

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.546

National Policy

Effective Date: 5/8/20

Cancellation Date: 5/8/21

SUBJ: Carriage of Cargo in the Passenger Compartments of Transport Category Airplanes Operated Under Part 121 When No Passengers are On Board

1. Purpose of This Notice. This notice provides information and guidance regarding the carriage of cargo in the passenger compartment (cabin) of transport category, passenger-carrying airplanes when no passengers are on board, as permitted by Title 14 of the Code of Federal Regulations (14 CFR) part 121.

2. Audience. The primary audience for this order is Federal Aviation Administration (FAA) principal inspectors (PI) and aviation safety inspectors (ASI) in the Flight Standards (FS) Air Carrier Safety Assurance (ACSA) offices. The secondary audience includes the FS Safety Standards and Foundational Business 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 FAA's website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. Part 121 operators may seek to use airplanes configured with passenger cabins that would otherwise be idle or operating well below capacity, to carry cargo only or to carry additional cargo in those cabins. While part 121, § 121.285 allows cargo to be transported within the passenger cabin, it did not envision an entire passenger cabin loaded with only cargo, because passenger cabins are not designed for use in an all-cargo configuration. ASIs will ensure certificate holders review any change in operations to evaluate regulatory implications and safety risks when transporting only cargo inside the passenger cabin of an airplane operating under part 121.

5. Discussion. While § 121.285 allows, under certain conditions, the carriage of cargo in passenger cabins, ASIs should be aware that all other regulatory requirements, such as those applicable to the airplane type design and the particular operation, will still apply.

a. Coordination with the Cargo Focus Team (CFT). PIs must consult with the CFT, Aircraft Maintenance Division of the Office of Safety Standards, prior to granting any relief to carry cargo on passenger seats or on the floor of the airplane after seats have been removed.

Cargo loading in a storage location that is not addressed in the airplane Weight and Balance Manual (WBM) would require a change to the WBM. Refer to 14 CFR part 25, § 25.1583; part 91, § 91.9; and §§ 121.135(b)(21), 121.141, and 121.153. PIs should be aware the FAA is considering issuing relief by way of exemption from applicable requirements to enable the carriage of cargo on passenger seats. Any such exemption would contain conditions and limitations with which each certificate holder must comply.

b. Safety Management Systems (SMS). Certificate holders that conduct operations under part 121 are already required to utilize their SMS to conduct a Safety Risk Assessment (SRA). ASIs will ensure that a certificate holder identifies the hazards and develops appropriate controls to mitigate risks associated with those hazards. ASIs must ensure the certificate holder reviews their FAA-approved and accepted manuals and operation specifications (OpSpecs), and coordinates with PIs to request changes, if needed. Should the certificate holder desire to make any changes to their hazardous materials (hazmat) (dangerous goods) program, they will need to consult with their assigned Office of Hazardous Materials Safety (AXH) Principal Hazardous Materials Inspector (PHI).

Note: ASIs are reminded that an SRA performed by a certificate holder does not replace, amend, or limit compliance with any regulatory requirement.

c. Inspector and Industry Guidance. The FAA has issued Safety Alerts for Operators (SAFO) 20008, Transporting Cargo on Transport-Category Airplanes Configured to Carry Passengers, with suggestions for certificate holders to include the description of the applicable operating environment of a certificate holder regarding the loading and carrying of cargo within the cabins of airplanes that were designed and configured to carry passengers in each SRA. SAFO 20008 can be found at http://www.faa.gov/other_visit/aviation_industry/airline_operators/ airline_safety/safo. Some airplane manufacturers are providing guidelines for carriage of cargo in passenger airplanes. That guidance is currently being updated. The certificate holder should have the most current copies of the guidance that pertain to their airplanes.

(1) This notice provides information similar to that contained in SAFO 20008, and is developed to assist the ASI with oversight responsibilities. Currently, there are two locations a certificate holder may transport cargo which do not require modification of OpSpecs if the certificate holder follows its current Weight and Balance (W&B) program. The two locations are:

(a) Lower deck cargo compartments. Current regulations cover this practice and if the certificate holder has no changes to these procedures, nothing needs to take place.

(b) Approved stowage locations in the passenger cabin. This notice applies to cargo stowed and transported in accordance with a certificate holder's approved W&B program. Cargo can be transported only in approved stowage locations in the passenger cabin. Cargo weighing 20 pounds or less may be stored under a passenger seat, unless there is a higher load limitation placarded, in accordance with § 25.1557.

