



Annex 3
Twentieth Edition
Corrigendum No. 1
30/11/18

**INTERNATIONAL STANDARDS
AND RECOMMENDED PRACTICES**

**METEOROLOGICAL SERVICE FOR
INTERNATIONAL AIR NAVIGATION**

**ANNEX 3
TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

TWENTIETH EDITION — JULY 2018

CORRIGENDUM NO. 1

1. Please replace pages APP 3-8, APP 3-10, APP 3-21, APP 3-24 and APP 6-3 by the attached new pages bearing the notation “Corr. 1”.
 2. Record the entry of this corrigendum on page (iii).
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- 2) 5 m/s (10 kt) or more otherwise;
- d) when a wind speed of less than 0.5 m/s (1 kt) is reported, it shall be indicated as calm;
- e) when a wind speed of 50 m/s (100 kt) or more is reported, it shall be indicated to be more than 49 m/s (99 kt); and
- f) when the 10-minute period includes a marked discontinuity in the wind direction and/or speed, only variations from the mean wind direction and mean wind speed occurring since the discontinuity shall be reported.

Note.— See note under 4.1.3.1.

4.1.5.3 In local routine and special reports:

- a) if the surface wind is observed from more than one location along the runway, the locations for which these values are representative shall be indicated;
- b) when there is more than one runway in use and the surface wind related to these runways is observed, the available wind values for each runway shall be given, and the runways to which the values refer shall be reported;
- c) when variations from the mean wind direction are reported in accordance with 4.1.5.2 b) 2), the two extreme directions between which the surface wind has varied shall be reported; and
- d) when variations from the mean wind speed (gusts) are reported in accordance with 4.1.5.2 c), they shall be reported as the maximum and minimum values of the wind speed attained.

4.1.5.4 In METAR and SPECI, when variations from the mean wind speed (gusts) are reported in accordance with 4.1.5.2 c), the maximum value of the wind speed attained shall be reported.

4.2 Visibility

4.2.1 Siting

4.2.1.1 **Recommendation.**— *When instrumented systems are used for the measurement of visibility, the visibility should be measured at a height of approximately 2.5 m (7.5 ft) above the runway.*

4.2.1.2 **Recommendation.**— *When instrumented systems are used for the measurement of visibility, representative visibility observations should be obtained by the use of sensors appropriately sited. Sensors for visibility observations for local routine and special reports should be sited to give the best practicable indications of visibility along the runway and touchdown zone.*

4.2.2 Displays

Recommendation.— *When instrumented systems are used for the measurement of visibility, visibility displays relating to each sensor should be located in the meteorological station with corresponding displays in the appropriate air traffic services units. The displays in the meteorological station and in the air traffic services units should relate to the same sensors, and where separate sensors are required as specified in 4.2.1, the displays should be clearly marked to identify the area, e.g. runway and section of runway, monitored by each sensor.*

4.2.3 Averaging

Recommendation.— *When instrumented systems are used for the measurement of visibility, their output should be updated at least every 60 seconds to permit provision of current representative values. The averaging period should be:*

- a) *1 minute for local routine and special reports and for visibility displays in air traffic services units; and*
- b) *10 minutes for METAR and SPECI, except that when the 10-minute period immediately preceding the observation includes a marked discontinuity in the visibility, only those values occurring after the discontinuity should be used for obtaining mean values.*

Note.— *A marked discontinuity occurs when there is an abrupt and sustained change in visibility, lasting at least 2 minutes, which reaches or passes through criteria for the issuance of SPECI reports given in 2.3.*

4.2.4 Reporting

4.2.4.1 In local routine reports, local special reports, METAR and SPECI, the visibility shall be reported in steps of 50 m when it is less than 800 m; in steps of 100 m when it is 800 m or more but less than 5 km; in kilometre steps when it is 5 km or more but less than 10 km; and as 10 km when it is 10 km or more except when the conditions for the use of CAVOK apply. Any observed value which does not fit the reporting scale in use shall be rounded down to the nearest lower step in the scale.

Note.— *Specifications concerning the use of CAVOK are given in 2.2.*

4.2.4.2 In local routine and special reports, visibility along the runway(s) shall be reported together with the units of measurement used to indicate visibility.

