



ENHANCED SPEED BAG SYSTEM (ESBS)

OVERVIEW:

The ESBS is a low cost solution to increase survivability of supplies and lethality on the battlefield. The need for this system derives from units creating ad-hoc delivery methods with techniques known as "Speed Ball" using rucksacks, aviator's kit bags and/or body bags to free drop commodities resulting in losses of up to 60% with 100% non mission capable items received by the ground forces. The ESBS has demonstrated, during trials, small element resupply with the ESBS is superior to the current ad-hoc methods resulting in increased Class V survivability and lethality on the ground.

DESCRIPTION:

The ESBS is a hands-free operated automatic rope brake assembly that controls the rate of descent and orientation of a cargo package comprised of three primary components: linear brake, speed line, and multipurpose cargo bag with loose fill padding and energy dissipation materials. The linear brake system operates by using a braided friction grip to apply friction to a self contained rope as it passes through the device. The friction grip is tensioned to one of various settings based on the weight of the package which controls the amount of friction on the speed line reducing the rate of decent. The multipurpose cargo bag is specially designed to land with its base down allowing the energy dissipation material to absorb the impact energy and is compatible with the Low Cost Low Altitude (LCLA) family of parachutes.

The ESBS will provide the capability to deliver six manageable size/weight packages between 125 and 250 lbs of supplies, from a rotary wing aircraft simultaneously, in less than 14 seconds Time on Target, with pin point accuracy.

It will provide Ground Commanders a low cost, economical material solution with predictable results from free fall aerial delivery with increased survivability for small element resupply operations from rotary wing aircraft from 100 ft AGL in environments where the terrain and or enemy situations prevent typical resupply methods.

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