

VOLUME 3 GENERAL TECHNICAL ADMINISTRATION**CHAPTER 26 AVIATION WEATHER REGULATORY REQUIREMENTS****Section 1 Safety Assurance System: Approved Weather Sources and Specific Regulatory Requirements—Parts 91K, 121, 125, and 135****3-2046 GENERAL.**

A. Purpose. This chapter contains policy, guidance, and information regarding Title 14 of the Code of Federal Regulations (14 CFR) regulatory requirements for weather. This chapter also provides information concerning the sources for obtaining weather reports and forecasts that are used by program managers, certificate holders, and Letter of Deviation Authority (LODA) holders conducting aircraft operations in accordance with 14 CFR parts 91 subpart K (part 91K), 121, 125, and 135. This section is related to Safety Assurance System (SAS) Elements 3.3.1, (OP) Operational Control, and 3.3.2, (OP) Dispatch Flight Release.

B. Chapter Layout. This chapter comprises six sections. Volume 3, Chapter 26, Sections 1 through 4 are designed as a suite of documents that are meant to be viewed sequentially. Volume 3, Chapter 26, Sections 1 and 2 contain both general and specific regulatory requirements, while Volume 3, Chapter 26, Sections 3 and 4 discuss specific systems of obtaining weather information. Volume 3, Chapter 26, Section 5, contains guidance for the use of Flight Information Services (FIS) and Volume 3, Chapter 26, Section 6, discusses Notices to Airmen (NOTAM).

C. Scope. This chapter applies to principal operations inspectors (POI) and aviation safety inspectors (ASI) with oversight responsibility of part 91K program managers and certificate holders conducting operations in accordance with parts 121, 125, and 135, as well as part 125 LODA holders. This section focuses on approved weather sources and specific regulatory requirements, including those applicable to reports and forecasts of adverse weather phenomena. A list of commonly used aviation weather acronyms is also provided. See Table 3-106, Acronyms Common to Aviation Weather.

3-2047 REFERENCES (current editions):

- Parts 91K, 121, 125, and 135.
- Federal Aviation Administration (FAA) Order 8900.1, Flight Standards Information Management System (FSIMS).
- Volume 3, Chapter 18, Section 3, Part A Operations Specifications—General, Operations Specification (OpSpec)/Management Specification (MSpec) A010, Aviation Weather Information.
- Volume 3, Chapter 26, Section 1, Safety Assurance System: Approved Weather Sources and Specific Regulatory Requirements—Parts 91K, 121, 125, and 135.
- Volume 3, Chapter 26, Section 2, Safety Assurance System: Regulatory Sources of Aviation Weather Information and Aviation Weather Information Systems—Parts 91K, 121, and 135.

- Volume 3, Chapter 26, Section 3, Safety Assurance System: Adverse Weather Phenomena Reporting and Forecast Systems.
- Volume 3, Chapter 26, Section 4, Enhanced Weather Information Systems.
- Volume 3, Chapter 26, Section 5, Use of Flight Information Services on the Flight Deck – Parts 91K, 121, and 135.
- Volume 3, Chapter 26, Section 6, Notices to Airmen.
- Advisory Circular (AC) 00-6, Aviation Weather for Pilots and Flight Operations Personnel.
- AC 00-24, Thunderstorms.
- AC 00-30, Atmospheric Turbulence Avoidance.
- AC 00-45, Aviation Weather Services.
- AC 00-54, Pilot Windshear Guide.
- AC 00-63, Use of Cockpit Displays of Digital Weather and Aeronautical Information.
- Federal Meteorological Handbook No. 1 (FMH-1).

3-2048 APPROVED WEATHER SOURCES. Title 14 CFR contains regulatory requirements for certificate holders and program managers to have adequate weather reporting facilities and to use approved sources of weather reports and forecasts to control flight operations. There are also requirements for certificate holders and program managers to have a system or method of obtaining reports and forecasts of adverse weather phenomena. Title 14 CFR typically refers to three sources of weather reporting facilities, weather reports, and weather forecasts.

A. U.S. National Weather Service (NWS). The NWS provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas. Operations outside of the jurisdiction of the NWS require a weather source approved by the Administrator (see Volume 3, Chapter 26, Section 2, subparagraphs 3-2073B and 3-2073C).