4.2.4.3 **Recommendation.**— *In local routine and special reports, when instrumented systems are used for the measurement of visibility:*

- a) *if the visibility is observed from more than one location along the runway as specified in Chapter 4, 4.6.2.2, the values representative of the touchdown zone should be reported first, followed, as necessary, by the values representative of the mid-point and stop-end of the runway, and the locations for which these values are representative should be indicated; and*
- b) *when there is more than one runway in use and the visibility is observed related to these runways, the available visibility values for each runway should be reported, and the runways to which the values refer should be indicated.*

4.2.4.4 **Recommendation.**— *In METAR and SPECI, visibility should be reported as prevailing visibility, as defined in Chapter 1. When the visibility is not the same in different directions and*

- a) *when the lowest visibility is different from the prevailing visibility, and 1) less than 1 500 m or 2) less than 50 per cent of the prevailing visibility and less than 5 000 m; the lowest visibility observed should also be reported and, when possible, its general direction in relation to the aerodrome reference point indicated by reference to one of the eight points of the compass. If the lowest visibility is observed in more than one direction, then the most operationally significant direction should be reported; and*
- b) *when the visibility is fluctuating rapidly, and the prevailing visibility cannot be determined, only the lowest visibility should be reported, with no indication of direction.*

4.3 Runway visual range

4.3.1 Siting

4.3.1.1 **Recommendation.**— *Runway visual range should be assessed at a height of approximately 2.5 m (7.5 ft) above the runway for instrumented systems or assessed at a height of approximately 5 m (15 ft) above the runway by a human observer.*

4.3.1.2 **Recommendation.**— *Runway visual range should be assessed at a lateral distance from the runway centre line of not more than 120 m. The site for observations to be representative of the touchdown zone should be located about 300 m along the runway from the threshold. The sites for observations to be representative of the mid-point and stop-end of the runway should be located at a distance of 1 000 to 1 500 m along the runway from the threshold and at a distance of about 300 m from the other end of the runway. The exact position of these sites and, if necessary, additional sites should be decided after considering aeronautical, meteorological and climatological factors such as long runways, swamps and other fog-prone areas.*

4.3.2 Instrumented systems

Note.— *Since accuracy can vary from one instrument design to another, performance characteristics are to be checked before selecting an instrument for assessing runway visual range. The calibration of a forward-scatter meter has to be traceable and verifiable to a transmissometer standard, the accuracy of which has been verified over the intended operational range. Guidance on the use of transmissometers and forward-scatter meters in instrumented runway visual range systems is given in the Manual of Runway Visual Range Observing and Reporting Practices (Doc 9328).*

4.3.2.1 Instrumented systems based on transmissometers or forward-scatter meters shall be used to assess runway visual range on runways intended for Category II and III instrument approach and landing operations.

4.3.2.2 **Recommendation.**— *Instrumented systems based on transmissometers or forward-scatter meters should be used to assess runway visual range on runways intended for Category I instrument approach and landing operations.*

4.3.3 Display

4.3.3.1 Where runway visual range is determined by instrumented systems, one display or more, if required, shall be located in the meteorological station with corresponding displays in the appropriate air traffic services units. The displays in the meteorological station and in the air traffic services units shall be related to the same sensors, and where separate sensors are required as specified in 4.3.1.2, the displays shall be clearly marked to identify the runway and section of runway monitored by each sensor.

4.3.3.2 **Recommendation.**— *Where runway visual range is determined by human observers, runway visual range should be reported to the appropriate local air traffic services units, whenever there is a change in the value to be reported in accordance with the reporting scale (except where the provisions of 3.2.2 a) or b) apply). The transmission of such reports should normally be completed within 15 seconds after the termination of the observation.*

4.3.4 Averaging

Where instrumented systems are used for the assessment of runway visual range, their output shall be updated at least every 60 seconds to permit the provision of current, representative values. The averaging period for runway visual range values shall be:

- a) 1 minute for local routine and special reports and for runway visual range displays in air traffic services units; and

- b) 10 minutes for METAR and SPECI, except that when the 10-minute period immediately preceding the observation includes a marked discontinuity in runway visual range values, only those values occurring after the discontinuity shall be used for obtaining mean values.

Note.— A marked discontinuity occurs when there is an abrupt and sustained change in runway visual range, lasting at least 2 minutes, which reaches or passes through the values 800, 550, 300 and 175 m.

