FPAW/AFS Update

Federal Aviation Administration

FAA Flight Standards AFS-220/430

FPAW 2017 Summer

Presented to: FPAW

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Overview

- **FAA Regulation**
- **FAA Guidance**
- **Legal Interpretation on recency of reported weather**

Regulatory Guidance

- **14 CFR 91.103 Preflight Action**
  - Each pilot in command shall, before beginning a flight, become familiar with **all available information** concerning that flight. This information **must include**
  - (a) For a flight under IFR or a flight not in the vicinity of an airport, **weather reports and forecasts**, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC;

Regulatory Guidance

- **§121.601 Aircraft dispatcher information to pilot in command: Domestic and flag operations.**

  (a) The aircraft dispatcher shall provide the pilot in command **all available current reports** or information on airport conditions and irregularities of navigation facilities that may affect the safety of the flight.

  (b) Before beginning a flight, the aircraft dispatcher shall provide the pilot in command 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, thunderstorms, and low altitude wind shear, for each route to be flown and each airport to be used.

  (c) During a flight, the aircraft dispatcher shall provide the pilot in command any additional **available information of meteorological conditions** (including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear), and irregularities of facilities and services that may affect the safety of the flight.

Regulatory Guidance

- **§121.655 Applicability of reported weather minimums.**
  - In conducting operations under §§121.649 through 121.653, the ceiling and visibility values **in the main body of the latest weather report control for VFR and IFR takeoffs and landings and for instrument approach procedures on all runways of an airport**. However, if the latest weather report, including an oral report from the control tower, contains a visibility value specified as runway visibility or runway visual range for a particular runway of an airport, that specified value controls for VFR and IFR landings and takeoffs and straight-in instrument approaches for that runway

Regulatory Guidance

- **§121.651 Takeoff and landing weather minimums: IFR: All certificate holders**
  - 2) At airports within the United States and its territories or at U.S. military airports, unless **the latest weather report** for that airport issued by the U.S. National Weather Service, a source approved by that Service, or a source approved by the Administrator, reports the visibility to be equal to or more than the visibility minimums prescribed for that procedure. For the purpose of this section, the term “U.S. military airports” means airports in foreign countries where flight operations are under the control of U.S. military authority.

Regulatory Guidance

- **§135.219 IFR: Destination airport weather minimums.**

  No person may take off an aircraft under IFR or begin an IFR or over-the-top operation **unless the latest weather reports or forecasts**, or any combination of them, indicate that weather conditions at the estimated time of arrival at the next airport of intended landing will be at or above authorized IFR landing minimums.

- **§135.225 IFR: Takeoff, approach and landing minimums**.

  (c) If a pilot has begun the final approach segment of an instrument approach to an airport under paragraph (b) of this section, and the **pilot receives a later weather report indicating that conditions have worsened** to below the minimum requirements, then the pilot may continue the approach only if the requirements of §91.175(l) of this chapter are met.

FAA Policy and Guidance

- **Current, Latest & Available Weather**

  - Throughout 14 CFR, there are requirements to have the "current," "available," or "latest weather reports or forecast

  - The purpose of regulations that establish weather minimums, or that require flight crews 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

FAA Policy and Guidance

Definitions of Current, Latest and Available Weather

- **“**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.

Recent Legal Interpretation

- The FAA office of Accident Investigation requested a legal interpretation on behalf of the NTSB, specifically they ask whether 121.651(a) requires that an airports weather reporting capabilities be operational at the time of takeoff or whether a pilot can rely on a weather report obtained prior to the loss of weather reporting capabilities.
- The interpretation request was based on an aircraft incident that occurred at Detroit Willow Run Airport. Three hours before takeoff the operator obtained the ASOS METAR weather report. The Air Traffic Control Tower was evacuated due to high winds prior to the departure so LAWRS was not available for the departure.
- The flight crew rejected the takeoff and overran the departure end of the runway, the factual investigation is not complete by the NTSB.

Legal Interpretation

121.651 is silent on the operational capabilities of weather facilities and the recency of reported weather, reported weather conditions are a precondition of takeoff, which indicates nearness in time. Furthermore, part 121 contains weather report and aircraft performance regulations that require reports of weather conditions that are occurring at time of takeoff, specifically and 121.189(e) requires, in relevant part, correction for the ambient temperature and wind component at time of takeoff…

Questions

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