1) The Weather Bureau. Some regulations contained in 14 CFR (e.g., part 121, § 121.119) contain references to “the Weather Bureau.” After these regulations were written, the U.S. Weather Bureau became the NWS. The term “Weather Bureau” is not used in the present day; however, 14 CFR still contains the term in some instances. All references to “the Weather Bureau” are in fact referring to the NWS.

2) The National Oceanic and Atmospheric Administration (NOAA). NOAA is a scientific agency within the U.S. Department of Commerce (DOC). NOAA focuses on the conditions of the ocean and the atmosphere. NOAA is comprised of several organizations referred to as “line offices.” The NWS is one such line office. Title 14 CFR does not refer to NOAA directly; however, the FAA considers information provided by NOAA as being the equivalent of that provided by the NWS for the purpose of satisfying the requirements of 14 CFR.

B. Sources Approved by the NWS. The sources approved by the NWS are actually approved in agreement with, and maintained in collaboration with the FAA. The collaboration between the FAA and the NWS is outlined in the current edition of FAA Order 7000.2, FAA/NWS Memorandum of Understanding for Policy Agreements. The NWS/FAA-approved

and/or maintained sources are listed below and are discussed further in Volume 3, Chapter 26, Section 2:

- NWS offices (including contract observatories).
- Flight Service Stations (FSS).
- Automated surface observing system (ASOS).
- Automated Weather Observing System (AWOS).
- Supplementary Aviation Weather Reporting System (SAWRS).
- Limited Aviation Weather Reporting Stations (LAWRS).
- Non-Federal Observation (NF-OBS) Program.

C. Sources Approved By the Administrator. Examples of sources approved by the Administrator appear below. Several of these sources are discussed in greater detail throughout this chapter:

- The NWS for those United States and its territories located outside of the 48 contiguous United States.
- U.S. and North Atlantic Treaty Organization (NATO) military observing and forecasting sources.
- Members of the World Meteorological Organization (WMO) (http://www.wmo.int/pages/index_en.html).
- Active meteorological offices operated by a foreign state that subscribes to the standards and practices of the International Civil Aviation Organization (ICAO) conventions. (These meteorological offices are normally listed in the meteorology information (MET) tables located in ICAO Regional Air Navigation Plans (ANP). The Aeronautical Information Publication (AIP) of individual states also lists active meteorological offices for that state.)
- ICAO Member State authorized meteorological station or automated observation.
- Weather products produced by an Enhanced Weather Information System (EWINS).
- Pilot Weather Reports (PIREP) provided by aircraft of similar speed and performance.
- Aircraft Reports (AIREP) provided by aircraft of similar speed and performance.

3-2049 REPORTS AND FORECASTS OF ADVERSE WEATHER PHENOMENA.

Adverse weather phenomena are meteorological conditions that, if encountered during flight or ground operations, could reduce and even threaten the safety of those operations. Examples of adverse weather phenomena include, but are not limited to:

- Thunderstorms,
- Icing,
- Low-altitude wind shear,
- Turbulence,
- Natural hazards such as volcanic ash, and
- Any meteorological condition that could cause contamination of a runway or other takeoff surface and directly affect aircraft performance.

3-2050 SPECIFIC REGULATORY REQUIREMENTS.

A. Regulatory Requirements—Part 91K.

1) **Weather Reporting Facilities.** Part 91, § 91.1039 requires pilots of a part 91K program aircraft operating a part 91K program flight, under instrument flight rules (IFR), to use weather reporting facilities that are operated by the following entities:

- The NWS,
- A source approved by the NWS, or
- A source approved by the Administrator.