4.3.5 Runway light intensity

Recommendation.— When instrumented systems are used for the assessment of runway visual range, computations should be made separately for each available runway. For local routine and special reports, the light intensity to be used for the computation should be:

- a) for a runway with the lights switched on and a light intensity of more than 3 per cent of the maximum light intensity available, the light intensity actually in use on that runway;
- b) for a runway with the lights switched on and a light intensity of 3 per cent or less of the maximum light intensity available, the optimum light intensity that would be appropriate for operational use in the prevailing conditions; and
- c) for a runway with lights switched off (or at the lowest setting pending the resumption of operations), the optimum light intensity that would be appropriate for operational use in the prevailing conditions.

In METAR and SPECI, the runway visual range should be based on the maximum light intensity available on the runway.

Note.— Guidance on the conversion of instrumented readings into runway visual range is given at Attachment D.

4.3.6 Reporting

4.3.6.1 In local routine reports, local special reports, METAR and SPECI, the runway visual range shall be reported in steps of 25 m when it is less than 400 m; in steps of 50 m when it is between 400 m and 800 m; and in steps of 100 m when it is more than 800 m. Any observed value which does not fit the reporting scale in use shall be rounded down to the nearest lower step in the scale.

4.3.6.2 **Recommendation.**— Fifty metres should be considered the lower limit and 2 000 metres the upper limit for runway visual range. Outside of these limits, local routine reports, local special reports, METAR and SPECI should merely indicate that the runway visual range is less than 50 m or more than 2 000 m.

4.3.6.3 In local routine reports, local special reports, METAR and SPECI:

- a) when runway visual range is above the maximum value that can be determined by the system in use, it shall be reported using the abbreviation “ABV” in local routine and special reports and the abbreviation “P” in METAR and SPECI, followed by the maximum value that can be determined by the system; and
- b) when the runway visual range is below the minimum value that can be determined by the system in use, it shall be reported using the abbreviation “BLW” in local routine and special reports and the abbreviation “M” in METAR and SPECI, followed by the minimum value that can be determined by the system.

