

# WINDHORSE AEROSPACE

## POUNCER™ AUTONOMOUS AIR VEHICLE FACTSHEET

The POUNCER™ proof of concept aerodynamic calculations have been carried out by Frazer Nash Consultancy. They support the delta wing design that is expected to exceed range requirements for a given payload and wingspan limitations. The shape is a clipped delta with a higher aspect ratio wing for improved range and it has dihedral winglets for stability. The air vehicle wingspan is limited to 3 metres because of the internal dimensions of a Hercules aircraft.

POUNCER™ payload capacity	50Kg
Full payload to Rations	50 man day rations for Asia, Africa 40 man day rations for Europe, The Americas and Oceania.
POUNCER™ Empty All Up Mass	25Kg
POUNCER™ Glide Range	35/40 Kilometres based on a release at 10,000ft
POUNCER™ Max Release Height	25,000ft = Glide range of approx. 100 Kilometres
Deployment from	C-130 Hercules
Release Air Speed	120 knots
POUNCER™ Wingspan	3.0m
POUNCER™ Fuselage Length	1.5m
POUNCER™ Total Load Volume	0.15 cubic metres

### Pricing

POUNCER™ RRP	£500
Aid Delivery Cost	£5 per Kilo average

Comparisons with Parachute delivery systems are extremely difficult as POUNCER™ is designed to not only provide aid but also to be broken up for shelter, cooking or providing heat to survivors, whilst Parachute systems can in some cases be re-used. However, recovery, re-loading and re-packing of these systems can be difficult and sometimes costly.

POUNCER™ has been designed to be a supplementary aid delivery system, used in conjunction with other delivery systems. That said, other delivery systems require the host aircraft in some circumstances to over-fly the drop zone whilst POUNCER™ can be launched at a stand off range of 35km or more, reducing the risk to the host aircraft.

### Benefits

Delivery Accuracy	Should be accurate to approx. 7m
Safer	Delivery drop zone is at least 35Km away from the launch point, not putting aircraft or aircrew at risk
Dependability	Cargo unlikely to be interfered with by local warlords as a result of direct delivery
Price	Price per Kilo delivered in line with other methods
Autonomous	Flies by itself, no external control
Non-recoverable	Designed to be used once so no cost to recover and the POUNCER™ airframe is intended to provide shelter and fuel. One day, the airframe may be made of edible components.
Range Extendable	Future versions will have the option to extend the range with the use of a power unit