



146

PROFESSIONAL



**AIRCRAFT VARIANTS
AND LIVERIES GUIDE**

Just Flight™

146 PROFESSIONAL AIRCRAFT VARIANTS AND LIVERIES GUIDE

There are eight variants of the 146 included in this simulation, some of which are automatically configured based on the folder name of the livery:

1. 146-100 passenger variant
2. 146-100 RAF VIP variant – 100 passenger with countermeasure pods (liveries starting with 'ZE7').
3. 146-200 passenger variant
4. 146-200 QT cargo variant – capped windows and large side cargo door (liveries starting with '2QT').
5. 146-200 QC combi variant – convertible cargo hold with capped windows (liveries starting with '2QC').
6. 146-200 QC RAF variant – 200 QC with countermeasure pods
7. 146-300 passenger variant
8. 146-300 QT cargo variant – capped windows and large side cargo door (liveries starting with '3QT').

There are 34 liveries included in this package and one blank white livery per variant. These are located in the 'objects' folder within the aircraft folder.

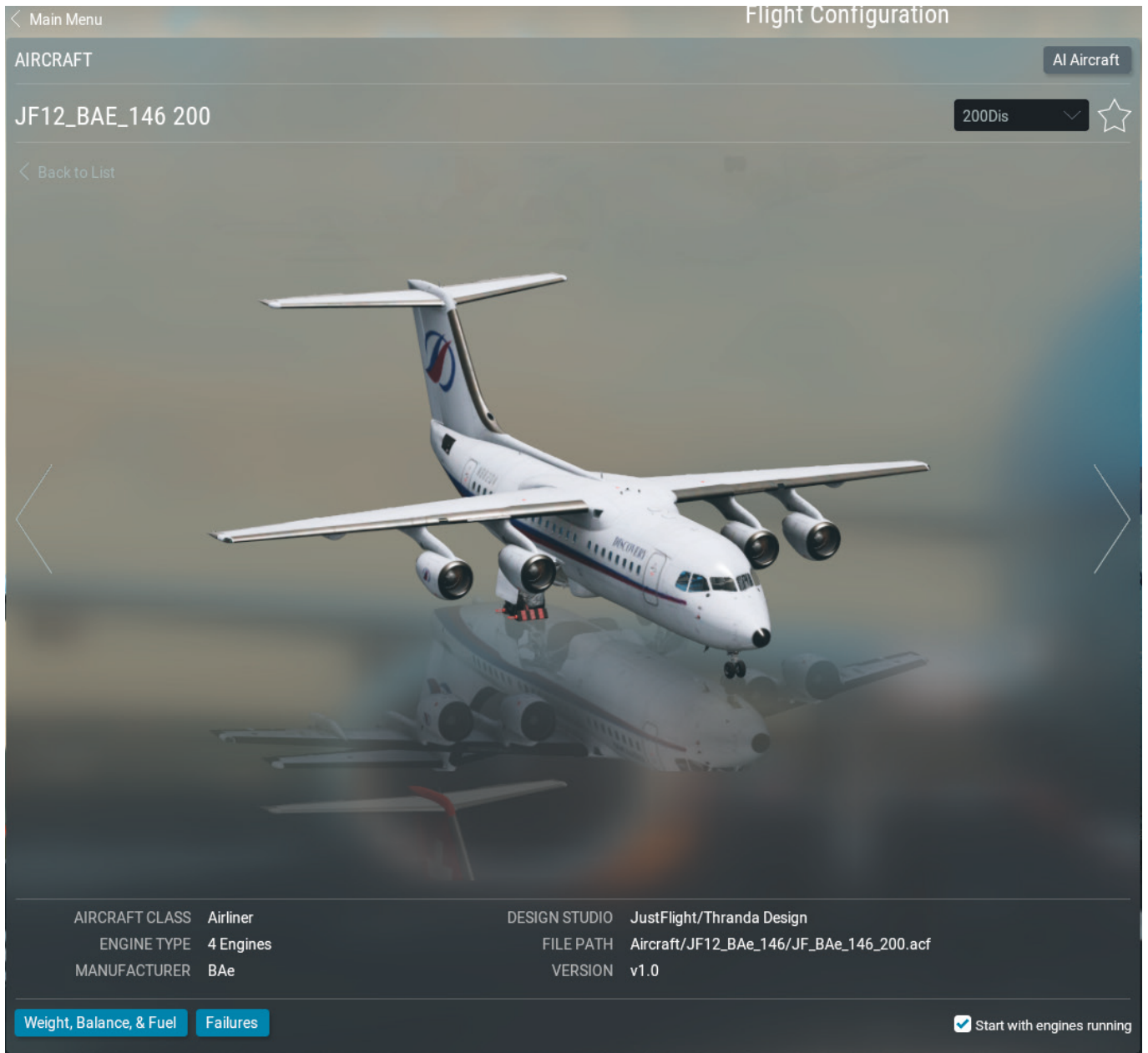
The 100, 200 and 300 variants of the 146 have significantly different flight dynamics, due to their fuselage geometry, weight, balance etc. and as such require their own .acf file. You can select which variant you want to fly by choosing the appropriate .acf file from X-Plane's aircraft selection menu.

