

FerryFuel

Ferry tanks & jerry cans for any prop aircraft
User manual for Microsoft Flight Simulator 2024

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Joe's Mods · Joe's Ferry Fuel · November 2026
For flight simulation only. Not for real-world flight planning, fuel planning or weight and balance.

1. What FerryFuel does

FerryFuel lets you carry extra fuel in the cabin, the way real pilots do on long ferry flights. You can:

- Load Turtle-Pac style collapsible cabin ferry tanks (Drum 25, Drum 33, Cushion 37, Ferry 100) or 5-gallon jerry cans onto the passenger seats and the baggage area.
- Move fuel from the cabin tanks into the wings with an electric transfer pump (it needs bus power) or a hand pump you crank.
- Pour jerry cans into a wing by hand when you are stopped on the ground with the engine off.
- Watch the weight and center of gravity change as the fuel moves.
- Keep a fuel log, a last-flight report and a Pilot Notes notebook.

Everything happens in a toolbar panel. FerryFuel does not change any of the sim's aircraft files. It works best in the default Cessna 172 and also works in most other propeller airplanes, piston or turboprop. Jets, helicopters, gliders, balloons and electric aircraft are not supported; the panel says so and does nothing.

2. Requirements

- Microsoft Flight Simulator 2024 on PC, Steam or Microsoft Store / Xbox app version.
- Nothing else. There is no installer and no extra software.

3. Installing, updating and removing

Install

1. Close the sim if it is running.
2. Unzip the download. Inside is the add-on folder: `joeengineer-ferry-tanks` for FerryFuel (or `joeengineer-ferryfuel-free` for FerryFuel Free). That folder *is* the add-on; it contains `manifest.json` and `layout.json`.
3. Copy that whole folder into your **Community** folder. Copy the folder itself, not just the files inside it, and do not add an extra folder level around it.
4. Start the sim.

Where is my Community folder?

Default locations (from Microsoft's “3rd party add-ons and Community folder” support article). Paste the line into the File Explorer address bar and press Enter.

Version	Community folder
Steam	`%APPDATA%\Microsoft Flight Simulator 2024\Packages\Community`
Microsoft Store / Xbox app	`%LOCALAPPDATA%\Packages\Microsoft.Limitless_8wekyb3d8bbwe\LocalCache\Packages\Community`

If you moved your packages somewhere else, open the sim and go to **Marketplace → My Library → Settings → Open** to open the Community folder that is in use.

When it is installed correctly the path looks like this:

`...\Community\joeengineer-ferry-tanks\manifest.json`
`...\Community\joeengineer-ferry-tanks\layout.json`

> Install only one FerryFuel package at a time. FerryFuel and FerryFuel Free share the same panel, so having both in Community can mix their files. Remove one before you add the other.

Update

Close the sim, delete the old FerryFuel folder from Community, then copy in the new one. Your settings are kept.

Uninstall

Close the sim and delete the FerryFuel folder from Community. To also remove saved settings (optional, a couple of small text files), delete the folder with the same name in the sim's `WASM\MSFS2024` folder; on Steam that is `%APPDATA%\Microsoft Flight Simulator 2024\WASM\MSFS2024\joeengineer-ferry-tanks`.

4. Opening the panel

1. Start a flight. Free Flight in the default Cessna 172 is a good first test.
2. Move the mouse to the top of the screen to show the sim's toolbar.
3. Click the **FerryFuel** button (a duffel bag marked FERRY with a fuel gauge). If you do not see it, open the toolbar's settings or “more” list and switch FerryFuel on.



The FerryFuel toolbar button (the sim tints it to match the toolbar).

The panel has four tabs: **Ground**, **Flight**, **Pilot Notes** and **Configuration**. The green pill at the top right says the FerryFuel module is running (**Live**). Amber means it has stalled; red means no module. Hover any **?** for help on that control.

5. Moving the panel and using a second monitor

The window around FerryFuel is the sim's own toolbar window, so it moves and sizes like any other toolbar panel.