Element as specified in Chapter 4	Detailed content	Template(s)			Examples
Cloud (M) ¹⁴	Name of the element (M)	CLD			CLD NSC CLD SCT 300M OVC 600M (CLD SCT 1000FT OVC 2000FT) CLD OBSC VER VIS 150M (CLD OBSC VER VIS 500FT) CLD BKN TCU 270M (CLD BKN TCU 900FT) CLD RWY 08R BKN 60M RWY 26 BKN 90M (CLD RWY 08R BKN 200FT RWY 26 BKN 300FT) CLD /// CB ///M (CLD /// CB ///FT) CLD /// CB 400M (CLD /// CB 1200FT) CLD NCD
	Runway (O) ²	RWY nn[L] or RWY nn[C] or RWY nn[R]			
	Cloud amount (M) or vertical visibility (O) ⁹	FEW or SCT or BKN or OVC or /// ¹²	OBSC	NSC or NCD ¹²	
	Cloud type (C) ⁹	CB or TCU or /// ¹²	—		
	Height of cloud base or the value of vertical visibility (C) ⁹	n[n][n][n]M (or n[n][n][n]FT) or ///M (or ///FT) ¹²	[VER VIS n[n][n]M (or VER VIS n[n][n][n]FT)] or VER VIS ///M (or VER VIS ///FT) ¹²		
Air temperature (M)	Name of the element (M)	T			T17 TMS08
	Air temperature (M)	[MS]nn			
Dew-point temperature (M)	Name of the element (M)	DP			DP15 DPMS18
	Dew-point temperature (M)	[MS]nn			
Pressure values (M)	Name of the element (M)	QNH			QNH 0995HPA QNH 1009HPA QNH 1022HPA QFE 1001HPA QNH 0987HPA QFE RWY 18 0956HPA RWY 24 0955HPA
	QNH (M)	nnnnHPA			
	Name of the element (O)	QFE			
	QFE (O)	[RWY nn[L] or RWY nn[C] or RWY nn[R]] nnnnHPA [RWY nn[L] or RWY nn[C] or RWY nn[R]] nnnnHPA			
Supplementary information (C) ⁹	Significant meteorological phenomena (C) ⁹	CB or TS or MOD TURB or SEV TURB or WS or GR or SEV SQL or MOD ICE or SEV ICE or FZDZ or FZRA or SEV MTW or SS or DS or BLSN or FC ¹⁵			FC IN APCH WS IN APCH 60M-WIND 360/13MPS WS RWY 12 REFZRA CB IN CLIMB-OUT RETSRA
	Location of the phenomena (C) ⁹	IN APCH [n][n][n]M-WIND nnn/n[n]MPS] or IN CLIMB-OUT [n][n][n]M-WIND nnn/n[n]MPS] (IN APCH [n][n][n]FT-WIND nnn/n[n]KT) or IN CLIMB-OUT [n][n][n]FT-WIND nnn/n[n]KT) or RWY nn[L] or RWY nn[C] or RWY nn[R]			
	Recent weather (C) ^{9, 10}	RERASN or REFZDZ or REFZRA or REDZ or RE[SH]RA or RE[SH]SN or RESG or RESHGR or RESHGS or REBLSN or RESS or REDS or RETSRA or RETSSN or RETSGR or RETSGS or REFC or REPL or REUP ¹² or REFZUP ¹² or RETSUP ¹² or RESHUP ¹² or REVA or RETS			
Trend forecast (O) ¹⁶	Name of the element (M)	TREND			TREND NOSIG TREND BECMG FEW 600M (TREND BECMG FEW 2000FT) TREND TEMPO 250/18 MPS MAX25 (TREND TEMPO 250/36KT MAX50) TREND BECMG AT1800 VIS 10KM NSW TREND BECMG TL1700 VIS 800M FG TREND BECMG FM1030 TL1130 CAVOK TREND TEMPO TL1200 VIS 600M BECMG AT1230 VIS 8KM NSW CLD NSC
	Change indicator (M) ¹⁷	NOSIG	BECMG or TEMPO		
	Period of change (C) ⁹	FMnnnn and/or TLnnnn or ATnnnn			
	Wind (C) ⁹	nnn/[ABV]n[n][n]MPS [MAX[ABV]nn[n]] (or nnn/[ABV]n[n]KT [MAX[ABV]nn])			
	Visibility (C) ⁹	VIS n[n][n]M or VIS n[n]KM		C A V O K	
	Weather phenomenon: intensity (C) ⁹	FBL or MOD or HVY	—		

Element as specified in Chapter 4	Detailed content	Template(s)			Examples
	Weather phenomenon: characteristics and type (C) ^{9, 10, 11}	DZ <i>or</i> RA <i>or</i> SN <i>or</i> SG <i>or</i> PL <i>or</i> DS <i>or</i> SS <i>or</i> FZDZ <i>or</i> FZRA <i>or</i> SHGR <i>or</i> SHGS <i>or</i> SHRA <i>or</i> SHSN <i>or</i> TSGR <i>or</i> TSGS <i>or</i> TSRA <i>or</i> TSSN	FG <i>or</i> BR <i>or</i> SA <i>or</i> DU <i>or</i> HZ <i>or</i> FU <i>or</i> VA <i>or</i> SQ <i>or</i> PO <i>or</i> FC <i>or</i> TS <i>or</i> BCFG <i>or</i> BLDU <i>or</i> BLSA <i>or</i> BLSN <i>or</i> DRDU <i>or</i> DRSA <i>or</i> DRSN <i>or</i> FZFG <i>or</i> MIFG <i>or</i> PRFG		TREND TEMPO FM0300 TL0430 MOD FZRA TREND BECMG FM1900 VIS 500M HVY SNRA TREND BECMG FM1100 MOD SN TEMPO FM1130 BLSN TREND BECMG AT1130 CLD OVC 300M (TREND BECMG AT1130 CLD OVC 1000FT) TREND TEMPO TL1530 HVY SHRA CLD BKN CB 360M (TREND TEMPO TL1530 HVY SHRA CLD BKN CB 1200FT)
	Name of the element (C) ⁹	CLD			
	Cloud amount and vertical visibility (C) ^{9,14}	FEW <i>or</i> SCT <i>or</i> BKN <i>or</i> OVC	OBSC	NSC	
	Cloud type (C) ^{9,14}	CB <i>or</i> TCU	—		
	Height of cloud base <i>or</i> the value of vertical visibility (C) ^{9,14}	n[n][n][n] M (<i>or</i> n[n][n][n] FT)	[VER VIS n[n][n]M (<i>or</i> VER VIS n[n][n][n] FT)]		

