



NEXTLEAP

AERONAUTICS

India's Leading Innovator in UAV Systems & Defence Technology

Company Profile & Products Overview



#startupindia

Powered by
 **PARAS DEFENCE**
& SPACE TECHNOLOGIES LIMITED



High Altitude
Logistics



Lethal Precision
Attack



Precision
Agriculture

Leadership Team

Led by 3 experienced Aeronautical Engineers with significant Industry experience



Alvin Anthony
CEO

Experience: 16 yrs

UAVs & Drones, Aerodynamics, flight controls & dynamics, flight testing, simulations, airworthiness certification, Automotive
BE – Aero (Aerodynamics)



Thariq Ahmad
COO

Experience: 16 yrs

Mechanical design, carbon composite design & manufacturing, propulsion system development, aero-structures
ME- Propulsion
BE-Aero (Propulsion)



Gajendra Kashyap
CTO

Experience: 21 yrs

Avionics & systems engineering, electrical systems, safety critical systems, flight simulators, iron-bird development & testing
MBA, MS (Systems Engg)
BE – Aero (Avionics)



Management Team

Seasoned Management Team with decades of Industry Experience



M. Soundarapandian
Vice President
Experience: 30 yrs

Govt Liaisoning, 30+ years in Agri Drone Industry & Aerial robotics, Aeromodelling, IT/ITES, Healthcare, Medical billing, Coding, Document Digitization



Dautya Aerospace Pvt. Ltd.
 दौत्य एयरोस्पेस (प) ल्टड.



Dr. Sheikh Akhter, PhD
Vice President – Business Operations
Experience: 32 yrs

Air Veteran | Defence Industry | Research | Intelligence | Operations | Advisory | Administrator | Leadership | Solutions | Policy | Consulting | Growth