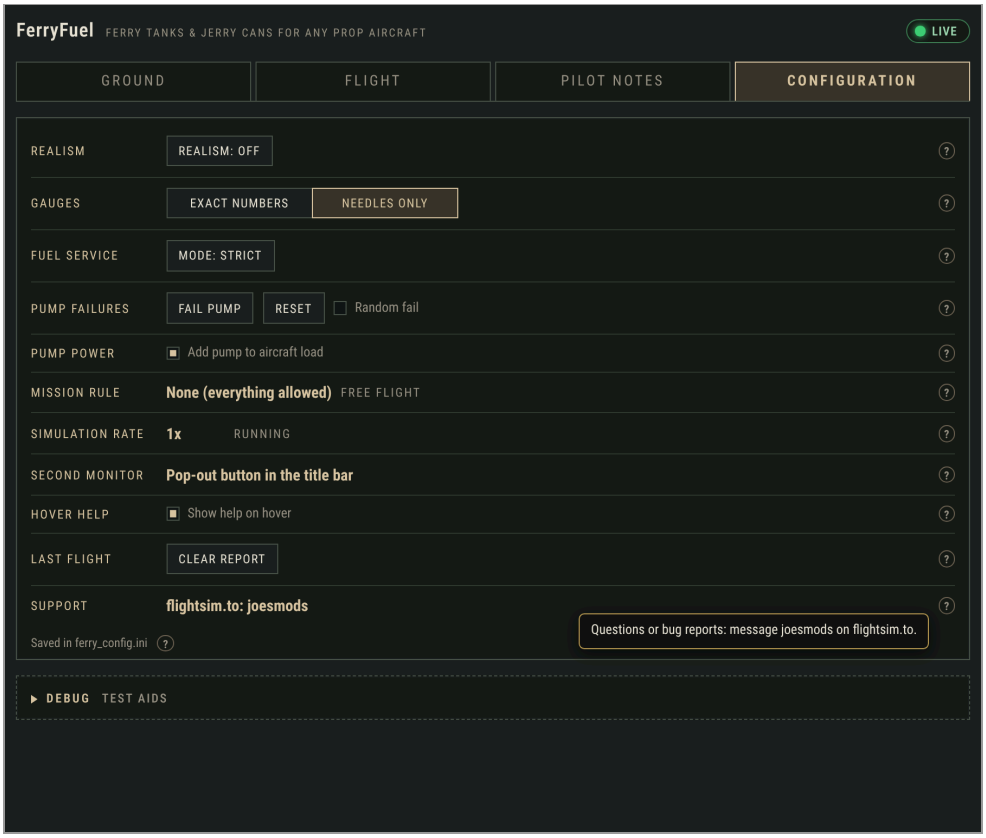
- **Show the title bar.** Hover the panel. The sim's title bar (“FerryFuel”) appears at the top.
- **Move it.** Drag the title bar. The first drag also detaches the panel from the toolbar; the pin button in the title bar does the same.
- **Resize it.** Drag an edge or a corner. The panel scales to fit: two columns when wide, one column when narrow.
- **Close it.** Press the **X** in the title bar, or click the toolbar button again.
- **Lost it?** If the panel ends up off screen, use **Reset Windows** in the toolbar's settings.

Put FerryFuel on a second monitor

1. Open FerryFuel from the toolbar.
2. Hover the panel so the title bar shows. Press the pin (detach) button, or drag the title bar away from the toolbar, so the panel floats.
3. In the title bar, press the **pop-out button**: a square with an arrow. FerryFuel becomes its own Windows window.
4. Drag that window to your other monitor and size it the way you like.
5. To bring it back into the sim, press the same pop-out button again, or close it and reopen it from the toolbar.

The pop-out button is the same one the sim's other toolbar windows use (for example Communication). A floating panel that has not been popped out cannot leave the sim window. VR has no separate windows. The sim saves floating positions with the flight.

Configuration → Second monitor repeats these steps in its **?** help, and reads **Popped out (own window)** while FerryFuel is in its own window.



Configuration tab with the Support help open: questions and bug reports go to joesmods on flightsim.to.

