

# ADSL PROJECTS

Aerospace

Land System

Combat Systems Technology

Unmanned Systems



# ADSL BUSINESS STRUCTURE

**ADSL**

## Aerospace

Cargo extraction system  
– Free / Precision

Ground support vehicle

Aero structures

Subsystem

## Land System

Next Generation VIP  
vehicle

Light Armored Multi Role  
Vehicle

Mounted Gun systems &  
troop carrier

T-72/90, VT 72 etc  
localization

Mobile / static shelters

## Combat Systems Technology

RCWS & Turret

Air craft weapon launcher

Air defence

Defense Electronics and  
smart solution

## Unmanned Systems

V35 UAV

V51 UAV

Sub system Development

Special Application



# ADSL At A Glance

**Airbornics Defence & Space Private Limited (ADSL)** was formed with a mission to Design, Manufacture, Upgrade, Maintain Strategic and Tactical Defence & Aerospace Equipment.

ADSL is organised in Four Vertical i.e.; Aerospace, Land Systems, Combat System Technologies & Unmanned Systems. ADSL is committed & equipped with proven manufacturing capability like System Integration, Defence Electronics, Heavy Fabrication, Advance & Precision Machining.



# Up Armoured Vehicles



Bulletproof SUV



Bulletproof Sedan



Armoured Tactical Vehicle



Stallion



Medium Armoured Troop Carrier



Light Armoured Troop Carrier



Army Ambulance



Police Morcha



HET 70 Ton



# ADSL Combat Vehicle / Light Armoured

## ➤ Overview:

ADSL Combat Vehicle is an armoured capsule based light bullet proof vehicle developed on Hilux chassis to provide protection to the personnel of Defence, Para Military and Police forces against small arms fire and under belly grenade attacks. It has capability to be used in counter terrorist as well as conventional roles.

YEAR:	2022
MAKE:	Toyota
MODEL:	Hilux
BODY STYLE:	Heavy Duty Truck
ARMOR LEVEL:	BR6
TRANSMISSION:	6-Speed Manual
ENGINE:	2.7L Gasoline, 4-Cylinder
HORSEPOWER:	201hp @ 3400
DRIVETRAIN:	4WD
DIMENSIONS (MM):	5330 x 2100 x 2000
WHEELBASE (MM):	3085
SEATING CAPACITY:	6-7 (Based on requirement)
FUEL CAPACITY:	80 L



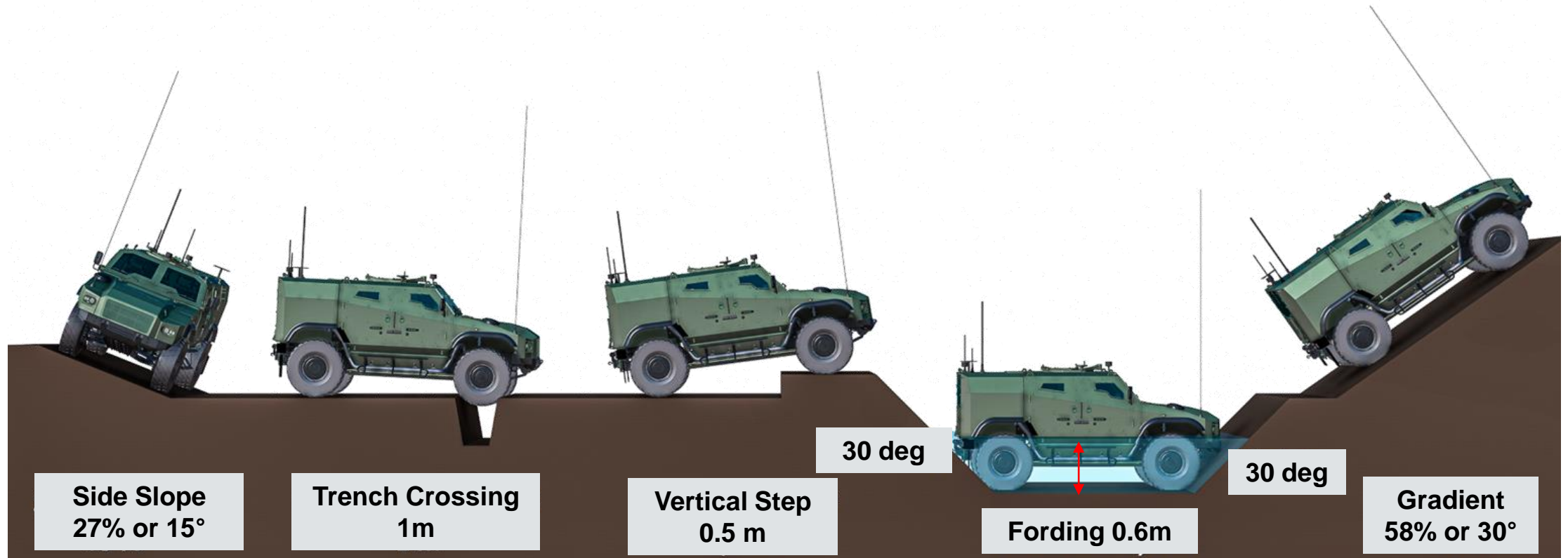
This ADSL vehicle carries an armor level of up to CEN BR6 with its key features being durability and dependability. The ADSL Combat Vehicle can accommodate up to 7 passengers including the driver and is built tough to last within its wide spectrum of applications.





