Fly UK AI Traffic Package

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Version 4.08.03

Objectives

This document explains how to install the Fly UK AI and VMR files, version 4.07.01 and later.

Compatibility

The Fly UK AI Traffic Pack is compatible with the following versions of Microsoft ESP based flight simulators and MSFS:

- FSX
- FSX SE
- P3D v1-5
- Microsoft Flight Simulator

As of version 4.08.02, support for FS2004 (FS9) has been removed. AI development for this simulator ceased with v4.04, and due to the increased file size to accommodate MSFS, the decision was made to remove FS9 content entirely.

Installation

1. Installing this software may result in the removal or replacement of any Fly UK AI Traffic Pack files you have previously installed. For most users, this will not be a concern and is necessary for the correct functioning of the AI Traffic Pack. HOWEVER, if you have customised any such files yourself for your own purposes you may wish to back these files up prior to installing this software.

2. Right click the Setup file and select 'Run as Administrator'
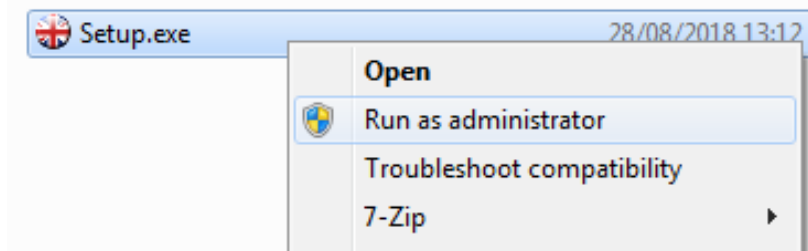
3. On slower systems it may take up to a minute or two for the installation wizard to launch. When it does, you will see the following screen which details the version of the traffic pack you are installing:

4. Click the Next button to continue.

5. The following screen will appear. It is VITAL that you read, understand, and agree to the terms set out in this document if you wish to use the AI Traffic Pack. Some of the content in the Pack is used under license from 3rd Parties and as such has distribution limitations placed upon it.

6. Click accept if you agree to the conditions in the scrollable document.

7. The following screen allows you to select the simulator you would like to install the Traffic Pack into:

8. If you have vPilot installed and would also like to install the Matching Rules for VATSIM / Fly UK FSD, ensure you have ticked the "Also install vPilot Model Matching Rules" checkbox.

9. The following screen will require you to select the folders for installation. If you selected any simulator other than P3Dv4/5, you will see a screen similar to the following and simply need to select your flight sim install folder if it is not already showing:

If you selected P3Dv4/5 you will need to select up to three folders:
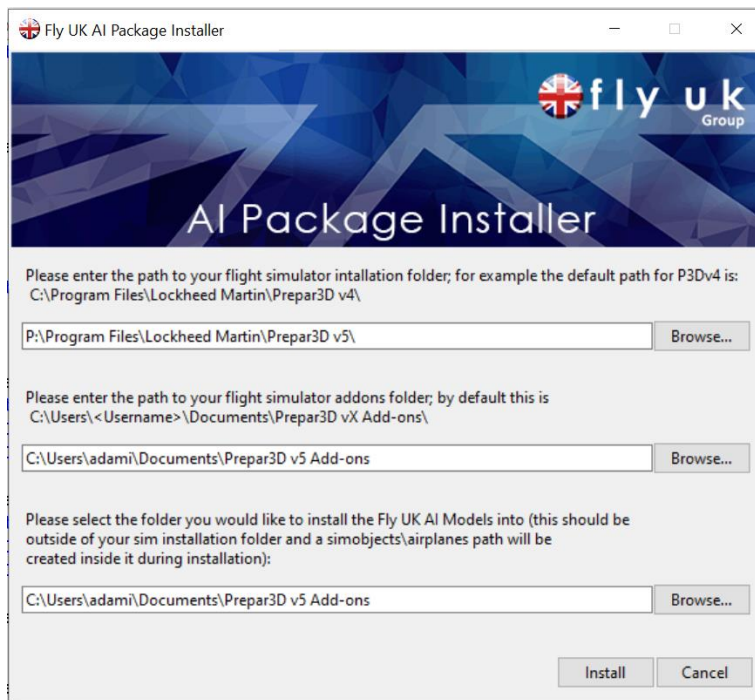
These boxes may have been pre-filled for you by the installer. In the first of these three boxes, select your flight sim installation folder. In the second you should select your P3Dv4 add-ons folder - this is usually found in your documents folder. The third box is where you would like the AI Traffic Files to be installed - this can be the same place the second box (add-ons folder), or if you prefer to put them on a different drive or location, this can also be selected here. Note - the location in the third box should NOT be inside your flight simulation installation folder.

