

Safety Information Bulletin

ATM/ANS – Aerodromes – Operations

SIB No.: 2021-11

Issued: 27 May 2021

Subject: Content of Aeronautical Information Publication – Assessment and Reporting of Runway Surface Conditions (GRF)

Ref. Publications:

- Commission Regulation (EU) [2017/373](#) dated 01 March 2017, as last amended.
- Commission Regulation (EU) [139/2014](#) dated 12 February 2014, as amended by Regulation (EU) [2020/2148](#) dated 8 October 2020.
- International Civil Aviation Organization (ICAO) Annex 15, Aeronautical Information Services.
- ICAO Doc 10066, Procedures for Air Navigation Services - Aeronautical information Management.
- ICAO Doc 8126, Aeronautical Information Services Manual.
- ICAO Annex 14, Aerodrome Design and Operations.
- ICAO Doc 9981, Procedures for Air Navigation Services - Aerodromes.

Applicability:

National competent authorities (NCAs), air navigation service providers, aerodrome operators.

Description:

ICAO developed a new system and method for assessing and reporting the runway surface conditions, known as Global Reporting Format (GRF), to associate aeroplane performance calculations with the actual runway surface conditions in order to mitigate the risk of runway excursions during landing and take-off operations on wet and contaminated runway surfaces.

In this context, relevant provisions were introduced into ICAO Annex 6, Annex 8 and Annex 14, and, consequently, ICAO Annex 3, PANS-Aerodromes (ICAO Doc 9981), PANS-AIM (ICAO Doc 10066) and PANS-ATM (ICAO Doc 4444) were also amended. Due to the COVID-19 pandemic, ICAO postponed the implementation date from 05 November 2020 to 04 November 2021, while in the European Union it has been decided to implement GRF as of 12 August 2021, to ensure smooth preparation for the winter season.

Point AIS.TR.100 of Regulation (EU) 2017/373 refers directly to ICAO Annex 15 in its 14th edition (including all amendments up to and including No 38), which contains provisions that, amongst others, address the format and content of the Aeronautical Information Products, including the Aeronautical Information Publication (AIP).

Note 1: ICAO has already transferred these Annex 15 provisions to ICAO Doc 10066 and more specifically to its Appendix 2. Paragraph 5.2.1.1.1 of ICAO Doc 10066 foresees that *“the AIP shall*

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contain concise, current information relating to, and arranged under, the subject headings listed in Appendix 2. This facilitates both the locating of information under a specific heading and the storage/retrieval of the information using automated processing". These provisions have been transposed into the EU regulatory framework with the adoption of Regulation (EU) [2020/469](#) (as amended by Regulation (EU) [2020/1177](#) regarding the applicability date of the GRF-related provisions), amending Regulation (EU) 2017/373, and shall apply as of 27 January 2022.

However, the provisions of ICAO Annex 15 (and ICAO Doc 10066), were not amended by ICAO to address in a holistic manner the implementation of GRF, by ensuring the promulgation of relevant and consistent operational information through the relevant AIP entries. This, combined with the fact that Regulation (EU) 139/2014, as amended by Regulation (EU) [2020/2148](#), contains additional provisions, which go beyond the content of the ICAO GRF in order to address operations on "specially prepared winter runways", it is considered as an important issue that needs to be addressed before the GRF implementation date.

Discussion:

Part AD 1 (*Aerodrome / heliports - introduction*) of an AIP contains general information for all aerodromes that needs to be included in the State's AIP. Therefore, information regarding the GRF implementation may only be included in that part of the AIP and should be originated by the relevant NCA of each State. On the other hand, any other relevant information concerning each individual aerodrome (e.g. method for assessing runway surface condition) is meant to be included under part AD 2 (Aerodromes) of the respective AIP entry, and such information should be originated by the aerodrome operator.

I. AD 1.2.2 Information to be originated by the NCA

A review of the relevant headings of part AD 1 demonstrates that the most relevant sub-heading to include information on GRF implementation is part AD 1.2 (*Rescue and firefighting services and snow plan*), because it is related to the runway surface contamination by winter contaminants.