# ADSL Combat Vehicle

## ➤ Mobility Parameters:



# Armoured Drivers Cabin HMTV 8x8 – MGS

## Key Features:

- ✓ Right Hand Drive
- ✓ STANAG Level I protection
- ✓ Armored Glass
- ✓ Air conditioned
- ✓ Cabin design and cabin aggregates meeting CMVR

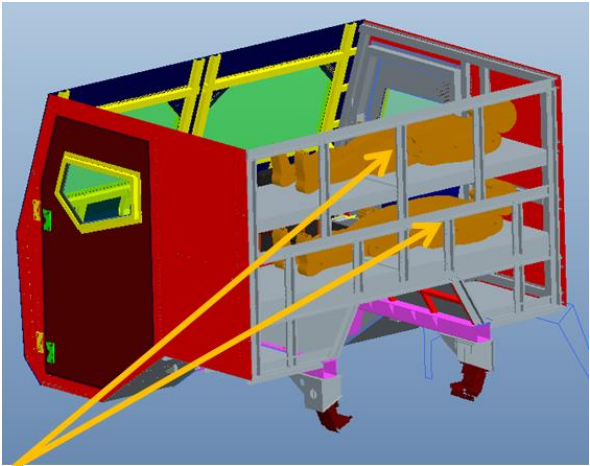
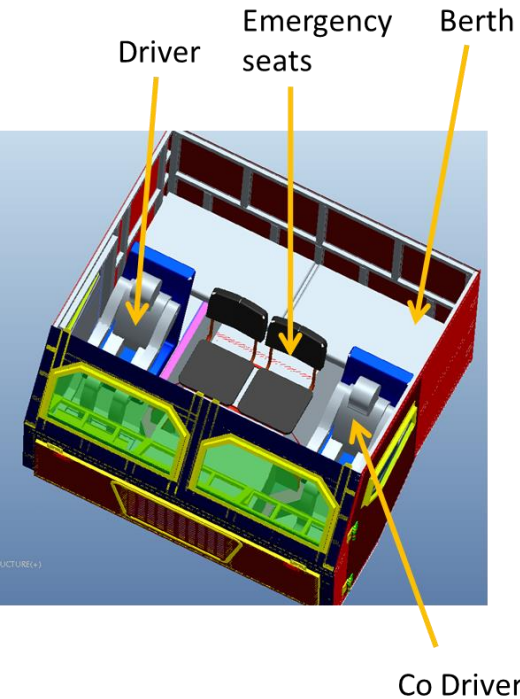
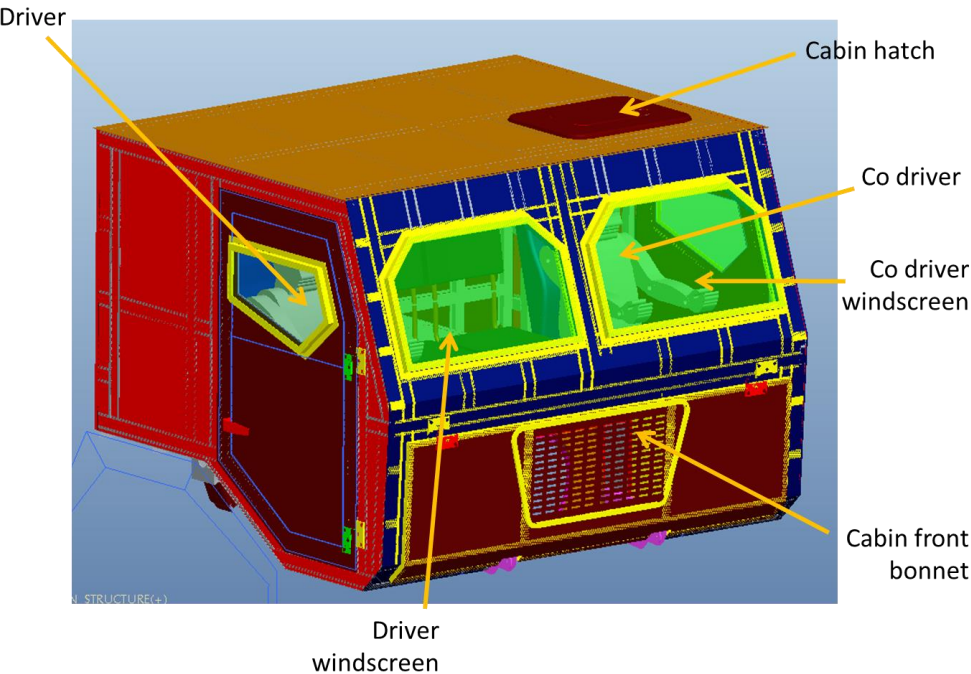
Overall Length, mm	2132
Overall height, mm	1790
Overall Width, mm	2400
Approx Weight, kg	1650