If you selected "MSFS", the installer automatically detects your default "Community" folder.

Installing in this location is recommended. Advanced users wishing to use "Addon linker" instead, can select "Browse" and choose an alternate location however, is not in scope of this documentation
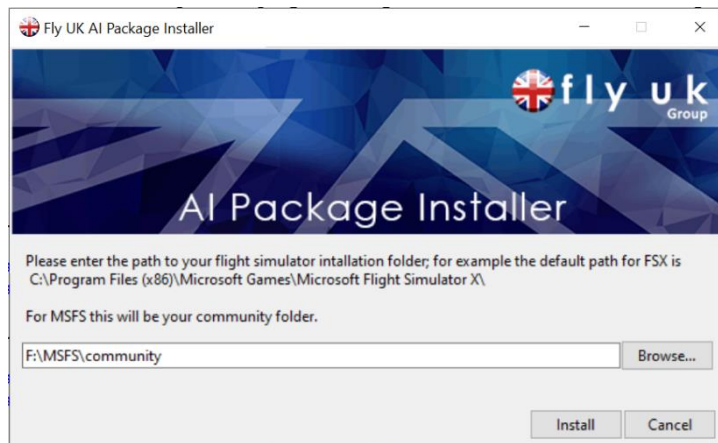
10. The installer will then check for any files already on your computer from older Fly UK Traffic Pack installations which could cause a conflict with your new installation. If it finds any files you will be given the option for the installer to remove them.