Anushka M. Shah
Nominee Director, DefSpace
Investor

BE (Senior Year) USC, USA



DefSpace

Clients – Government Departments

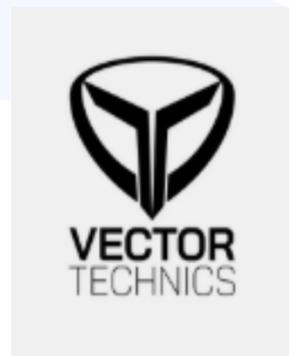


Armed Forces Medical College



Directorate of Higher Education
Government of Tripura

Clients – Private Industry



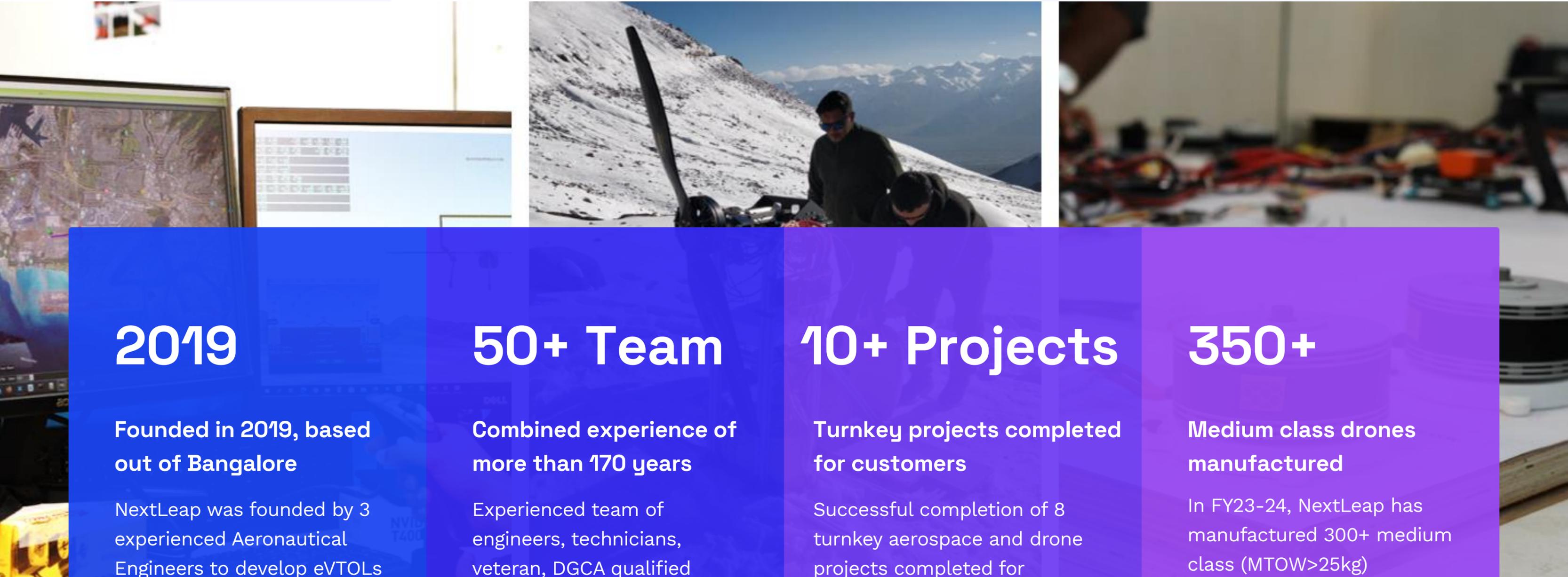
Clients – Institutions



About NextLeap



NextLeap is a DGCA Authorized UAV Manufacturing company based out of Bangalore (India).



2019

Founded in 2019, based out of Bangalore

NextLeap was founded by 3 experienced Aeronautical Engineers to develop eVTOLs in India and execute turnkey aerospace/UAV projects.

50+ Team

Combined experience of more than 170 years

Experienced team of engineers, technicians, veteran, DGCA qualified pilots & instructors.

10+ Projects

Turnkey projects completed for customers

Successful completion of 8 turnkey aerospace and drone projects completed for customers across the globe.

350+

Medium class drones manufactured

In FY23-24, NextLeap has manufactured 300+ medium class (MTOW>25kg) Agricultural spraying drones.

Our Journey (2018-2020)

Development of 5-seater eVTOL for the Indian market. Carried out conceptual design and product feasibility studies.