One Cabin will be integrated on BEML HMTV 8x8 vehicle

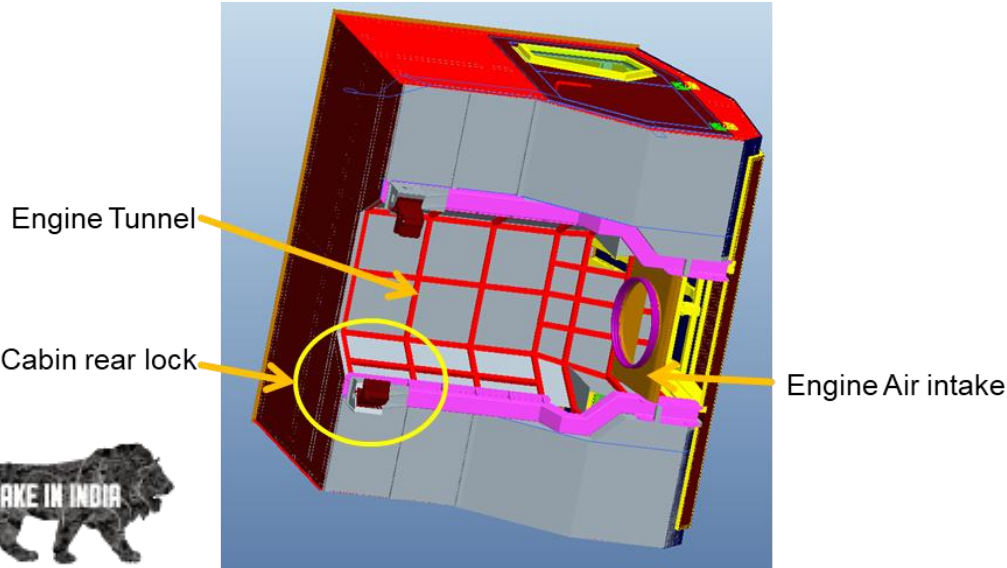




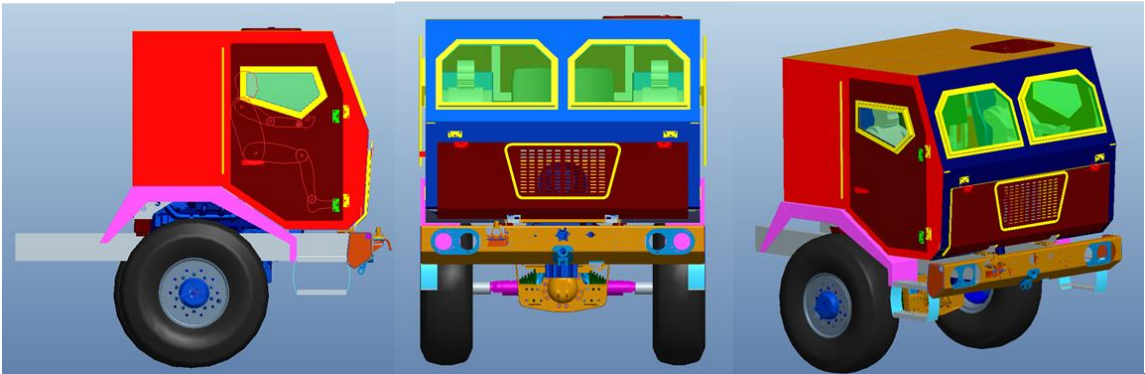
# Armoured Drivers Cabin HMV 8x8 – MGS



Double berth provision

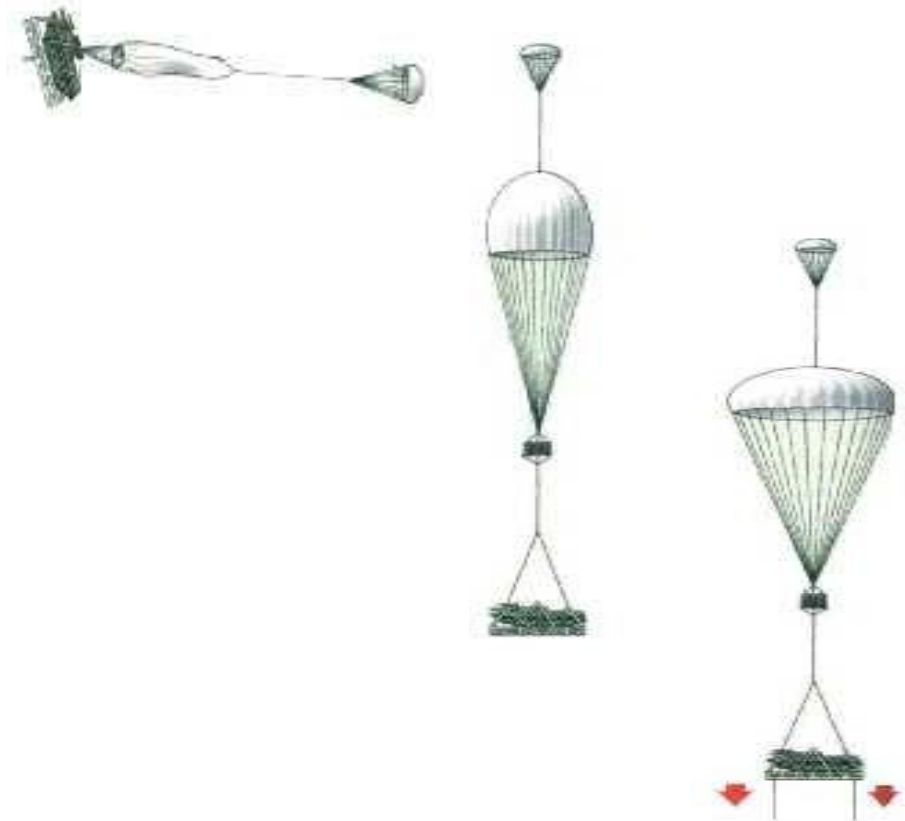