11. The files will then be installed onto your computer. When this is complete, the "Finished" button will be enabled and this can be clicked to close the installer.
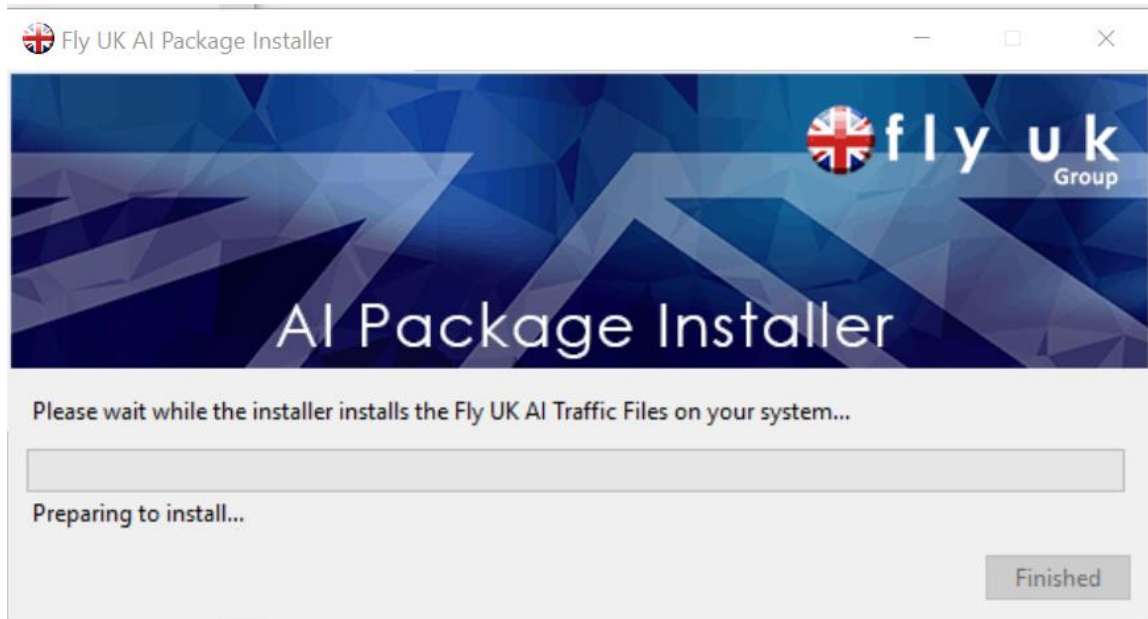
12. You can then access the readme file, this manual, and the uninstaller from the Start Menu:
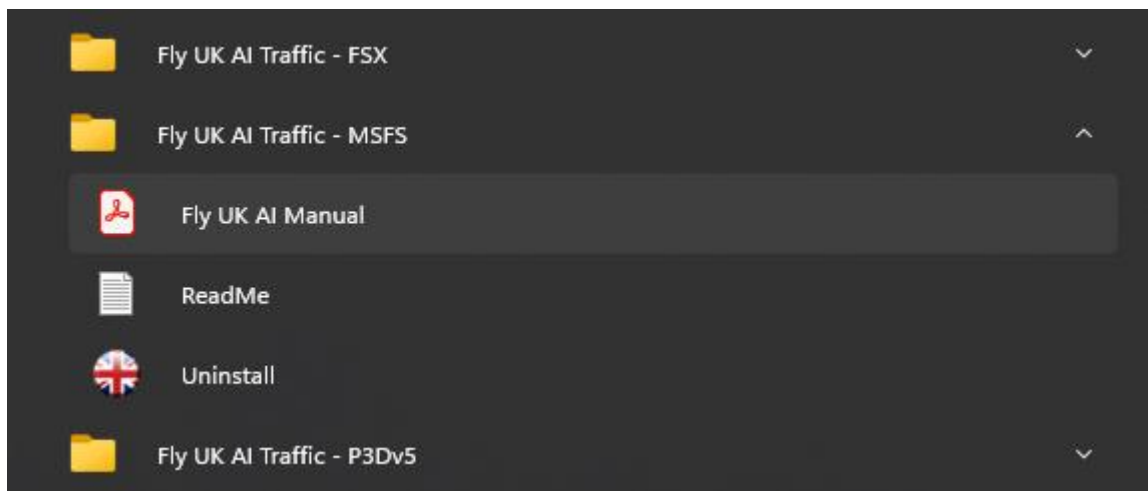
13. If you have P3Dv4/5, the next time you start P3Dv4/5 you will be asked if you would like to "Enable" the Addon - you should allow this.

Installing the Aurora Avro RJ100 in P3Dv4/5

If you are using FSX or P3Dv1-3 this section does not apply to you and can be disregarded.

If you are using P3Dv4 and wish to enjoy Fly UK Aurora traffic with the RJ100 included, there are some additional steps you will need to take. These steps are NOT necessary if you are happy with the 757 and DHC8 ONLY being depicted for Aurora as these will be installed as normal.

Because the model required for the RJ100 in P3Dv4 is limited by distribution rights, we are not allowed to supply it with this pack. A custom model is in production for inclusion in future versions of the pack. Until this is completed, we have however, included the Aurora textures ONLY with this pack. The correct model to use with these textures can be set up by following these steps:

1. In a browser, navigate to https://orbxdirect.com/
2. To continue to step 3, you will need to log in to Orbxdirect and already have installed their FTX Central V3 software – most of our users already have this.
3. Once you have installed FTX Central and logged in at Orbxdirect.com, click the Freeware link at the top of the page on the website
4. Scroll down to the Oceania category of freeware
5. Click the link for "AI Traffic Australia and New Zealand **P3Dv4**" – Make sure you click the correct link with "P3Dv4" at the end – there is an identically named link but without the "P3Dv4" – don't confuse them!
6. Click the "Add to Account" button on the right-hand side. This is a FREE product.
7. In FTX Central, click the Oceania section on the left-hand menu.
8. At the bottom of the listed products, you should see "AI Traffic Australia and New Zealand P3Dv4" – install this product.
9. Set the options for the product once installed – there is no need to have ANYTHING ticked / activated if you want it completely turned off – the Aurora RJ100 will still work with everything unticked.
10. Navigate to your P3Dv4 Addons folder (or the folder you chose to install the traffic pack aircraft into)
11. Inside this folder, navigate to: Fly UK AI Traffic\SimObjects\Airplanes\ukv_rj100_Textures
12. Copy the texture.aurora folder, "Aircraft FltSim Section" file and from here and paste them into the following folder (or the equivalent in your system):
    [Prepar3D v4 Install Folder]\SimObjects\Airplanes\FTX AU BAe 146-300
13. Then open the Aircraft.cfg file with notepad and the "Aircraft FltSim Section" file.
14. Copy all the text from the "Aircraft FltSim Section" file and paste it into Aircraft.cfg file above the "[General]" line – as indicated in the image below.

```
Aircraft - Notepad                                                    —    □    ×
File  Edit  Format  View  Help
[fltsim.2]
title=FTX AI BAe 146-300 Cobham Aviation New Colour
sim=bae146
model=
panel=
sound=
texture=Cobham New Colour
atc_airline=Jetex
ui_manufacturer=Cobham
ui_type=British Aerospace BAe 146-300
ui_variation=Cobham Aviation Services New Colour
description=BAe146\/Avro Series by Fernando Martinez. FDE by DWF
atc_parking_codes=NJS
atc_parking_types=GATE

[fltsim.3]
title=FTX AI BAe 146-300 StarTrack
sim=bae146
model=
panel=
sound=
texture=StarTrack
atc_airline=StarTrack
ui_manufacturer=StarTrack
ui_type=British Aerospace BAe 146-300
ui_variation=StarTrack Freight
description=BAe146\/Avro Series by Fernando Martinez. FDE by DWF
atc_parking_codes=XME
atc_parking_types=GATE

[General]
atc_type=BAe 146
atc_model=BA46
editable=1
performance=Cruise Speed\t.74 Mach\nMaximum Range\t2,059 nm\nService Ceiling\t36,089 ft\nMax Takeoff Weight\t138,500 lb
\nSeating\t\t147 to 168\nCargo Capacity\t1,373 CU ft\n
Category=airplane

[WEIGHT_AND_BALANCE]
max_gross_weight = 110000.0
empty_weight = 55800.0
reference_datum_position      = 0.0, 0.0, 0.0
empty_weight_CG_position      = 1.5, 0.0, -1.0
max_number_of_stations =2
station_load.0 =30000.0, 2.5, 0.0, 1.0
```
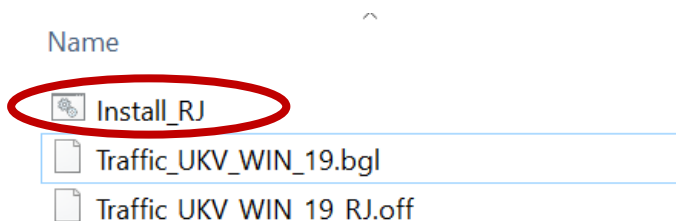
15. Save and close the Aircraft.cfg file

16. Navigate back to your P3Dv4 Addons folder (or the folder you chose to install the traffic pack aircraft into)

17. Inside this folder, navigate to: Fly UK AI Traffic\Scenery

18. Finally, double click the "Install_RJ" file (shown below)

Name

Install_RJ

Traffic_UKV_WIN_19.bgl

Traffic_UKV_WIN_19_RJ.off

Installing the Traffic Pack in MSFS

Provided with this installer are two folders which it will place in your MSFS "Community" folder.