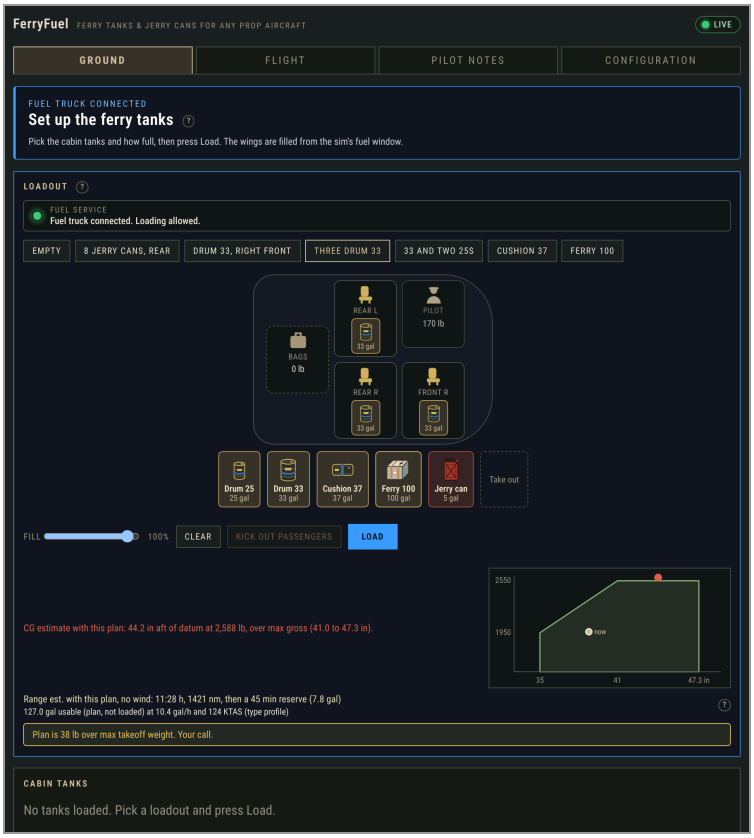
6. Ground tab: loading tanks and jerry cans

Fuel service

Like real life, tanks and cans can only be filled when fuel is available. The **Fuel service** line says whether loading is allowed now. The mode is set in Configuration:

Mode	When you can load
Strict (default)	While the sim's fuel truck is connected (ask for fuel in the sim's ground services), or self-service when parked within about 200 yards of a fuel pad: on the ground, engine off, parking brake set. It stays open after the truck leaves until you start the engine, taxi or take off.
Ramp	On the ground, engine off, parking brake set, stopped. Used automatically on airplanes that have no fuel-hose point.
Off	Always. Handy for just trying FerryFuel out.

Taking every tank out only needs a parked airplane with the engine off. The transfer pump is never blocked by this setting. When the fuel truck connects, an open FerryFuel panel jumps to the Ground tab and shows a **Fuel truck connected** banner. A closed panel cannot open itself, so keep it open while you call the truck.



Ground tab with the fuel truck connected and the “Three Drum 33” loadout planned, before pressing Load.

Planning a load

1. Pick a suggested loadout button (Empty, 8 jerry cans rear, Drum 33 right front, Three Drum 33, 33 and two 25s, Cushion 37, Ferry 100), or drag tanks and cans from the tray onto the seat map (or click one, then a seat). **Take out** removes an item.
2. Set **Fill** (how full the tanks and cans are).
3. Check the CG estimate and range under the seat map. Over max weight or out of CG is shown in red: it still loads, it is your call, pilot.
4. Press **Load**. Load refills to the selected fill; it does not keep what was left from the previous load. The wings are filled from the sim's own fuel window, not here.

