

# Morphing Wing Unmanned Aerial Vehicle (UAV) for Loitering munition

## Challenge

- Stringent weight Target with in 2.5kg
- Accommodating Wing Dihedral
- Location of Powerplant - Mounting Plane

## Scope

- Detail Structural design – Concept Designs, Advanced Simulations for Aerodynamics, CFD
- Modal Analysis
- Wire harness routing – Electrical Distribution System
- Concept Design
- Material Selection
- Structure configuration
- Weigh & CG
- Detailed 2D Drawing

## Tool Used

- CATIA
- Solid Works
- ANSYS

## Impact

- Faster development of CAD Model
- 2D Manufacturing Drawings as per ASME 15.4Y
- Documentation as per AS9100 Rev. D Standards