Notes.—

1. Fictitious location.
2. Optional values for one or more runways.
3. Optional values for one or more sections of the runway.
4. To be included in accordance with 4.1.5.2 c).
5. To be included in accordance with 4.1.5.2 b) 1).
6. To be included if visibility or runway visual range < 1 500 m.
7. To be included in accordance with 4.3.6.4 d).
8. To be included in accordance with 4.3.6.4 c).
9. To be included whenever applicable.
10. One or more, up to a maximum of three groups, in accordance with 4.4.2.9 a), 4.8.1.1 and Appendix 5, 2.2.4.3.
11. Precipitation types listed under 4.4.2.3 a) may be combined in accordance with 4.4.2.9 c) and Appendix 5, 2.2.4.1. Only moderate or heavy precipitation to be indicated in trend forecasts in accordance with Appendix 5, 2.2.4.1.
12. For automated reports only.
13. Heavy used to indicate tornado or waterspout; moderate used to indicate funnel cloud not reaching the ground.
14. Up to four cloud layers in accordance with 4.5.4.3 e).
15. Abbreviated plain language may be used in accordance with 4.8.1.2.
16. To be included in accordance with Chapter 6, 6.3.2.
17. Number of change indicators to be kept to a minimum in accordance with Appendix 5, 2.2.1, normally not exceeding three groups.

Table A3-2. Template for METAR and SPECI

Key: M = inclusion mandatory, part of every message;
 C = inclusion conditional, dependent on meteorological conditions or method of observation;
 O = inclusion optional.

Note 1.— The ranges and resolutions for the numerical elements included in METAR and SPECI are shown in Table A3-5 of this appendix.

Note 2.— The explanations for the abbreviations can be found in the PANS-ABC (Doc 8400).

Element as specified in Chapter 4	Detailed content	Template(s)		Examples
Identification of the type of report (M)	Type of report (M)	METAR, METAR COR, SPECI <i>or</i> SPECI COR		METAR METAR COR SPECI
Location indicator (M)	ICAO location indicator (M)	nnnn		YUDO ¹
Time of the observation (M)	Day and actual time of the observation in UTC (M)	nnnnnZ		221630Z
Identification of an automated or missing report (C) ²	Automated <i>or</i> missing report identifier (C)	AUTO <i>or</i> NIL		AUTO NIL
END OF METAR IF THE REPORT IS MISSING.				
Surface wind (M)	Wind direction (M)	nnn	VRB	24004MPS (24008KT) 19006MPS (19012KT) 00000MPS (00000KT) 140P49MPS (140P99KT)
	Wind speed (M)	[P]nn[n]		VRB01MPS (VRB02KT)
	Significant speed variations (C) ³	G[P]nn[n]		12003G09MPS (12006G18KT) 24008G14MPS (24016G28KT)
	Units of measurement (M)	MPS (<i>or</i> KT)		
	Significant directional variations (C) ⁴	nnnVnnn	—	02005MPS 350V070 (02010KT 350V070)
Visibility (M)	Prevailing <i>or</i> minimum visibility (M) ⁵	nnnn		C 0350 CAVOK A 7000 V 9999 O 0800 K
	Minimum visibility and direction of the minimum visibility (C) ⁶	nnnn[N] <i>or</i> nnnn[NE] <i>or</i> nnnn[E] <i>or</i> nnnn[SE] <i>or</i> nnnn[S] <i>or</i> nnnn[SW] <i>or</i> nnnn[W] <i>or</i> nnnn[NW]		2000 1200NW 6000 2800E 6000 2800
Runway visual range (C) ⁷	Name of the element (M)	R		R32/0400
	Runway (M)	nn[L]/ <i>or</i> nn[C]/ <i>or</i> nn[R]/		R12R/1700 R10/M0050 R14L/P2000
	Runway visual range (M)	[P <i>or</i> M]nnnn		R16L/0650 R16C/0500 R16R/0450 R17L/0450
	Runway visual range past tendency (C) ⁸	U, D <i>or</i> N		R12/1100U R26/0550N R20/0800D R12/0700

