

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.472

National Policy

Effective Date: 6/7/18

Cancellation Date: 6/7/19

SUBJ: Delineation of Responsibilities for Principal Inspectors Relating to Evaluating a Weight and Balance Program, Cargo Operations, and Surveillance

- **1. Purpose of This Notice.** This notice provides guidance to principal inspectors (PI) on the process of accepting and/or revising manuals and changes to manuals in connection with Weight and Balance Programs (WBP), cargo loading, and surveillance of those programs. This notice is applicable to operators and certificate holders operating under Title 14 of the Code of Federal Regulations (14 CFR) parts 91 subpart K (part 91K), 121, 125, and 135 operations.
- **2. Audience.** The primary audience for this notice includes PIs at the certificate management offices (CMO), certificate-holding district offices (CHDO), and Flight Standards District Offices (FSDO). The secondary audience includes all Flight Standards divisions, branches, and offices.
- **3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the Federal Aviation Administration's (FAA) website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.
- **4. Background.** In April 2013, a Dubai-bound Boeing 747-400 crashed after takeoff from Bagram Air Base, Afghanistan. The aircraft was transporting heavy military vehicles, which would later be known as "special cargo." Following the accident, it was determined that a review of part 121 certificated air carriers' WBP manuals and authorizations was necessary to ensure the programs were based on approved data. The National Transportation Safety Board (NTSB) Aircraft Accident Report recommended that the FAA include specific guidance that defines responsibilities for PIs for the oversight of an operator's loading, restraint, and documentation of special cargo loads.

5. Discussion.

a. Acceptance and Approval Concerns. The WBP reviews conducted under part 121 thus far show one or more of the following concerns in regards to the acceptance and approval of the procedures and the overall program. We anticipate similar concerns with parts 91K, 125, and 135 operations.

Distribution: Electronic Only Initiated By: AFS-300

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(1) Company Airplane Flight Manuals (AFM) approvals under part 121, § 121.141(b) exceeded part 91, § 91.9(a) operating limitations of the type certificate (TC) and Supplemental Type Certificate (STC) AFMs.

- (2) In some cases, Certificate Management Teams (CMT) accepted the WBP loading instruction changes submitted by the certificate holder without getting Aircraft Certification Office (ACO) approval or concurrence. These instructions are necessary to ensure loading of the airplane remains within the weight and center of gravity (CG) limits.
- **b. Delineating Responsibilities.** These findings, along with the NTSB Safety Recommendation A-15-16, emphasizes the need to clarify the responsibilities as it relates to evaluating a WBP and performing the surveillance of cargo operations. The Delineation of Responsibilities Chart (Appendix A) provides an overview of the responsibilities between the aviation safety inspector (ASI) disciplines and the ACO. This overview is not an all-inclusive chart. It displays the overlap and the specific areas of discipline responsibility in relation to cargo elements of Weight and Balance (W&B), airplane limitations, and cargo operations.
- **c. Shared Oversight.** The WBP consists of aircraft weighing, passenger and baggage weighing (standard average, survey, or actual), and cargo operations. The oversight of the WBP is a shared responsibility of the assigned PIs. All PIs must work closely together in order to achieve safe, complete, accurate, and compliant programs.
- **d. Authorizing the WBP.** In the past, the principal maintenance inspector (PMI) authorized the entire WBP. The correct delineation of responsibilities for the program is that the PMI and principal avionics inspector (PAI) authorize the aircraft weighing program. The principal operations inspector (POI) authorizes the passenger and baggage weighing and cargo operations programs, in coordination with the cabin safety and dispatch inspectors. Prior to issuing the operations specifications (OpSpecs), the PIs should coordinate with each other to achieve a safe, complete, accurate, and compliant WBP.
- e. Cargo Surveillance. There are many elements and functions within the various stages of the cargo operations that require surveillance to ensure compliance. The NTSB Safety Recommendation stated that cargo handling, loading, restraint, and documentation are areas in which the FAA can provide clarity by defining the responsibilities of PIs. The Delineation of Responsibilities Chart in Appendix A displays an overview of these defined responsibilities. The cargo operations functions are primarily the responsibility of the POI, yet the oversight and surveillance are a responsibility shared with Airworthiness ASIs. Pending changes to FAA Order 8900.1 will provide the guidance and clarify the roles. Specifically, the content will appear in Volume 3, Chapter 37, Evaluate a Part 121/135.411(a)(2) Certificate Holder's Short-Term Escalation Procedures, and Volume 6, Chapter 2, Section 4, Safety Assurance System: Ramp Inspections for Part 91K, 125, 141, 142 Operators and Part 121 and 135 Air Carriers, and Section 5, Safety Assurance System: Conduct a Random Inspections (Ramp) Inspection on Cargo Loading (Including Part 125). The new Data Collection Tool (DCT) for Safety Assurance System (SAS) Element 6.3.4 (AW) Carriage of Cargo, allows Airworthiness ASIs to conduct surveillance and provide observations on cargo loading operations.

