Operational Directive requiring the use of pressurized aircraft for air operators conducting scheduled passenger flights over mountainous areas in Norway


1. Introduction and applicability
1.1. This Operational Directive contains mandatory action that is required to establish an acceptable level of safety. The Directive is issued in accordance with the Aviation Act (luftfartsloven) § 9-1 and Regulation (EC) No 216/2008 art. 14.1.

1.2. This Operational Directive is applicable to commercial air transport (CAT) operators conducting scheduled passenger flights with airplanes over mountainous land areas in the Kingdom of Norway.

2. Action to be taken: Requirement for pressurized aircraft

2.1. For all scheduled passenger flights with airplanes, over mountainous areas in Norway, pressurized aircraft must be used.

2.2. Mountainous areas in this context include all areas along intended routes, as well as relevant alternates where Minimum Obstacle Clearance Altitude or Grid Minimum Off-Route Altitude (MOCA/Grid MORA) is at or above 8000 feet, ref. Regulation (EU) No 965/2012 Annex IV, CAT.OP.MPA.145 - Establishment of minimum flight altitudes. This includes terrain with elevation at or above 6000 feet.

3. Reason
3.1. Mountainous areas in Norway are particularly exposed to icing conditions, evidenced by icing incidents resulting in loss of control of the aircraft.

3.2. The unique weather and geographical conditions in Norway which causes increased risk of icing is well documented in meteorological literature.
3.3. Due to altitude restriction for flights without oxygen, ref. Regulation (EU) No 965/2012, CAT.IDE.A.240, an unpressurized passenger aircraft flying in mountainous areas will have to operate in the altitude levels between 8000 and 10 000 feet, resulting in a vertical maneuvering space of only 2000 feet. In case of a serious icing incident causing loss of control, the distance to the terrain below leaves an insufficient margin for a safe recovery of the aircraft.

3.4. To mitigate the risk of an accident due to icing and possible loss of control, all air operators conducting scheduled passenger flights over mountainous areas in Norway are required to use pressurized aircraft. This will enable flights to operate above 10 000 feet in order to avoid icing conditions, and to also provide an increased vertical maneuvering space for a safe recovery of the aircraft in case of loss of control due to icing.

4. Notifications and queries
4.1. Notifications or queries should be sent to The Civil Aviation Authority of Norway, P.O. Box 243, 8001 Bodø, Norway, or by e-mail to postmottak@caa.no. Please refer to case 14/00185.

5. Entry in to force
5.1. This Operational Directive shall enter in to force immediately after its publication, and shall remain in force until it is revoked by the Civil Aviation Authority of Norway.