<i>Element as specified in Chapter 4</i>	<i>Detailed content</i>	<i>Template(s)</i>			<i>Examples</i>		
Present weather (C) ^{2, 9}	Intensity <i>or</i> proximity of present weather (C) ¹⁰	– <i>or</i> +	—	VC			
	Characteristics and type of present weather (M) ¹¹	DZ <i>or</i> RA <i>or</i> SN <i>or</i> SG <i>or</i> PL <i>or</i> DS <i>or</i> SS <i>or</i> FZDZ <i>or</i> FZRA <i>or</i> FZUP ¹² <i>or</i> FC ¹³ <i>or</i> SHGR <i>or</i> SHGS <i>or</i> SHRA <i>or</i> SHSN <i>or</i> SHUP ¹² <i>or</i> TSGR <i>or</i> TSGS <i>or</i> TSRA <i>or</i> TSSN <i>or</i> TSUP ¹² <i>or</i> UP ¹²	FG <i>or</i> BR <i>or</i> SA <i>or</i> DU <i>or</i> HZ <i>or</i> FU <i>or</i> VA <i>or</i> SQ <i>or</i> PO <i>or</i> TS <i>or</i> BCFG <i>or</i> BLDU <i>or</i> BLSA <i>or</i> BLSN <i>or</i> DRDU <i>or</i> DRSA <i>or</i> DRSN <i>or</i> FZFG <i>or</i> MIFG <i>or</i> PRFG <i>or</i> // ¹²	FG <i>or</i> PO <i>or</i> FC <i>or</i> DS <i>or</i> SS <i>or</i> TS <i>or</i> SH <i>or</i> BLSN <i>or</i> BLSA <i>or</i> BLDU <i>or</i> VA	RA HZ VCFG +TSRA FG VCSH +DZ VA VCTS –SN MIFG VCBLA +TSRASN –SNRA DZ FG +SHSN BLSN UP FZUP TSUP FZUP //		
Cloud (M) ¹⁴	Cloud amount and height of cloud base <i>or</i> vertical visibility (M)	FEWnnn <i>or</i> SCTnnn <i>or</i> BKNnnn <i>or</i> OVCnnn <i>or</i> FEW/// ¹² <i>or</i> SCT/// ¹² <i>or</i> BKN/// ¹² <i>or</i> OVC/// ¹² <i>or</i> ///nnn ¹² <i>or</i> ////// ¹²	VVnnn <i>or</i> VV/// ¹²	NSC <i>or</i> NCD ¹²	FEW015 VV005 OVC030 VV/// NSC SCT010 OVC020 BKN/// ///015		
	Cloud type (C) ²	CB <i>or</i> TCU <i>or</i> /// ¹²	—		BKN009TCU NCD SCT008 BKN025CB BKN025/// ///CB		
Air and dew-point temperature (M)	Air and dew-point temperature (M)	[M]nn/[M]nn			17/10 02/M08 M01/M10		
Pressure values (M)	Name of the element (M)	Q			Q0995 Q1009 Q1022 Q0987		
	QNH (M)	nnnn					
Supplementary information (C)	Recent weather (C) ^{2, 9}	RERASN <i>or</i> REFZDZ <i>or</i> REFZRA <i>or</i> REDZ <i>or</i> RE[SH]RA <i>or</i> RE[SH]SN <i>or</i> RESG <i>or</i> RESHGR <i>or</i> RESHGS <i>or</i> REBLSN <i>or</i> RESS <i>or</i> REDS <i>or</i> RETSRA <i>or</i> RETSSN <i>or</i> RETSGR <i>or</i> RETSGS <i>or</i> RETS <i>or</i> REFC <i>or</i> REVA <i>or</i> REPL <i>or</i> REUP ¹² <i>or</i> REFZUP ¹² <i>or</i> RETSUP ¹² <i>or</i> RESHUP ¹²			REFZRA RETSRA		
	Wind shear (C) ²	WS Rnn[L] <i>or</i> WS Rnn[C] <i>or</i> WS Rnn[R] <i>or</i> WS ALL RWY			WS R03 WS ALL RWY WS R18C		
	Sea-surface temperature and state of the sea <i>or</i> significant wave height (C) ¹⁵	W [M]nn/Sn <i>or</i> W[M]nn/Hn[n][n]			W15/S2 W12/H75		

2. SPECIFICATIONS RELATED TO AIRMET INFORMATION

2.1 Format of AIRMET messages

2.1.1 The content and order of elements in an AIRMET message shall be in accordance with the template shown in Table A6-1A.