2400





# Heavy Drop System – 20T

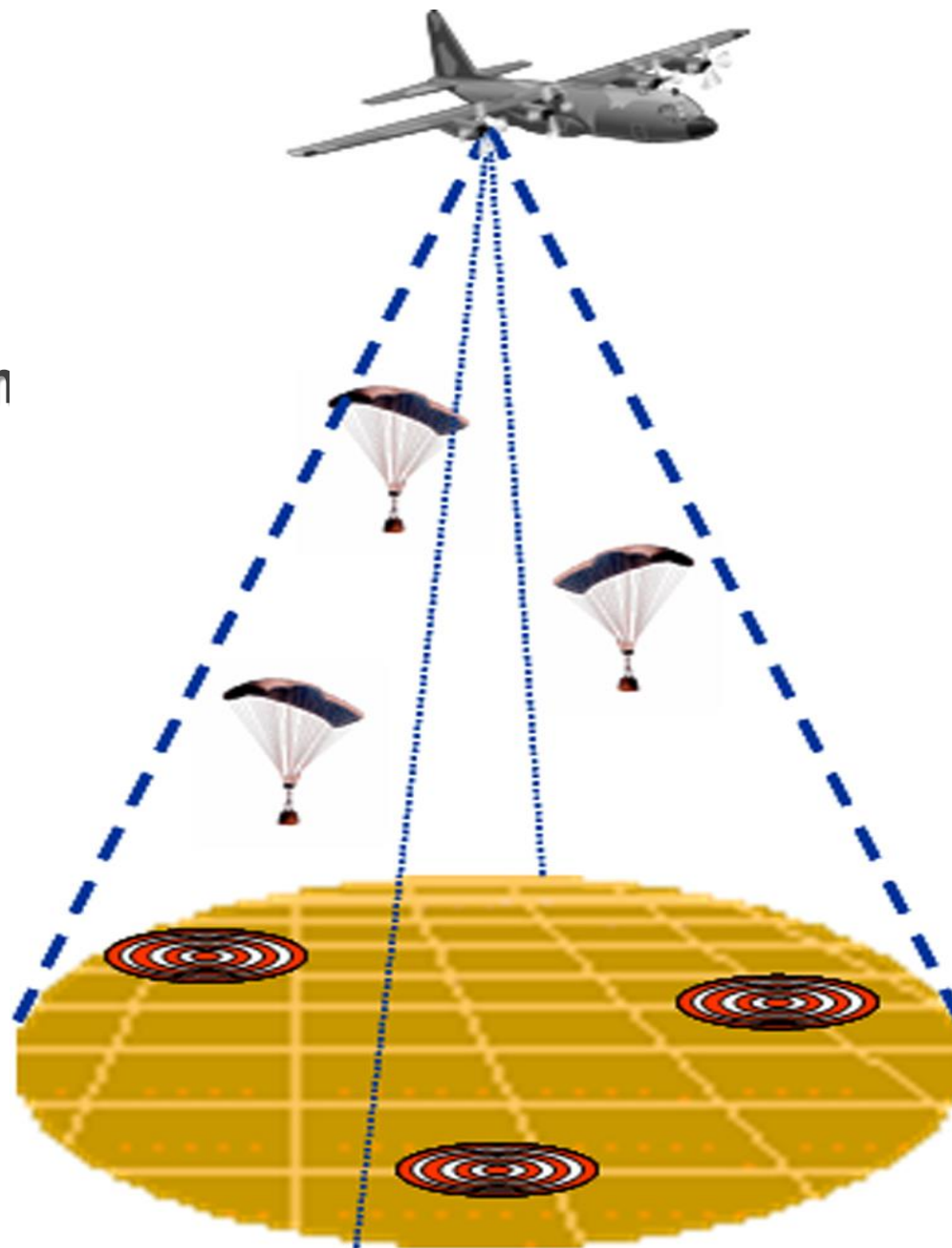


# NAVAL CARGO DROP



# PRECISION DROP SYSTEM

- Develop Precision Drop system
- Develop Extra wide Platform
- Develop Supply drop pallet





