

# Background on the use of aerodrome weathers warnings

#### Intent of aerodrome warnings

Aerodrome Warnings are issued in accordance with CAA and ICAO requirements and are designed to provide advice to airfield operators on potential weather hazards that may affect their airport.

It is anticipated that these warnings are used alongside the wide range of aviation forecasts that are provided by the Met Office on behalf of the CAA, to develop a picture of the expected weather conditions for each airport to help airfield operators plan accordingly.

### Phraseology used

The content of aerodrome warnings follows a standardised format agreed with the CAA. The standardisation of text in warnings helps the Met Office to provide aerodrome warnings efficiently to over 100 UK airfields and often helps the parsing of information to end user systems.

The use of phrases such as 'likely to occur' and 'may occur' have recently been introduced to help convey information on the potential likelihood for a warned of weather hazard to occur. For example, a warning stating that 'Thunderstorms may affect the airfield at times' should be used to infer that there is up to a 40% probability for a thunderstorm to occur at or in the vicinity of the airfield during the defined period. A warning stating that 'Thunderstorms are likely to affect the airfield at times' should be used to infer that there is at least a 40% probability for a thunderstorm to occur at or in the vicinity of the airfield during the defined period.

## **Differences compared to TAFs**

Unlike TAFs (whose primary purpose is to support flight planning) where a probability threshold of 30% (denoted by the term 'PROB30') is required before weather can be included, there are no such constraints on aerodrome warnings. This can mean that on occasions a warning may be issued providing details which are not reflected in the TAF. It can be inferred in such instances, that the probability of the weather hazard described in the aerodrome warning is less than 30%.

Another difference exists in the requirement for forecasting frozen precipitation in TAFs and Warnings. For example, a slight snow shower would not necessarily require the issuance of a TAF amendment whereas a Warning would be issued for the onset of any intensity of snow.

Finally, aerodrome warnings provided for almost all airports are issued at routine intervals and are not amendable outside of these times. TAFs on the other hand are subject to amendment at any time when the meteorological conditions expected on an airfield are expected to significantly deviate from that described in the TAF.

# **Summary**

Conveying a consistent 'weather picture' for aerodromes is always uppermost in the minds of the Met Office aviation forecasters. However, it should be recognised that aerodrome warnings and TAFs serve different purposes and are provided against different criteria. This means that the level of detail between the 2 services can vary at times.

Aerodromes are encouraged to contact the Met Office, should clarification on the forecasts issued be required. Further details and conditions of use of this service can be found in the UK AIP, GEN 3.5, Section 4 – Types of service, Paragraph 4.2.4.