



**U.S. Department
of Transportation**
**Federal Aviation
Administration**

SAFO

Safety Alert for Operators

SAFO 17003

DATE: 3/9/17

Flight Standards Service
Washington, DC

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

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Non-compliance with a Manufacturer's Federal Aviation Administration (FAA)-approved Aircraft Weight and Balance Manual (WBM)

Purpose: This SAFO serves to warn Title 14 of the Code of Federal Regulations (14 CFR) Part 121 Air Carriers of safety concerns and operational compliance issues regarding Weight and Balance Programs (WBP).

Background: In May of 2013, the FAA recommended in SAFO 13005 that all part 121 air carriers review their WBP with an emphasis on special cargo. The FAA followed up in August of 2013 with SAFO 13008, which recommended an in-depth review of a part 121 air carrier's WBP along with cargo loading documents. The air carrier's WBP is derived from the approved WBM, which is provided to the owner when the airplane is purchased. The FAA's Cargo Focus Team (CFT) identified safety concerns and operational compliance issues during its review of Part 121 air carrier's WBPs.

Discussion: The CFT, in reviewing part 121 air carriers' WBP, found that some do not comply with the requirements of 14 CFR part 91, § 91.9. Some air carriers have not provided the FAA with copies of the FAA-approved manufacturers' WBM and supplemental type certificate (STC) WBM supplement(s). Air carriers have developed their own WBP, which allows for restraint methods that are not approved. These unapproved restraint methods are contrary to the aircraft's FAA-approved flight manual limitations and may exceed the aircraft structural design capability. Air carriers are not permitted to use any cargo restraint methods that are not specifically approved in the WBM or WBM supplement.

Other issues of concern identified by the CFT during its review included a lack of documentation of the aircraft's current cargo loading system (CLS). Due to the installation and removal of multiple STCs over time, the cargo configuration of some aircraft could not be determined. In some isolated cases, air carriers have developed procedures for aircraft loading that exceeds the structural design capability of the aircraft. Exceeding this capability can lead to catastrophic failure of the aircraft.

Recommended Action: Air carriers should review their WBM and cargo loading documents to validate adherence to the manufacturer's FAA-approved WBM or STC WBM supplement for each aircraft on their Operations Specifications. The air carrier may contact the design approval holder to obtain the WBM.

Contact: Questions or comments regarding this SAFO should be directed to the Aircraft Maintenance Division, Repair Station Branch (AFS-340) at (202) 267-1675 or 9-NATL-CARGO-CFT@FAA.GOV.