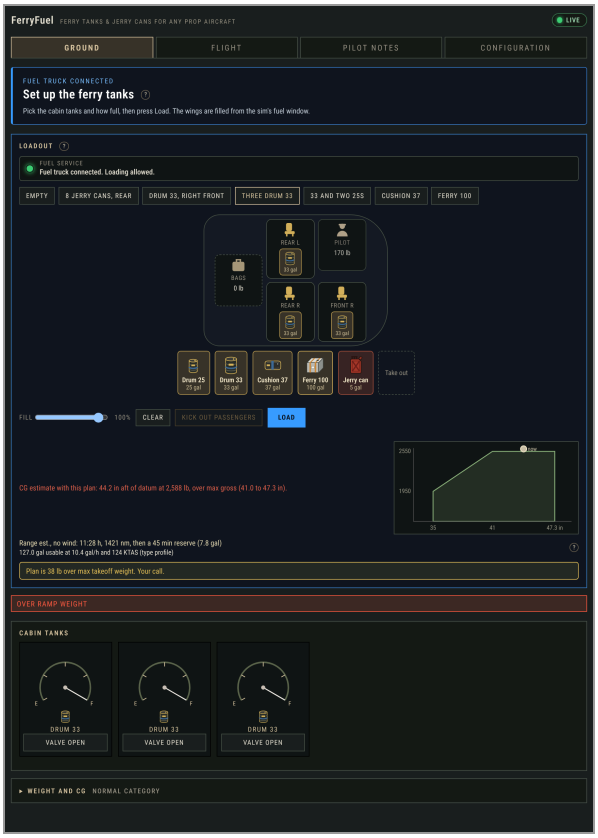
The tanks

Tank	Capacity	Empty weight	Where it goes
Drum 25	25 US gal	9.5 lb	One passenger seat
Drum 33	33 US gal	10.5 lb	One passenger seat
Cushion 37	37 US gal	about 11.6 lb (estimate)	Across the rear seat pair
Ferry 100	100 US gal	11.2 lb (about 611 lb full)	Across the rear seat pair

The pilot seat never takes a tank or a can. A seat with a passenger in it will not take one either; **Kick out passengers** sets every passenger seat to zero (pilot, bags and cargo stay). Baggage is checked against the 120 lb limit of the baggage area.

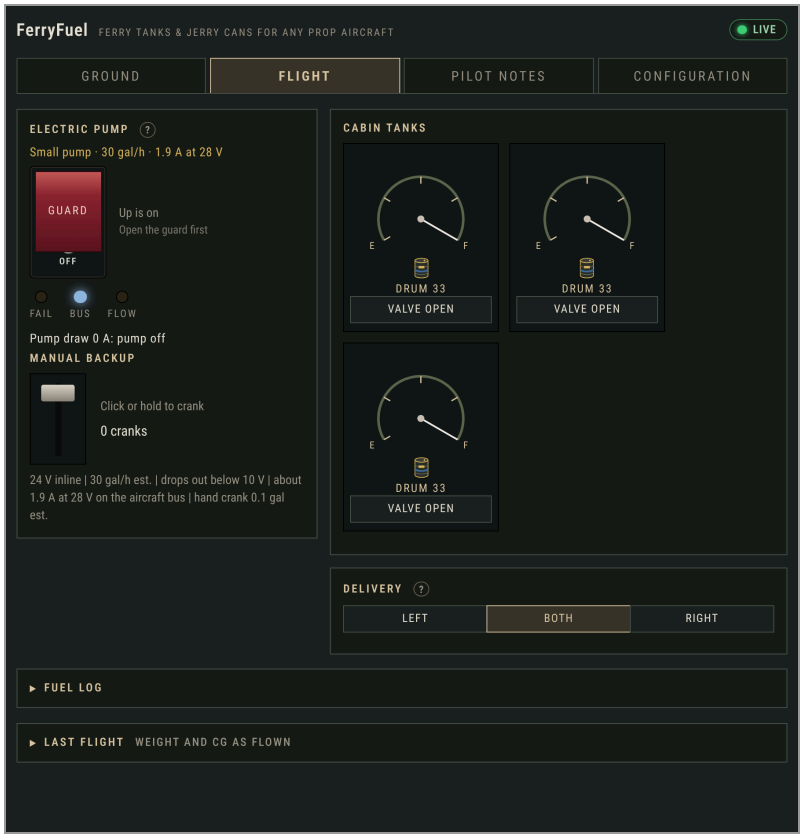
Jerry cans

- 5 US gal each, about 4 lb empty (34 lb full). Up to 4 on each passenger seat and up to 4 in the baggage area (the baggage area also has to stay under 120 lb with the cans full, so three full cans fit an empty baggage area, four do not).
- **Ferry tanks or jerry cans, never both.** Load Empty first, then load the other kind.
- Cans have no pump or fuel line. To use them, land, stop, shut the engine down, then in the **Jerry cans** section pick the left or right wing and press **Pour**. A full can takes 15 seconds of sim time. Nothing is spilled: if the wing fills up, the rest stays in the can.



