

12 DRIFTDOWN / DEPRESSURIZATION

Riyadh Air is employing the Enroute Terrain Analysis functionality of the Lido flight planning system, to generate Drift down and / or Depressurization strategies for each OFP.

Enroute Terrain Analysis for Drift down and Depressurization is meant to achieve terrain clearance for flights over high terrain if one of the following situations occurs:

1. Engine failure resulting in a drift down.
2. Depressurization enforcing the pilot to descend.
3. In both cases the altitude of the aircraft decreases. The DD/DP Analysis checks if this decrease of altitude may lead to a violation of the terrain clearance.

12.1 DRIFTDOWN

In case of an engine failure the aircraft experiences a drift down. The altitude of the aircraft decreases continuously until the level-off altitude is reached, where the aircraft can hold or even increasing the altitude.

The distance between the point where the drift down starts, and the point where level-off altitude is reached, is called 'level-off distance'.

12.1.1 Driftdown Profile

The figure shows the profile of a drift down event including level-off altitude, level-off distance, and the terrain clearance profile. The terrain clearance profile results from the drift down profile and the value for terrain clearance, which is configurable for the DD/DP Analysis. Note that the required terrain clearance after the level-off distance may vary from the one before.



RIYADH AIR
طيران الرياض

OPERATIONS MANUAL PART C

12 DRIFTDOWN / DEPRESSURIZATION

12.1 DRIFTDOWN

Issue: 00

Revision: 00

Date: 18-FEB-2024

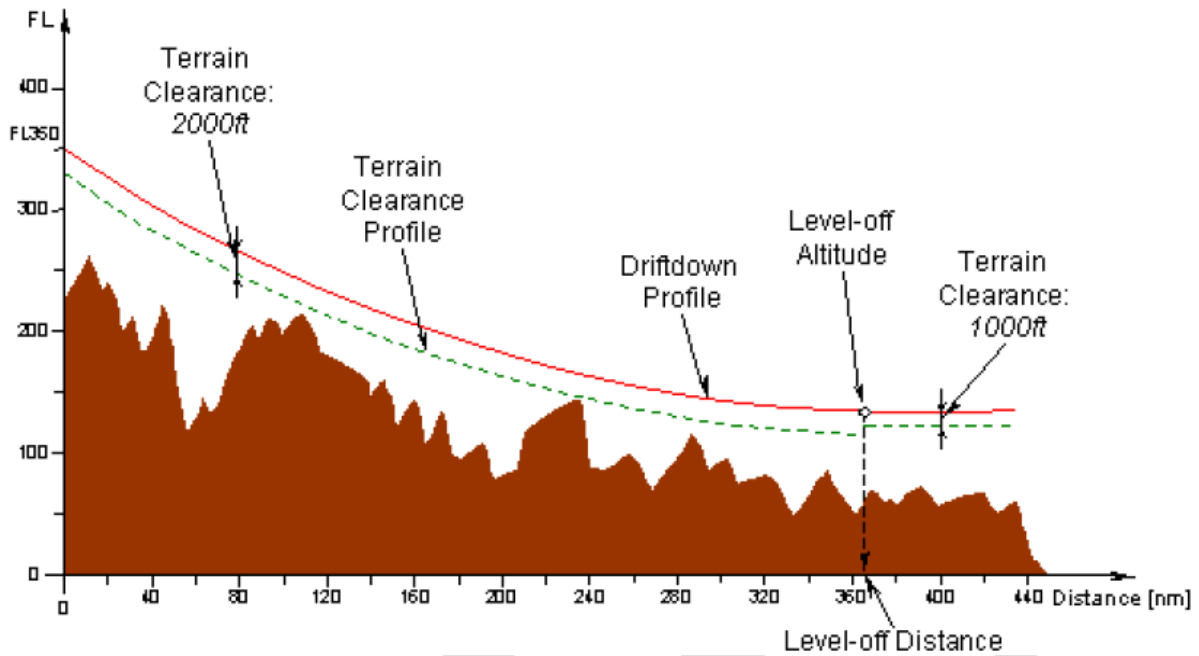


Figure 3 – Drift down and Terrain Clearance Profile

12.2 DEPRESSURIZATION

In case of a loss of pressure the aircraft must descend to reach an altitude where the external pressure is sufficient. This descent is performed stage by stage. Cruise phases and emergency descents alternate. Certain flight levels must be reached within certain time periods.

