



# Advisory Circular

## AC172-3

Revision 1 (0)

### ATS Transmission of Graphical Meteorological Information by Voice

21 December 2021

#### General

Civil Aviation Authority (CAA) Advisory Circulars (ACs) contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rule.

Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate AC.

#### Purpose

This AC describes an acceptable means of compliance with the requirements under Civil Aviation Rule Part 172 relating to passing, by voice, of information derived from graphical meteorological information products to aircraft in flight.

#### Related Rules

This AC relates to Civil Aviation Rule Part 172 *Air Traffic Service Organisations* - specifically rule 172.73.

#### Change Notice

ICAO 29th Assembly Resolution A29-3 of year 1992 urges States to promote global harmonization of national rules. In order to implement this Resolution, Mongolian Civil Aviation Regulation has been developed based on “Memorandum for Technical Cooperation” between CAA of Mongolia and New Zealand, signed on 6th of May, 1999.

Amendment 164 of Annex 1 to the Chicago Convention on International Civil Aviation urges pilots, navigators using radiotelephony, air traffic controllers and aeronautical station operators to comply with the language proficiency requirements; and

Under Article 14 of the Civil Aviation Act, “Use of foreign language in civil aviation” the AC has been released in English version only, in order to prevent any mistranslation and misuse of the aviation safety related documents.

This AC172-3 was developed based on NZ AC172-3 revision 0, dated on 30 July 2015.

In Revision 1, editorial changes were made to standardize formatting and to correct references specific to New Zealand.

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## 1. Introduction

### 1.1. Applicable rules

1.1.1. The Civil Aviation Rules that apply to the provision of an air traffic control (ATC) aerodrome control service, and flight information service are contained within Part 172 *Air Traffic Service Organisations*.

1.1.2. In particular rule 172.73 requires certain meteorological information to be available for provision to pilots as part of any flight information service.

1.1.3. Meteorological information is a defined term under “*CAR interpretation summary*”.

### 1.2. Requirements

1.2.1. Rule 172.73(b) requires the certificate holder to ensure that it has on hand the latest meteorological information, in a form that is easily applied to the performance of ATS and FIS operations.

1.2.2. If meteorological information is corrupted or contained any clear material errors or omissions, the certificate holder is expected to liaise with the supplier of any defective meteorological information, to have that information corrected.

1.2.3. Under the requirements of Part 172, any onward voice transmission of meteorological information from a Part 174 organisation by ATS must be done in an unambiguous manner, ensuring such transmissions do not materially change the nature of the particular meteorological information. This does not mean the information must be transmitted verbatim. It means the transmission should be done using words, phrases and descriptions that are easily understood by the recipient.

### 1.3. Graphical meteorological information

1.3.1. As a result of international deliberations and technology developments, there is a move towards the provision of graphical renditions of traditional meteorological information products.

1.3.2. In this regard, a Part 172 organisation would benefit from the provision of a level of guidance on how to interpret such graphical meteorological information, in order to pass such information to pilots by voice transmission.

1.3.3. This AC sets out such guidance for specific graphical representations of meteorological information.

## 2. Graphical SIGMET Information

### 2.1. Introductions

2.1.1. Graphical representation of current SIGNificant METeorological information (SIGMET) will be provided by Meteorological Service Provider, as contracted by CAA, in addition to the standard text-based messages provided via the AFTN.

2.1.2. The graphical presentation of current SIGMETs is effectively a monitoring product intended for the situational awareness of ATS, pilots, and aircraft operators.

2.1.3. Standard textual SIGMETs will continue to be issued for hazardous weather phenomenon, whether observed or forecast.

### 2.2. ATS radio transmission of SIGMET information

2.2.1. The voice transmission of SIGMET information to aircraft operating domestically in the Ulaanbaatar FIR should routinely be made using information from the graphical SIGMET monitor.