The sub-variants listed above can be accessed by selecting a livery that corresponds to that model. The aircraft's plugin system will add or remove geometry to adapt the exterior and interior of the model to match your selection. For example, selecting a cargo (QC/QT) livery will swap out the interior passenger compartment for a cargo interior, and the exterior will receive a large cargo-loading door, window covers, an adapted pop-up window for the operation of doors and other changes that convert it to the cargo variant in real time. This system is designed to minimise the wasteful or duplicated use of textures and geometry, reducing the software file size and in-sim resources as well as providing a less complex way of managing an aircraft with many variants.

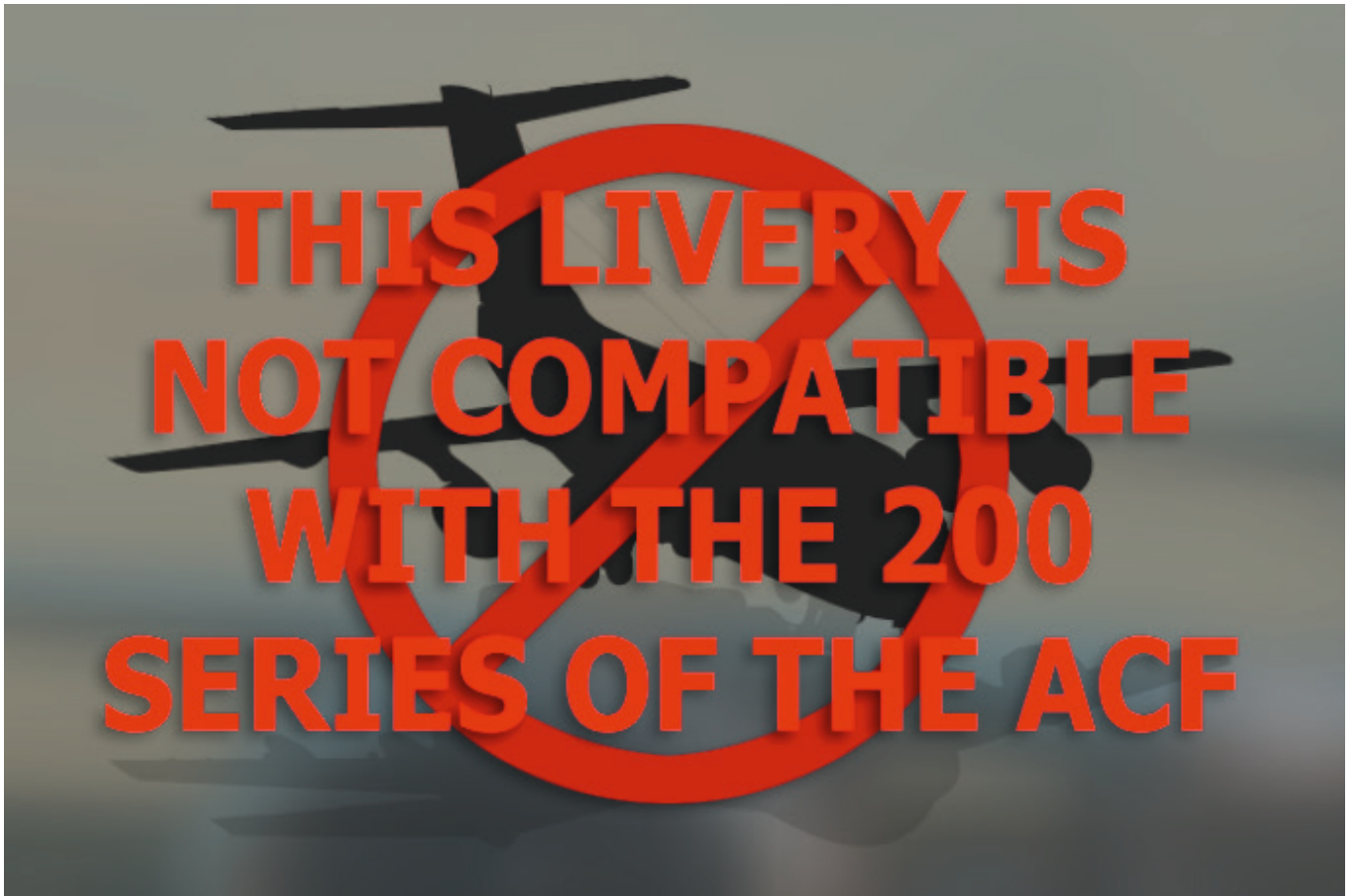
Please note that for this system to work properly, the aircraft folder name (JF12_BAe_146) must not be edited.

