

## Fuel Policy Part 2 - Departure to destination/Destination to alternate

In this day of ILS approach aids at most large city airports, it is only rarely that the pilots do not visually acquire the runway at the ILS approach minima, even in poor weather. A missed approach and diversion to an alternate can NOT be ruled out though, and we must plan for this eventuality whenever the destination airport is forecast to be continuously below the ILS alternate minima (acceptable airport).

For the purpose of the ATPL exam you will assume one approach attempt only is conducted. As the chances of having to actually proceed to an alternate are rare, the fixed reserve is reduced to reflect this reduced probability. The fixed reserve if an alternate is required drops to 2250 kg (not 3300 kg).

Points to note:

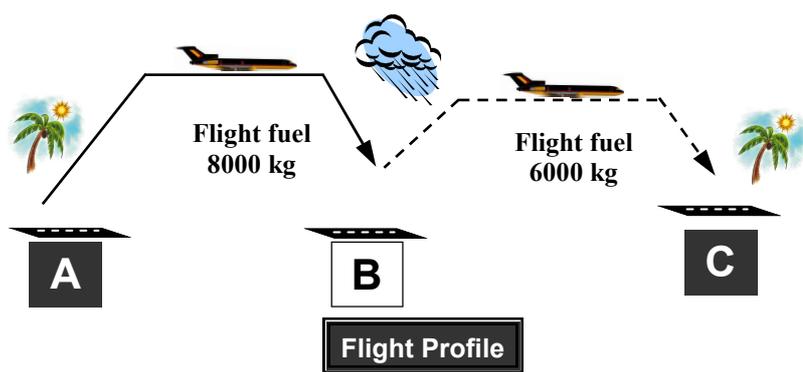
- The only weather holding that needs to be carried, is that which applies to the alternate to bring it up to a SUITABLE airport.
- Variable reserve is 10% of the total fuel from departure to destination, and destination to alternate.
- Only one lot of initial taxi, and final taxi fuel need be carried (i.e. 150 kg + 100 kg).
- Fixed reserve is 2250 kg (i.e. 30 minutes @ 4500 kg per hour).
- Only one lot of approach manoeuvre fuel is required, and this is included in the destination to alternate flight fuel.

**Example 1.**

Given:

- Departure airport “A” is ‘SUITABLE’.
- Destination airport “B” is ‘ACCEPTABLE’.
- Alternate airport “C” is ‘SUITABLE’.
- Flight fuel A to B is 8000 kg.
- Flight fuel B to C is 6000 kg.

What is the minimum fuel which must be on board for normal operations ?



**SYMBOL KEY:**  
 = SUITABLE  
 = ACCEPTABLE

### Fuel Summary

Item	Kg
Flight Fuel	14000
V/R 10%	1400
Fixed Reserve	2250
Wx Hold	Nil
Traffic Hold	Nil
WIP Hold	Nil
Final Taxi	100
Initial Taxi	150
<b>Min FOB @ ramp</b>	<b>17900</b>

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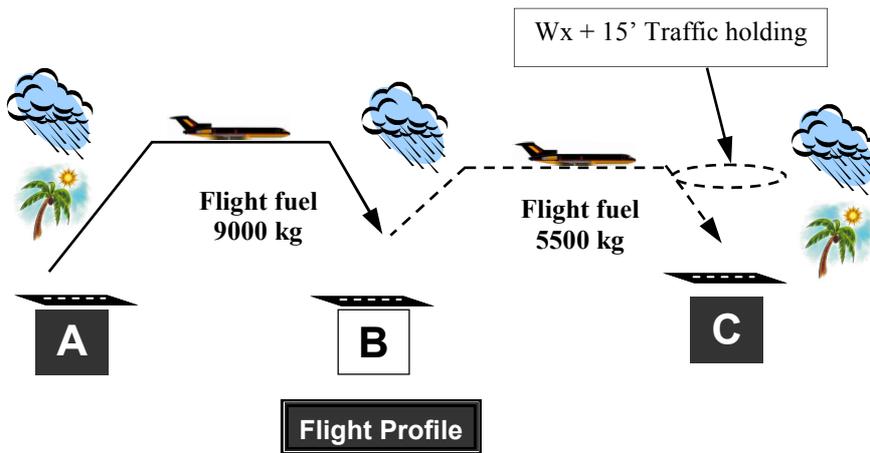