# Hydraulic Platform Loader

**Scope of Work :** Design, Development & supply of complete vehicle to ADRDE.

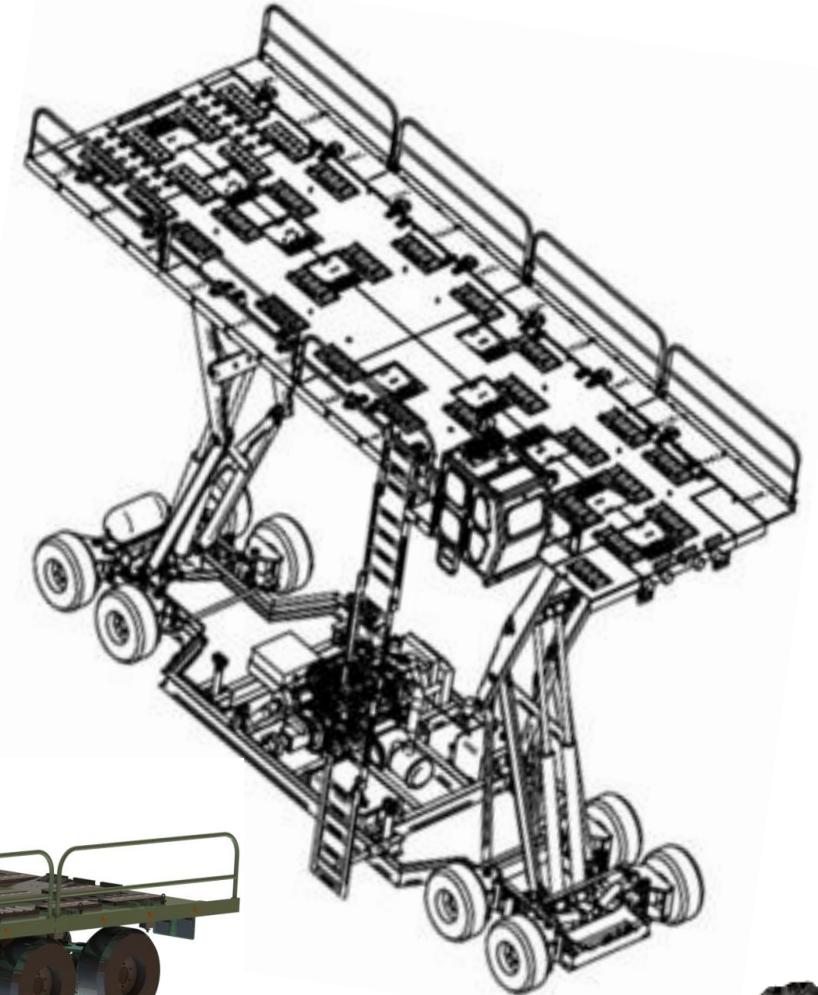
Hydraulic Platform Loader (HPL) is required to load & offload the Heavy Drop Loads inside/from the Aircraft. This system will also be used for the transportation of the Load from Load preparation site (Aerial Port) to the Aircraft tarmac.

HPL should be self-propelled for transportation of max. 20000 kg of Cargo-load, with the following speed range :

- (i) Unladen forward speed = 32 kmph (max)
- (ii) Unladen reverse speed = 10 kmph (max)
- (iii) Loaded platform speed = 15 kmph (max)

Overall Dimensions of HPL :

- (i) Length : 10,130 mm
- (ii) Width (Platform) : 2,870 mm
- (iii) Width (Over Tyres) : 2,580 mm
- (iv) Height : 2,430 mm