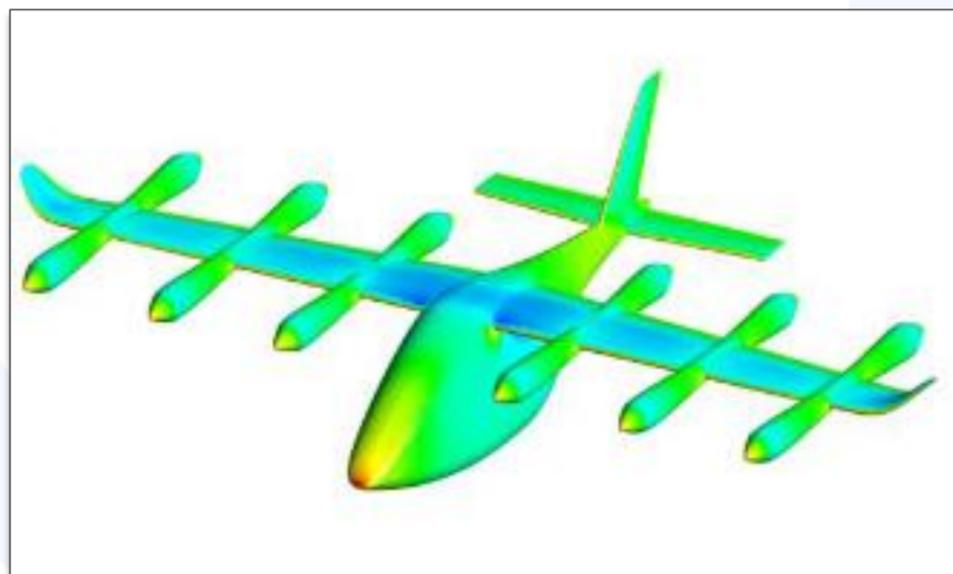
Generation 1



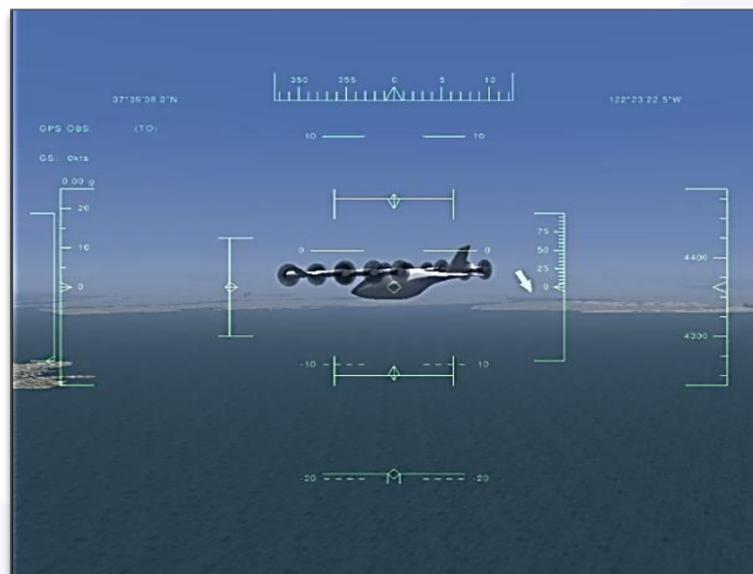
Generation 2



Generation 3



CFD Simulations



6DOF Simulations



Subscale prototype Testing (1:5 scale)

Supported by Ministry of Electronics & Information Technology (MeiTY) & CSIR-National Aerospace Laboratories



सत्यमेव जयते

इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY



Our Products

Advanced UAV systems developed by NextLeap for the Defence sector.

GAJRAJ-45



Heavy Lift Logistics Drone – 45kg Payload

Compact Heavy-lift Drone built for strength and precision

Features:

Payload: 45kg

For high altitude logistics transport @ 16000ft

Max. Endurance: 30 mins

Day & night flying capability

IM4



Original footage from Drone's thermal camera

AI Powered Surveillance Drone

Multi-purpose Surveillance UAV for Defence & Security applications

Features:

Take-off weight: 4kg

Onboard Artificial Intelligence computing for Autonomy

Endurance: 50 mins

Day & night flying capability

Our Products

Advanced UAV systems developed by NextLeap for the Defence sector

BLAZE-OFC



Next-Gen Lethal Attack Drone

Engineered to withstand EW attacks & anti-drone countermeasures

Features:

Take-off weight: 3.5kg

Ammunition carrying ability: 600g

Fiber-optic communication

Endurance: 15mins

BLAZE-RF



Grenade dropper FPV drone

Capable of dropping 2 grenades and fly upto 2km

Features:

Payload: 2 grenades

Take-off weight: 3kg

RF based communication

Endurance: 15 mins

Our Products

Advanced UAV systems developed by NextLeap for the Defence & Agricultural Sector.

SKYHAMMER



Multi-ammunition dropper drone

Capable of carrying upto 5-7kg of ammunition

Features:

Take-off weight: 25kg

Ammunition carrying ability: 5-7kg

Both RF & Fiber optic communication

Range: 2-5km

Endurance: 22mins

LEAP A10



Agricultural Spraying UAV

Type Certified Agricultural UAV by DGCA

Features:

Payload: 10L

Advanced obstacle avoidance sensors

Autonomous waypoint navigation

Max. Endurance: 22 mins

Drones for other applications

Advanced UAV systems developed by NextLeap for the Commercial Sector



Firefighting/Window Cleaning



Power Line Maintenance



Crowd Management



Solar panel cleaning



Package/Medicine Delivery

Our Products

TR 50 – Thrust stand



Measurement Specs

Thrust; Up to 50 kg

Torque: ± 30 Nm

Voltage Range: 0 to 800 V

Current Range : 0 to 200 A

RPM: 0 to 40,000 RPM

Temperature: Up to 380°C

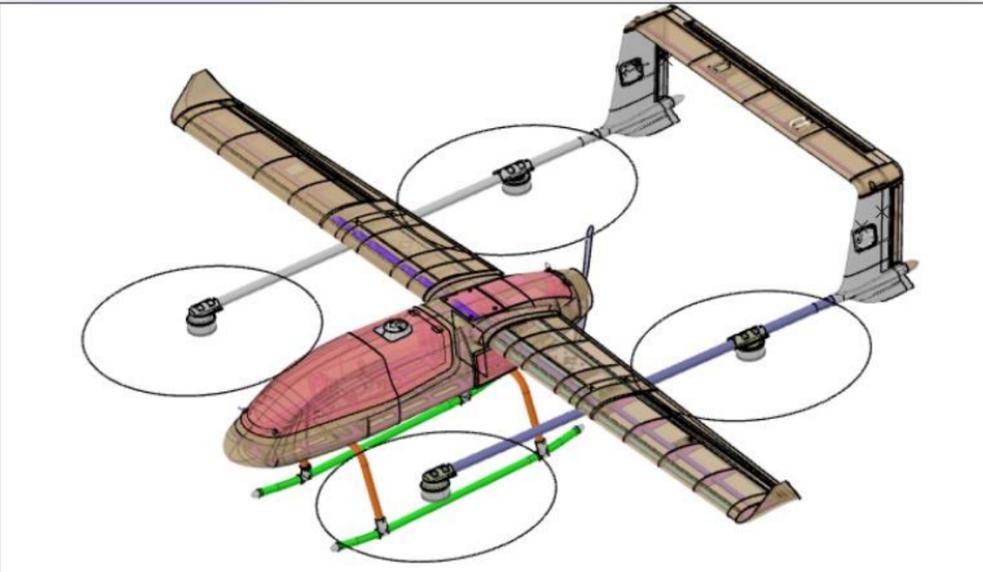


Suitable for motor manufacturers, Drone manufacturers for compliance testing and Universities / Colleges.

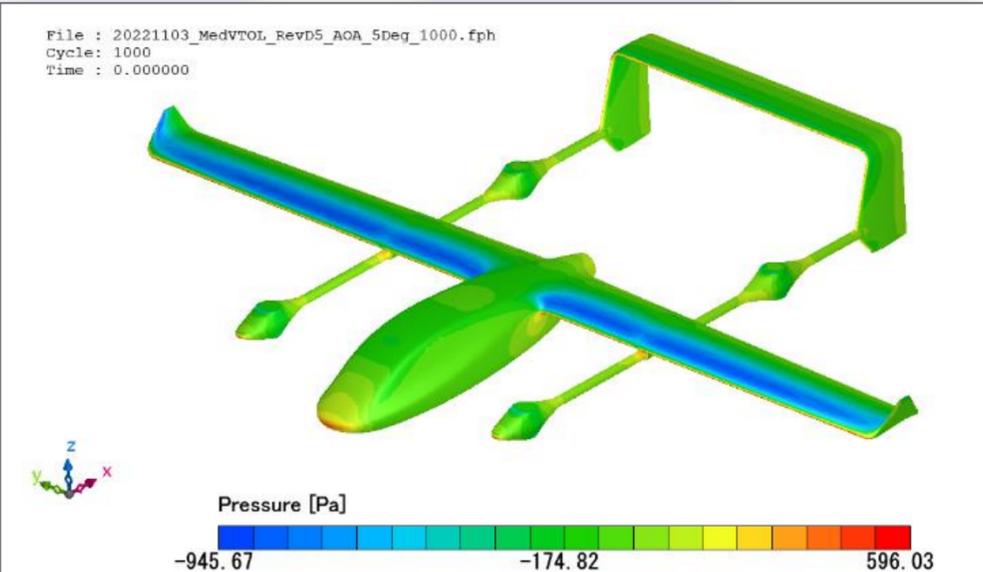
Our Capabilities

In-house capability of design, simulations, prototyping & testing of UAVs.