2) **Reports and Forecasts of Adverse Weather Phenomena.** Part 91K program managers must ensure that pilots of program aircraft operating program flights are able to obtain reports and forecasts of adverse weather phenomena that could affect the safety of flight. POIs of these program managers should be able to verify that each program manager has a method of ensuring this information is available to pilots.

a) **Reports and Forecasts of Icing.** Section 91.527 contains requirements for ensuring that no airplane is taken off with frost, ice, or snow adhering to a critical surface, and that no aircraft is operated into known or forecast icing conditions. Therefore, a pilot of a part 91K program aircraft operating a program flight must have a method of obtaining reports and forecasts of icing conditions on the ground and en route in order to ensure the safety of flight and ground operations, and to ensure operations are conducted within the requirements set forth by § 91.527.

b) **Manual and Airport Analysis Requirements for Large Transport Category Aircraft.**

1. Section 91.1037 contains certain takeoff and landing limitations for large transport category aircraft operating on program flights. Section 91.1037(c) contains a provision that would allow a program manager or other person flying a turbine-engine-powered large transport category airplane on a program flight to takeoff at a greater weight under certain circumstances, provided the airplane is operated in accordance with an approved destination airport analysis contained in the program operating manual. The destination airport analysis must contain the elements specified by § 91.1025(o), which sets forth requirements for program operating manuals. The destination airport analysis must be supported by aircraft performance data supplied by the aircraft manufacturer for the appropriate runway condition. The airport analysis must contain, in pertinent part:

- Runway conditions (including contamination),
- Airport or area weather reporting,
- Environmental conditions, and
- Any criteria that affect aircraft performance.

2. In order to determine runway conditions and aircraft performance capability based on the destination airport analysis, a person flying a turbine-engine-powered

large transport category airplane on a program flight must be able to obtain reports and forecasts of adverse weather phenomena that could affect aircraft performance (e.g., low pressure, downdrafts, and microburst associated with thunderstorms) and cause runway contamination (e.g., snow (dry and wet), ice, slush, or standing water).

B. Regulatory Requirements—Part 121 Domestic and Flag Operations.

1) Weather Reporting Facilities. Section 121.101(a) requires each certificate holder conducting domestic or flag operations to show that enough weather reporting services are available along each route to ensure weather reports and forecasts necessary for each flight are available.

2) Sources of Weather Reports and Forecasts. Section 121.101 requires a certificate holder to use the following sources for weather reports and forecasts:

a) For operations within the 48 contiguous United States and the District of Columbia, § 121.101(b)(1) requires a certificate holder to use weather reports prepared by the NWS or a source approved by the NWS.

b) For operations outside the 48 contiguous United States and the District of Columbia, § 121.101(b)(2) requires a certificate holder to use weather reports prepared by a source approved by the Administrator.

c) For reports and forecasts of adverse weather phenomena, § 121.101(d) requires each certificate holder conducting domestic or flag operations to have an approved system for obtaining forecasts and reports of adverse weather phenomena that may affect the safety of flight. Weather sources used in that system must be approved by the Administrator.

d) For forecasts to control flight movement, § 121.101(c) requires each certificate holder who conducts domestic or flag operations and uses forecasts to control flight movement to base those forecasts on the following sources:

- Weather reports prepared by the NWS or a source approved by the NWS;
- Weather reports prepared by a source approved by the Administrator if operating outside the United States; and
- Weather reports prepared by a source approved as part of a certificate holder's system of obtaining reports and forecasts of adverse weather phenomena.

3) Approved System of Obtaining Reports and Forecasts of Adverse Weather Phenomena. In accordance with § 121.101(d), certificate holders conducting part 121 domestic and/or flag operations must have an FAA-approved system of obtaining reports and forecasts of adverse weather phenomena. Each FAA-approved adverse weather phenomena reporting and forecast system must provide reports and forecasts of all adverse weather phenomena that could affect the safety of flight. Each system must contain procedures for collecting and disseminating this information to pilots and Aircraft Dispatchers. In addition, these systems are necessary to ensure the safety of flight and to ensure compliance with the regulatory requirements outlined in

subparagraphs a)–e) listed below. (Adverse weather phenomena reporting and forecast systems are discussed in greater detail in Volume 3, Chapter 26, Section 3.)

a) Aircraft Dispatcher Familiarity with Weather Conditions. An adverse weather reporting and forecast system is necessary to ensure that an Aircraft Dispatcher has information regarding all adverse weather phenomena along the route of each flight the dispatcher is responsible for.

b) Aircraft Dispatcher Information to the Pilot in Command (PIC). An Aircraft Dispatcher must provide the PIC with all information regarding adverse weather phenomena, in accordance with the requirements of § 121.601.

