraft appearing at the gates?

If you are seeing default aircraft at the gate with FS Traffic installed, this suggests that the Aircraft Traffic Type is not set correctly in MSFS Traffic Options.

In MSFS Options > General Options > Traffic, please ensure that the Aircraft Traffic Type option is set to OFF, and that your other MSFS traffic settings are set according to the <u>MSFS AI traffic settings</u> section of this manual.

Why are no aircraft pushing back from the gates?

Al aircraft in MSFS require a pushback tug to push back from the gate. Pushback tugs will not spawn in MSFS unless the AIRPORT VEHICLE DENSITY slider is set somewhere between 1 and 100. This slider can be found in MSFS by navigating to Options > General Options > Traffic.

Why are all my AI Aircraft invisible? I can see jetways connecting to invisible aircraft.

FS Traffic aircraft models may be invisible if the simulator's maximum object count has been exceeded. This may occur if you are using highly detailed third-party airport sceneries or airport ground service add-ons (such as cones, people, stairs etc.) which add clutter to airports These products greatly increase the object count within the simulator and, in extreme circumstances, may exceed the MSFS maximum object count limit.

In an attempt to reduce object count within the simulator, we have included a tool in the Traffic Control Centre that allows you to customise which ground services interact with the FS Traffic aircraft models. In the Traffic Control Centre, go to Aircraft Manager > Ground Services and there you can toggle ON/OFF the various pieces of ground equipment. The more ground equipment enabled, the higher the object count. Three presets are also available on the left side of the page to allow you to quickly change these ground services.

If you are concerned about a specific product increasing the object count in MSFS, we advise you to contact the product's developer directly.

Why are parts of the aircraft disappearing, and why do they have blurry textures?

In the Traffic Control Centre, go to the Options tab and check that the LOD Setting is set to High and that Texture Detail is set to High. This will increase the quality of the models, but at the cost of a slight reduction in performance.

I have a custom flight set up for a certain aircraft. Why can I not see it flying in MSFS?

Please ensure you are starting your flight in the simulator at the correct time and day of the week when your custom flight is due to depart.

When creating a custom flight in the Flight Plan Manager, make sure you save your changes before leaving the page by clicking the Save Changes button at the bottom right of the page.

The departure airport for your custom flight may also have no parking spaces available. If you suspect this may be the case, try reducing the TRAFFIC DENSITY (%) setting in FS Traffic's in-game menu or deleting some other flights around the same departure time in the Flight Plan Manager.

Why are aircraft taking off on the wrong runway, or using the wrong taxiways?

This is a limitation of the MSFS traffic system. In the simulator, aircraft will always take off using the runway that has the greatest headwind. FS Traffic only injects the aircraft models into the simulator, so it has no control over which taxiways or runways are used.

Where can I request new liveries and aircraft models?

Our aim with FS Traffic is to continue releasing new models and liveries over time, based on community feedback. If you would like to request a livery to be added in a future FS Traffic update, please get in touch with us on our Forum.

Can I use FS Traffic aircraft models with other AI traffic add-ons, and can I use aircraft models from other AI traffic products in FS Traffic?

Yes, and yes! FS Traffic's aircraft models can be used with any other third-party traffic program. Please refer to the respective traffic program's documentation for instructions on how to use the FS Traffic models with its software.

Third-party aircraft models and liveries can be used in FS Traffic simply by entering the 'Title=' entry from their aircraft.cfg file into the Aircraft Manager page of the Traffic Control Centre. For further information, please refer to the <u>Aircraft Manager</u> section of this manual.

Installation issues

I am seeing a message during installation that I do not have enough space on this drive.

FS Traffic includes a large amount of highly detailed aircraft models and liveries and thus it does occupy a large amount of space on your PC.

To download the FS Traffic installers in a different location, right-click on the download link in your account, then click 'Save as'. This will allow you to download the installers to a different drive which has more storage space available.

Please contact Just Flight's Support team for further assistance.

I am receiving a (0x3) error during installation and seeing pink/missing textures on air-craft.

This error typically indicates that the file path of your MSFS installation exceeds the 256-character limit set by Windows. Any files above this limit will not be installed and could cause missing texture issues. This typically occurs if you have MSFS installed in the default location. We would recommend installing MSFS in a custom location with a shorter file path such as: D:\Games\Microsoft Flight Simulator.

