



## HUMANITARIAN OPERATIONS PACKAGED ESSENTIALS (HOPE)

### CAPABILITIES:

HOPE could provide the US with a rapid humanitarian disaster response capability by allowing food and water to be delivered directly onto a population. The system can be deployed between 800ft AGL-25,000ft MSL keeping the aircrew and aircraft out of harm's way. The payload can be activated at any altitude between the release point and the ground, allowing for a mission tailored dispersion/density footprint(s). The system was developed by NSRDEC and sponsored by USTRANSCOM and USAF.



**HOPE Deployment Sequence**

### DESCRIPTION:

The HOPE aid items are specially designed food and water items packaged into boxes. The packages were designed to reduce/eliminate the potential of injury should an aid item impact a human. The items are wrapped in a foam overlay, which provides cushioning on impact and additional drag to control the rate of descent. The HOPE system is the delivery method for the aid items. The system is rigged similar to a Container Delivery System (CDS) payload with a few exceptions; a 26 foot ring slot parachute, Low Cost Container (LCC), and protective foam. After the payload exits the aircraft, the payload rapidly descends towards the ground until the activation device unlatches the LCC at a predetermined altitude. The parachute pulls the boxes, full of aid items, out of the net and allows the aid items to fall freely from the boxes towards the ground. The remaining components remain attached to the parachute and slowly descend as a single unit.



**Water Packet in Foam Overlay**



**Water Packet**



**Food Item**

### FACTS:

- Payload Weight: ~1,000 pounds
- Aid Items: ~2,400 water or ~3,000 food bars per bundle
- Aircraft compatibility: C-130 or C-17

### POINT OF CONTACT:

**US Army Natick Soldier Research, Development & Engineering Center  
Aerial Delivery Directorate**

COMM: (508) 233-4495

Email: usarmy.natick.rdecom-nsrdec.mbx.nati-amsrd-nsc-ad-b@mail.mil