

JETBEE

High-Speed, Autonomous, Aerial Delivery System



The JetBee from Jet Bike Ltd. is a high-speed, hybrid jet / electric powered airborne Vertical Take-Off and Landing (VTOL) delivery drone that will enable rapid delivery of critical, life-saving help within minutes of a call to aid. The JetBee will have a significant positive impact on the capability of rescue, disaster, humanitarian and military aid services such as Mountain Rescue, Coast Guards, UNICEF and the RNLI to name but a few, and will save lives where time is a critical factor.



Current drone technology is limited with regard to payload, speed, and range, and generally cannot operate in adverse weather conditions. This makes current drone technology suitable for reconnaissance, but is inadequate for public safety, search, rescue and recovery operations.

This is where the JetBee excels. With its compact footprint of only 2m² and with a cruising speed of up to 500mph it has a range in excess of 300 miles and can carry a payload up to 30kg.

This means it can deliver life-saving supplies to locations 40 km away in less than 10 minutes.

JetBee has been designed with a flexible payload bay that can carry 30kg packs which could include supplies for various situations, such as:

- Food rations and fresh water
- Flotation aids
- Environmental shelters
- Spares for equipment and repairs
- Disaster relief supplies
- And many more
- Spare batteries and power packs
- Survival packs
- Vehicle fuel
- Communication equipment
- Medical supplies

JetBee is at the cutting edge of drone technology offering a combination of performance, size and range that is not available anywhere else in the world. Tilt-jets mean take off is possible within 30 seconds with a transition to fast horizontal flight providing delivery exactly to the point the lifesaving equipment is needed.

A victim in the water has an increased drive to survive if they have flotation aids, food and fresh water and they also know that their position is known to the rescue authorities. The JetBee will be able to deliver this to them faster than a standard drone or helicopter increasing their chance of survival.



It disrupts all previous thoughts and capabilities over what is and what is not possible as this kind of search and delivery system has never been seen before. It will provide a safer, quicker and more durable method to deliver what is needed exactly where it is needed and when it is needed.

JETBEE

A true hybrid Jet-Electric vehicle combining the advantages of high speed and high lifting capacity of jet aircraft with the VTOL capability of a traditional quadcopter. Stable in poor weather conditions, robust and capable of operating near groups of people as there are no exposed blades. Ideal for search and rescue missions as well as resupply both in the civil and military marketplace. Full INS system with GPS, Lidar and optical data fusion for autonomous operation.

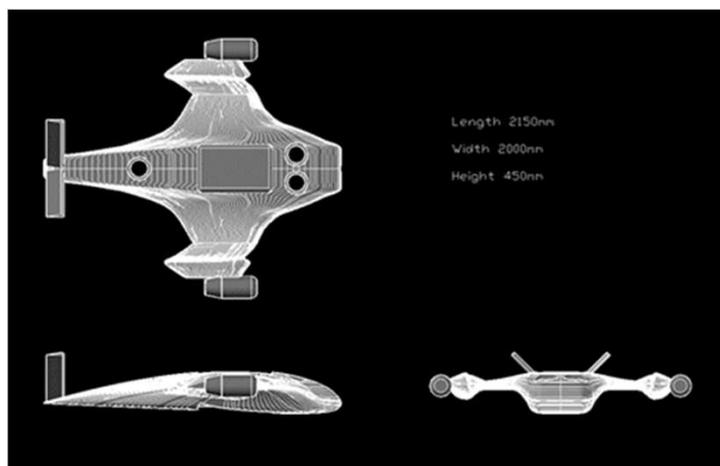
PAYLOAD OPTIONS:

Quick change payload bay can take either cargo containers (60cm x 30cm x 25cm height) or can have a range of sensors fitted.



USES:

- Search & Rescue
- Last mile resupply
- Transport of medicines and blood
- AED and lifesaving equipment
- Humanitarian Aid delivery



SPECIFICATIONS:

MTOW	96kg
Empty Weight	42kg
Wing Span	2.0 m
Length	2.15 m
Powerplant	2x 15HP Jet 5x EDF
Max Payload	30kg
Fuel capacity (Kerosene)	26 litres
Take-off / Land method	VTOL

PERFORMANCE:

Endurance ¹	48 mins
Max. Cruising Speed	500 mph
Min. Cruising Altitude	30 ft
Max. Cruising Altitude	20,000 ft
Hover Duration	12 mins
Battery Capacity	10 TOAL
Cold start to launch	30 seconds

KEY POINTS:

- Airborne in less than 60 seconds
- No need for runway
- Small footprint UAS
- 30kg payload
- Quick change payload bay
- VTOL with hovering capability
- Range up to 300 miles*

*payload dependant