

Safety Information Bulletin Operations SIB No.: 2018-07 Issued: 12 April 2018

Subject: Blood Alcohol Concentration Limits for General Aviation Pilots

Ref. Publications:

- Regulation (EC) No <u>216/2008</u> (hereinafter referred to as the Basic Regulation).
- Commission Regulation (EU) No <u>965/2012</u> (hereinafter referred to as the Air Operations Regulation).
- Commission Regulation (EU) No <u>1178/2011</u> (hereinafter referred to as the Aircrew Regulation).
- Commission Implementing Regulation (EU) No <u>923/2012</u> (hereinafter referred to as the Rules of the Air Regulation).

Applicability:

General Aviation pilots, aero clubs, pilot training organisations and EASA Member States' competent authorities.

Description:

Several air accident investigation reports concerning General Aviation flights refer to alcohol intake by the operating pilot before the flight. The aim of this Safety Information Bulletin (SIB) is to provide guidelines on blood alcohol concentration levels which should not be exceeded by operating pilots in General Aviation, including non-commercial aerial work.

Alcohol (ethanol) is rapidly absorbed from the stomach and small intestine, and transported by the blood throughout the body. The majority of adverse effects produced by alcohol relate to the brain, the eyes, and the inner ear. Brain effects include impaired reaction time, reasoning, judgement, and memory. Alcohol decreases the ability of the brain to make use of oxygen. This adverse effect can be magnified as a result of simultaneous exposure to altitude. Visual symptoms include eye muscle imbalance, which leads to double vision and difficulty focusing. Inner ear effects include dizziness, and decreased hearing perception.

If other variables are added, such as sleep deprivation, fatigue, medication use, altitude hypoxia, or flying at night or in bad weather, the negative effects on the individual's performance will be significantly magnified. It should be noted that the impairment evolves more than linearly with alcohol quantity.

According to the Basic Regulation, 'A crew member must not perform allocated duties on board an aircraft when under the influence of psychoactive substances or alcohol or when unfit due to injury, fatigue, medication, sickness or other similar causes'. The related implementing rules are provided in the Air Operations Regulation¹ and in the Rules of the Air Regulation².



¹ NCC.GEN.105(e)(2), NCO.SPEC.115(e)(2), SPO.GEN.105(e)(2), NCO.GEN.105(a)(5)

² SERA.2020

This is information only. Recommendations are not mandatory.

In addition, the pilot-in-command shall comply with the laws, regulations and procedures of those States where operations are conducted³. National legislation exists in some EASA Member States, which stipulates maximum limits for blood alcohol concentration levels for operating pilots.

The following provisions in the Aircrew Regulation are also applicable:

- The effects of alcohol on a pilot's performance are included in the syllabus of theoretical knowledge for the Private Pilot Licence⁴.
- It is the responsibility of licence holders not to exercise the privileges of their licence at any time when they are aware of any decrease in their medical fitness which might render them unable to safely exercise those privileges⁵.
- The competent authority shall limit, suspend or revoke a pilot licence if the pilot is exercising the privileges of his or her licence when adversely affected by alcohol or drugs⁶.

At this time, the safety concern described in this SIB does not warrant the issuance of an operational directive under Commission Regulation (EU) No <u>965/2012</u>, Annex II, ARO.GEN.135(c).

Recommendation(s):

A pilot must not operate an aircraft when under the influence of alcohol. This Basic Regulation requirement should be understood as follows:

- The blood alcohol concentration (BAC) should not exceed the lower of the national limit or 0.02%, which is 0.2 grams of alcohol per litre of blood, whilst performing duties related to operating an aircraft, including flight preparation.
- The breath alcohol concentration (BrAC) should not exceed the lower of the national limit or 90 micrograms of alcohol per litre of breath, whilst performing duties related to operating an aircraft, including flight preparation.
- 3) Alcohol should not be consumed within 8 hours of performing duties related to operating an aircraft, including flight preparation. However, it should be noted that 8 hours 'from bottle to throttle' does not guarantee that the individual's BAC/BrAC will be below the above-mentioned limits. It is, therefore, recommended to abstain for longer than 8 hours, as appropriate, in order to take into account the quantity of alcohol consumed.
- 4) Alcohol should not be consumed whilst performing duties related to operating an aircraft, including flight preparation.

Pilot training organisations and aero clubs should consider these recommendations under their risk management responsibilities. Competent authorities should consider these recommendations in the context of their oversight of General Aviation pilots operating under their responsibility.

Contact(s):

For further information contact the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.



³ NCC.GEN.110(a), NCO.GEN.110(a), NCO.SPEC.110(d), and SPO.GEN.110

⁴ AMC1 FCL.210; FCL.215

⁵ MED.A.020

⁶ ARA.FCL.250 (a)(4)

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