1. **Purpose of This Notice.** This notice applies to principal inspectors (PI) with certificate management responsibilities for Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 125 and 135 certificated aircraft that carry unit load devices (ULD) in their aircraft. This notice is a proactive approach to provide PIs an awareness of “Active ULDs” – ULDs with active temperature control systems for transporting temperature sensitive (Cool Chain) cargo.

2. **Audience.** The primary audience for this notice is Flight Standards District Office (FSDO) PIs. The secondary audience includes Flight Standards branches and divisions in the regions and in headquarters.


4. **Background.** Unlike the typical ULD (or “Can”), Active ULDs are capable of heating and/or refrigerating as required. These systems consist of a highly insulated container with a battery-operated heating/cooling system integrated into the construction of the container; they are battery-powered in flight and are only recharged while on the ground. The “active” component of these units usually consist of a vapor cycle refrigeration/heat pump type system that is powered by various types of large batteries, depending on the manufacturer.

5. **Action.** Only Active ULDs certificated under 14 CFR § 21.305(d), in accordance with Technical Standard Order-C90 (TSO), Cargo Pallets, Nets and Containers, standard may be utilized on U.S.-registered aircraft. In addition to the markings required by the above, they will also bear a placard as depicted in Figure 1. Additionally, if an operator intends to deploy these containers in their fleet, they should follow the guidance in Advisory Circular 120-85, Air Cargo Operations, and at a minimum prepare the following in their manual:

   a. **Air Carrier Operations Procedures.** Operators must have procedures that ensure only containers that are properly prepared, and meet the handling and airworthiness requirements of the manufacturer are carried on an aircraft. The operator should address these requirements in the appropriate manual.
b. **Crew/Ground Personnel Awareness.** Although the certification basis (§ 21.305(d)) ensures Active ULDs do not present a hazard, aircrew and ground personnel need to recognize that they are different, due to their design and contents.

c. **Maintenance Procedures/Training.** The maintenance and inspections procedures are normally derived from the Active ULD manufacturers’ instructions for continued airworthiness and/or limitations documents. This program must also include training to ensure that only qualified personnel perform maintenance on, and return these devices to service in accordance with the operators’ procedures.

6. **Disposition.** We will permanently incorporate the information in this notice in FSIMS before this notice expires. Direct questions concerning this notice to the Aircraft Maintenance Division, AFS-300 at (202) 267-3796.

ORIGINAL SIGNED BY
Carol Giles for

James J. Ballough
Director, Flight Standards Service