"ukvai-aigoci-liveries" – The Fly UK Fleet Texture Pack

"ukvai-traffic" – The Offline AI Traffic File

An "Uninstall" shortcut will be created in your Start Menu by the installer should you wish to uninstall this completely.
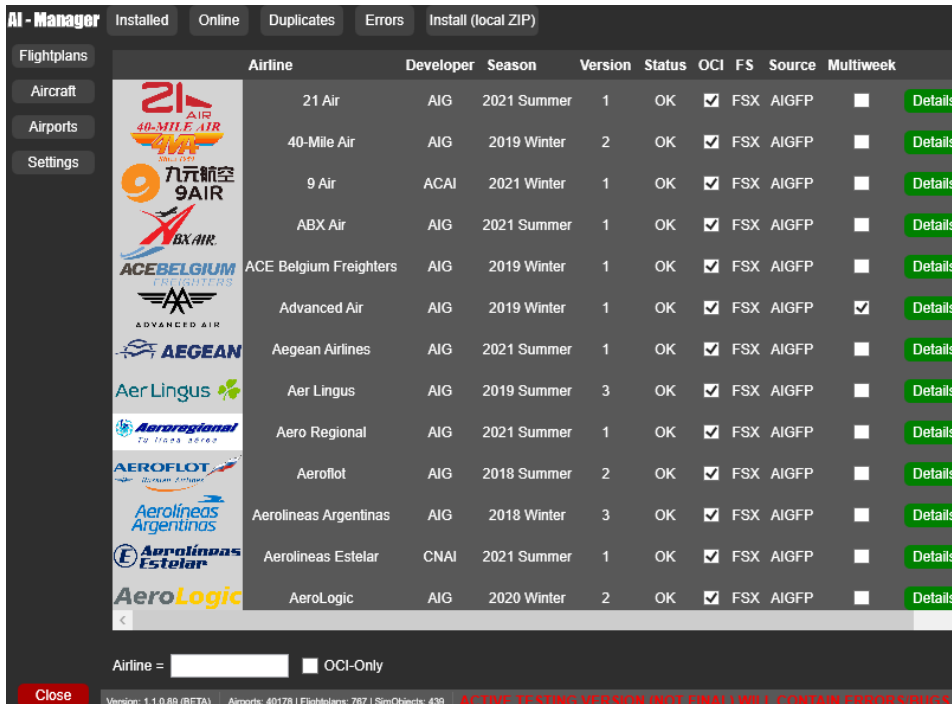
Please do not manually remove the "ukvai-aigoci-liveries" or "ukvai-traffic" folders.

Obtaining the AI Models

Aircraft models need to be recompiled (and in some cases, rebuilt from scratch) for use in MSFS. Even though AI might be released as "freeware", there are still certain "limitations of use", which rarely extends to recompiling existing models into other simulators. As such, at this present time we are unable to provide the base aircraft models in this installer as we have for other simulators.

Fly UK do have historical relationships with many of these AI model developers, which we are looking to rekindle with the hope that we can provide the AI models in a future release.

The pre-requisite base aircraft models can be installed and downloaded by installing software provided by Alpha India Group (AI Manager) and downloading their real-world Airline flight plans.

At a bare minimum, you will need to install the following airlines via AIG Addon Manager to ensure that you have all the correct models.

Airlines (*)
Air Canada
Air Canada Express
Air Europa
Air France Cargo
Air Taxi Benin
Aircalin
Airest
Alaska Airlines
All Nippon Airways
American Airlines
American Eagle
Austrian Airlines
Avianca
British Airways
CargoLux
Dana Air
Delta Air Lines
Jet2
Lufthansa
UPS

List correct at time of writing

Should a particular Fly UK Aircraft not display in your sim (either Offline AI or VATSIM model matching), this list may have changed. Please reach out to us on via the Fly UK forums for support.

Whether you intend to fly on VATSIM, or simply use Offline AI, it's recommended that you download **all** available Airlines through AIG Addon Manager for the most immersive experience (and from a VATSIM perspective, get the most thorough set of models for model matching rulesets)

Several "pre-built" vmr's for other real-world operators are available to download from Microsoft Flight Simulator Mods, Liveries & Add-Ons | Flightsim.to

A "Fly UK" Guide on how to install, configure and setup Addon Manager can be found here. Alternatively, a YouTube guide (based on an older release of Addon Manager) can be found here. A Fly UK specific vmr for MSFS is provided as part of this installation.

