

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

N 8900.123

National Policy

Effective Date: 6/10/10

Cancellation Date: 6/10/11

SUBJ: Approval of Temperature Controlled Shipping Containers

- 1. Purpose of This Notice. This notice provides guidance for issuing operational authorization for the transport by air of temperature controlled shipping containers (referred to in this notice as "devices"). This guidance does not apply to unit load devices (ULD) covered by Technical Standard Order (TSO) TSO-C90c, Cargo Pallets, Nets, and Containers, with active temperature control (active ULDs).
- **2. Audience.** The primary audience for this notice is Federal Aviation Administration (FAA) Flight Standards Service (AFS) certificate-holding district office (CHDO) managers and aviation safety inspectors (ASI) who have certification and surveillance responsibility for operators or air carriers that desire to carry these devices. The secondary audience includes AFS branches and divisions in the regions and in headquarters.
- **3.** Where You Can Find This Notice. You can find this notice on the MyFAA employee Web site at https://employees.faa.gov/tool_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators may find this information on the FAA's Web site at http://fsims.faa.gov.

4. Background.

- **a.** Need for the Device. Transportation of high-value medicines, vaccines, and other biomedical materials requires a temperature stable environment. There are several commercially available battery-powered devices used today in other transportation modes; however, these devices must be deactivated for aircraft to carry them as cargo. This defeats the purpose of the device. Recently, a manufacturer approached the FAA seeking approval for devices that can be carried aboard aircraft in an "active mode." These devices have no precedence for certification, nor do they meet the definition of ULD under TSO-C90c.
- **b. Interim Solution.** Discussions between the FAA and a manufacturer led to the decision that the FAA will specify special conditions in the form of technical requirements. These will establish the approval basis for issuing an FAA letter of design approval (LODA) under Title 14 of the Code of Federal Regulations (14 CFR) part 21, § 21.305(d), to use the Parts Manufacturer Approval (PMA) process with a § 21.305(d) approval of devices approved to operate in flight. This is intended to be an interim solution with a TSO as the final certification basis goal.

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c. Special Conditions Requirements. The FAA special conditions will require that the applicant submit the following technical requirements:

- (1) A list of the specific pallet/cargo-net combinations for which the applicant seeks carriage approval for the device. The applicant must conduct a compatibility demonstration (and/or analysis) for each proposed pallet/cargo-net combination. These approved pallet/cargo-net combinations will become part of the limitations sections of the instructions for continued airworthiness (ICA) and operating instructions. This will eliminate the need for any aircraft-specific approval.
 - (2) Required markings, placards, and labeling, including:
 - (a) Marking required by 14 CFR part 45, § 45.15.
- (b) Any other placards or labeling required for the safe handling, operation, and carriage of the device.
 - (3) ICA containing:
- (a) A complete set of instructions for maintenance, inspection, and return to service after maintenance, and a list of people authorized to perform these functions; and
- (b) All proposed limitations and restrictions necessary to safely carry the device on an aircraft. This includes the list of approved pallet/cargo-net combinations, the number of devices allowed for each of these combinations, and instructions that no other cargo is allowed under the cargo-net.
 - (4) Operating instructions for the device, which include:
- (a) Procedures for preflight preparation and inspection, including identification of any serviceable tags or other instrument required to certify airworthiness prior to carriage.
- (b) Instructions to ensure air carrier and ground handling personnel can identify the unit is operating properly and ensure the unit is removed from service in case of failure.
 - (c) Procedures for normal and emergency operations.
 - (d) Procedures for handling of the device.
- (e) Instructions for the proper loading of the device for each approved pallet/cargo-net combination, including the number of devices allowed, and instructions that no other cargo is allowed under the cargo-net.
 - (f) All limitations (as approved in the ICA).
 - (g) Training requirements for the above.

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5. Guidance.

a. Future Additional Guidance. The § 21.305(d) approval process is considered an interim procedure, leading to a TSO in the future. The FAA will issue additional guidance as required.

- **b. Requirements.** The process for an operator or air carrier to carry these devices has been simplified. All the requirements were built into the special conditions requirements in paragraph 4c above. Before an operator or air carrier may transport these devices, it must:
 - (1) Provide a copy of the FAA LODA; and
- (2) Incorporate or reference the applicable sections of the technical requirements in its manual, and train applicable personnel utilizing the included training document.
- **6. Action.** Prior to transport of the temperature controlled shipping container on its aircraft, ensure the operator or air carrier complies with the guidance in paragraph 5. It is imperative to note that all operators or air carriers (e.g., transfer, interline, etc.) must have these procedures in their manuals and provide training to their personnel prior to carriage on their aircraft.
- **7. Disposition.** We will permanently incorporate the information in this notice into FSIMS before this notice expires. Direct questions or comments concerning this notice to the Air Carrier Maintenance Branch (AFS-330) at (202) 385-6435, or to Mr. David K. Hopson at (202) 385-6423.

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