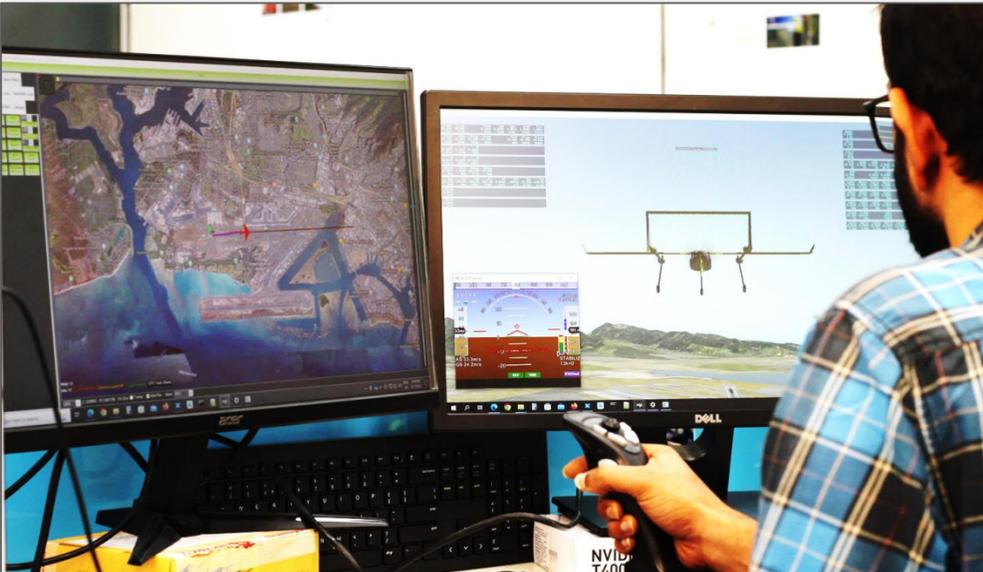
1 UAV Design



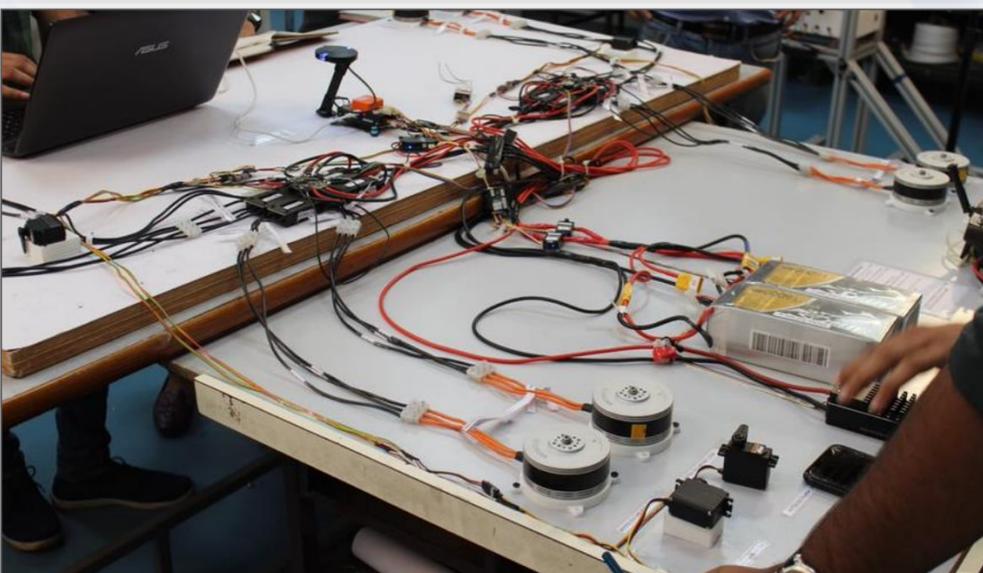
2 CFD & FEA Simulations



3 SITL Simulations



4 HITL Simulations



5 Composite Fabrication



3 Systems Testing



Facilities

Manufacturing and testing facility based out of Bangalore (India). Production capacity: upto 100 drones per month.