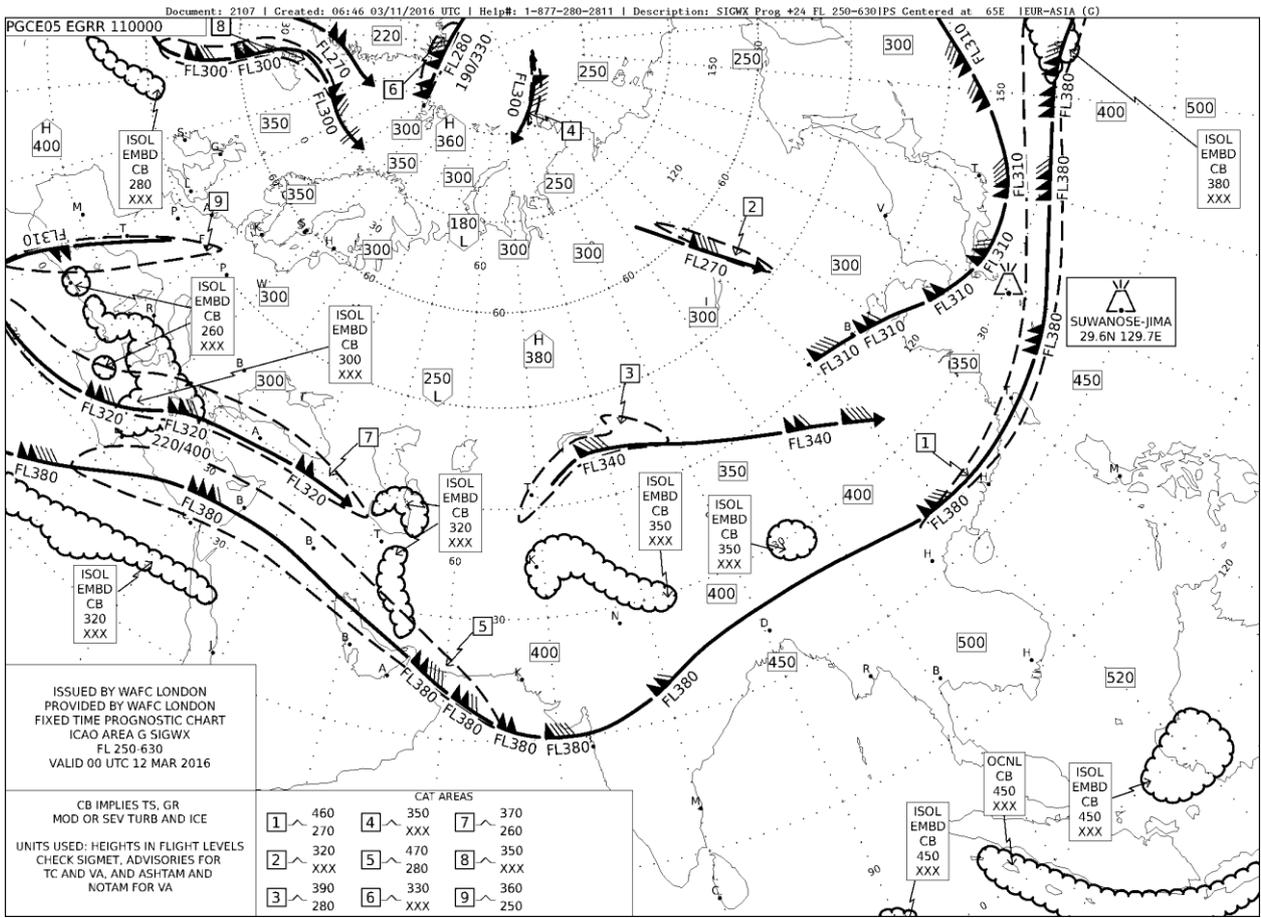
2.2.2. The location of the hazardous weather phenomena should be described in a general geographical regional area, sense from the location of the affected area. The description of the affected area does not need to be detailed.

2.2.3. The following are examples of what ATS might pass by voice transmission to an aircraft operating near, or towards the affected areas.

2.2.4. Should a pilot operating domestically in the Ulaanbaatar FIR requires the exact location of the hazardous weather phenomena covered in a SIGMET, ATS may pass that information using the standard textual SIGMET, which contains the latitude and longitude coordinates describing the area of severe weather phenomena.

2.2.5. Note that the voice transmission of SIGMET information to international aircraft operating, in the Ulaanbaatar FIR, should only be made using the standard textual SIGMET – relaying the latitude and longitude coordinates describing the area of severe weather phenomena.

# Appendix 1 – General SIGMET Information Examples



## LEGEND TO SYMBOLS

Active thunderstorms		Cold front	
Tropical cyclone		Warm front	
Severe line squall		Occluded front	
Hail		Quasi-stationary front	
Moderate turbulence		Convergence line	
Severe turbulence		Inter-tropical convergence zone	
Moderate aircraft icing		Tropopause High	
Severe aircraft icing		Tropopause Low	
Widespread sandstorm or duststorm		Tropopause level	
Drizzle	,	Speed in km/h of movement of frontal system	
Rain		Position speed and level of max wind	
Snow	*		
Shower			
Widespread blowing snow			
Widespread haze			
Freezing rain			
Widespread smoke			
Clear air turbulence	CAT		
Widespread fog			
Hail			
		<b>CLOUDS except CB</b>	
		clear (0 oktas)	SKC
		1/8 to 2/8	FEW
		scattered (3/8 to 4/8)	SCT
		broken (5/8 to 7/8)	BKN
		overcast (8/8)	OVC
		<b>CB only</b>	
		individual CBs	ISOL
		well-separated CBs	OCNL
		CBs with little or no separ	FRQ
		CBs embadded in layers of other clouds or concealed by haze	EMBD

SWH significant weather forecast for high layer (FL250-450)  
 SWM significant weather forecast for middle layer (FL100-250)  
 SWL significant weather forecast for low layer (<FL100)