Compatibility with Alpha India Group's "Traffic Controller"

For those flying offline, AIG also provide software which injects their aircraft and flight plans into the sim via SimConnect using their Traffic Controller software. These real-world flight plans provided by AIG are a bespoke file-type (AIGFP), whereas our internal workflows still depend on traditional BGL files for traffic injection.

Traffic injected via SimConnect have no "awareness" of traffic read from the more traditional BGL method, and as such you may find that AIG Traffic taxi through Fly UK Traffic or occupy the same stands. AIG intend to make their conversion utility public at some stage in the future, however, is unavailable currently.

Using the Traffic Pack

After installation, the AI Traffic for Fly UK should appear in your simulator providing you have set your traffic sliders above 0% in your simulator settings. Please be aware that the greater the percentage density, the greater the performance impact on your sim. How much offline AI your sim can handle will greatly depend on your PC's specific hardware and sim settings.

For MSFS, the Traffic Density slider can be found in Options > General Options > Traffic

For MSFS Offline AI, ensure that you start your flight with the "**AI**" (not Live Traffic) option under "Flight Conditions" via the "World Map".
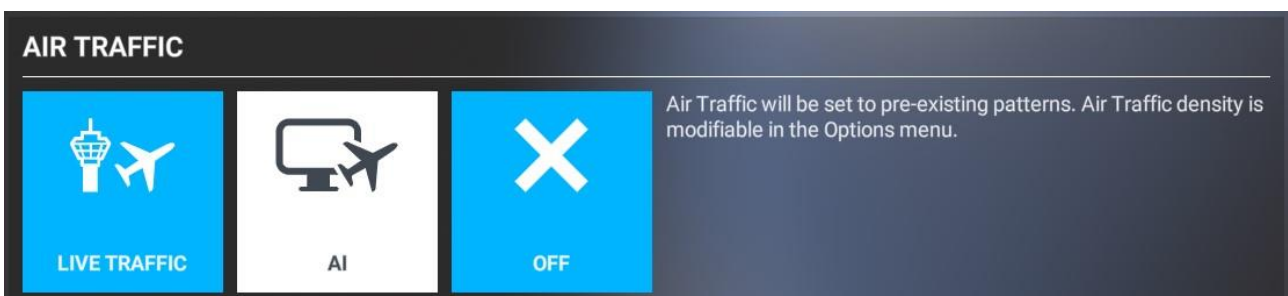
To ensure that AI aircraft are not displayed when connecting to VATSIM, please ensure this setting is set to "**OFF**".

Improving Performance at High Traffic Density Airports

A feature to reduce the level of Fly UK traffic at key London airports has been included with this pack. If you would like to significantly reduce Fly UK AI traffic in the London airports, simply reduce your AI Traffic slider in your simulator s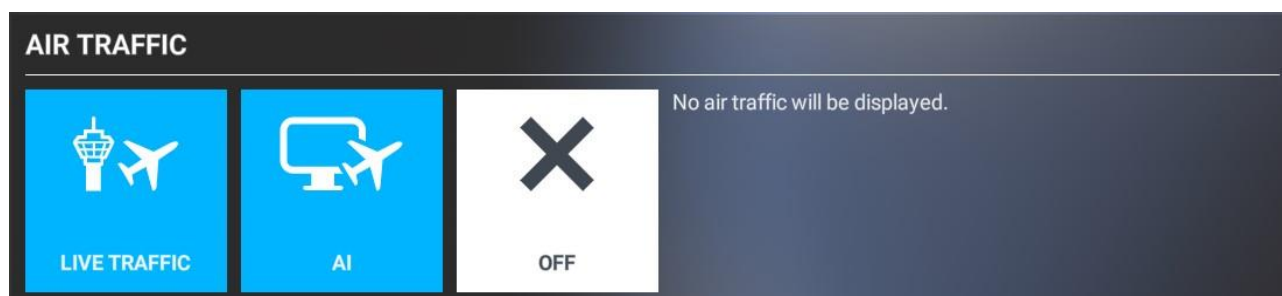ettings to 39% or below. This will not affect any other Fly UK AI traffic at other airports, only that at our London hubs. This should help improve performance of the simulator in this demanding scenery area.

