http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info

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. The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies.

Subject: Applicability of Maximum Structural Landing Weights at Emergency Alternate Airports Including Airports Designated as a Takeoff Alternate Airport.

Purpose: This InFO provides information on the selection of emergency alternate airports or designating an alternate airport for takeoff.

Background: Frequently, the maximum takeoff weight of a turbine engine-powered aircraft will far exceed the maximum structural landing weight, particularly with, but not limited to, the newer ultra-long-range aircraft. When weather conditions at the departure airport fall below the landing minimums in the certificate holder’s operation specification (OpSpecs), a takeoff alternate airport must, per Title 14 of the Code of Federal Regulations (14 CFR) part 121, § 121.617, Alternate airport for departure, be listed in the dispatch or flight release. Compliance with the maximum structural landing weight at the takeoff alternate or emergency alternate airport may be difficult or impossible to accomplish unless the operator reduces the payload or the aircraft is equipped with a fuel jettison system. Misperception can exist when an operator considers that its aircraft performance for a takeoff alternate or emergency alternate needs to comply with the structural maximum landing weight established by the manufacturer. See § 91.9 (“no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards”).

Discussion: Sections 121.195(a), Landing limitations: Destination airports, and 121.197, Landing limitations: Alternate airports, require operators’ compliance with landing performance limitations. Each aircraft has a Maximum Landing Weight (MLW) limitation that applies when the aircraft conducts a normal operation. The requirement to list an alternate airport for departure, drift down, Equal Time Point (ETP), or Extended Operations (ETOPS) provides airport options should the aircraft encounter an emergency in which a return to the departure airport or a precautionary landing is necessary. In those cases, MLW compliance is not required because an emergency exists. However, when operators are designating the alternate airports, they must ensure performance limitations at those alternate airports comply with § 121.195(a), which prohibits persons operating a turbine engine powered airplane from taking off at that airplane:

at such a weight that (allowing for normal consumption of fuel and oil in flight to the destination or alternate airport) the weight of the airplane on arrival would exceed the
landing weight set forth in the Airplane Flight Manual for the elevation of the destination or alternate airport and the ambient temperature anticipated at the time of landing.

Section 121.197 references the landing limitations in § 121.195(b), which state that such persons may also not take off that airplane unless (except for exceptions in subparagraphs (c), (d), or (e)) its:

- weight on arrival, allowing for normal consumption of fuel and oil in flight (in accordance with the landing distance set forth in the Airplane Flight Manual for the elevation of the destination airport and the wind conditions anticipated there at the time of landing), would allow a full stop landing at the intended destination airport within 60 percent of the effective length of each runway described below from a point 50 feet above the intersection of the obstruction clearance plane and the runway.

The FAA generally recognizes operators’ alternate weather minimums by including them in Operating Specifications. See § 119.49, Contents of operations specifications.

**Recommended Action:** Directors of safety and directors of operations (Part 121) should be aware of the information provided in this InFO and ensure the company procedures for emergency alternate airports are up-to-date and consistent with §§ 121.195 and 121.197.

**Contact:** Please direct questions or comments regarding this InFO to the Air Transportation Division’s Air Carrier Operations Branch at 202-267-8066.