1. Before the flight begins (the aircraft departs (pushes back or taxis) from the departing gate or ramp area), the Aircraft Dispatcher must provide the PIC with all available weather reports and forecasts of weather phenomena that may affect the safety of flight, including adverse weather phenomena, such as Clear Air Turbulence (CAT), thunderstorms, and low altitude wind shear, for each route to be flown and each airport to be used.

2. During a flight, the Aircraft Dispatcher must provide the PIC with any additional available information of meteorological conditions (including adverse weather phenomena, such as CAT, thunderstorms, and low altitude wind shear) and irregularities of facilities and services that may affect the safety of the flight.

3. The regulatory requirements of § 121.601 are *not* satisfied if the PIC simply obtains this information on his or her own. The information must specifically be provided by the Aircraft Dispatcher who shares the authority for operational control of the flight along with the PIC. The Aircraft Dispatcher must provide this information to the PIC throughout the duration of the flight. This includes the preflight planning phase of the flight as well as the initiation, continuation, and completion of the flight. Principal inspectors (PI) and ASIs should be aware that, throughout the duration of a flight, there could be more than one dispatcher who exercises operational control as the flight progresses. It is not uncommon for one dispatcher to conduct the preflight planning while another dispatcher assumes operational control (along with the PIC) while the flight is en route. There could also be shift changes while a flight is en route. During the shift change, the outgoing dispatcher effectively transfers the authority for operational control to the oncoming dispatcher. Only one dispatcher will have authority for operational control of the flight along with the PIC, at any given time. Each dispatcher is responsible to provide the information to the PIC during the time in which that dispatcher is exercising operational control.

c) Operational Requirement to Restrict or Suspend Operations. Section 121.551 requires a certificate holder conducting domestic or flag operations to restrict or suspend operations when it knows of conditions that are a hazard to safe operations. Adverse weather phenomena present a hazard. A certificate holder's adverse weather phenomena reporting and forecast system must provide information regarding all adverse weather phenomena that could affect the safety of flight.

d) **Manual Requirements for Information Regarding Adverse Meteorological Conditions.** Section 121.135(b)(15) requires each certificate holder conducting part 121 operations to have procedures contained in its manual system for operating in periods of ice, hail, thunderstorms, turbulence, or any potentially hazardous meteorological condition.

e) **Reports and Forecasts of Icing.** All adverse weather reporting and forecast systems utilized by certificate holders conducting part 121 operations must provide information regarding conditions that could result in icing on the ground or en route. This information is necessary for the safety of flight and ground operations and to comply with the requirements of § 121.629. Each FAA-approved ground deicing program required by § 121.629 must include a detailed description of how the certificate holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, and that ground deicing/anti-icing operational procedures must be in effect.

C. Regulatory Requirements Part 121—Supplemental Operations.

1) **Weather Reporting Facilities.** Section 121.119 requires each certificate holder who conducts supplemental operations to use specific sources for weather reports and forecasts.

2) **Sources of Weather Reports and Forecasts.** Section 121.119.

a) **Operations Within the United States.** Each certificate holder conducting part 121 supplemental operations within the United States must use weather reports prepared by the NWS or a source approved by the Weather Bureau. (The Weather Bureau is the NWS. See subparagraph 3-2048A1.)

b) **Operations Outside of the United States or at U.S. Military Airports.** Certificate holders conducting part 121 supplemental operations outside of the United States or at U.S. Military airports may use a source approved by the Administrator, but only at those locations where the NWS reports are not available.

c) **Forecasts to Control Flight Movement.** Section 121.119(b) requires certificate holders who conduct supplemental operations and use forecasts to control flight movements to base those forecasts on the following sources:

- Weather reports prepared by the NWS or a source approved by the NWS.
- Weather reports prepared by a source approved by the Administrator when operating outside the United States or at U.S. Military airports.

3) **Reports and Forecasts of Adverse Weather Phenomena.** Certificate holders who do not have domestic or flag authority, but do have the authority to conduct part 121 supplemental operations, are required to have a system of obtaining reports and forecasts of all adverse weather phenomena. Certificate holders conducting these supplemental operations are not required to obtain FAA approval of their adverse weather phenomena reporting and forecast system. These systems are necessary for the safety of flight, and to ensure compliance with the regulatory requirements outlined in subparagraphs a)–d) listed below (Volume 3, Chapter 26, Section 3 contains more detailed information on adverse weather phenomena reporting and forecast systems).

a) Information to the PIC.

