

## **Fuel Management System**

For detailed technical specs you may wish to refer to the authentic Pilot Handbook (POH), the schematic physical fuel system being explained on page 136

<http://www.sfcaero.com.au/pdf/PA-28-161%20Warrior%20II.pdf>

Although the total fuel capacity is stated as 2 x 24 gallons US, the Navigator at every start up is loaded with 2 x 17 gallons US, a quantity which under normal conditions can be seen as ample for average short to medium outing.

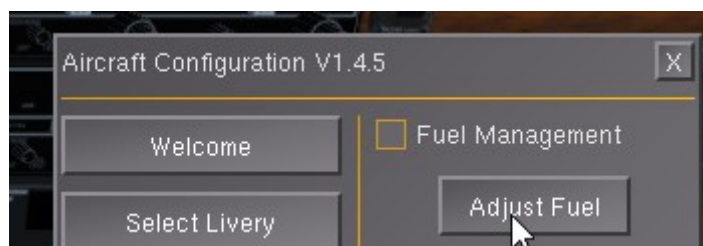
However, excess fuel translates into excess weight, ergo more consumption and ultimately higher costs.

Therefore it will be useful to adjust your fuel load to correspond with your flight plan. This will allow you to take note of the fuel at take-off and the fuel left after landing, which means you can then compare your planned fuel requirements with the actual burn.

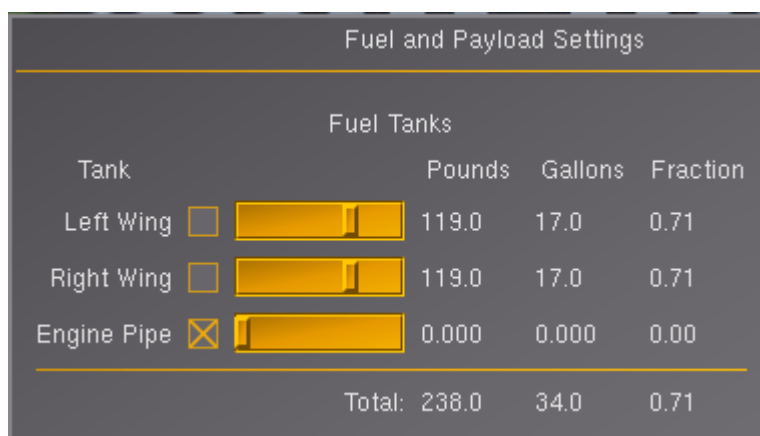
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As the Navigator is designed to provide as much realism as possible, the standard menu item used for refuelling has been disabled making it impossible to top up once airborne, after all a small GA aircraft has no air to air refuelling capacity.

Instead fuel control is only accessible from the Warrior II / Aircraft Config menu and select the Adjust Fuel option...



Use the slider bars of left and right wing to adjust the fuel load up or down...

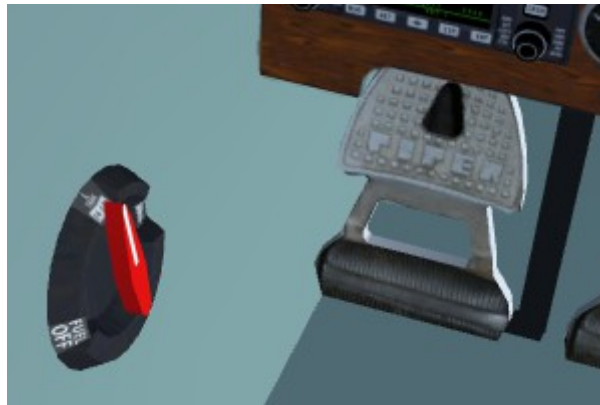


Please leave the check boxes as they are, however make an attempt to split the load between the tanks evenly or you might end up like the Irish woman with one leg, whose name was Ei leen, then simply click OK.

Now, we have one tank in each wing but no cross feed between them like for example the Cessna. Apart from that the tanks are below engine level, so the lack of gravity feed is compensated by engine suction and an auxiliary electrical fuel pump.

This pump should be used during take-offs, landings and whenever we want to switch tanks to keep the wings nice and level

Now to switch between tanks you have to move the tank selector lever and by doing so you do not see the rock in front of you...



So instead of moving around and losing sight of things just keep an eye on both, the fuel gauges and the HUD and use the j key to switch back and forth....



The HUD will also show the current fuel flow which allows you to estimate how long the remaining fuel will last.

Ok, you are up in the air, forgot about switching back and forth every 6 gallons and all of a sudden the propeller stops, because the left tank is out of fuel !!!!

**Immediately press j to switch to the right tank and press s to restart the engine, hold on to the s key for a few sec s until the rpm s move up again.**

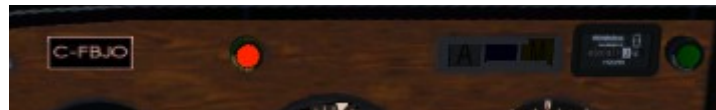
As you keep flying along, left empty and using the right tank depending on your mileage, wind, change of altitude etc you might have a brief aural alarm going off being accompanied by the non cryptic message that we are low of fuel on the right



You have about less then 5 gallons left....

If in luck there is an airstrip nearby (checkout the AI menu, nearby...) worst case do a GIMLI or abort the mission

Once out of fuel completely the alarm sound comes on again and the red Out of fuel light will be on.



Remember you can not refuel in the air, good luck with your fuel requirement planning.

Once down on terra firma with some fuel to spare, shut off the engine once in a nice parking spot, take the difference of original fuel and whats left and compare the number with your plan.