# NEXT GENERATION LOADER

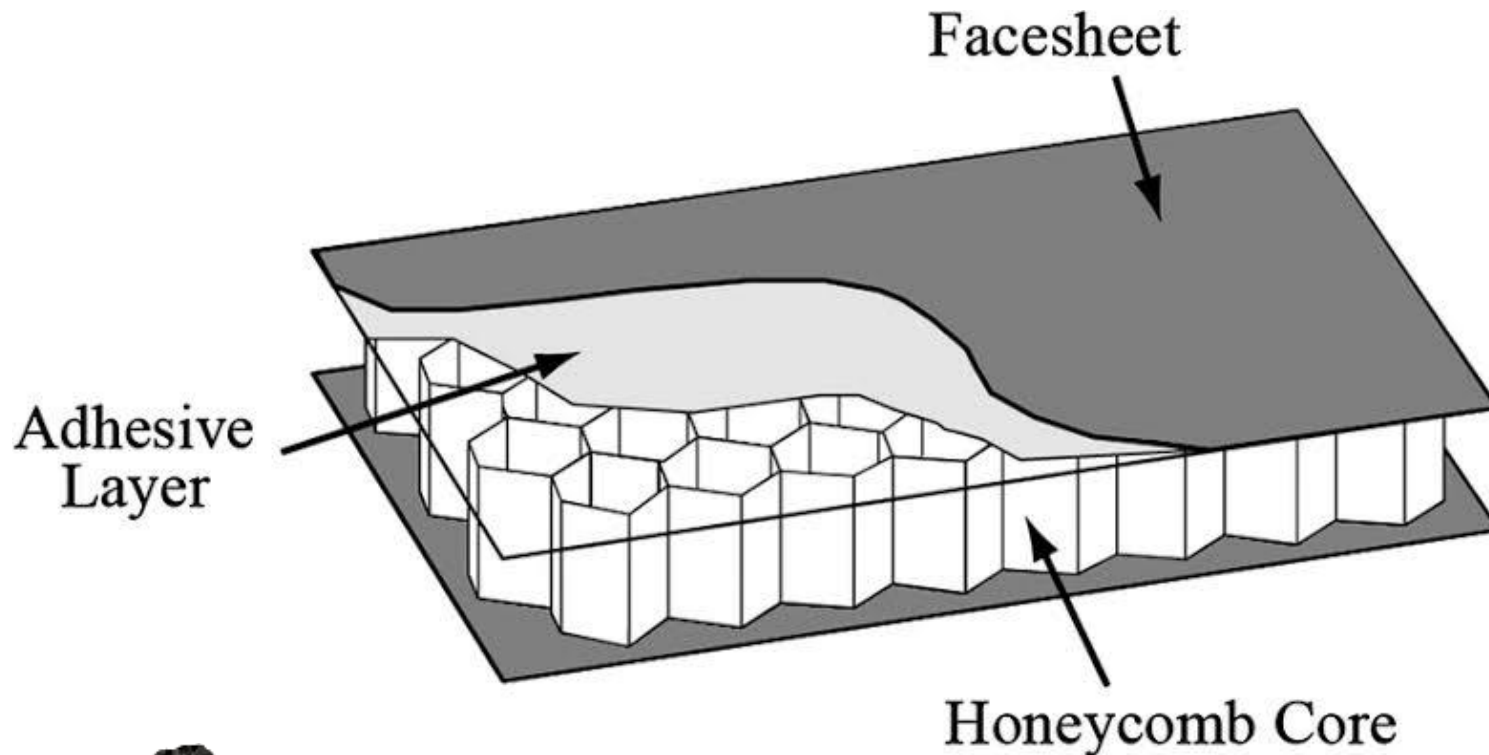
- **Modular trailer with Pendulum axle**
  - Front module with mobility. Can be detached while loading
  - Rear modules as required for various lengths of platform
- **Outrigger to stabilise and lift the load – 300 to 2000 mm**
- **Top platform with side sliding lock to take care of different width of platform**
- **If side loading require then one module with small lift as heavy load will not go for side loading**



<https://youtu.be/wL3YvOe0ZgE>

# AERO STRUCTURES

- Local production of Pre-pregs
- Local production of aramid Honeycomb structure
- Manufacture components using advance composite





# RCWS AND TURRET SYSTEMS

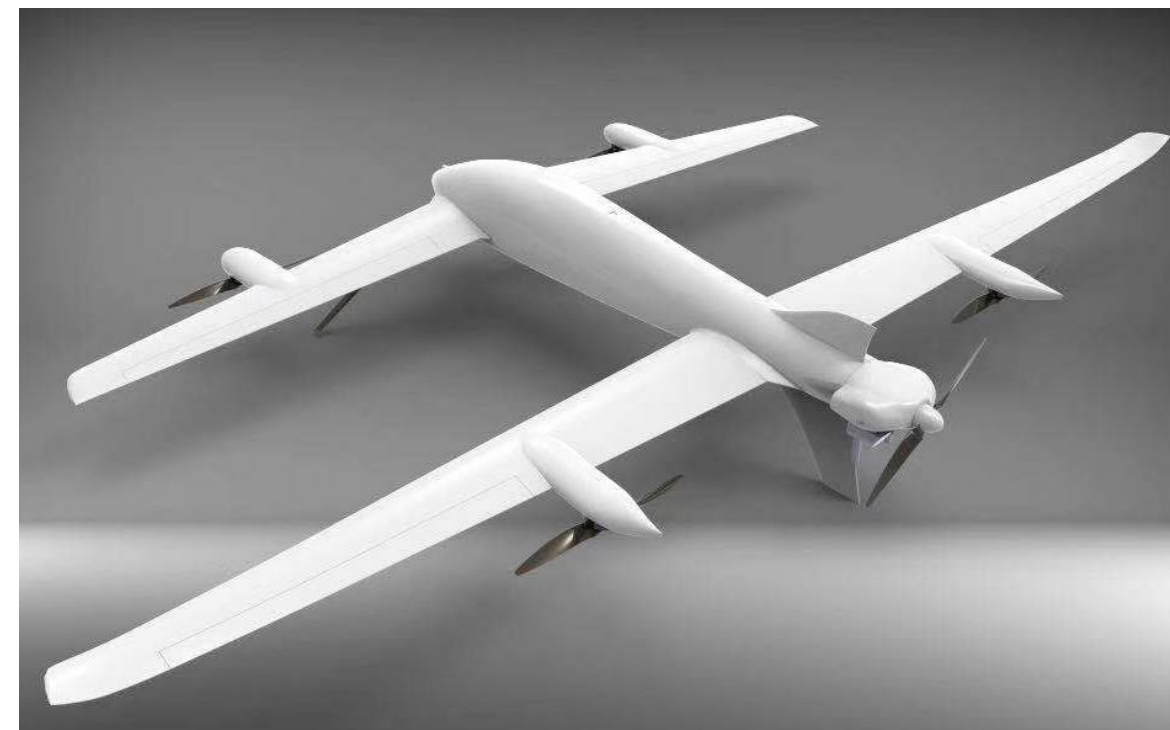


1. **RCWS 12.7 mm cum 7.62 mm cum 5.56 mm , with unique features and proven capability**
2. **One Man Turret – 30 mm capability**
3. **Ballistic computing, servo drive and stabilization logic is in-house along with our European partner. Complete manufacturing in house in India**
4. **Also targeting products in higher caliber and Air defence weapon system**