After Load: three Drum 33s aboard, cabin tank gauges below, and an over-weight warning for this plan.

7. Flight tab: moving fuel in the air



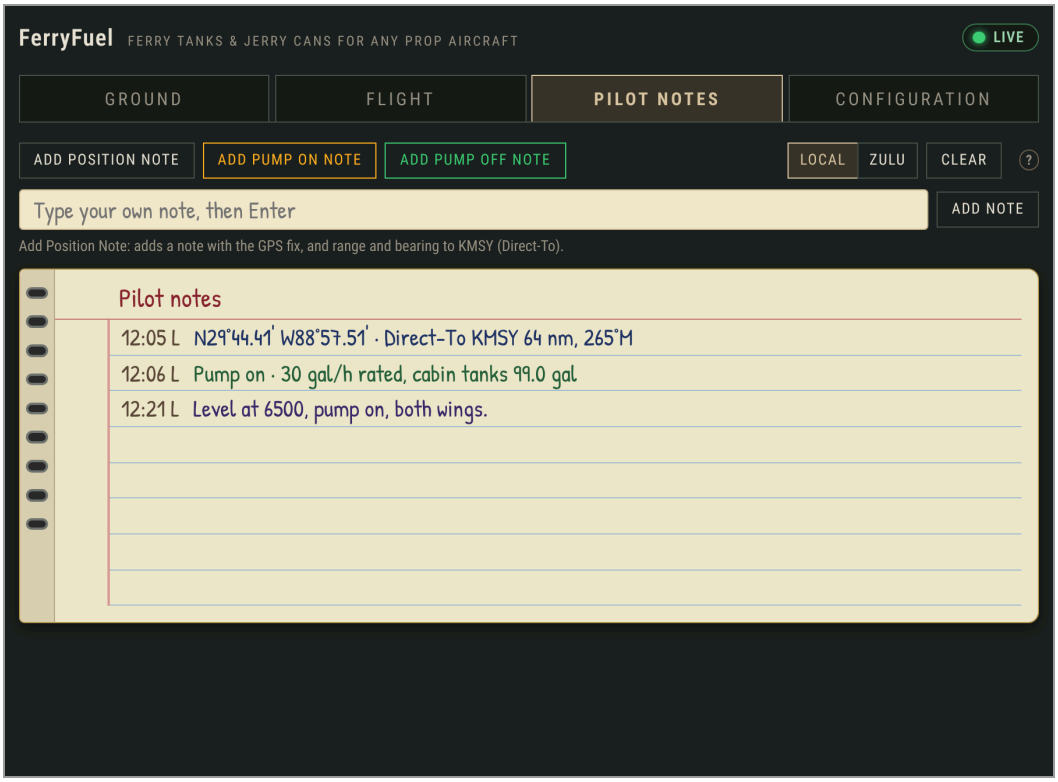
Flight tab: electric pump with its guard closed, manual backup handle, cabin tank gauges and delivery.

- **Electric pump.** Open the red guard, then flip the switch up. It runs only while the switch is on and the aircraft bus has power. The **Bus**, **Flow** and **Fail** lamps show its state, and the panel shows the pump's current draw. With no bus power the switch stays where you left it and the pump restarts by itself when power returns.
- **Manual backup.** Click or hold the handle to crank. It works with a dead bus and with a failed electric pump.
- **Valves.** Each cabin tank gauge has its own valve button.
- **Delivery.** Send the fuel to the left wing, the right wing, or both (default).
- **Overflow goes overboard.** There is no wing-full light: watch your wing gauges. The fuel log counts what was lost.
- **Endurance and range**, the **Fuel log** and the **Last flight** report (weight and CG as flown) are further down the tab.

Taking off switches the panel to the Flight tab.

8. Pilot Notes

A small notebook for the flight. Press **Add position note** to write down where you are (needs the airplane's GPS), **Add pump on note** / **Add pump off note** when you switch the pump, or type your own note and press Enter. Choose **Local** or **Zulu** time; **Clear** empties the notebook.



