



Specific Range Solutions Ltd.

"Your partner in flight operations optimization"

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iPhone AvFuelSaver User's Manual

[Version 1.2]

1.0 Summary

This fuel tankering calculator compares the cost of uploading sufficient fuel for each leg of a two leg trip versus uploading the fuel for both legs within fuel load limits. The app applies to any aircraft type, and IFR or VFR flight. Fuel type, currency and units are user-selected. Temperature correction is not applied to the fuel density value. Thank you to Walt Foley for the basis for the app and for his valuable feedback during the development.

AvFuelSaver is designed for the iPhone 4S/5/5S series of devices running iOS 7.1. The app consists of only two screens to render it as simple, fast and pilot-friendly as possible. The Main View screen is used to input fuel, unit and pricing information. The Flip Side screen is used to input flight plan fuel data and to present the calculation result: Yes (**Green**) or No (**Red**) to the fuel tankering option.

Note: The accuracy of the results depends on the accuracy of the data input by the user. Please double check your data after entering it.

2.0 Fuel, Unit and Price Inputs [Main View]

Carrier 3:13 PM

AvFuelSaver

This fuel tankering calculator compares the cost of uploading sufficient fuel for each leg of a two leg trip versus uploading the fuel for both legs within fuel load limits. The app applies to any aircraft type, and IFR or VFR flight. Fuel type, currency and units are user-selected. Temperature correction is not applied. Credits: Walt Foley.

Fuel Type:

Currency:

Fuel Purchase Units:

Fuel Burn Units:

Departure Fuel Price: \$/USG

Destination 1 Fuel Price: \$/USG

Destination 1 Ramp Fee: \$

Destination 1 Ramp Waiver: USG

[Enter Fuel Data ->](#)

Fuel Type: The user selects the fuel type: Jet A or AvGas. An average density is used for each type, temperature compensation is not applied. Jet A and Jet A-1 are equivalent in density:

- Jet A Density = 6.738 lb/USG (0.8074 kg/L);
- AvGas Density = 5.981 lb/USG (0.7167 kg/L).

Currency: The user selects the currency units: dollars (\$) or euros (€). The currency units are only displayed, there is no currency conversion within the app.

Fuel Purchase Units: The user selects the fuel purchase units: USG or L.

Fuel Burn Units: The user selects the fuel burn units as indicated in the Aircraft Flight Manual (AFM) or Pilot Operating Handbook (POH): lb, kg, USG or L.

Departure Fuel Price: The user inputs the departure fuel price at the departure airport.

Destination 1 Fuel Price: The user inputs the destination 1 fuel price at the first destination airport following Leg 1.

Destination 1 Ramp Fee: The user inputs the destination 1 ramp fee at the first destination airport following Leg 1. Enter "0" for no ramp fee.

Destination 1 Ramp Fee Waiver: The user inputs the destination 1 ramp fee waiver at the first destination airport following Leg 1. The ramp fee waiver is applied if the fuel purchase exceeds the waiver value. Enter "0" for no ramp fee waiver.

Carrier 10:30 PM

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This fuel tankering calculator compares the cost of uploading sufficient fuel for each leg of a two leg trip versus uploading the fuel for both legs within fuel load limits. The app applies to any aircraft type, and IFR or VFR flight. Fuel type, currency and units are user-selected. Temperature correction is not applied. Credits: Walt Foley.

Fuel Type: Dep. Fuel Price > Dest. 1 Fuel Price. No fuel cost savings by tankering.

Currency:

Fuel Purchase Units:

Fuel Burn Units:

Departure Fuel Price: \$/USG

Destination 1 Fuel Price: \$/USG

Destination 1 Ramp Fee: \$

Destination 1 Ramp Waiver: USG

[Enter Fuel Data ->](#)

Note: If the departure fuel price is greater than the destination 1 fuel price, then fuel cost savings by tankering are not possible. A warning pop-up message is posted to alert the user at this early stage of the analysis to give them the option whether or not to proceed.

