File Code: 2002.12.02



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC) WRIGHT-PATTERSON AIR FORCE BASE, OHIO

MEMORANDUM FOR U.S. Army Medical Materiel Agency

18 Dec 2002

Attn: Ms. Gretchen Bronson Fort Detrick, MD 21702-5001

FROM: ASC/ENFC (ATTLA) 2530 Loop Road West

Wright Patterson AFB, OH 45433-7101

SUBJECT: Airlift Approval of VaxiCool Dual-Temperature VXC-2 Refrigeration Unit (Your Memo, 2 Dec 02)

- 1. The VaxiCool VXC-2 is an advanced technology vaccine storage and transport refrigerator. When prepared for shipment the Energy Storage Technologies, Inc. VaxiCool Dual-Temperature VXC-2 Model refrigeration unit measures 39 inches Length x 21 inches Width x 21 inches Height. The estimated gross weight of a VXC-2 unit with payload is 125 pounds.
- 2. This Container is approved for air transport aboard all AMC Cargo aircraft with the following provisions:
 - a. Individual units may be hand-carried aboard the aircraft and secured as floor loaded cargo. For efficient loading of multiple units, we recommend that up to 6 units may be secured on a 463L pallet. The VXC-2 units should not be stacked and no other cargo should be placed on the pallet. A piece of plywood, which is at least the size of the base of the refrigeration unit, is recommended as an interface between the unit and the pallet surface.
 - b. Required restraint for each unit is 3 G forward/aft, 2 G up, and 1.5 G lateral. Note that for airlift on some aircraft, the pallet may be rotated 90 degrees. The shipper shall ensure that all items mounted on the units or payload contained within will withstand these forces in addition to a potential 4.5 G download. Due to the low profile, an HCU-15/C top net with fabric straps may be used for securing the units to the pallet.
 - c. With restraint straps over the lid, the VaxiCool VX-2 refrigeration unit will withstand the maximum rapid cabin depressurization without endangering the aircraft or personnel in the cargo compartment.
 - d. Units will be shipped with technical escorts. Cautionary statements and instructions shall be contained in the VaxiCool VXC-2 Operations Manual accompanying the load.
 - e. The VaxiCool VXC-2 refrigeration unit may be operated inside the aircraft using its battery. Per ASC/LUN, these units will not exceed acceptable Electromagnetic Interference levels if operated on the supplied battery. ASC/LUN does not authorize these units to be operated inside the aircraft using aircraft electrical power or other sources of power.
 - f. All hazardous materials must be prepared and certified for airlift in accordance with AFMAN 24-204(I). This air transport certification is not an approval for hazardous materials. The Air Force Packaging Technology and Engineering Facility (AFMC LSO/LOPP) grants this approval at 937-255-4503.
- 3. A copy of this certification shall accompany the item(s) during air shipment.

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4. The air transportability point of contact for this project is the undersigned at DSN 785-9647 or (937) 255-9647 or MSgt. Ronald Parks at (937) 255-2547 or Mr. Jim Leger at (937) 255-2330. The email address convention is firstname.lastname@wpafb.af.mil. Please refer to project file 2002.12.02.

CAROLINE J. BUCKEY Aerial Delivery Group Crew Systems Branch

Caroline J. Buckey

cc: HQ AMC/DOV AFMC LSO/LOPP Energy Storage Technologies, Inc. ASC/LUN