Pilot Notes with a position note, a pump-on note and a typed note.

9. Configuration

Setting	What it does
Realism	On: only what a ferry pilot sees in the cabin. Weight and CG, Fuel log, Last flight and Debug stay closed and the tank gauges show needles only. A weight or CG problem still shows.
Gauges	Exact numbers, or Needles only (no gallons shown, like the real gauges).
Fuel service	Strict, Ramp or Off (see section 6).
Pump failures	Fail pump fails the electric pump now; Reset clears it. Random fail lets it fail on its own now and then.
Pump power	Adds the pump's current to the aircraft's electrical load where the airplane supports it.
Mission rule	Set by a FerryFuel mission while it runs. In free flight it reads None.
Simulation rate	FerryFuel runs on sim time: at 4x the pumps and pours move 4x the fuel per real second.
Second monitor	Where the pop-out button is, and whether FerryFuel is popped out (see section 5).
Hover help	Turns the **?** help pop-ups on or off.
Last flight	Clear report removes the saved Last flight report.
Support	flightsim.to username joesmods. Questions and bug reports go there; FerryFuel is also sold on flightsim.to.

Realism, Gauges, Fuel service, Random fail and Hover help are saved and come back the next time you start the sim.

10. FerryFuel and FerryFuel Free

There are two separate packages. Both have the same panel, pumps, jerry-can pouring, Pilot Notes and settings.

	FerryFuel Free	FerryFuel
Cabin tanks	One Drum 25, filled up to 10 gal	Drum 25, Drum 33, Cushion 37, Ferry 100
Jerry cans	Up to two	Up to 4 per seat and 4 in baggage
Combo loadouts	—	All suggested loadouts
Package folder	`joeengineer-ferryfuel-free`	`joeengineer-ferry-tanks`

In FerryFuel Free, Drum 33, Cushion 37, Ferry 100 and the combo loadouts show greyed out with the note that they are part of the full FerryFuel product, which is sold separately on flightsim.to. FerryFuel Free is complete and fully usable on its own. Install only one of the two packages at a time.

11. Known limits and troubleshooting

- **No 3D tanks.** Tanks and cans are on the panel and as weight on the seats; they do not appear in the cabin.
- **CG chart for the Cessna 172 only.** Other airplanes get the sim's own CG numbers instead of a chart.
- **Not every airplane is tested.** Most testing is in the default Cessna 172 (C172SP G1000). Add-on aircraft with custom fuel systems may not accept the transfer.
- **Ammeter.** The pump's draw always shows on the panel; whether the cockpit ammeter shows it depends on the airplane.
- **The panel cannot open itself**, for example when the fuel truck arrives. Open it from the toolbar.
- **Multiplayer and shared cockpit** have not been tested.

Troubleshooting

Problem	Try this
No FerryFuel button in the toolbar	Check the toolbar's settings or “more” list. Check the install path: `Community\joeengineer-ferry-tanks\manifest.json`, with no extra folder level.
Status pill is red or amber	The FerryFuel module is not running. Restart the flight; if it stays red, reinstall the package folder.
Load is refused	Read the Fuel service line and the message under the seat map: usually the fuel truck is not connected, a passenger is in the seat, or you are mixing tanks and cans.
Can't find the pop-out button	Detach the panel first (pin, or drag the title bar). The pop-out button (square with an arrow) shows in the title bar of a floating panel. Not available in VR.
Panel is off screen	Toolbar settings → Reset Windows.

When you report a problem, include what you did and what happened, the airplane's full name, Steam or Store, a screenshot of the panel, and the file `ferry_debug.log` from FerryFuel's folder under the sim's `WASM\MSFS2024` folder (next to `ferry_config.ini`).

Send reports and questions via flightsim.to, username **joesmods**. Support and purchase stay on flightsim.to.

FerryFuel is provided for flight simulation only, as is, with no warranty. The handwriting font (Patrick Hand) is included under the SIL Open Font License 1.1; its license is in the package at `html_ui\InGamePanels\FerryTanks\fonts\PatrickHand-OFL.txt`.