1. An adverse weather phenomena reporting and forecast system is necessary to ensure that the PIC is provided with all information necessary for the safety of the flight. In accordance with § 121.125(a)(2)(ii) flight following system requirements, a PIC must be provided with this information.

2. An adverse weather phenomena reporting and forecast system is necessary to ensure the PIC's compliance with § 121.599(b), which prohibits a PIC from beginning a flight unless he or she is thoroughly familiar with reported and forecast weather conditions on the route to be flown.

b) Operational Requirement to Restrict or Suspend Operations. Section 121.553 requires each certificate holder or PIC conducting supplemental operations to restrict or suspend operations when he or she knows of conditions that are a hazard to safe operations. Adverse weather phenomena present a hazard. Certificate holders conducting part 121 supplemental operations must have an adverse weather phenomena reporting and forecast system that provides information regarding all adverse weather phenomena that could affect the safety of flight.

c) Manual Requirements for Information Regarding Adverse Meteorological Conditions. Section 121.135(b)(15) requires each certificate holder conducting part 121 operations to have procedures contained in its manual system for operating in periods of ice, hail, thunderstorms, turbulence, or any potentially hazardous meteorological condition.

d) Reports and Forecasts of Icing. All adverse weather reporting and forecast systems utilized by certificate holders conducting part 121 operations must provide information regarding conditions that could result in icing on the ground or en route. This information is necessary for the safety of flight and ground operations and to comply with the requirements of § 121.629. Each FAA-approved ground deicing program required by § 121.629 must include a detailed description of how the certificate holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, and that ground deicing/anti-icing operational procedures must be in effect.

D. Regulatory Requirements Part 125. Part 125 does not contain any specific requirements for weather reporting facilities or sources of weather reports and forecasts.

1) Weather Reports and Forecasts. In general, part 125 requires weather reports or forecasts to indicate that weather conditions at a destination and/or alternate airport will be at or above the authorized minimums at the time of arrival. Some examples of these requirements are contained in the following regulations:

- Section 125.359, Flight Release under VFR.
- Section 125.361, Flight Release under IFR or Over-The-Top.
- Section 125.363, Flight Release over Water.
- Section 125.369, Alternate Airport Weather Minimums.

2) Reports and Forecasts of Adverse Weather Phenomena. Certificate holders and LODA holders conducting part 125 operations must ensure that pilots are able to obtain reports and forecasts of adverse weather phenomena that could affect the safety of flight. POIs of these certificate/LODA holders should be able to verify that each certificate/LODA holder has a method of ensuring this information is available to its pilots.

a) Section 125.403. The section requires the airplane flight release to contain, or have attached to it, weather reports, available weather forecasts, or a combination thereof; this includes reports or forecasts of adverse weather phenomena that could affect the safety of flight. POIs of part 125 certificate/LODA holders should ensure that each certificate/LODA holder includes these reports and forecasts in, or as an attachment to, the airplane flight release. In addition, POIs should ensure that pilots conducting part 125 operations are able to use the information provided in these reports and forecasts to recognize and avoid adverse weather phenomena.

b) Reports and Forecasts of Icing. Section 125.221 specifies operating limitations during icing conditions. Certificate/LODA holders and pilots conducting part 125 operations must have a method of obtaining reports and forecasts of icing conditions on the ground and en route in order to ensure the safety of flight and ground operations, and to ensure operations are conducted within the limitations set forth by § 125.221.

E. Regulatory Requirements for Part 135.

1) Sources of Weather Reports and Forecasts. Section 135.213 requires a person operating an aircraft to use the following sources for aviation weather reports and forecasts:

- The NWS,
- A source approved by the NWS, or
- A source approved by the Administrator.

