

Mono 550 Helicopter | High Payload UAV



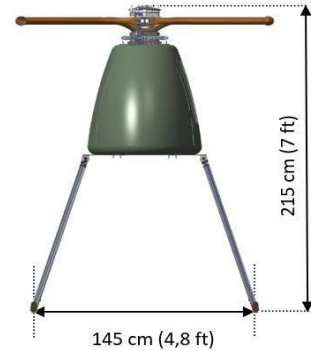
Rigid Rotor two-bladed helicopter with smooth transmission
(driven by ejection of gases from a turbojet)
and electrically driven yaw control



- Cyclic control by Swash Plate and 4 Servomotors
 - 3 required + 1 as backup
- Yaw control by 2 Electric Duct Fans
 - Brushless motors with faired propellers

Technical Information

<i>MTOW</i>	250 kg 550 lbs
<i>Empty Weight</i>	64 kg 141 lbs
<i>Useful Mass</i>	186 kg 410 lbs
<i>Flight Duration</i>	90 minutes
<i>Cruise Speed</i>	148 km/h 80 kts 92 mph
<i>Range</i>	222 km 138 miles
<i>Fuel type</i>	Jet A1 Kerosene + 5% Oil
<i>Fuel Capacity</i>	135 litres 36 gal 95 kg
<i>Main Rotor Speed</i>	1400 RPM (Governor)
<i>Available Power to the Rotor</i>	43 kW 58 hp
<i>Power Loading / Lift Efficiency</i>	5,7 daN/kW
<i>Disk Loading</i>	29 daN/m ²
<i>Yaw Control</i>	2 Electric Ducted Fans
<i>Landing Gear</i>	Foldable with suspension
<i>Anchor points</i>	4 screws under the Unit



Front View



Side View



First Prototype Data :

- Control : semi-manual (Head-Lock)
- Radio-Controller Transmission : Jeti 2,4GHz (Duplex 2.4 EX)
- Servomotors : Volz DA-26 or MKS HBL388
- Backup battery for powering of the servomotors and the receiver
- Telemetry on Transmitter

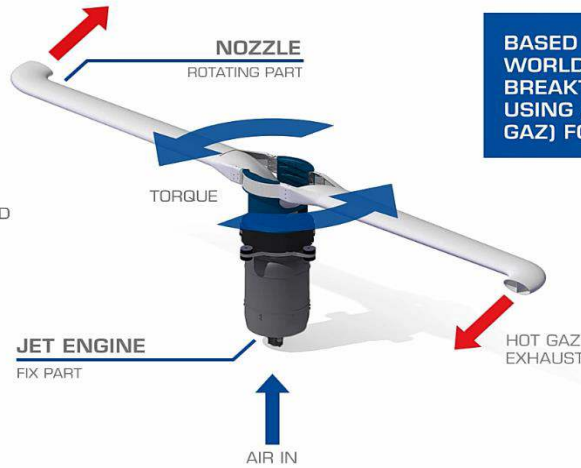
EYO Engine 550 | Heavy Lift Operations

Compact, Lightweight & Powerful Powerplant, smooth Transmission
(driven by ejection of gases from a turbojet)



TECHNOLOGY & INNOVATION

- VERTICAL JET ENGINE
- HOT GAZ EJECTED AT THE TIP OF 2 REVOLVING NOZZLES
- ROTATING THRUST TRANSFORMED INTO A LIFTING FORCE
- FREE REVOLVING SHAFT, NO RIGID LINK TO THE BODY STRUCTURE



BASED ON AN INNOVATING, WORLDWIDE PATENTED, BREAKTHROUGH TECHNOLOGY USING A DIRECT FLUID (HOT GAZ) FORCE TRANSMISSION.

Technical Information

<i>Weight Ready to Run</i>	16 kg 35 lbs
<i>Mechanical Power</i>	40-52 kW 53-70 hp
<i>Settable Rotor RPM Range</i>	700-3000 RPM
<i>Fuel type</i>	Jet A1 Kerosene + 5% Oil

- ✓ No Torque Effect on the fixed Part
- ✓ Very High Motor Torque at low RPM
- ✓ Power to Weight Ratio
- ✓ Easy Operation and Maintenance
- ✓ Low Vibration
- ✓ Minimum number of Parts