3.0 Flight Plan Inputs [Flip Side View]

Carrier 3:13 PM

[Back](#) Enter Flight Plan Fuel Data

A. Taxi Fuel Burn/Leg: 400 lb

B. Reserve+Alternate Fuel Leg 1: 2211 lb

C. Reserve+Alternate Fuel Leg 2: 1900 lb

D. Leg 2 Fuel Burn: 4989 lb

E. Tankered Amount [A-B+C+D]: 5078 lb

F. Leg 1 Fuel Burn [No Tankering]: 7299 lb

G. Leg 1 Fuel Burn [Tankering]: 7762 lb

Fuel Loads Calculate Limits

Total Cost [No Tankering]: 6894.60 \$

Total Cost [Tankering]: 7224.07 \$

Tankering Benefit [Y/N]: -329.46 \$

[Version 1.2] Leg 1 & 2 fuel burn input values are for in-flight phases only. W&B compliance PIC responsibility. [Support: www.srs.aero](http://www.srs.aero)

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- A. Taxi Fuel Burn/Leg:** The user inputs the taxi fuel burn per leg. The taxi fuel burn is assumed to be the same for both Leg 1 and Leg 2.
- B. Reserve+Alternate Fuel Leg 1:** The user inputs the reserve and alternate fuel required for Leg 1.
- C. Reserve+Alternate Fuel Leg 2:** The user inputs the reserve and alternate fuel required for Leg 2.
- D. Leg 2 Fuel Burn:** The user inputs the *in-flight* fuel burn required for Leg 2, excluding the taxi fuel burn.
- E. Tankered Amount [A-B+C+D]:** The user inputs the tankered amount for Leg 2 if permitted and possible i.e. fuel load limits and aircraft weight limits are not exceeded.
- F. Leg 1 Fuel Burn [No Tankering]:** The user inputs the *in-flight* Leg 1 fuel burn with no tankered fuel.

G. Leg 1 Fuel Burn [Tankering]: The user inputs the *in-flight* Leg 1 fuel burn with tankered fuel.

Carrier 2:09 PM

[Back](#) Enter Flight Plan Fuel Data

A. Taxi Fuel Burn/Leg: 400 lb

B. Reserve+Alternate Fuel Leg 1: 2211 lb

C. Reserve+Alternate Fuel Leg 2: 1900 lb

D. Leg 2 Fuel Burn: 4989 lb

E. Tankered Amount [A-B+C+D]: 2000 lb

F. Leg 1 Fuel Burn [No Tankering]: 7299 lb

G. Leg 1 Fuel Burn [Tankering]: 7762 lb

[Fuel Loads](#) [Calculate](#) [Limits](#)

Tankered Amount: Input < Need 5078 lb
 Leg 1 [No Tankering]: 9910 lb
 Leg 1 [Tankering]: 15451 lb
 Leg 2: 7289 lb

Fuel load not to exceed fuel load limits for any leg. Aircraft weight limits based on AFM and operational constraints not to be exceeded e.g. take-off performance.

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Fuel Loads Button: The fuel loads button presents a pop-up window listing the following total fuel loads prior to take-off:

- Tankered Amount;
- Leg 1 [No Tankering];
- Leg 1 [Tankering];
- Leg 2.

If the user inputs in field E. Tankered Amount an amount less than [A-B+C+D], then “Input < Need” is indicated in the note.

Calculate Button: The calculate button calculates the total fuel burn and ramp fee costs of both legs without tankering, the total fuel burn and ramp fee costs of both legs with tankering and difference between the two.

Limits Button: The limits button posts a pop-up warning message advising the user to not exceed fuel load limits and aircraft weight limits.

4.0 Support:

If you have any questions, would like to report a problem or make any comments, please fill out the online form or send an email to support@srs.aero. Please be sure to include your full name, the subject, app name, device and iOS version in the email.

Thank you for purchasing and using AvFuelSaver. We appreciate your support.