1 UAV Manufacturing - Mech



2 UAV Manufacturing - Systems



3 Flight Testing



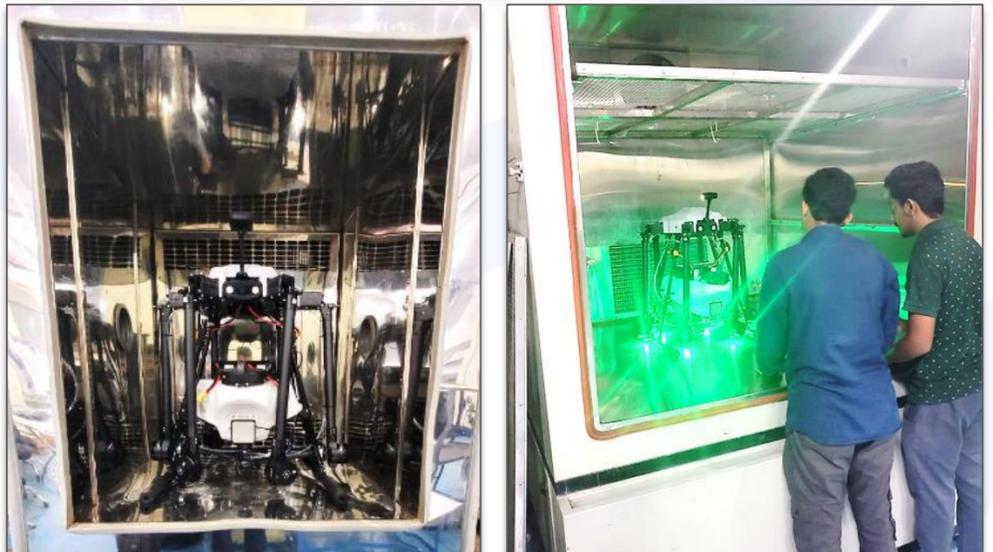
4 Propulsion System Testing



5 EMI/EMC Testing



6 Environmental Testing



Projects – Tata Power Robotic Arm Drone

Phase 1 of project for Tata Power to test a robotic arm drone to remove debris from power lines



Drone Specifications:

Max. Weight: 25kg

Dimensions: 2m x 2m x 0.8m

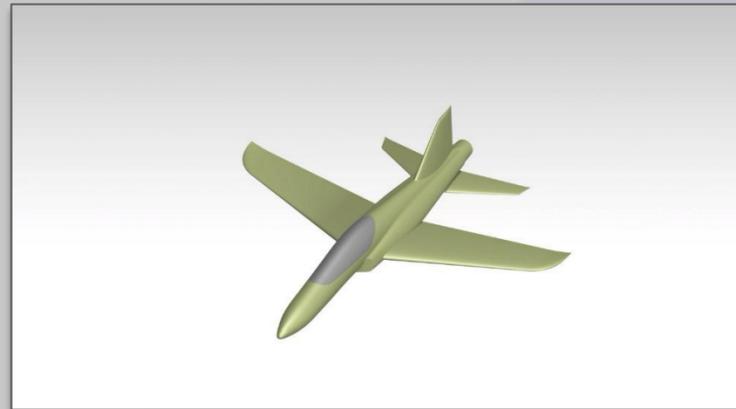
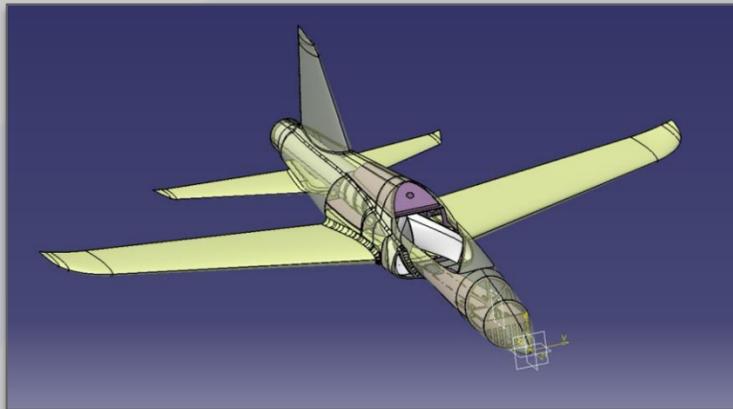
Electric VTOL

Carbon fiber airframe

Link for trial videos: [Tata Power Mumbai Trials Phase 1](#)

Projects - UAVs & eVTOL

Engineering design, consultation & prototyping projects completed for customers.



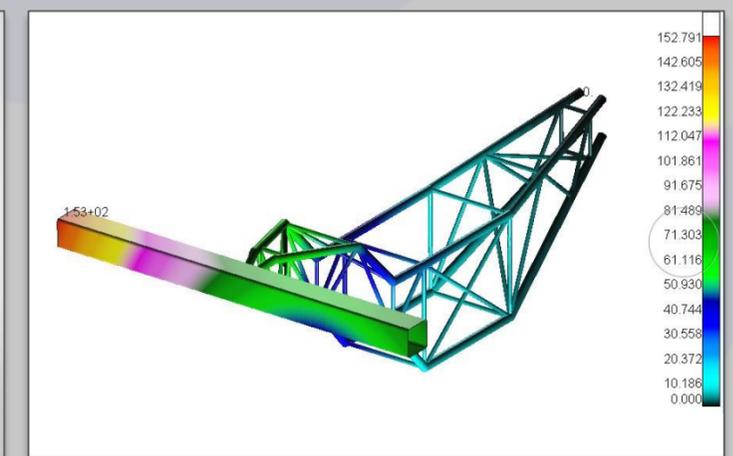
High speed jet powered UAV

Remotely controlled technology demonstrator

Max. speed 450 km/h

Video link: https://www.youtube.com/watch?v=u6cEP7_hcY&t=42s

Customer location: India



Single seater eVTOL (100kg payload)