**Example 2.**

Given:

- Departure airport “A” ACCEPTABLE, becoming SUITABLE if fuel for INTER deteriorations is carried.
- Destination airport “B” is “ACCEPTABLE” (i.e. below alternate minima for the period of possible use).
- Alternate airport “C” is ACCEPTABLE, becoming SUITABLE if TEMPO Wx holding is carried. Additionally, airport “C” has a 15 minute traffic holding requirement.
- Flight fuel A to B is 9000 kg.
- Flight fuel B to C is 5500 kg.

What is the minimum amount of fuel that is required to be on board at the departure airport ramp to cover normal operations ?



**Fuel Summary**

Item	Kg
Flight Fuel	14500
V/R 10%	1450
Fixed Reserve	2250
Wx Hold at alternate	4000
Traffic Hold at alternate	1000
WIP Hold	Nil
Final Taxi	100
Initial Taxi	150
<b>Min FOB @ ramp</b>	<b>23450 kg</b>

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**Points to note:**

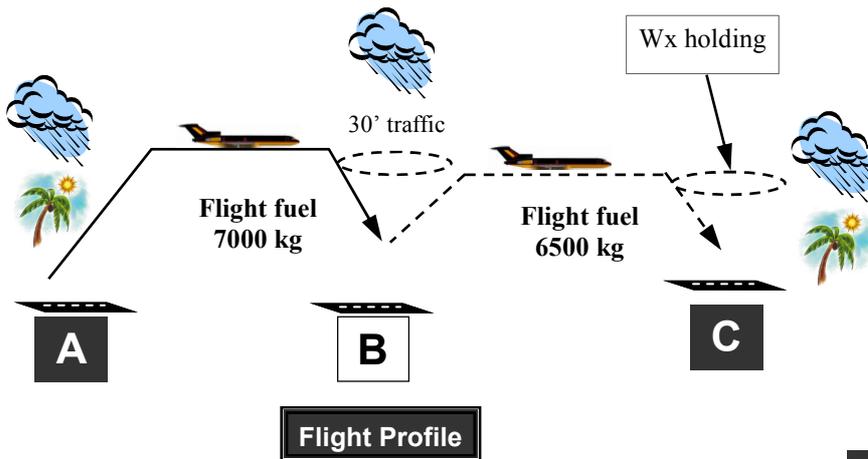
1. We do NOT have to carry weather holding on the departure airport.
2. We do have to carry whatever holding applies to the alternate airport including weather, WIP, and traffic. In this case weather and traffic only.
3. The fixed reserve is reduced from 3300 kg to 2250 kg when an alternate is required.

**Example 3.**

Given:

- Departure airport “A” ACCEPTABLE, becoming SUITABLE if fuel for TEMPO deteriorations is carried. Additionally, airport “A” has a 15 minute traffic holding requirement.
- Destination airport “B” is “ACCEPTABLE”. 30 min traffic holding applies.
- Alternate airport “C” is ACCEPTABLE, becoming SUITABLE if INTER Wx holding is carried.
- Flight fuel A to B is 7000 kg.
- Flight fuel B to C is 6500 kg.

What is the minimum amount of fuel that is required to be on board at the departure airport ramp to cover normal operations ?



**Fuel Summary**

Item	Kg
Flight Fuel	13500
V/R 10%	1350
Fixed Reserve	2250
Wx Hold (at alternate)	2000
Traffic Hold at destination	2000
WIP Hold	Nil
Final Taxi	100
Initial Taxi	150
<b>Min FOB @ ramp</b>	<b>21350 kg</b>

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**End of Fuel Policy Part 2 - Now try Fuel policy quiz assignments 2a to 2c.**  
(Book version answers at rear of fuel assignments).