For vPilot Users:

1. During install of the Traffic Pack, ensure that you have selected the optional VMR option during installation

2. After the installation is complete, start vPilot and go into Settings > Model Matching > Custom Rules

3. Add the VMR file installed by the pack and move it up to the top of the list in the box. You should find the file in your Documents > vPilot Files > Model Matching Rule Sets.

   - FSX – "FlyUK.vmr"

   - P3Dv4/v5 – "FlyUK - P3D.vmr"

   - MSFS – "FlyUK-MSFSv4.vmr"

4. When connecting to your online server using vPilot, use the Callsign Ranges and Type Codes specified in the table below.

The correct codes to use in the 'Type Code' box for our aircraft are listed in the following table. You should also use an appropriate flight number in your Callsign box if you wish the correct variant (franchise) to be depicted for other users. For example, a Type Code of DHC6 with a Callsign of UKV4115 would show as a Highland Connect livery, whereas a Type Code of DHC6 with a Callsign of UKV3067 would show as an Aurora Livery.

Model / Airframe	Type Code
Aerospatiale ATR 72-500	AT75
Airbus A319-131	A319
Airbus A320-214	A320
Airbus A320-251N	A20N
Airbus A321-231	A321
Airbus A321-251N	A21N
Airbus A350 XWB	A359
Avro RJ100	RJ1H
Beechcraft B1900D	B190
Boeing 737-700	B737
Boeing 737-800	B738
Boeing 737-MAX8	B38M
Boeing 737-900	B739
Boeing 747-400	B744
Boeing 747-400F	B744
Boeing 747-8F	B748
Boeing 747-8i	B748
Boeing 757-200	B752
Boeing 757-200F	B752
Boeing 767-300ER	B763
Boeing 777-200ER	B772
Boeing 777-200LR	B77L
Boeing 777-200LRF	B77L
Boeing 787-8	B788
Boeing 787-9	B789
Boeing 787-10	B78X
Bombardier CRJ700	CRJ7
Bombardier Dash 8 Q400	DH8D
Cessna Grand Caravan	C208
de Havilland Canada DHC-6	DHC6
Dornier Do228	D228
Embraer E195LR	E195
McDonnell Douglas MD-88	MD88
Saab 340B	SF34

FAQs / Troubleshooting

- **I use X-Plane – can I use this traffic pack in X-Plane?**
  Although the developers of this pack have explored the possibilities of creating a package
  which is compatible with X-Plane, the limitations of the native AI aircraft system in the
  current version of X-Plane do not make this possible without utilising third-party AI

software. Until X-Plane enhances its system for AI traffic, it is unlikely a Fly UK AI Traffic Pack will be compatible with X-Plane.

- **I have two simulators installed on my computer - can I use the traffic pack in both?**
  Yes, providing they are Microsoft ESP based simulators (e.g. FS2004/FSX/P3D) or MSFS - simply run the installer a second time and select your other simulator.

- **After installing the traffic pack, it does not appear in the add/remove programs list in my control panel, how come?**
  This is normal and is designed to be the case. To uninstall the traffic pack you should run the uninstall link in the start menu. To add a program to the programs list in Windows the installer would need to write a key into the windows registry. This would require permissions which some users may not have and so was avoided to maximise compatibility for our members.

- **The traffic pack seems to install correctly with no errors, but I see no (Fly UK) traffic in my simulator**
  The most common cause of this is when you have an old (none Fly UK) traffic file installed in your <flight sim>\scenery \world \ scenery folder. This may be the case if you have installed 3rd party traffic packs such as WOAI or if you have installed add-on scenery or airports which include some traffic. If such a file was originally created for FS2004 for example, it will most likely work in FSX or another simulator, BUT it is likely to prevent the other traffic in the simulator from appearing. The solution is to identify the culprit file and remove it. To see if a file is a "culprit" you could move the suspect file to another location temporarily and try running the sim again.