My browser is telling me that the installer may harm my PC. Should I be worried?

This is a false positive and is a common occurrence when downloading .exe files online. Rest assured that all Just Flight products are thoroughly tested before going on sale. They are 100% safe to download.

If you see this error message, click on the three dots next to the message and click 'Allow'. This will tell your browser that the file is safe and the download will begin.

I am receiving a WebView2 error during installation.

This error typically indicates that the correct permissions may not be set up in the temporary data folder where the FS Traffic installer needs to create files for the activation. To solve this error:

- 1. Go to the following file directory: C:\users\<your username>\appdata\local\
- 2. Right-click on the Temp folder and select Properties.
- 3. Select the Security tab.
- 4. Click 'Allow' for all permissions except 'Special Permissions'.
- 5. Run the FS Traffic installer and the error should no longer appear.

Traffic Control Centre issues

I am receiving an 'Unhandled Exception' error when using the Traffic Control Centre.

This is a generic error message and could be caused by various factors.

Please contact Just Flight's <u>Support</u> team. For the fastest outcome, please include a screenshot of the error and an explanation of how to replicate the error in your initial correspondence.

The Database Selection menu on the Traffic Control Centre Options page is greyed out and I can't change the year.

The option to change years will be greyed out in early versions of FS Traffic as the schedules for these years are not available in the release version. Additional years will be made available as free updates to existing customers after release.

LIMITATIONS

We have put a great deal of care into the development and testing of FS Traffic but, as great as Microsoft Flight Simulator is, it does have a number of limitations when it comes to the handling of AI traffic.

We have compiled the following list of simulator limitations that we have discovered during the development of FS Traffic. With the steady stream of updates which Asobo/Microsoft are providing for Microsoft Flight Simulator, however, we are hopeful that this list will be reduced with future MSFS updates.

Aircraft limitations

- Aircraft can sometimes randomly disappear when at a gate.
- Aircraft have only one ground contact point, causing them to 'jump' over gradient changes and in some cases appear to be floating or sunk into the ground.
- Aircraft loiter on the runway before beginning their take-off roll and before they exit the runway after landing. This can cause excessive go-arounds.
- Aircraft may land short or long of the runway in strong winds, when using high sim rates, or if an airport's ILS system is not set up correctly by the scenery developer.
- Aircraft taxi slower than expected.
- Aircraft taxi with their engines at 100% power.
- Aircraft turn immediately after take-off to their first waypoint and do not follow a SID (Standard Instrument Departure).
- Departure aircraft do not climb higher than the initial altitude to which they are assigned by ATC.
- Only an extremely limited number of configuration options are active in the FlightModel.cfg, causing undesirable aircraft behaviour during all stages of flight.
- The use of Slew mode may prevent aircraft from starting their pre-flight routine.

Airport limitations

- Aircraft take off on the incorrect runway (either not taking off into the wind or taking off from a runway not normally used in real-world operations).
- Aircraft taxi routes are not correct at all airports.
- Airports having incorrect gate sizes set (Al aircraft cannot use gates where the wingspan is set smaller than that of the aircraft).
- Airports having incorrect taxiway set-ups, causing AI aircraft to get stuck and eventually disappear.
- Airports not being correctly modelled and are missing taxiways or terminals or only have runways, preventing correct AI traffic operation. (This typically occurs at auto-generated airports in cities with newly constructed airports in the real world that are not yet created in MSFS, such as the new Istanbul Airport LTFM.)
- Airports not having airline codes set at gates, causing airlines to use a random selection of gates.
- Jetway animations are inconsistent when connecting to the aircraft, preventing the jetway from connecting flush to the aircraft on every occasion.

Other limitations

- Al labels cannot be applied to Al created using SimConnect.
- Callsign pronunciation varies between ATC and aircraft. The pilot may pronounce a callsign correctly, yet ATC may pronounce a callsign phonetically.
- Changing the time, date or weather during a flight temporarily removes all airborne traffic.
- MSFS Live Traffic and Multiplayer model matching may be inaccurate.
- Multiplayer aircraft may spawn at the same gate as an FS Traffic aircraft.
- When exiting a flight, AI aircraft models will sometimes appear inside the globe.

CREDITS

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A special thank you to all our dedicated testers!

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