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InFO

Information for Operators

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An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

Subject: Failure to Comply with Minimum Crossing Altitudes at Stepdown Fixes Located on Instrument Landing System (ILS) Inbound Courses

Purpose: This InFO emphasizes the requirement for operators to comply with all altitude restrictions (i.e. stepdown altitudes) prior to the Final Approach Segment when cleared for an ILS approach.

Background: On ILS approaches, stepdown fixes are established for obstacle or traffic separation. For all practical purposes, the glide slope remains stationary regardless of atmospheric temperature and pressure. Conversely, stepdown fixes are published for a pilot to fly using indicated altitude, which varies with temperature and pressure changes. Therefore, the proximity of stepdown fixes in reference to the glide slope, changes with the weather.

Discussion: What this means to pilots is that on some approaches, outside the Final Approach Segment, on a cool day, you might be able to follow the glide slope and all the published stepdown altitudes may pass below your aircraft. The next day, after a warm front passes, you could follow the same glide slope and (because the temperature is hotter this day) those same stepdown altitudes now protrude into the glide slope and require pilot action to ensure compliance with the published minimum altitudes (stepdown fixes). On both days your flight path on the glide slope was the same, but on the hotter day, the stepdown altitude, *crept up* into your glide path. High barometric pressure produces the same effect as high temperature.

Regardless of cause, pilots are cautioned to adhere to published step-down fixes located outside the Final Approach Segment on an ILS approach. If a pilot elects to follow the glide slope while outside the Final Approach Segment he should be fully aware that this technique needs to be closely monitored and, if necessary, action must be taken to meet all stepdown altitudes. Examples of airports where multiple altitude deviations have occurred include, but are not limited to; LAX, ORD, ATL, SLC.

Recommended Action: Directors of safety, directors of operations, chief pilots, fractional ownership program managers, training managers, and operators of aircraft should ensure that aircraft under their control, when cleared for an ILS approach, do not descend below published step-down altitudes on an ILS final approach course, while outside the Final Approach Segment.

Contact: Questions or comments regarding this INFO should be directed to John Blair, AFS-410, (202) 385-4586 or Deke Abbott, AFS-220, (202) 267-8166.

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