2) Reports and Forecasts of Adverse Weather Phenomena. Certificate holders conducting part 135 operations must ensure that its pilots are able to obtain reports and forecasts of adverse weather phenomena that could affect the safety of flight. POIs of these certificate holders should be able to verify that each certificate holder has a method of ensuring this information is available to its pilots.

a) Restriction or Suspension of Operations. Section 135.69 requires each certificate holder or PIC to restrict or suspend operations when conditions exist that present a hazard to safety. Adverse weather phenomena present a hazard. Therefore, it is essential that certificate holders and pilots conducting part 135 operations are able to obtain all reports and forecasts of adverse weather phenomena that could affect the safety of flight.

b) Reports and Forecasts of Icing. Section 135.227 specifies operating limitations during icing conditions. Certificate holders and pilots conducting part 135 operations must have methods of obtaining reports and forecasts of icing conditions on the ground and en route in order to ensure the safety of flight and ground operations, and to ensure operations are conducted within the limitations set forth by § 135.227.

3-2051 REGULATORY INTENT.

A. Requirement for Weather Reports, Forecasts, or a Combination Thereof.

Regulations that establish weather minimums or require flightcrews, Aircraft Dispatchers, and certificate holders to consider weather conditions are intended to prevent unsafe flight operations. There are many regulations in 14 CFR that contain requirements for weather reports, forecasts, or a combination thereof to indicate that the weather at a destination or alternate airport will be at or above the authorized landing minimums at the estimated time of arrival (ETA). The regulatory intent of these regulations is that each certificate holder, PIC, dispatcher, or person authorized to exercise operational control must consider all available weather information pertaining to a particular airport when making the decision on whether or not to dispatch, release, or operate (continue) a flight; this includes weather information that is depicted graphically. When weather reports, forecasts, or any combination thereof indicate that weather will be below authorized minimums at the ETA, delay or cancellation of the flight must be considered.

1) Combination of Weather Reports and Forecasts—The Worst Weather Conditions are Controlling When Determining Minimums at the ETA. For the purposes of dispatch, release takeoff, or designation of alternate airports, when determining if weather reports, forecasts, or any combination thereof, indicates that weather conditions will be at or above the authorized minimums at the ETA at a destination or alternate airport, the worst weather conditions in any combination of the reports or forecasts take precedence. This policy is based on consistent interpretation by the FAA Office of the Chief Counsel (AGC), that the worst weather conditions contained in any combination of weather reports or forecasts must be considered and are therefore the controlling factor when determining minimums. This includes the consideration of any information contained in “Remarks” and conditional language of a weather report or forecast. This information is as operationally significant as the information appearing in the body or primary language of the report or forecast. Ultimately, the burden of proof is on the certificate holder to show compliance with regulatory requirements and FAA legal interpretations. Therefore, each certificate holder must be able to show at all times that any combination of available weather reports and forecasts indicate that the weather at the destination and any alternate airport will be at or above the authorized minimums at the ETA. This applies when determining compliance with the following regulations:

- Section 91.169—IFR flight plan: Information required.
- Section 121.613—Dispatch or flight release under IFR or over the top.
- Section 121.615—Dispatch or flight release over water: Flag and supplemental operations.
- Section 121.619—Alternate airport for destination: IFR or over the top: Domestic operations.
- Section 121.621—Alternate airport for destination: Flag operations.
- Section 121.623—Alternate airport for destination; IFR or over the top: Supplemental operations.
- Section 121.625—Alternate airport weather minima.
- Section 121.631—Original dispatch or flight release, redispach or amendment of dispatch or flight release.

- Section 135.219—IFR: Destination airport weather minimums.
- Section 135.223(b)—IFR: Alternate airport requirements.

2) Weather Reports and Forecasts are Required by Part 121 and Part 135

Subpart I. As previously stated, 14 CFR contains regulatory requirements for “weather reports or forecasts, or a combination thereof” to indicate that weather will be at or above the authorized minimums at the ETA. Part 121 contains several regulations (e.g., §§ 121.613, 121.615, and 121.625) with this type of regulatory text. In some cases, the appearance of the word “or” in this regulatory text has led to confusion and the belief that a flight can be dispatched, released, and/or operated (continued) using just a report or just a forecast; however, this is not the case. There are several part 121 regulations that require both reports and forecasts to be available for flight operations; therefore, in order to comply with all of the part 121 regulatory weather requirements, both weather reports and forecasts must be available for all part 121 flight operations.