Since large portions of the 3D geometry and textures are shared between models, the liveries are centralised in the single 'liveries' folder, but each livery is only suitable for use on a specific aircraft variant. There are two ways you can select liveries:

1. When selecting a livery in X-Plane's flight configuration window, you will get a preview, as expected, of the liveries that are compatible with your currently selected aircraft:



All incompatible liveries' icons will display a warning:

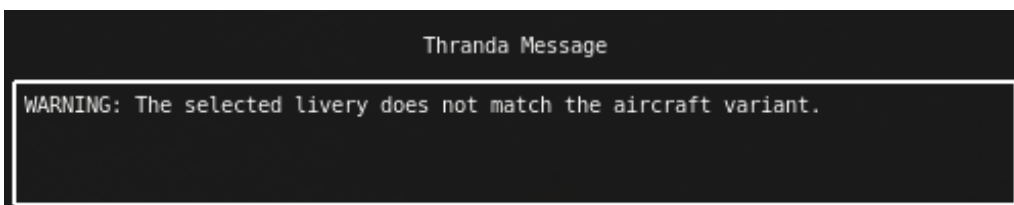


Even when regenerating icons, this warning will be restored the next time the aircraft is loaded.

2. The 146 side menu (pop-up) has a left and right arrow for selecting liveries. These arrows are commands, which can also be accessed by keyboard shortcuts or joystick buttons; these can be assigned from X-Plane's 'Settings' menu.



The pop-up window warning will again appear if you select an invalid livery for the currently loaded variant.



Creating custom liveries

The PSD paint kit consists of a .zip file containing Photoshop (PSD) files of the albedo textures in layers, ready for the creation of custom liveries. These files have file names that are indicative of the portion of the plane they cover and the variant (cargo, passenger, combi).

The textures have to be exported as PNG or DDS files and renamed to fit X-Plane's convention ('E1.png', 'E2.png', 'E3.png', 'E4.png', 'E5.png', 'E6.png', 'E7.png' and 'Cargo.png' for the cargo and combi version interior textures).

To create your own livery that conforms to the aircraft's logic for controlling the different sub-variants, start by creating a folder in your 'liveries' folder, with a folder name that follows the rules outlined above:

For a **passenger** variant, start your folder name with '100', '200' or '300', depending on the variant for which you wish to make this livery, and then complete the folder name with your livery name, e.g. '100MyLivery'.

For a **cargo** variant with capped windows, start your folder name with '2QT' or '3QT'.

For a **combi** variant (cargo with windows), start your folder name with '2QC' (only available for -200).

For a **VIP** variant, start your folder name with 'ZE7' (only available for -100).

Note: Please ensure that you respect capitalisation in your folder name.

Once your top-level livery folder has been created, you need to create a sub-folder and call it 'objects' (be sure to check for proper spelling and capitalisation). Save the output of your Photoshop exported files into this 'objects' folder. For example, if E1 was the only texture that required modified artwork versus the blank white livery, you only need to export the repainted Photoshop file named 'BAE146_EXT01_PK.psd' as an 'E1.png' file into your custom livery's 'objects' folder. If your custom livery requires modifications to E2, E3 or any other texture, you'll have to populate your custom livery's 'objects' folder with your 'E2.png', 'E3.png' etc. files as well.

You can also copy and paste the corresponding _NML texture files into the custom livery folder and modify the PBR values (metallic characteristic and roughness) of your livery. Including the _NML textures in your custom livery will allow you to alter your custom texture's metallic and roughness characteristics uniquely. So, if you want a matte camouflage paint scheme, you should copy the corresponding _NML textures over and reduce the transparency value of the _NML file in order to increase the microscopic roughness (and thus, the matte characteristic) of that livery.

To monitor the progress of your painted livery in-sim, you first need to make sure the aircraft is loaded with the livery you're working on set to the active livery. Then you can reload the entire aircraft to reflect the latest saved changes to the livery textures you're working on. You can also simply change the livery to 'next' then 'previous' to refresh the artwork – it might be a little faster than reloading the entire aircraft.

Refer to the existing liveries as a guide for your own livery and pay special attention to things like the location of the registration number placard, which will show up inside the cockpit on the instrument panel.

You can publish your custom-created liveries online and share them with fellow 146 enthusiasts on forums such as the [Just Flight Forum](#) or [X-Plane.org](#), which has a dedicated livery upload section.

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