

Non-Federal AWOS A/V Connection to the WMSCR



Federal Aviation
Administration

Presented to:

By:

Date:

FAA Policy on AWOS Connection to WMSCR

- **FAA Order 7900.5, Surface Weather Observing**
 - Requires a Complete, all Elements Certified METAR (Aviation Routine Weather Reporting) for Long-Line Dissemination of Aviation Weather
 - Mandatory METAR Elements consist of-type of report, station ident, date and time, wind, visibility, sky condition, temperature, dewpoint and altimeter
 - Mandatory METAR Elements = FAA AWOS-III



FAA Policy on AWOS Connection to WMSCR

- **Advisory Circular (AC) 150/5220-16, AWOS for Non-Federal Applications**
 -type certified, commissioned AWOS III and AWOS IV (may) be disseminated by the FAA nationally.....
 - connection type can be via an approved third party vendor or the state approved (e.g. NASAO) interface who provide connection to the Weather Message Switching Center Replacement (WMSCR) for type certified, commissioned AWOS III or IV systems.....



Government Wide Policy

- **Federal Meteorological Handbook No.1 (FMH-1), Surface Weather and Reports**
 -the DOT's Federal Aviation Administration (FAA), as the agency responsible for safe operation of aircraft and efficient use of the Nation's airspace system, has the role of establishing requirements for, and disseminating aviation weather data to airspace users.



International Civil Aviation Organization (ICAO)

- **FAA is Committed to Complying with ICAO Standards**
 - ICAO Annex 3, Meteorological Service for International Air Navigation –
 - 4.3.2 Reports of routine observations shall be issued as:
 - a) local routine reports, only for dissemination at the aerodrome (airport) of origin (intended for arriving and departing aircraft)
 - b) METAR for dissemination beyond the aerodrome (airport) of origin.....



ICAO Annex-3 METAR Template

Appendix 3

Annex 3 — Meteorological Service for International Air Navigation

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 Procedures for Air Navigation Services — ICAO Abbreviations and Codes (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 or 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 or missing report identifier (C)	AUTO or NIL	AUTO NIL
END OF METAR IF THE REPORT IS MISSING.			
Surface wind (M)	Wind direction (M)	nnn	24004MPS (24008KT) 19006MPS (19012KT) 00000MPS (00000KT) 140P149MPS (140P99KT) 12003G09MPS (12006G18KT) 24008G14MPS (24016G28KT) 02005MPS 350V070 (02010KT 350V070)
	Wind speed (M)	[P]nn[n]	
	Significant speed variations (C) ³	G[P]nn[n]	
	Units of measurement (M)	MPS (or KT)	
	Significant directional variations (C) ⁴	nnnVnnn	—
Visibility (M)	Prevailing or minimum visibility (M) ⁵	nnnn	0350 7000 9999 0800 2000 1200NW 6000 2800E 6000 2800
	Minimum visibility and direction of the minimum visibility (C) ⁶	nnnn[N] or nnnn[NE] or nnnn[E] or nnnn[SE] or nnnn[S] or nnnn[SW] or nnnn[W] or nnnn[NW]	
RVR (C) ⁷	Name of the element (M)	R	R32/0400 R12R/1700 R10/M0050 R14L/P2000 R16L/0650 R16C/0500 R16R/0450 R17L/0450 R20/0700V1200 R19/0350VP1200
	Runway (M)	nn[L]/or nn[C]/ or nn[R]/	
	RVR (M)	[P or M]nnnn	
	RVR variations (C) ⁸	V[P or M]nnnn	
		C A V O K	CAVOK

APP 3-23

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Federal Aviation
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ICAO Annex 3

- **Does not Set Standards for Certification of Automated Weather Systems by Member States (Nations)**
 - Responsibility of Member States
- **Does not Designate Names, Categories or Classification of AWOS**
 - None of the FAA AWOS Classifications (AWOS-A, A/V, I, II, III, IV, etc) are recognized by ICAO.



ICAO Under Annex 3

- **Does Recognize Aviation Weather for Use at the Local Aerodrome (airport)**
 - Can be Anything the Member State Has Certified and Designated
- **Sets Standards for (Long-Line) Dissemination of Weather Beyond the Local Aerodrome**
 - Must be a Complete METAR
 - Complete METAR = FAA Designated, Certified and Commissioned AWOS-III or Greater- AWOS-IIIP, AWOS-IIIT, AWOS-IIIP/T, AWOS-IV