2.1.2 The sequence number referred to in the template in Table A6-1A shall correspond with the number of AIRMET messages issued for the FIR since 0001 UTC on the day concerned. The meteorological watch offices whose area of responsibility encompasses more than one FIR and/or CTA shall issue separate AIRMET messages for each FIR and/or CTA within their area of responsibility.

2.1.3 The FIR shall be divided in sub-areas, as necessary.

2.1.4 In accordance with the template in Table A6-1A, only one of the following phenomena shall be included in an AIRMET message, using the abbreviations as indicated below:

At cruising levels below flight level 100 (or below flight level 150 in mountainous areas, or higher, where necessary):

- | | |
|---|---|
| — surface wind speed | |
| — widespread mean surface
wind speed above 15 m/s (30 kt) | SFC WIND
(+ wind, direction, speed and units) |
| — surface visibility | |
| — widespread areas affected
by reduction of visibility to less than
5 000 m, including the weather
phenomenon causing the reduction
of visibility | SFC VIS
(+ visibility)
(+ one of the following weather phenomena or combinations
thereof: BR, DS, DU, DZ, FC, FG, FU, GR, GS, HZ, PL, PO,
RA, SA, SG, SN, SQ, SS or VA) |
| — thunderstorms | |
| — isolated thunderstorms
without hail | ISOL TS |
| — occasional thunderstorms
without hail | OCNL TS |
| — isolated thunderstorms
with hail | ISOL TSGR |
| — occasional thunderstorms
with hail | OCNL TSGR |
| — mountain obscuration | |
| — mountains obscured | MT OBSC |
| — cloud | |
| — widespread areas of broken
or overcast cloud with
height of base less than
300 m (1 000 ft)
above ground level: | |
| — broken | BKN CLD (+ height of the base and top and units) |
| — overcast | OVC CLD (+ height of the base and top and units) |

— cumulonimbus clouds which are:	
— isolated	ISOL CB
— occasional	OCNL CB
— frequent	FRQ CB
— towering cumulus clouds which are:	
— isolated	ISOL TCU
— occasional	OCNL TCU
— frequent	FRQ TCU
— icing	
— moderate icing (except for icing in convective clouds)	MOD ICE
— turbulence	
— moderate turbulence (except for turbulence in convective clouds)	MOD TURB
— mountain wave	
— moderate mountain wave	MOD MTW

2.1.5 AIRMET information shall not contain unnecessary descriptive material. In describing the weather phenomena for which the AIRMET is issued, no descriptive material additional to that given in 2.1.4 shall be included. AIRMET information concerning thunderstorms or cumulonimbus clouds shall not include references to associated turbulence and icing.

Note.— The specifications for SIGMET information which is also applicable to low-level flights are given in 1.1.4.

2.1.6 **Recommendation.**— Until 4 November 2020, AIRMET information should be disseminated in IWXXM GML form in addition to the dissemination of AIRMET information in accordance with 2.1.1.

2.1.6 As of 5 November 2020, AIRMET information shall be disseminated in IWXXM GML form in addition to the dissemination of AIRMET information in accordance with 2.1.1.

Note.— The technical specifications for IWXXM are contained in the Manual on Codes (WMO-No. 306), Volume I.3, Part D — Representation Derived from Data Models. Guidance on the implementation of IWXXM is provided in the Manual on the Digital Exchange of Aeronautical Meteorological Information (Doc 10003).

2.2 Dissemination of AIRMET messages

2.2.1 **Recommendation.**— AIRMET messages should be disseminated to meteorological watch offices in adjacent FIRs and to other meteorological watch offices or aerodrome meteorological offices, as agreed between the meteorological authorities concerned.

2.2.2 **Recommendation.**— AIRMET messages should be transmitted to international operational meteorological databanks and the centres designated by regional air navigation agreement for the operation of aeronautical fixed service Internet-based services, in accordance with regional air navigation agreement.