

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**CHAPTER 26 AVIATION WEATHER REGULATORY REQUIREMENTS****Section 3 Adverse Weather Phenomena Reporting and Forecast Systems**

3-2091 BACKGROUND. Adverse weather phenomena are meteorological conditions that, if encountered during flight or ground operations, could reduce and even threaten the safety of those operations. All certificate holders conducting Title 14 of the Code of Federal Regulations (14 CFR) part 121 operations that have a Federal Aviation Administration (FAA)-approved ground deicing/anti-icing program in accordance with part 121, § 121.629 must have an FAA-approved system of obtaining reports and forecasts of the adverse weather phenomena that could result in icing conditions on the ground. Certificate holders conducting part 121 domestic and flag operations are required to have an FAA-approved system for obtaining forecasts and reports of all adverse weather phenomena, in accordance with § 121.101(d). These systems are referred to as adverse weather phenomena reporting and forecast systems. These weather systems are optional for certificate holders and program managers conducting 14 CFR parts 91 subpart K (part 91K), 125, and 135 operations. However, since these certificate holders and program managers do have some requirement to either obtain reports and forecasts of adverse weather phenomena, or at least recognize such phenomena (refer to Volume 3, Chapter 26, Section 1), the information contained in this section may also apply.

3-2092 SCOPE. The information contained in this section is mostly directed toward principal operations inspectors (POI) with oversight responsibility of certificate holders conducting part 121 domestic and flag operations. POIs of certificate holders and program managers conducting parts 91K, 121 supplemental, 125, and 135 operations should review this information and encourage the certificate holders and program managers for which they are responsible to adopt the policies contained herein.

3-2093 ADDITIONAL GUIDANCE. Volume 3, Chapter 26, Section 1 contains information regarding the general regulatory requirements for adverse weather phenomena reporting and forecast systems and forecasts and reports of adverse weather phenomena. Volume 3, Chapter 26, Section 2 contains information regarding approved sources of forecasts and reports of adverse weather phenomena. POIs must review this information before approving an adverse weather phenomena reporting and forecast system and any source of forecasts and reports of adverse weather phenomena.

3-2094 GENERAL. An adverse weather phenomenon reporting and forecast system must contain methods through which a certificate holder obtains, maintains, and disseminates information regarding adverse weather phenomena. In accordance with § 121.135(b)(15), all certificate holders conducting part 121 operations must document and describe their procedures for operating during any potentially hazardous meteorological conditions; therefore, a certificate holder must describe its adverse weather phenomena reporting system, as the means of obtaining information regarding hazardous meteorological conditions, in its manual.

3-2095 ADVERSE WEATHER PHENOMENA. Adverse weather phenomena are meteorological conditions that, if encountered during ground or flight operations, could directly

diminish and even threaten the safety of those operations. At a minimum, the FAA considers the following meteorological conditions to be adverse weather phenomena.

- Clear air turbulence,
- Strong surface winds (exceeding 30 knots),
- Low-level wind shear,
- Thunderstorms,
- Moderate or severe in-flight icing,
- Icing which affects ground operations (including snow, freezing rain, drizzle, ice, fog, or sleet),
- Meteorological conditions that contaminate a runway or takeoff surface and adversely affect aircraft performance,
- Sandstorms and duststorms,
- Cyclones, hurricanes, typhoons, and tropical storms, and
- Natural hazards such as volcanic ash.

3-2096 CAPABILITIES OF AN ADVERSE WEATHER PHENOMENA REPORTING AND FORECAST SYSTEM. An adverse weather phenomena reporting and forecast system must include the following.

A. Access. Each adverse weather phenomena reporting and forecast system must provide direct and timely access to sources of weather information capable of identifying, reporting, and forecasting adverse weather phenomena that could directly diminish and/or threaten the safety of flight or ground operations.

B. Collection and Evaluation. Each adverse weather phenomena reporting and forecast system must have methods, policies, and procedures for the collection and evaluation of adverse weather phenomena and its effects on flight and ground operations.

C. Dissemination. Each adverse weather phenomena reporting and forecast system must have a means of quickly disseminating information regarding adverse weather phenomena to flightcrews, dispatchers, and other persons authorized to exercise operational control.

D. Continuous Updating. Each adverse weather phenomena reporting and forecast system must have methods of providing flightcrews, dispatchers, and persons authorized to exercise operational control with continuous updates regarding adverse weather phenomena as it develops and changes.

E. Continuous Monitoring. In order to ensure continuous updating, each adverse weather phenomena reporting and forecast system must have a means whereby weather phenomena is continuously monitored by a certificated aircraft dispatcher (or other person authorized to exercise operational control if the system is being adopted voluntarily by a certificate holder/program manager who conducts part 91K, 121 supplemental, or 135 operations).

F. Pilot Weather Reports (PIREP) and Aircraft Weather Reports (AIREP). Each adverse weather reporting and forecast system must have a means of disseminating PIREPs and AIREPs when reported by aircraft of a similar type and size.

