

COPTERBOX

JULY 2004 PRODUCT REVIEW

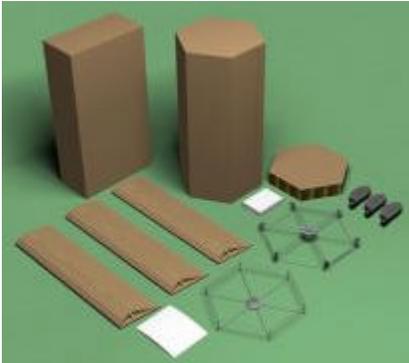
BY WILLIAM E. OTT

I recently saw a 'CopterBox' demonstration and immediately saw the usefulness this device could offer the public safety and emergency management markets for simple, cost effective aerial supplying of personnel in remote or disaster stricken areas. CopterBox is the ideal delivery system to provide supplies to people trapped by flood waters or those stranded by snow or ice.

CopterBox is a container that auto-rotates to the ground delivering supplies to a targeted drop zone. CopterBox can be packed with up to 120 pounds of equipment or supplies however at that weight the impact is a little above 40 feet/second. Packed with 60 pounds the impact velocity is a much softer 30 feet/second.



CopterBox was originally designed for a heavy equipment company to provide supplies to their equipment in very remote areas nine years ago.



CopterBox is a hexagonal shaped tubular box made of biodegradable, waxed, heavy cardboard. CopterBox has a hexagonal wire frame at the top and bottom for strength and to allow attachment of the wings. At the top of the box three aerodynamic folding wings are attached to the wire frame. These wings are folded down flush with the box during transport to the drop zone so the box takes up very little space. CopterBox has a honeycomb cardboard crush-pad in the bottom of the box to help cushion the supplies contained in the box from the landing impact.

CopterBox is packed with the required supplies, be it food, medical supplies, mechanical or electronics parts, water, fuel, ammunition, etc... Once loaded the CopterBox can be deployed from any type of aircraft from large cargo airplanes to small single engine airplanes or helicopters. CopterBox can be deployed at any altitude but drop zone accuracy improves the lower to the target the dropping aircraft is. CopterBox can be deployed at airspeeds of up to 130 knots. Once CopterBox exits the aircraft a small drogue parachute is deployed. The drogue

chute does three things, it orients the box in the proper position for decent, it deploys the wings, and it assures the center of gravity during decent is kept near the bottom of the box. Once the wings are deployed the box starts to auto-rotate in a controlled decent. The drogue chute stays in place keeping the box properly oriented. CopterBox lands in the drop zone bottom down so the crush pad dissipates much of the energy of impact helping to protect the supplies. As soon as CopterBox is on the ground, it stays put. The drogue chute isn't big enough for even strong winds to drag the box.

CopterBox is made entirely in North Carolina and is available at prices starting at \$300 per box in quantities of 500. CopterBox is available with complete customization. You can have cardboard of any color, chutes of any color, etc...

CopterBox is manufactured by DropMaster and you can learn more at

www.dropmaster.com.

I welcome your comments, criticisms, feedback, and ideas. You may contact me at ejems@cpcstech.com

William Ott is president and chief consultant of CPCS Technologies, a NC-based technology consultancy providing services to the public safety and defense communities. He's been involved in EMS since 1981, in field, education and administrative capacities