a) Section 121.101 requires a certificate holder conducting domestic and/or flag operations to show that enough weather reporting services are available along each route to ensure weather reports and forecasts necessary for the operation.

b) Section 121.599 states that, for domestic and flag operations, no Aircraft Dispatcher may release a flight and, for supplemental operations, no PIC may begin a flight unless he or she is thoroughly familiar with reported and forecast weather conditions on the route to be flown.

c) Section 121.601 requires a dispatcher for a certificate holder conducting domestic and/or flag operations to provide the PIC with all available weather reports and forecasts of weather phenomena that may affect the safety of flight.

d) Both weather reports and forecasts are required to comply with the requirements for airplane performance operating limitations contained in part 121 subpart I and part 135 subpart I.

1. Aircraft takeoff and landing performance is predicated on the following information contained in a weather report: ambient temperature, wind direction and speed, and altimeter setting. Therefore, a weather report is always required for takeoff and landing.

2. Part 121 and part 135 subpart I landing limitations require a certificate holder to consider forecast (anticipated/probable) winds at the destination airport. Therefore, weather forecasts for the destination airport are always required.

B. “Current,” “Latest,” and “Available” Weather. Throughout 14 CFR, there are requirements to have the “current,” “available,” or “latest” weather reports or forecasts. The purpose of regulations that establish weather minimums, or that require flightcrews and dispatchers to consider weather conditions, is to prevent unsafe flight operations. The phrases “current weather,” “latest weather report,” and “available forecasts” have occasionally been interpreted inappropriately, resulting in noncompliance with 14 CFR and in diminished safety during flight operations. In order to ensure the highest degree of safety and regulatory

compliance, the FAA defines the following terms within the context of weather reports and forecasts, as applicable:

- “Current,” with respect to a weather report, means present and actual;
- “Available,” with respect to a weather report and/or forecast, means for immediate use, obtainable, and accessible; and
- “Latest,” with respect to a weather report and/or forecast means just completed, most current, and up-to-the-minute.

NOTE: These definitions are limited to weather reports and forecasts and should not be construed as being applicable to other sections of the regulations.

Table 3-106. Acronyms Common to Aviation Weather

ADDS	Aviation Digital Data Service (Web site at http://www.aviationweather.gov (Aviation Weather Center (AWC)))
AFSS	Automated Flight Service Station
AIREP	Aircraft Reports
AIRMET	Airmen's Meteorological Information
AMS	American Meteorological Society
ASOS	Automated Surface Observing System
ASWON	Aviation Surface Weather Observation Network
AWC	Aviation Weather Center (Web site at http://www.aviationweather.gov)
AWOS	Automated Weather Observing System (FAA system)
AWRP	Aviation Weather Research Program
AWSS	Automated Weather Sensors System
CWA	Central Weather Advisory
CWIP	Commercial Weather Information Provider
CWO	Contract Weather Observer
EWINS	Enhanced Weather Information System
FICON	Field Condition
FMF	Flight Movement Forecast
GOES	Geostationary Operational Environmental Satellite
ICAO	International Civil Aviation Organization
LAWRS	Limited Aviation Weather Reporting Station (usually a control tower)
LLWAS	Low Level Wind Shear Alert System
METAR	Aviation Routine Weather Report
NCEP	National Centers for Environmental Prediction
NESDIS	National Environmental Satellite, Data, and Information Service
NF-OBS	Non Federal Observation
NOAA	National Oceanic and Atmospheric Administration
NOTAM	Notice to Airmen
NWA	National Weather Association
NWS	National Weather Service (part of NOAA)
PIREP	Pilot Weather Report
RTMA	Real-Time Mesoscale Analysis
SAWRS	Supplemental Aviation Weather Reporting System
SAWS	Stand-Alone Weather Sensors
SIGMET	Significant Meteorological Information
SPECI	Aviation Selected Special Weather Report
TAF	Terminal Aerodrome Forecast
TDWR	Terminal Doppler Weather Radar
VAA	Volcanic Ash Advisory
VAAC	Volcanic Ash Advisory Center
WMO	World Meteorological Organization
WMSCR	Weather Message Switching Center Replacement

RESERVED. Paragraphs 3-2052 through 3-2070.