Electric VTOL for recreational flights

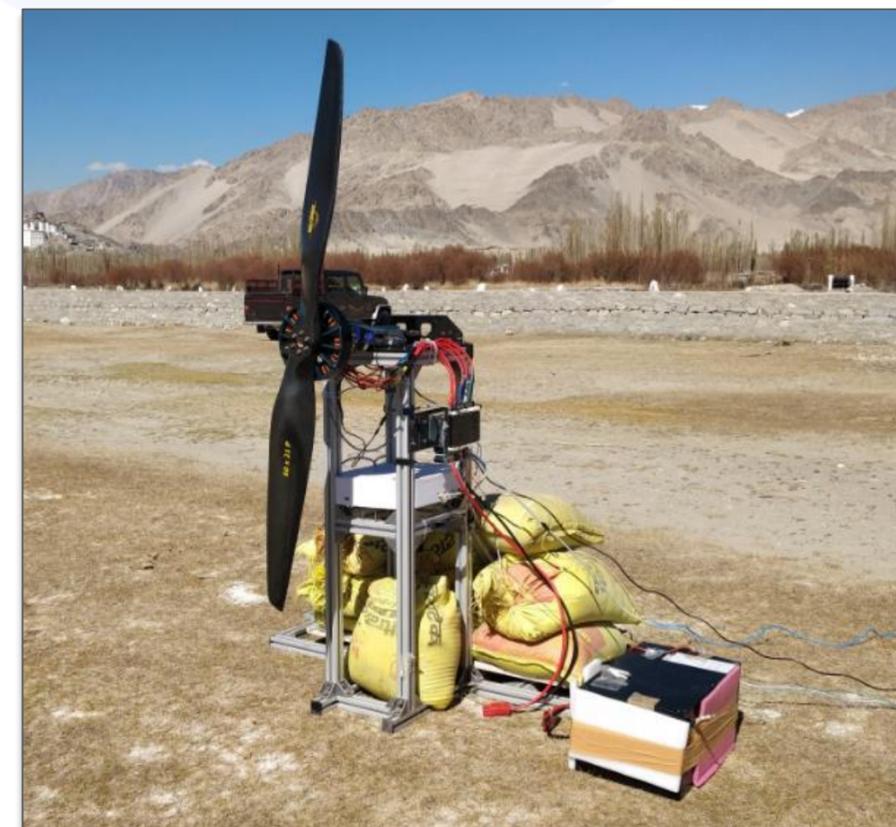
MTOW: 164 kg

Max. Endurance: 21 mins

Customer location: Europe

Projects – Electric propulsion system for HAA

Engineering design, consultation & prototyping projects completed for customers.



Electric propulsion system development & testing for High altitude applications

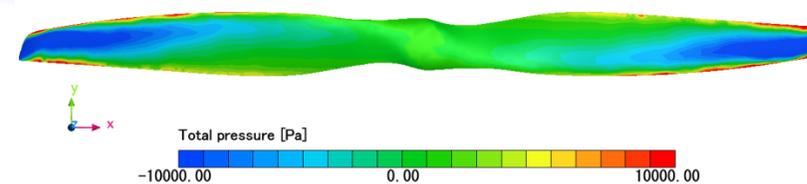
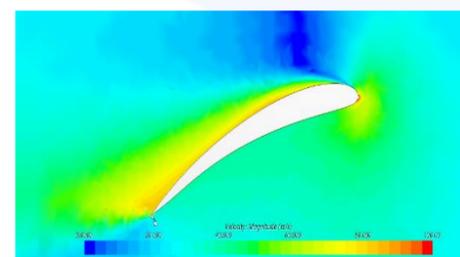
Propulsion system for high altitude logistics UAV

Max power: 24kW

Propeller diameter: 60 inch

Test altitude: 4908m (Khardungla, Leh)