Note 2: Part AD 1 includes the following headings: "AD 1.1 *Aerodrome/heliport availability and conditions of use*; AD 1.2 *Rescue and firefighting services and snow plan*; AD 1.3 *Index to aerodromes and heliports*; AD 1.4 *Grouping of aerodromes/heliports*; AD 1.5 *Status of certification of aerodromes*."

Note 3: Part AD 1.2.2 reads as follows:

"AD 1.2.2 Snow plan

Brief description of general snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:

- 1) organization of the winter service;*
- 2) surveillance of movement areas;*
- 3) measuring methods and measurements taken;*
- 4) actions taken to maintain the usability of movement areas;*
- 5) system and means of reporting;*
- 6) the cases of runway closure; and*
- 7) distribution of information about snow conditions."*

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However, both the concept and the structure of part AD 1.2.2 are outdated, as they are based on the old provisions of Annex 14, which refer to surface friction measurements on contaminated surfaces and do not reflect the provisions of GRF. Thus, although some of the information that may be published under part AD 1.2.2 may provide general and useful information regarding the way winter operations are conducted in a State, part AD 1.2.2 may not fully accommodate the GRF concept.

For this reason, part AD 1.2.2 does not serve the need for the provision of operational information stemming from "continuous assessment of friction characteristics", irrespective of season, that is introduced with the GRF concept and which covers a wider set of contaminants (e.g. water).

II. AD 2.7 Information to be originated by the aerodrome operator

A review of the relevant headings of part AD 2 of the AIP shows that the most relevant sub-heading to include specific information on GRF implementation is part AD 2.7 (*Seasonal availability — clearing*), whose content is currently addressing, amongst others, runway surface contamination by winter contaminants, as illustrated further in ICAO Doc 8126.

Note 4: Part AD 2.7 reads as follows:

"AD 2.7 Seasonal availability — clearing

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

- 1) type(s) of clearing equipment;*
- 2) clearance priorities; and*
- 3) remarks."*

However, due to its structure and content, part AD 2.7 may not be fully adequate to accommodate the required information, given that currently it focuses mostly on snow-plan implementation.

III. Conclusions

For the above reasons, EASA considers that the information to be published under part AD 1.2.2 and AD 2.7 of the AIP needs to be adjusted and EASA plans to submit a relevant proposal to ICAO.

Therefore, until the submission of the proposal for the amendment of the relevant provisions of ICAO Doc 10066, and the adjustment of the EU regulatory framework, and taking into account the need to prepare the implementation of the GRF as of 2021, EASA considers that Member State NCAs should ensure that the AIP content accurately reflects the GRF concept and any additional provisions contained in the EU regulatory provisions.

The origination of such information both by the NCAs and aerodrome operators should be performed timely, in order to allow the Aeronautical Information Service Providers (AISPs) to distribute the amended information under part AD 1.2.2 and AD 2.7, in accordance with the provisions of ICAO Annex 15 to which Regulation (EU) 2017/373 refers to, concerning the Aeronautical Information Regulation and Control system, prior to the date that GRF will be implemented.

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At this time, the safety concern described in this SIB is not considered to be an unsafe condition that would warrant Safety Directive (SD) action under Regulation (EU) [2017/373](#), Annex II, ATM/ANS.AR.A.030, nor under Regulation (EU) [139/2014](#), Annex II, ADR.AR.A.040.

Recommendations:

EASA recommends NCAs:

a) To ensure that:

i) the following heading is used for part AD 1.2 of the AIP:

AD 1.2 Rescue and firefighting services, runway surface condition assessment and reporting and snow plan

ii) the following headings are included under part AD 1.2.2 of the AIP:

AD 1.2.2 Runway surface condition assessment and reporting and snow plan

Description of runway surface condition assessment and reporting; and brief snow plan considerations for aerodromes/heliports available for public use at which snow conditions are normally liable to occur, including:

- 1) *organization of the runway surface condition reporting and winter service;*
- 2) *surveillance of movement areas;*
- 3) *surface condition assessment methods used; operations on specially prepared winter runways;*
- 4) *actions taken to maintain the usability of movement areas;*
- 5) *system and means of reporting;*
- 6) *the cases of runway closure; and*
- 7) *distribution of information about runway surface conditions.*

b) To timely originate the relevant information to be included under each of the above headings (1 to 7). The following text, which is an adjustment of the relevant text included in ICAO Doc 8126, indicates the type of information that is recommended to be included under each heading:

1) Organization of the runway surface condition reporting and the winter service:

Indication of the:

- *authority responsible for snow clearance and for assessing, improving and reporting runway surface conditions;*
- *general policy concerning operational priorities established for the clearance of movement areas;*
- *the general policy concerning trend monitoring of surface friction characteristics, and what constitutes a complete survey.*

2) Surveillance of movement areas:

Indicate how surveillance of the movement areas is organized.