(2) Two other potential locations exist for carrying cargo in an airplane designed to carry passengers: on passengers' seats and the cabin floor when passenger seats are removed. While

§ 121.285 allows carriage of cargo in passenger cabins under certain conditions, all other regulatory requirements (such as those applicable to the airplane type design and particular operation) still apply. We expect relief from those requirements will be necessary to enable carriage of cargo on passenger seats or on the floor of the airplane after the removal of seats. Refer to §§ 25.1583, 91.9, 121.135(b)(21), 121.141, and 121.153. Each exemption will include conditions and limitations with which the certificate holder must comply. Carrying cargo on the cabin floor (after seat removal) and using the seat tracks to tie the cargo down will require further evaluation by manufacturers and the FAA, and is not allowed at this time.

6. Considerations.

a. Loading. When loading cargo in a passenger cabin, ASIs will ensure the certificate holder complies with the limitations prescribed in § 121.285. In addition:

(1) All loading of cargo in the passenger cabin must comply with the certificate holder's W&B program, in accordance with § 121.153, and should not include any hazmat or live animals. Cargo should only be loaded in the passenger cabin when the content is known or has been verified.

(2) If the certificate holder chooses to carry mail in the passenger cabin, the certificate holder must perform an SRA specific to the acceptance and carriage of mail inside the passenger cabin.

(3) Cargo may be carried in approved stowage locations within the passenger cabin, such as overhead stowage compartments, closets, or underneath passenger seats, and approved galley storage, if each item can be secured appropriately.

(4) Cargo must not be stowed in lavatories.

(5) Certificate holders must adhere to stowage capacity and weight restrictions of overhead compartments or other approved storage areas.

(6) Cargo must not be placed where it obstructs access to, or use of, any required emergency or regular exit, or the use of the aisle between the crew and the passenger cabin. Additionally, cargo must be stowed in a manner that does not hinder the possible use of any emergency equipment.

(7) Cargo placed in enclosed stowage areas must not prevent latched doors from closing securely.

(8) Crewmembers assigned to duty must ensure all overhead compartments are secured before takeoff, before landing, and whenever the "Fasten Seat Belts" signs are illuminated.

b. Certificate Holder's W&B Program. The ASI will ensure the following:

(1) The load manifest (§ 121.665) must identify the actual cargo weights and positions, such that an accurate W&B can be determined. In doing so, certificate holders must consider the following areas, if used:

- Overhead compartment stowage.
- Designated stowage compartments.
- Bulkhead/divider location and, if utilized, capacity identification.
- Under-seat stowage area (not to exceed 20 pounds, unless there is a higher load limitation placarded, in accordance with § 25.1557).

(2) The certificate holder has trained people to supervise the loading of cargo in the passenger cabin in order to meet the requirements of § 121.665.

(3) The certificate holder must observe weight limitations, as stated on stowage compartment placards. Loading must be limited so that allowable strength limits are not exceeded and load distribution is controlled.

(4) Actual weights must be used for all cargo transported, in accordance with the certificate holder's OpSpecs.

(5) Load manifests are accurate and consistent with manufacturers' guidance.

c. Fire Detection, Fire Protection, Fire Suppression, and Smoke Penetration.

(1) Due to the design of passenger cabins, other than in the lavatories, a smoke detection system typically does not exist within the cabin of airplanes designed to carry passengers. When carrying cargo in the passenger cabin, ASIs must ensure the certificate holder has determined, through their SRA, the number of crewmembers or company employees assigned to mitigate and address the following safety concerns for each airplane type:

- (a) Ability to detect smoke or fire.
- (b) Adequacy of existing cabin firefighting procedures, to include:
 - Location and number of fire extinguishers.
 - Sufficiency and location of firefighting equipment, such as breathing equipment.
 - Sufficiency of firefighting resources for Extended Operations (ETOPS).

(2) Some additional considerations for the certificate holder to determine:

(a) The means to reduce the effects of smoke in the flight deck, given the absence of a smoke curtain.

(b) Flightcrew familiarization with emergency procedures or Quick Reference Handbook procedures to address cabin smoke or fire to reduce the possibility of smoke entering the flight deck in the event of a cabin fire.