Customer location: India

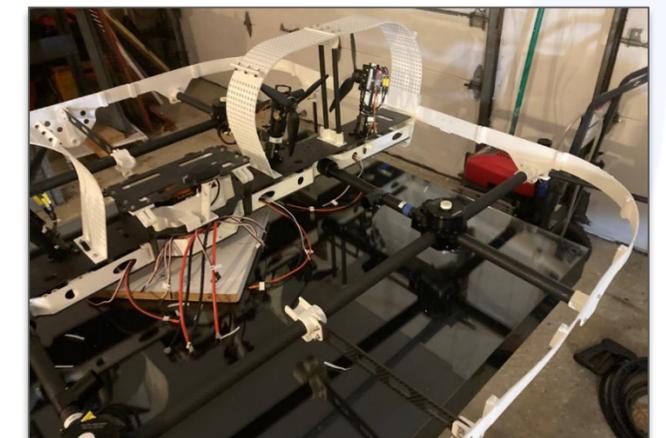
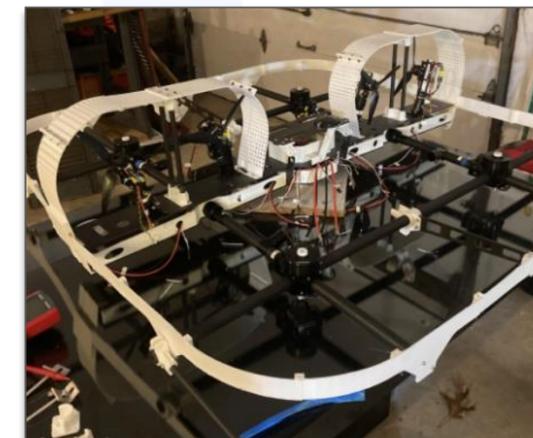
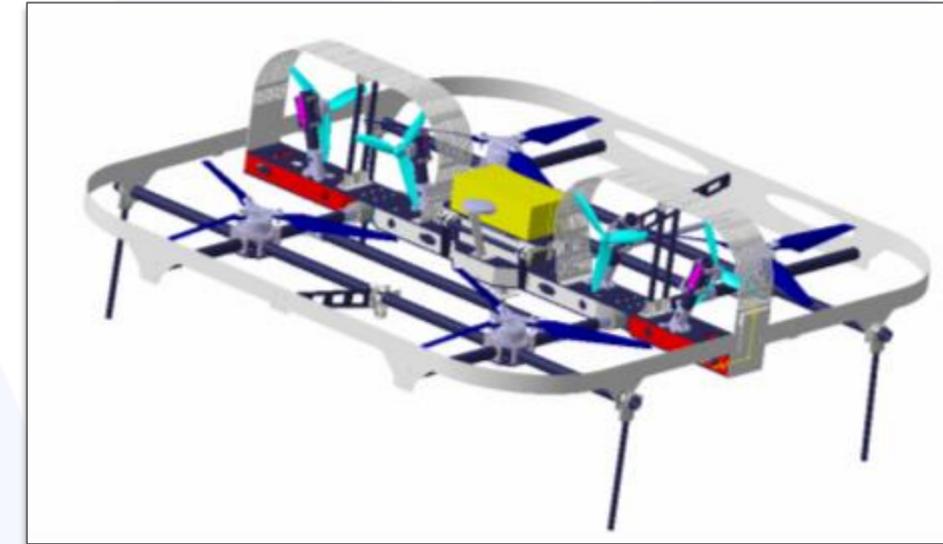


CFD simulations using Hexagon CRADLE



Projects – UAVs

Engineering design, consultation & prototyping projects completed for customers.



Logistics UAV for medical delivery

Max. Payload: 10kg

Wingspan: 3.2m

Electric VTOL

Carbon fiber airframe

Customer location: India

Cleaning drone for High-rise building

MTOW: 36kg

Tethered platform

Carbon fiber & 3D printed plastic airframe

Customer location: USA

NextLeap Advantage

-  Fastest growing UAV Systems company in India with focus on **Make-in-India** initiative.
-  Experienced and seasoned team of **50+ engineers, production technicians, DGCA qualified pilots & instructors.**
-  Manufacturing experience of **350+ medium class UAVs** and providing after-sales support.
-  Trained over **250+ medium class UAV pilots** for Agricultural spraying operations (OEM & Handholding)
-  Backed by **DefSpace Technologies Pvt Ltd** (Investment arm of **Paras Defence & Space Technologies Ltd**)

Corporate Office:

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