Approved Non-Federal AWOS List of Systems and Manufacturers as of October 30, 2023

This list identifies manufacturers that provide approved non-federal AWOS systems. Systems not shown on this list are not approved by the FAA and are not FAA approved sources of automated aviation weather information. Different types of flight operations require specific approved weather information. Please make sure the selected non-federal AWOS supports the flight operations conducted at your airport.

This list will be updated as needed. It may not be used as the means for determining whether bidders are responsive. Airport sponsors and consultants must verify with the FAA the current list of approved non-federal AWOS manufacturers and systems when preparing bid documents. (Printed/downloaded copies of this list are not valid for procurement purposes.)

Prospective owners wanting to install an AWOS system and their consultants, should coordinate their plans with the FAA Service Center Non-Federal Program Implementation Manager (PIM), follow the procedures they provide and become familiar with the current revisions of:

- FAA Advisory Circular 150/5220-16, Automated Weather Observing Systems (AWOS) for Non-Federal Applications,
- FAA Order 6560.20, FAA Siting Criteria for Automated Weather Observing Systems,
- FAA Order 6700.20, Approval, Operation, and Oversight of Non-federal Systems,
- The FAA 7460-1 obstruction approval process,
- The VHF frequency assignment process before starting to acquire or install a nonfederal AWOS.

Further information concerning non-federal AWOS standards, and the FAA approval process may be obtained from the Non-Federal-Program@faa.gov.

This table identifies the AWOS manufacturers with systems approved by the FAA and which of their models have FAA approval for use in the National Airspace System (NAS).

Manufacturer	Model
All Weather, Inc.	AWOS 3000, AWOS 900 ⁶
Optical Scientific, Inc., (formerly Belfort Instrument)	OSI AWOS
Mesotech International	AWA ⁵
DBT Transportation Services LLC	F1STA, VC/VD ⁶ , AW20 ⁶

The following table provides the approved AWOS configurations currently available for purchase, and a detailed description of the data provided. It also shows the configurations each available model supports.

Non-Federal AWOS System Definitions ¹	Approved Data ²	AWOS 3000	OSI AWOS	AWA ⁵	F1STA
AWOS A	Altimeter setting	X	X	X	Х
AWOS A / V	Altimeter setting, visibility	X ⁴	X ⁴	X ⁴	X ⁴

AWOS I	Wind speed, wind direction, wind	Х	X	Х
	gust, variable wind direction,			
	temperature, dew point, altimeter			
	setting, and density altitude			
AWOS II	Same as AWOS I plus	X	X	Χ
	visibility, and variable visibility			
AWOS III ³	Same as AWOS II plus	X	X	Χ
	precipitation accumulation, cloud			
	height, and sky condition			
AWOS III P ³	Same as AWOS III plus	X	X	Χ
	present weather identification			
AWOS III T ³	Same as AWOS III plus	X	X	Χ
	thunderstorm/lightning reporting			
AWOS III P/T ³	Same as AWOS III plus	X	X	Χ
	present weather identification and			
	thunderstorm/lightning reporting			
AWOS IV Z ³	Same as AWOS III P/T plus	X	X	
	freezing rain detection			
AWOS IV R ³	Same as AWOS III P/T plus			
	runway surface condition			
AWOS IV Z/R ³	Same as AWOS III P/T plus			
	freezing rain detection and			
	runway surface condition			

The following table provides a list of systems that still have FAA approval to operate in the NAS; however, they are no longer available for purchase as new systems.

Non-Federal AWOS System Definitions ¹	AWOS 900 ⁶	VC/VD ⁶	AW20 ⁶
AWOS A	X	X	X
AWOS A / V	X ⁴	X ⁴	X ⁴
AWOS I	X	X	Χ
AWOS II	X	X	X
AWOS III ³ ; AWOS III P ³ ; AWOS III T ³ ; AWOS III P/T ³	Х	Χ	Χ
AWOS IV Z ³	X	Χ	Χ
AWOS IV R ³ ; AWOS IV Z/R ³		Х	

Notes:

- 1. These system definitions are based on information found in FAA Advisory Circular 150/5220-16, Automated Weather Observing Systems (AWOS) For Non-Federal Applications. This AC also contains site location and implementation criteria that must be adhered to before the installed system can be commissioned and become an approved source of aviation weather information. It also contains maintenance, annual inspection and personnel criteria that must be met throughout the system's life cycle in order for the system to continue to be an approved source of aviation weather information.
- 2. In addition to providing the identified weather information based on its configuration, AWOS systems may also provide additional "Advisory" information.
 - Advisory weather parameters are not verified or approved by the FAA.
 - Advisory parameters may not adhere to the criteria (definitions, accuracy, reliability, etc.) identified in FAA Advisory Circular 150/5220-16.

- Advisory sensors may not be properly located in accordance with the siting criteria, FAA Order 6560.20, hence the weather information they provide may not be representative of prevailing conditions encountered by aircraft.
- Any unapproved weather information (measured or calculated), e.g., density altitude
 or wind speed and direction on an AWOS A system, is advisory and must be clearly
 identified as such and preceded by the word, "Advisory" in all automated verbal
 transmissions (radio or phone line).
- 3. In accordance with the current revision of FAA Advisory Circular 150/5220-16, only non-federal AWOS systems meeting the AWOS III (or better) criteria may be eligible for FAA long-line dissemination of approved weather information (i.e. METAR information) nationally via the FAA network. Please refer to the advisory circular as additional criteria do apply.
- 4. The AWOS-II is also approved to provide AWOS-A/V information (altimeter setting and visibility).
- 5. Mesotech refers to each model AWA configuration as follows:

AWOS-A and -A/V : AWA-A
AWOS-I : AWA-10
AWOS-III : AWA-20
AWOS-III P : AWA-30P
AWOS-III T : AWA-30T
AWOS-III PT : AWA-30PT
AWOS-IV Z : AWA-40Z

6. While these systems still have FAA approval to operate in the NAS, they are no longer available for purchase as new systems.