SAFETY REGULATION GROUP

FLIGHT OPERATIONS DIVISION COMMUNICATION

Civil Aviation Authority

03/2009

Applicability: All Aeroplane AOC Holders

THE IMPORTANCE OF USING PERFORMANCE DATA APPROPRIATE TO THE EXISTING RUNWAY CONDITIONS

1 Introduction

1.1 The purpose of this FODCOM is to inform operators of the importance of using the performance data appropriate to the existing runway conditions. Some operators may be using "dry" performance figures when the runway is in fact "wet" (see UK AIP AD 1-1-1 paragraph 15).

2 Background

2.1 EU-OPS 1.480(a)(4) states:

"Dry runway". A dry runway is one which is neither wet nor contaminated, and includes those paved runways which have been specially prepared with grooves or porous pavement and maintained to retain "effectively dry" braking action even when moisture is present.

2.2 It is not sufficient for a runway to be considered, for performance purposes, as dry when it is wet solely on the basis that it is constructed with, for example, grooves or porous friction course pavement. Dry runway performance must only be used when the CAA has accepted in writing that the aeroplane can actually achieve the "effectively dry" braking action referred to in the EU-OPS definition.

2.3 However, there is currently no provision in the UK for notifying operators of runways having such surfaces, and the CAA is not aware of runways elsewhere that fully meet the "effectively dry" criterion.

2.4 The following considerations are important to the provisions of EU-OPS 1.480(a)(4):

- Although a runway may have a grooved or porous surface, it may not be possible to demonstrate that it retains an "effectively dry" braking action when wet. This may be because the type of surface is inherently not physically capable of retaining dry braking friction characteristics in the presence of sufficient moisture to be termed "wet". In other cases, it may be as a result of a surface reaching the end of its design life or that the recommended routine maintenance procedures have not been sufficiently effective (see CAP 683 *The Assessment of Runway Surface Friction Characteristics)*. This is particularly relevant in the case of accumulation of rubber deposits in touchdown zones.

- The effectiveness of aircraft anti-skid systems is especially sensitive to the presence of water on the runway. Aerodrome operators' Continuous Friction Measuring Equipment does not record a corresponding response to the presence of water, and thus operators may not rely on runway friction reports alone for demonstrating that a runway can retain "effectively dry" braking action. Verification of the aircraft's braking performance capability in wet conditions is also required. This would normally require support from the aircraft manufacturer.

3 Responsibilities

3.1 It is the operator's responsibility to ensure that the correct performance data (dry, wet or contaminated) is used for take-off and landing.

3.2 Operators should review their guidance to crews on the use of wet and dry performance data, and review the associated training requirements. The incorporation of wet runway performance issues into Line Orientated Flying Training (LOFT) or Line Orientated Evaluation (LOE) exercises should be considered.

3.3 In order to comply with EU-OPS 1.480 when a runway, or section of a runway, is reported as wet, crews must use wet runway performance data regardless of the type of runway surface unless the operator can demonstrate to the CAA that the runway surface and the aircraft's braking capabilities fully meet the criteria of EU-OPS 1.480(a)(4).

4 Recommendations

4.1 Operators should review their performance data to confirm that inappropriate credit is not being claimed for "effectively dry" braking action.

4.2 Operators should review and amend as necessary their guidance to crews on the use of wet and dry performance data, and review the associated training requirements.

5 Queries

5.1 Any queries as a result of this FODCOM should be addressed to Head of Flight Operations Policy Department at the following e-mail address: **FOP.Admin@caa.co.uk**.

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Recipients of new FODCOMs are asked to ensure that these are copied to their 'in house' or contracted maintenance organisation, to relevant outside contractors, and to all members of their staff who could have an interest in the information or who need to take appropriate action in response to this Communication.

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