# VTOL FIXED WING UAV : AV35 – EISR / GISR

Specifications	
Length: 2.2 m	
Wingspan: 3.7 m	
Max Take Off Weight: 35 kg	
Payload: 5 kg	
PowerPlant: 60CC EFI Engine	
Fuel Type: Motor Gasoline/AV Gas	
Performance	
Maximum Speed: 120 km/h	
Cruise Speed: 90 km/h	
Range: 150 km	
Communication Range: Line-of-sight propagation	
Service Ceiling: 4000 m	
Endurance: 480 Mins	
Item	Performance
Take-Off Way	• Assisted Takeoff/Landing (Moving Platform)
	• Autonomous Takeoff/Landing (Moving Platform)
	• 20m x 20m Area for Takeoff/Landing



# VTOL FIXED WING UAV : AV51 – GISR

## Specifications

Wingspan: 5.1 m

Length: 2.9 m

Max Take Off Weight: 95 kg

Payload: 40 kg

PowerPlant: 170CC EFI Engine

Fuel Type: Motor Gasoline/AV Gas

## Performance

Maximum Speed: 135 km/h

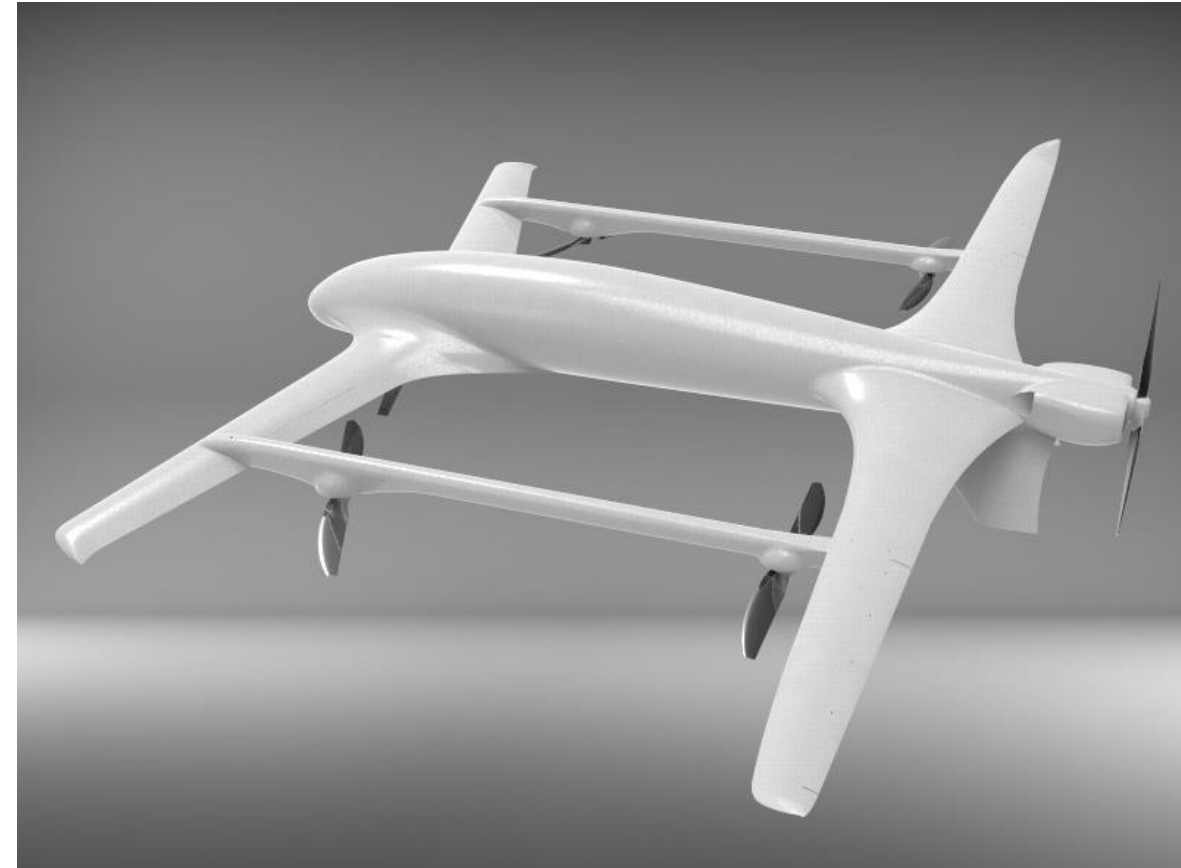
Cruise Speed: 115 km/h

Range: 100 km

Communication Range: Line-of-sight propagation

Service Ceiling: 5500 m

Endurance: 90 Mins



## Item

## Performance

- | Item     | Performance                                    |
|----------|--|
| Take-Off | • Assisted Takeoff/Landing (Moving Platform)   |
| Landing  | • Autonomous Takeoff/Landing (Moving Platform) |
|          | • 10m x 10m Area for Takeoff/Landing           |