G. Location of Phenomena. Each adverse weather phenomena reporting and forecast system must have a means to provide and/or describe the location of adverse weather phenomena with reference to navigational fixes or aircraft relative position.

H. Operating Procedures. Each adverse weather phenomena reporting and forecast system must have procedures for operating in areas affected by adverse weather phenomena in order to comply with § 121.135(b)(15).

I. Communication. Each adverse weather phenomena reporting and forecast system should contain methods for flightcrews and dispatchers (or other persons authorized to exercise operational control) to communicate with each other regarding areas of adverse weather phenomena.

J. Restrict or Suspend Operations. Each adverse weather phenomena reporting and forecast system must contain policies and procedures for certificate holders, pilots, dispatchers, or other persons authorized to exercise operational control to restrict or suspend flight and/or ground operations when adverse weather phenomena presents a threat to the safety of those operations.

K. Quality Control (QC) and Quality Assurance (QA). Each adverse weather phenomena reporting and forecast system should contain methods to ensure that each certificate holder maintains the quality and accuracy of the information provided.

3-2097 APPROVAL. Certificate holders conducting part 121 domestic and flag operations are required to have an FAA-approved adverse weather phenomena reporting and forecast system in order to comply with § 121.101(d). (Certificate holders conducting part 121 supplemental operations must have an FAA-approved system of obtaining reports and forecast of adverse weather phenomena that could result in icing conditions on the ground.) POIs with oversight responsibility over these certificate holders may grant approval of an adverse weather phenomena reporting and forecast system in the appropriate table (Table 1) located in a certificate holder's operations specification (OpSpec) A010. For more information on OpSpec A010, refer to Volume 3, Chapter 18, Section 3. POIs must ensure that certificate holders requesting approval of an adverse weather phenomena reporting and forecast system do so in writing in accordance with Volume 3, Chapter 1, Section 1. Each request must describe the proposed system in sufficient detail for the POI to conduct a thorough evaluation of the proposal and decide if it warrants approval. Each request must be accompanied by all proposed manual materials.

A. Adverse Weather Phenomena Reporting and Forecast System Combined with an Enhanced Weather Information System (EWINS). Certificate holders have the option to fulfill the requirements of § 121.101(d) by obtaining and maintaining an FAA-approved EWINS. POIs of certificate holders who desire this option may go directly to Volume 3, Chapter 26, Section 4 for detailed guidance regarding EWINS.

B. Adverse Weather Phenomena Reporting and Forecast System Without an EWINS. POIs of certificate holders that do not desire an EWINS but are required to have an adverse weather phenomena reporting and forecast system may approve weather sources for that system in accordance with the guidance contained in Volume 3, Chapter 26, Section 2, subparagraphs 3-2072A and B. When approving an adverse weather phenomena reporting and forecast system that is not combined with an EWINS, POIs must evaluate the material submitted by the certificate holder along with their request for approval and ensure it complies with the requirements of this section.

C. Manual Requirements. Certificate holders who are required to have an FAA-approved adverse weather phenomena reporting and forecast system that do not have an EWINS must describe the details of the adverse weather phenomena reporting and forecast system in their manual system as a condition for approval.

1) Any component that comprises the adverse weather phenomena reporting and forecast system is subject to FAA approval; therefore, the details as described in a certificate holder's manual are subject to FAA approval.

2) If a certificate holder elects to include its adverse weather phenomena reporting and forecast system in a manual that is typically accepted, rather than approved, by the FAA (e.g., a dispatch or operations manual), the portion of the manual that contains the adverse weather phenomena reporting and forecast system is still subject to FAA approval.

3) POIs of certificate holders who elect to describe the details of their adverse weather phenomena reporting and forecast system in a section of an FAA-accepted manual must verify that the certificate holder has a means of distinguishing the section of the manual containing the description of the adverse weather phenomena reporting and forecast system as being FAA-approved rather than FAA-accepted.

4) Any revisions to a certificate holder's FAA-approved adverse weather phenomena reporting and forecast system are subject to approval by the POI. Once approved, the POI will update the adverse weather phenomena reporting and forecast system table located in OpSpec A010 to reflect the current revision information.

NOTE: POIs of part 121 certificate holders must ensure that an aviation safety inspector (ASI)-aircraft dispatcher (AD) evaluates the certificate holder's adverse weather phenomena reporting and forecast system and the applicable policies, procedures, and processes prior to approval or revision of that system. If there is no ASI-AD resource available in the certificate-holding district office (CHDO), the POI should contact the regional Flight Standards division (RFSD) for assistance in locating an ASI-AD within the region. If the RFSD is unable to locate an ASI-AD resource, then the RFSD should request assistance from the Air Transportation Division (AFS-200) in locating an ASI-AD, or to provide the necessary subject matter expertise.

RESERVED. Paragraphs 3-2098 through 3-2115.