The assignment of flight levels to time periods results in the depressurization profile. Lido will vary the profile depending on the used oxygen system of the specific aircraft.

12.2.1 Depressurization Profile

The figure shows a depressurization profile as well as the respective terrain clearance profile. The terrain clearance profile results from the depressurization profile and the value for terrain clearance, which is configurable for the DD/DP Analysis.

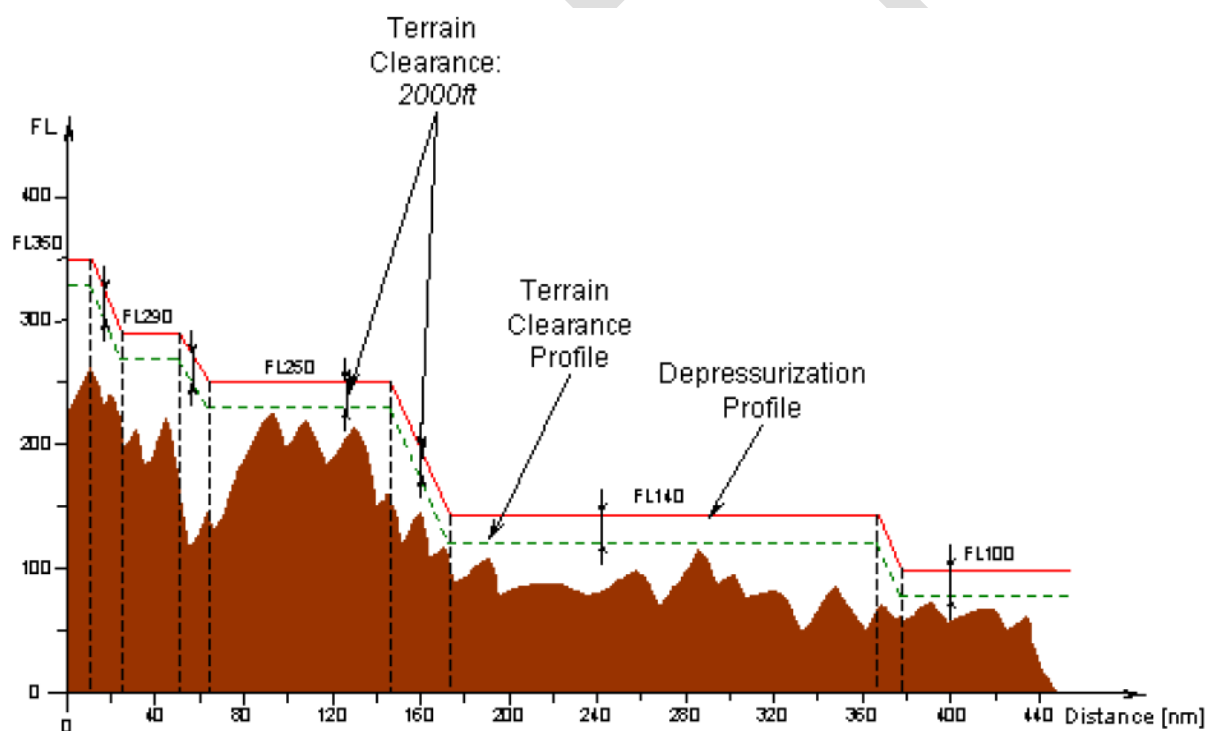


Figure 4 - Depressurization and Terrain Clearance Profile



RIYADH AIR
طيران الرياض

OPERATIONS MANUAL PART C

12 DRIFTDOWN / DEPRESSURIZATION

12.3 AREA BASED AND NONSTANDARD DRIFTDOWN /
DEPRESSURIZATION

Issue: 00

Revision: 00

Date: 18-FEB-2024

12.3 AREA BASED AND NONSTANDARD DRIFTDOWN / DEPRESSURIZATION

Reserved

DRAFT