



HUMANITARIAN OPERATIONS PACKAGED ESSENTIALS FROM AN UNDERSLUNG LOAD (HOPEFUL)

CAPABILITIES:

The Humanitarian Operations Packaged Essentials From an Underslung Load (HOPEFUL) capability was developed by NSRDEC and sponsored by OSD, with the goal of delivering humanitarian aid from a vertical take-off and landing (VTOL) aircraft within the first few days of a disaster. The project developed a system in which the humanitarian aid items are rigged into a helicopter sling load (HSL) cargo net, transported to a designated location, released and the aircraft would then return to base with all non-aid items.

DESCRIPTION:

The HOPEFUL system uses a 10,000 pound capacity HSL cargo net with a wireless activation device and an extra line to retain all non-aid items with the helicopter. The aid items are loaded into the cargo net and secured to the aircraft. The helicopter travels to the desired air release point and activates the cargo net release, allowing all aid items to fall out of the net. The net is retained by the aircraft hook via a retention line and the helicopter can return to base with all of the equipment for reuse.

FACTS:

- Payload Weight: ~6,000 pounds
- Aid Items: ~15,000 water or ~18,000 food bars
- Aircraft compatibility: UH-60 and CH-47

POINT OF CONTACT:

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HOPEFUL under UH-60 during transport



HOPEFUL during deployment



Dispersal packets dropped at low altitude

UNCLASSIFIED

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TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.