3) Surface condition assessment methods used; operations on specially prepared winter runways:

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Assessment methods and measurements taken. Reference should be made to the use of the Runway Condition Assessment Matrix, including the case of specially prepared winter runways, in case the use of such runways has been approved.

4) *Actions taken to maintain the usability of movement areas:*

A brief description of the methods used for clearing snow, slush, ice and standing water, e.g. ploughing, sweeping or blowing, and details of any chemical methods employed for clearing movement areas. Information concerning when and how surface friction characteristics will be improved. General policy concerning coordination between aerodrome operators, Air Traffic Services providers and the competent authorities to ensure compatibility between efficient snow clearance procedures and maximum utilization of the aerodrome.

5) *System and means of reporting:*

Reference should be made to the Runway Condition Report.

6) *The cases of runway closure:*

Indicate the general policy on closure of a runway.

7) *Distribution of information about runway surface conditions:*

A short description of the system for distribution of information (NOTAM) for runways reaching the minimum friction value (slippery wet runways). Reference should be made to when NOTAM for slippery wet runways are issued and updated.

A short description of the system for distribution of information about runway surface conditions (SNOWTAM, Automatic Terminal Information Service (ATIS) updating). Reference should be made to when SNOWTAMs are issued and updated. Furthermore, a description should be provided how the upgraded/downgraded information is included in the SNOWTAM. In addition, a statement should be included when the information is disseminated with ATIS only.

c) To ensure that the following headings are included under part AD 2.7 of the AIP:

AD 2.7 Runway surface condition assessment and reporting and snow plan

Information on runway surface condition assessment and reporting.

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

- 1) type(s) of clearing equipment;*
- 2) clearance priorities;*
- 3) use of material for movement area surface treatment;*
- 4) specially prepared winter runways; and*
- 5) remarks.*

d) To ensure that aerodrome operators timely originate relevant and correct information to be included under AD 2.7. The following text, which is an adjustment of the relevant text included in ICAO Doc 8126, indicates the type of information that is recommended to be included under each heading:

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AD 2.7 Runway surface condition assessment and reporting and snow plan

A reference to the content of AD.1.2.2 should be made for the runway surface condition assessment and reporting. Additional, aerodrome specific, Information on runway surface condition assessment and reporting, complementing the information contained in AD 1.2.2.

Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

1) *Type(s) of clearing equipment*

Indicate whether the aerodrome is serviceable during all seasons of the year and, if not, the periods (months of the year) during which it may be unserviceable or must be used with caution, indicating the likely cause of unserviceability and the precautions to be taken.

Information relating to snow removal should include:

- a) where no snow removal equipment is required, indicate “Not applicable”;
- b) where snow conditions exist, indicate the types of equipment used.

2) *Clearance priorities*

Indicate the priorities with regard to clearing of runway(s), taxiway(s) and apron(s).

3) *Use of material for movement area surface treatment*

Indicate the type of material used for movement area surface treatment using the following abbreviation/words:

KAC, for potassium acetate fluids

KFOR, for potassium formate fluids;

GAC, for glycerine acetate fluids;

NAFO, for sodium formate solids;

NAAC, for sodium acetate solids,

EG, for ethylene glycol fluids;

PG, for propylene glycol fluids;

UREA; and

SAND.

Where no material is used indicate “Not applicable”

4) *Specially prepared winter runways*

Indicate if specially prepared winter runways have been approved, including runway designators; where the use of specially prepared winter runways has not been approved indicate “Not applicable”.

5) *Remarks*

Any other relevant information not covered under this subsection.

- e) To liaise with the responsible AISP(s) to ensure that the above information is published in the AIP in a timely manner.

Contact(s):

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

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