



ADVISORY CIRCULAR

UCAA-AC-MET013

DECEMBER 2022

GUIDANCE ON CRITERIA FOR SPECIAL OBSERVATIONS AND REPORTS

1.0 PURPOSE

- 1.1 The purpose of the Advisory Circular is to guide the Meteorological Service Provider (MSP) in respect to the criteria for special observations and reports in accordance with the technical specifications in the Civil Aviation (Meteorological services for air navigation) Regulations, 2022.

2.0 REFERENCES

- 2.1 Regulations 20 and Schedule 3 of the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.
- 2.2 ICAO DOC. 8896; Manual of Aeronautical Meteorological Practice.

3.0 GUIDANCE AND PROCEDURES

3.1 General

- 3.1.1 The guidance describes criteria the MSP is required to follow in respect to preparation and issuance of special observations and reports as set out in Regulations 20 and Schedule 3 of the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.

- 3.1.2 The special observations and reports should provide operationally relevant information, updated whenever operationally significant change occur. The special observations and reports should form a data source for Automatic Terminal Information Service (ATIS) and the Air traffic controllers (ATCs) should have displays for the special reports updated in real time.

3.2 Criteria for Special Observations and Reports

- 3.2.1 The reports of special observations are issued as:

3.2.1.1 Local special reports, only for dissemination and use at the aerodrome of origin (intended for arriving and departing aircraft); and

3.2.1.2 SPECI for dissemination beyond the aerodrome of origin (mainly intended for flight planning and VOLMET broadcasts). However, in accordance AFI air navigation

agreement, at aerodromes where METARs are issued at half-hourly intervals, SPECI are not issued.

3.2.2 The criteria for the issuance of special observation reports shall include meteorological conditions:

- (i) That correspond with the operating minima of the operators using the aerodrome.
- (ii) That satisfy other local requirements of the air traffic services units and of the operators; and
- (iii) When an operationally significant change in RVR is observed.

3.2.3 For or local special reports that are disseminated at only the aerodrome of origin, the following criteria shall be used for issuance of the reports:

3.2.3.1 An increase in air temperature of 2 °C or more from that given in the latest report, or an alternative threshold value as agreed between the meteorological authority, the appropriate ATS authority and the operators concerned.

3.2.3.2 The available supplementary information concerning the occurrence of significant meteorological conditions in the approach and climb-out areas.

3.2.3.3 When the variation from the mean surface wind speed (gusts) has changed by 2.5 m/s (5 kt) or more from that at the time of the latest report, the mean speed before and/or after the change being 7.5 m/s (15 kt) or more; and

3.2.3.4 Those values which constitute criteria for SPECI as stated under 3.2.4.

3.2.4 A SPECI should be issued for dissemination beyond the aerodrome of origin whenever changes in meteorological conditions occur in accordance with the following criteria:

3.2.4.1 When mean surface wind direction has changed by 60° or more from that given in the latest report, the mean speed before and/or after the change being 5 m/s (10 kt) or more.

3.2.4.2 When the mean surface wind speed has changed by 5 m/s (10 kt) or more from that given in the latest report.

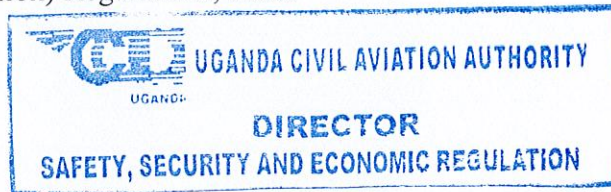
3.2.4.3 When the variation from the mean surface wind speed (gusts) has changed by 5 m/s (10 kt) or more from that at the time of the latest report, the mean speed before and/or after the change being 7.5 m/s (15 kt) or more.

3.2.4.4 When the onset, cessation or change in intensity of any of the following weather phenomena occurs:

- (i) Precipitation with hail.
- (ii) Moderate or heavy precipitation (including showers thereof).
- (iii) Thunderstorm with precipitation.
- (iv) Severe fog; or
- (v) Thunderstorm (without precipitation)

- 3.2.4.5 When the amount of a cloud layer below 450 m (1 500 ft) changes:
- (i) From SCT or less to BKN or OVC; or
 - (ii) From BKN or OVC to SCT or less.
- 3.2.5 Further to criteria stated in 3.2.4 and where required, SPECI should be issued whenever changes in meteorological conditions occur in accordance with the following criteria:
- 3.2.5.1 When the wind changes through values of operational significance as established by the meteorological authority in consultation with the ATS authority, taking into account changes in the wind which would:
- (i) Require a change in runway(s) in use; and
 - (ii) Indicate that runway tailwind and crosswind components have changed through values representing the main operating limits for typical aircrafts operating at the aerodrome.
- 3.2.5.2 When the visibility is improving and changes to, or passes through, one or more of the following values, or when the visibility is deteriorating and passes through one or more of the following values:
- (i) 800m, 1 500m or 3 000 m; and
 - (ii) 5 000 m, in cases where significant numbers of flights are operated in accordance with visual flight rules.
- 3.2.5.3 When the runway visual range is improving and changes to, or passes through, one or more of the following values, or when the runway visual range is deteriorating and passes through one or more of the following values: 50m, 175m, 300m, 550m or 800m;
- 3.2.5.4 When onset, cessation or change in intensity of any of the following weather phenomena occurs:
- (i) Fog or Hail
 - (ii) Duststorm.
 - (iii) Funnel cloud (waterspout)
 - (iv) Low drifting dust or Blowing dust
- 3.2.5.6 When the height of base of the lowest cloud layer of BKN or OVC extent is lifting and changes to, or passes through, one or more of the following values, or when the height of base of the lowest cloud layer of BKN or OVC extent is lowering and passes through one or more of the following values:
- (i) 30m, 60m, 150m or 300m (100ft, 200ft, 500ft or 1 000 ft); and
 - (ii) 450m (1 500ft), in cases where significant numbers of flights are operated in accordance with visual flight rules.
- 3.2.5.7 When the sky is obscured and the vertical visibility is improving and changes to, or passes through, one or more of the following values, or when the vertical visibility is deteriorating and passes through one or more of the following values: 30m, 60m, 150m or 30 m (100ft, 200ft, 500ft or 1 000ft); and
- 3.2.5.8 Any other criteria based on local aerodrome operating minima, as agreed between the meteorological authority and the ATS Authority.

- 3.2.6 When a deterioration of one meteorological element is accompanied by an improvement in another element, a single SPECI is issued and it should be treated as a deterioration report.
- 3.2.7 When a deterioration in all meteorological conditions is observed at an aerodrome, a single SPECI should be issued representing a deterioration report of meteorological conditions immediately after the observation.
- 3.2.8 A SPECI should be prepared and issued to represent improvement in meteorological conditions only after the improvement in the conditions has been maintained for at least ten (10) minutes; and it should be amended before dissemination, if necessary, to indicate the conditions prevailing at the end of that 10-minute period.
- 3.2.9 Once prepared, the SPECI is disseminated to all ATS units, aerodrome operator, Pilot Briefing offices, international OPMET databanks and transmitted through the operation of aeronautical fixed service Internet-based services, in accordance with the Civil Aviation (Meteorological Services for Air Navigation) Regulations, 2022.



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