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6. Action. PIs will review and use the Delineation of Responsibilities Chart as a guide to focus on their specific areas of responsibility. PIs will also use the DCTs to perform surveillance.

7. Disposition. We will incorporate the information in this notice into Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Cargo Focus Team Manager, Repair Station Branch (AFS-340), at 202-267-1675.

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Appendix A. Delineation of Responsibilities Chart

Operations	Airworthiness	Aircraft Certification
Control of Weight and Balance (W&B): weight distribution of cargo, passengers, baggage, fuel on board aircraft.	Aircraft conformity inspections with type certificates (TC)/Supplemental Type Certificate (STC) and supplements.	Approval of TC/STC instructions for continued airworthiness (ICA), Aircraft Flight Manuals (AFM), Weight and Balance Manuals (WBM), including associated supplements that are necessary to meet 14 CFR part 91, § 91.9(a) operating limitations (including loading) revisions.
Training of flightcrews and other operational personnel: cargo buildup, loading, supervising loading, hazardous materials (hazmat), load manifest, cargo loading system (CLS), and W&B limitations.	Training of personnel: hazmat, aircraft markings, minimum equipment list (MEL), continued airworthiness of CLS and unit load devices (ULD), aircraft weighing, and center of gravity (CG) calculations.	
Ground handling: use of equipment.	Ground handling: condition and serviceability/condition of equipment.	
Cargo scales and weighing process.	Incorporate into the inspection and maintenance program.	
CLS operations and configuration of cargo compartment.	Proper application of CLS, replacement and repair of components in the MEL.	Define the CLS (per TC/STC) and associated operating limitations.
Operator following ULD compatibility per TC/STC and damage limits.	ULD continued airworthiness, damage limits, serviceability, and return to service.	Define approved list of ULD for each airplane (per TC/STC).
Pallets and restraint devices (nets, straps, ropes, etc.): usage and operating and serviceability checks.	Pallets and restraint devices (nets, straps, ropes, etc.): airworthiness standard/limitations, serviceability, and damage limits. Repair facility follows Technical Standard Order (TSO) repair instructions and ICAs for repair of restraint devices.	TSOs for products (e.g., pallets, nets, straps).
Cargo handling: includes cargo acceptance, cargo buildup, cargo weighing, cargo staging, special handling of cargo, hazmat, and cargo transport to and from aircraft.		

Operations	Airworthiness	Aircraft Certification
Cargo loading: includes loading cargo aboard aircraft, cargo loading supervision, load verification, securing, and restraint calculation.	Cargo loading: inspect to ensure cargo compartments are placarded and incorporated into the inspection and maintenance program.	Ensure each cargo compartment has placards. Define operating limitations (including loading limitations).
Operational checks, inspection of installation and use of: • Nets (9G and intermediary), • Smoke barriers, and • Smoke detectors.	Installed nets (9G and intermediary), smoke barriers, smoke detectors, inspection/installation procedures, and incorporation in the maintenance program.	Approve ICAs for TSO nets or other specific nets and smoke barriers.
Ensure all contracts are complied with when using contracted entities for freight forwarding, interlining, and other vendors (for cargo buildup, loading, preparing load manifest, etc.).	STCs to include integration of ICAs into the maintenance program, including any aging aircraft program limitations and inspection adjustments.	
Authorize A-series OpSpecs associated with the Weight and Balance Program (WBP). Accept operator WBP in conjunction with the principal maintenance inspector (PMI) and principal avionics inspector (PAI).	Authorize D- and E-series OpSpecs associated with the WBP. Accept operator WBP in conjunction with the principal operations inspector (POI).	
Load manifest: including documentation, load verification, W&B calculations, not exceeding operating limitations, notification to pilot in command (PIC) of hazmat in accordance with 49 CFR part 175, § 175.33.		
Anything related to station operations providers and vendors (including auditing) that are not associated with repair stations.	Anything related to maintenance providers and repair stations including vendors and auditing (e.g., authorized vendor list).	Airworthiness Directives (AD), Certificate Maintenance Requirements (CMR), and participation in the Maintenance Review Board (MRB).
Approval and/or acceptance of documents and/or manuals related to the subjects in this column is performed by the POI.	Approval and/or acceptance of documents and/or manuals related to the subjects in this column is performed by the PMI and/or PAI.	Approval and/or acceptance of documents and/or manuals related to the subjects in this column is performed by the Aircraft Certification Office (ACO).