(c) Training for personnel who will respond to fires in the cabin, to include variances from normal firefighting procedures and differences that may accompany higher-than-normal, closely packed cardboard boxes.

d. Crew Rest and Fatigue. A certificate holder must provide for crewmember duty and rest within the provisions of their approved Fatigue Risk Management Plan (FRMP). A certificate holder may operate under part 121 regulations applicable to cargo operations only when it is approved within the certificate holder's FRMP. Refer to 14 CFR part 117, § 117.1(d) and Information for Operators (InFO) 10017, Fatigue Risk Management Plans (FRMP) for Part 121 Air Carriers – Part Two.

e. Hazmat. Under 14 CFR part 119, § 119.49, certificate holders that choose to transport hazmat in cargo must maintain authorization from the FAA to do so. The FAA issues OpSpec A055, Carriage of Hazardous Materials (HazMat), to indicate this authorization.¹

(1) ASIs will ensure the certificate holders have safety risk controls to prevent inadvertent loading of hazmat into the passenger cabin.

(2) The operator must have a process to prevent excepted quantities of lithium batteries contained in equipment from being stowed in the cabin.

(3) Cargo containing hazmat and loaded in the lower deck cargo compartment is acceptable only when the operator holds OpSpec A055. The cargo must be loaded and stored as described in the certificate holder's approved processes and procedures, as well as contained within their approved training program. The certificate holder must adhere to the provisions of the certificate holder's applicable SRA, which will contain operation restrictions, limitations, and applicable requirements codified in Title 49 of the Code of Federal Regulations (49 CFR) part 175 regarding the transport of hazmat. Refer to 14 CFR § 121.135(b)(25) and part 121 subpart Z.

(4) ASIs should coordinate the review of controls, procedures, and training for the transport of cargo containing hazmat with the appropriate PHI.

f. Personnel Assigned to Duty. ASIs will ensure:

(1) Certificate holders incorporate procedures into the certificate holder's operations manual for the safe carriage of persons covered under § 121.583.

(2) Persons transported in accordance with § 121.583 have an approved seat with an approved safety belt and must have unobstructed access from the seat to the pilot compartment or to a regular or emergency exit.

(3) Certificate holders consider any minimum equipment list (MEL) deferrals and their effect on cargo operations.

(4) Any noncrewmember is orally briefed by the appropriate crewmember on smoking; the use of seat belts; the location and operation of emergency exits; the use of oxygen and

¹ Certificate holders authorized to carry hazmat are subject to provisions codified in 49 CFR parts 171, 172, 173, 175, and 178. Also refer to FAA Advisory Circular (AC) 121-40, 14 CFR Part 121 and Part 135 Dangerous Goods Transportation Operations, https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.inf ormation/documentID/1032386.

emergency oxygen equipment; and for extended overwater operations, the location of life rafts, and the location and operation of life preservers, including a demonstration of the method of donning and inflating a life preserver.

g. Reference Material (current editions). Refer to the following ACs for additional information:

- AC 20-42, Hand Fire Extinguishers for use in Aircraft, at https://www.faa.gov/regulat ions_policies/advisory_circulars/index.cfm/go/document.information/documentID/88 8491.
- AC 120-80, In-Flight Fires, at https://www.faa.gov/regulations_policies/advisory_circ ulars/index.cfm/go/document.information/documentID/1026526.

7. Action. For Safety Assurance System (SAS) reporting, this notice requires mandatory action by the Principal Operations Inspectors (POI) who have part 121 certificate holders that want to use airplanes with passenger cabins configured to carry cargo only or to carry additional cargo without passengers onboard. The POIs must coordinate with these certificate holders and complete the following actions:

a. Within 30 business-days of the effective date of this notice, document actions in SAS.

b. POIs, or assigned ASIs, will use the National/Divisional Custom Data Collection Tool (C DCT) titled "Carriage of Cargo in the Passenger Cabin of Transport Category Airplanes Operated under Part 121 when no Passengers are On Board." Enter "N8900.546 cargo" (without quotes) in the Local/National/Regional common data field.

c. If deficiencies were noted in the National/Divisional C DCT, the PI must use the Action Item Tracking Tool (AITT) to track actions required by this notice.

d. After the National/Divisional C DCT is completed, the Air Transportation Division's Air Carrier Operations Branch may query the data in SAS to monitor for proper SRA of this operation.

8. Disposition. We will incorporate the information in this notice into FAA Order 8900.1 before this notice expires. Direct questions concerning the information in this notice to the Air Transportation Division's Air Carrier Operations Branch at 202-267-8166 or by email at 9-AFS-200-Correspondence@faa.gov, or the CFT at 202-267-1675 or by email at 9-AWA-AFS-300-Maintenance@faa.gov.

Robert C. Carty Deputy Executive Director, Flight Standards Service