Study Case
Suite class concept

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BROADENING THE HORIZON

Summary

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Introduction

This study case is focusing on the modification of the forward lower deck in order to embed a private suite for two passengers. The afterward lower deck would remain as a cargo hold for freight and luggage.

During this modification, the cargo floor is lowered, stairs are created and the forward cargo door is replaced by an EarthBay product. In addition the area is refurbished to create a suite and an zone for lavatories (with all the necessary supplies like water, waste, air conditioning).

The following is assumed regarding the operator:

- Wide-body aircrafts operating long-haul flights
- High-end market segment
- Freight loading factor of 40% or less on a significant group of destinations

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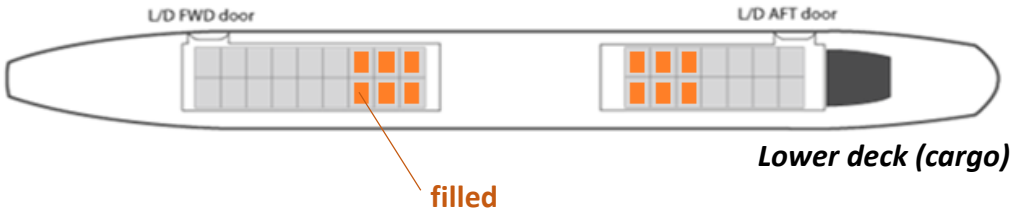
Baseline

Main deck

The baseline for this study case is an initial cabin layout composed of 8 First class seats and 40 Business class seats on the main deck.



Lower deck (cargo)

In this study, the operator has a freight load factor of 40%.

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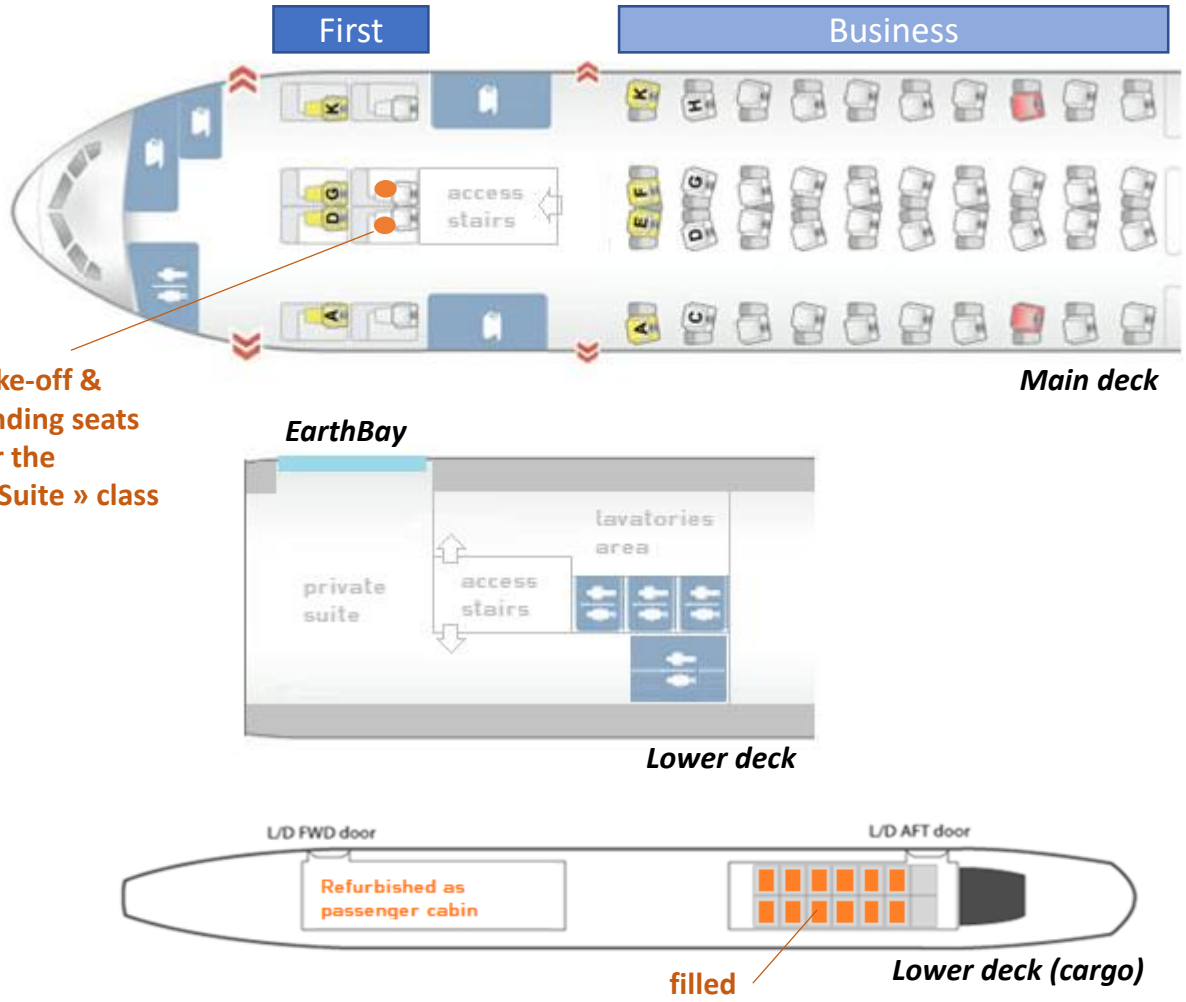
After cabin refurbishment



In this scenario, the passenger capacity remains the same but with the following dispatch on the main deck:

- 2 take-off & landing seats for “Suite” class
- 6 First class seats (- 2)
- 40 Business class seats

Stairs allow access to the lower deck, which is composed of two areas accessible in flight:

- A private suite
- A lavatories area (public)

The same quantity of freight would be carried in the afterward cargo compartment.

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Modification cost scenario

Modification steps	Cost ($)
Move 2 rows of business seats	1.000$
Remove main deck lavatories (qty 2) and galleys (qty 4)	2.000$
Install new large galleys in new locations on the main deck (qty2)	200.000$
Create stair case to reach forward cargo hold	300.000$
Cargo hold adaptation: lowering the floor & moving harnesses, ducting & piping, creation for all necessary supplies like power, water, waste…	700.000$
Install new lower deck lavatories (qty 4)	400.000$
Suite furnishing	200.000$
Create new crew rest area	500.000$
Replace the cargo door by an EarthBay product	500.000$
TOTAL	**2.803.000$**

These costs, given only for information, reflects the modification of an in-service A/C, for example during a heavy maintenance check. It includes a portion of non-recurring costs covering engineering studies.

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Revenues scenario

assumptions	
Suite class seats	+2
Average income per seat per flight	8000$
First seats	-2
Average income per seat per flight	-3500$
Flights per year	700
Average occupancy rate	60%

+3.800.000$
per year per A/C

These revenues, given only for information, reflects the gain compared to the baseline configuration.

This is equivalent to 9,5M FTK per year.

In the case of a freight load factor above 40%, it would be necessary to compare with the losses of cargo revenues

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Thank you

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