

Revision 0

30 July 2015

ATS Transmission of Graphical Meteorological Information by Voice

General

Civil Aviation Authority advisory circulars contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rule.

An acceptable means of compliance is not intended to be the only means of compliance with a rule, and 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 advisory circular.

An advisory circular may also include **guidance material** to facilitate compliance with the rule requirements. Guidance material must not be regarded as an acceptable means of compliance.

Purpose

This advisory circular provides guidance for an organisation certificated under Part 172 with regard to passing, by voice, of information derived from graphical meteorological information products to aircraft in flight.

Related Rules

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

Change Notice

This is the initial issue.

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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 Part 1.

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 advisory circular sets out such guidance for specific graphical representations of meteorological information.

2. Graphical SIGMET Monitor (GSM)

2.1. GSM introduction

- 2.1.1. Graphical representation of current SIGNificant METeorological information (SIGMET) will be provided by MetService, as contracted by CAA, in addition to the standard text-based messages provided via the AFTN, from 31 July 2015. See examples in Appendix 1.
- 2.1.2. The graphical presentation of current SIGMETs is called the graphical SIGMET monitor (GSM). It 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.

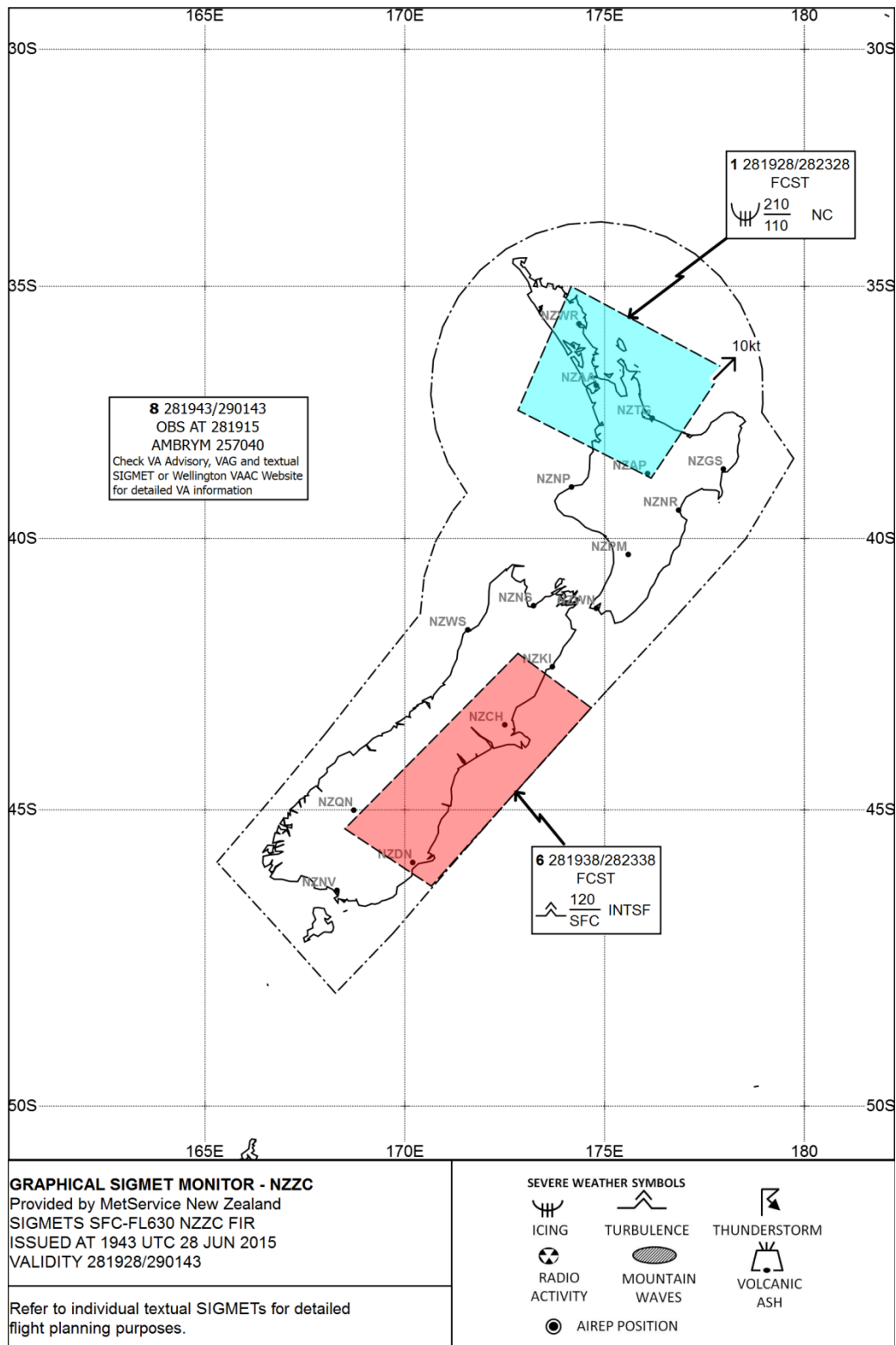
- 2.1.4. GSM will include in a single graphic a rendition of the location of all current SIGMETs in a particular flight information region (FIR).
- 2.1.5. A separate GSM will be issued for the New Zealand FIR (NZZC) and for the Auckland Oceanic FIR (NZZO).

2.2. ATS radio transmission of GSM and SIGMET information

- 2.2.1. The voice transmission of SIGMET information to aircraft operating domestically in the New Zealand FIR (NZZC) 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, sense from the location of the affected area set out on the GSM. 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 (refer GSM for NZZC in Appendix 1):
 - “SIGMET 1 valid 1928 to 2328, severe icing, FL110 to FL210, Kawhia-Taupo-Whakatane to Northland, moving NE 10 kt”:
 - “SIGMET 6 valid 1938 to 2338, severe turbulence, surface to FL120, south of Kaikoura, north of Dunedin, east of the Southern Alps, intensifying”.
- 2.2.4. Should a pilot operating domestically in the New Zealand 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 (polygon) of severe weather phenomena.
- 2.2.5. Note that the voice transmission of SIGMET information to international aircraft operating, in either of the New Zealand FIR (NZZC) or the Auckland Oceanic FIR (NZZO), should only be made using the standard textual SIGMET – relaying the latitude and longitude coordinates describing the area (polygon) of severe weather phenomena.

Appendix 1 – GSM Examples

GSM for NZCC



GSM for NZZO