# QUAD-COPTER : AQ10 – EISR

## Specifications

Aircraft Dimension unfolded: 910\*720\*525mm (L\*W\*H)

Aircraft Dimension folded: 480\*545\*525mm (L\*W\*H)

Maximum Take-off Weight: 10 Kg

Maximum Payload Capacity: 1 Kg

Propulsion: Fully Electric

### Performance

Maximum Speed: 15m/s

Range: 25 Km

Communication Range: 10 Km

Service Ceiling: 3500 m AMSL

Endurance: 70 min

## Performance

Autonomous take-off landing

2m x 2m Area for take-off/ landing



# Military Logistic Drone

**Drone Capacity  
60Kg and 100Kg**



# GROUND CONTROL & COMMAND CENTER

Ground control and command center is a flexible and universal solution for controlling unmanned vehicles and payloads. By using a unique, modular electronics compartment (MEC), application-specific hardware can be quickly installed. control unmanned aircraft vehicles (UAS) and its payloads. It can also be configured to control and monitor measurement and sensing equipment. The ground control acts as the hub for the intelligence, surveillance, and reconnaissance (ISR) data generated by the unmanned aircraft's payload.

We can design, develop and manufacture Command and Control systems and sub-systems such as Shelters, Consoles, Rack Type Cabinets, Power Distribution Units(PDUs), Monitoring and Command Modules, Command and Control Software and User Interface Software.





# GROUND CONTROL OPERATOR INTERFACE DEVELOPMENT

The Operator Interface (OI) provides real time control of the Uas and has screens to monitor data coming from the aircraft. Because of its modular structure, OI is easy to use for a wide range of operators with different training levels.

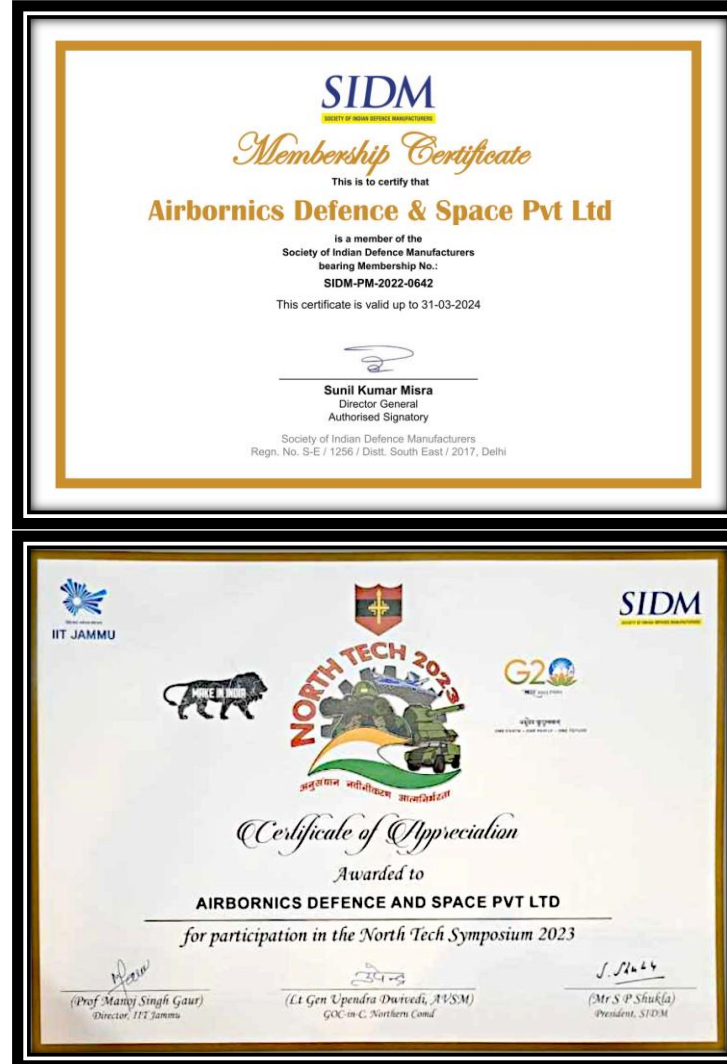
Main functions of IO can be listed as follows

- Commands and Controls the Uas
- Monitors detailed Telemetry Data
- Provides Mission Planning and Mapping functionality
- Displays and Configures Camera views
- Provides computer-generated graphics for various gauges and displays



# Our Certifications

Striving for perfection and progress





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Striving for perfection and progress



IATF 16949



ISO 9001:2015



CMMI Level 3



ISO/IEC 27001:2013



Ballistic Material Testing



MSME Certificate



Registered with  
Ministry Of Defence-DGQA



ISO 9001-2015



EN ISO 3834-2:2005



EN 15085-2



IATF 16949



IRIS 22163-2017



PESO Certified



# Thank You.

## Jai Hind !