- **The installer hangs during install - what is causing this and how can I fix it?**
  Whilst careful development and testing has been carried out with the installer, there is a nearly infinite number of software, hardware and user variables which exist in the real world. The installer will "hang" when it has encountered an error the developer had not expected it to encounter. Before seeking support, you may wish to try the following troubleshooting steps:
  - Make sure you run the installer with administrator permissions
  - Make sure you have write access to the folders you selected (i.e. you can copy a test file to that place)
  - Make sure the folder for install you selected exists
  - Seek support on the Fly UK forums or drop an email with a detailed description of the issue you are facing to adamismobileuk@goolemail.com

If the installer hangs before the progress bar in the last step starts to move, there will be no files or alterations made to your system. After this point, some files may have been

copied to the folders you selected, but these can be safely removed and will not affect your Sim if left.

- **Does the traffic pack work with other traffic related add-ons?**
  The pack is tested with Pro-ATCX, VOX ATC, TrafficGlobal and Radar Contact. Since it uses standard AI Traffic techniques, there is no reason for any incompatibility with other add-ons. The pack will not work with Ultimate Traffic Live "out of the box", although a search on the Fly UK forum should find a post which explains how this can be achieved with a little tweaking.

- **If I have set up a previous Fly UK traffic pack to work with UTL in the past, will installing the new traffic pack affect this?**
  Where AI models or data has been updated in the pack this could affect your Fly UK assignments in UTL if you have added some previously. If extra aircraft have been added to the Traffic Pack since the previous version, you will need to assign these in UTL. For AI models in the pack which have not changed, there will be no effect on your UTL assignments by installing a newer Fly UK Traffic Pack providing you install it to the same folder.

- **What can I expect from the Offline AI Traffic Pack in MSFS?**

  All AI aircraft benefit from all the new "bells and whistles" in MSFS, including:

  - Baggage Handling
  - Marshaller
  - Catering Trucks

  ... as well as the functionality that we've all been used to in FSX/P3D, such as:

  - Jetway connection
  - Interaction with ATC (AI will be heard on frequency)
  - Aircraft animations (nosewheel/flaps/taxi/landing/nav lights)

- **MSFS Known Issues**

There are several known issues with Offline AI behaviour in MSFS, and therefore this traffic pack comes with certain limitations compared to FSX/P3D. Asobo has stripped away much of the AI FDE that was present in FSX/P3D to make MSFS more performant, however in doing so has caused some issues with AI behaviour in sim. Such examples include (but not limited to):

1. Departing AI Aircraft appear to not reach cruising altitude
2. AI Aircraft will spin on the spot upon reaching a holding point (if the runway is in use, or if there is AI in front of the plane blocking its path)
3. AI will despawn if the airport has not been designed with AI in mind (taxiways paths haven't been connected properly). Whilst not necessarily a *new* issue, or an issue unique to MSFS, this continues to be an issue. It has been noted that this is less of an issue at "handcrafted" or payware airports, or airports included in "World Updates"
4. AI appear to run approximately 10 mins behind their scheduled departure times.
5. AI will despawn entirely if it has missed its scheduled departure time significantly (again, not necessarily a new issue)
6. AI may not use the correct runway assignments for takeoff/landing
7. AI will only fly at a maximum of 250kts when spawned enroute
8. Enroute AI will spawn a maximum of 2000ft above the "players" aircraft. This makes for some rather "interesting" experiences with enroute aircraft when sat on the ground preparing your aircraft for flight.

Considering the above there have been many talks internally whether we include Offline AI at all as part of this pack, or whether we should merely provide MSFS VATSIM model matching. However, we're aware that many of our members do not fly online and enjoy having populated airports to fly in and out of.

To that end, we have decided to release this "as is", in the hope that Asobo continue to work on MSFS AI behaviour during the lifetime of the sim and that they fix these issues in due course. Please do not report AI behavioural issues to Fly UK, as this is outside of our ability to resolve.

- **What is the "ukvai-aigoci-liveries_CVT_" folder for in "Community", and can I remove it?**

This folder gets automatically created the first time that you run MSFS after installing the package. It contains Fly UK textures which the sim has converted to native MSFS format. While you can delete this folder, it will simply reappear when you next run the sim. This folder needs to reside within your Community folder, so please do not attempt to move it.