

## Technical Training Video Transcription

### PART 5 - RKN e1 Container

#### Scene 1

The RKN e1 container is an LD-Three air cargo container designed to maintain cargo at a set temperature range of zero to twenty degrees Celsius. It is powered by internal batteries and uses a heating and cooling system to circulate conditioned air around the product. The container is designed for reliability and redundancy with two batteries, three fans, two heaters and three cooling circuits.

The container can also record temperature and other data during the shipment for later retrieval by the customer. Contact Envirotainer for "RAPID" service information.

The RKN e1 container can maintain product temperature for up to one hundred hours under certain conditions and at least thirty hours at extreme ambient temperatures of minus ten or thirty degrees Celsius. The container has three fans that constantly circulate the air through the container and heating and cooling system. As with the "t" version container, the product must be loaded on a pallet or spacers to allow air flow.

The control unit is similar to the "t" version container. To start the container, open the cover to the control unit and press the ON OFF button. The indicators will flash for approximately ten seconds during the self-test function. After self test, the default display indicates the container and set temperatures.

For the two-forty-two type control unit, the battery voltage is displayed by pressing the "Menu Enter" button twice. On the three-forty-eight type control unit, the voltage is displayed on the default screen.

For the two-forty-two type control unit, change the set temperature by pressing the SET button. Use the PLUS or MINUS buttons to change the temperature and press the SET button again to confirm. For the three-forty-eight type control unit, change the set temperature by pressing the Enter button three times. Use the UP or DOWN arrows to change the temperature and press the Enter button again to confirm.

The control unit also has a series of indicators to alert the operator of container conditions. If there is a problem with the container, the red alarm indicator flashes and the condition is displayed.

Although the container has redundant systems, the situation should be assessed for appropriate action to be taken. During start-up, if the red alarm cannot be cleared by turning the container back on, the container should be replaced. However, if the container is already at the destination and able to maintain set temperature while operating on batteries, delivery should proceed with close

monitoring of the container.

A flashing yellow alert indicates the container requires attention and the reason for the alert is noted on the display. During container preconditioning, the alert "inside temp out of spec" will flash until the container temperature is within the required range.

Confirm the container's main power switch is on by turning the container ON while it is operating on batteries. If it does not start, remove the thumb screws and remove the adapter tray. Turn the switch to the "start" position and release. Ensure to return the adapter case and thumbscrews to the proper position.

The container is equipped with a charging cable and adapters for the power outlets in most countries. To charge the container, position the container near an electrical outlet that is rated for at least one thousand, eight hundred and fifty Watts.

Pull out the entire length of cable to prevent heat buildup during charging and placed out of the way. Select the proper adapter and connect the cable to an electrical outlet. The blue charge indicator flashes when it is recharging and, at ninety-five percent capacity, the batteries are fully charged and the blue indicator remains lit. Disconnect the container from the electrical source and return the cable and any adapter to the charging unit and secure the door closed.

Ensure the container is ON and set it to the required temperature. Close the container doors and allow it to precondition for at least thirty minutes before loading. After loading confirm the container is maintaining temperature within the specified temperature range and that both the charging unit and the doors are closed before transport. During transportation, plug in the container for as long as possible when in the warehouse.

## **REVIEW**

To review some of the major points from this section:

- A red alarm indicates a container problem that may require the shipment to be suspended
- A yellow alert indicates the container requires attention
- When charging, ensure to use an electrical outlet rated for the container
- At 95 % battery status the batteries are considered as fully charged and the blue indicator remains lit