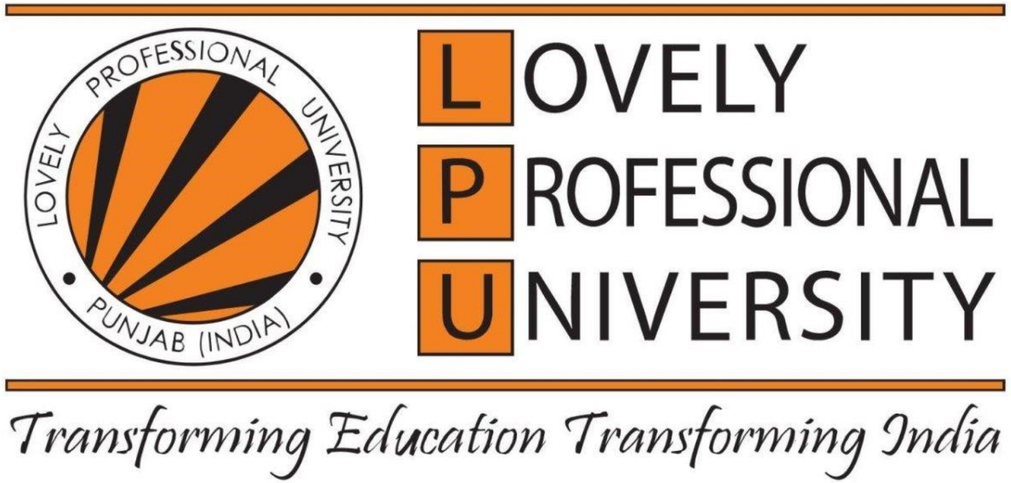
MODEL ROCKETRY 2024-25

Team - Pinaka



1. Presentation Outline

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1. Mission Summary

Mission Objectives

- To design a rocket that can deploy the payload at 1000m +/- 100m altitude.
- To design a rocket that is less than 180cm in height.
- To design a rocket with a payload that can carry a CAN-Sized satellite of Diameter 0.15m and length 0.40m, with a weight of 1Kg +/-0.05Kg.
- To design a rocket that can descent and land safely after the payload deployment.

2. Team Structure

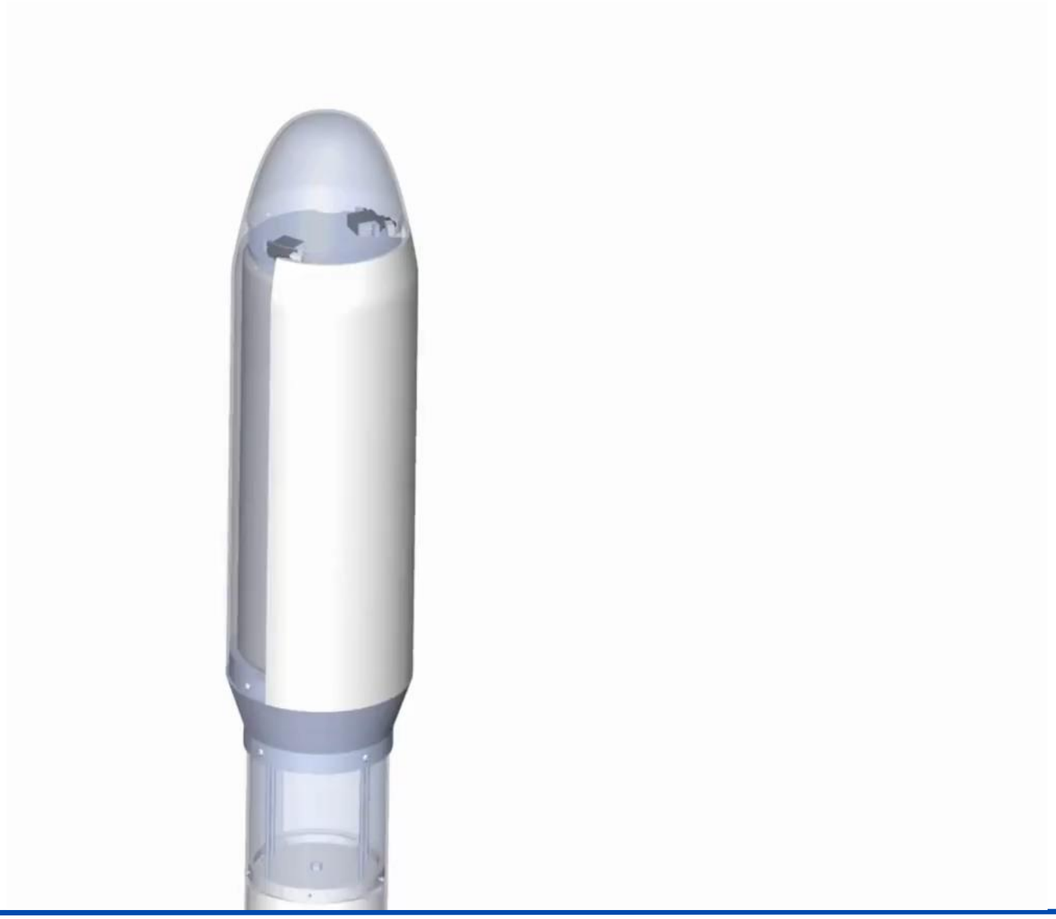
Name	Discipline	Role	Academic Year
• Mandeep Singh	Assistant Professor and Assistant Dean	Faculty Advisor	-
• Ruhul Amin Choudhury	Innovation Officer	Mentor	-
• Pranav MP	Aerospace Engineering	Aerodynamics	3rd Year
• Vijay Mishra	Aerospace Engineering	Design	3rd Year
• Shalu Yadav	Aerospace Engineering	Aerodynamics	3rd Year
• Prajwal Kale	Aerospace Engineering	Motor and Propellant	3rd Year
• Ishu Saini	Aerospace Engineering	Motor and Propellant	3rd Year
• Bhanu Mahesh	Robotics Engineering	Avionics and Electronics	4rd Year
• V Manish	Robotics Engineering	Avionics and Electronics	4rd Year
• Nandish Panchal	Mechanical Engineering	Manufacturing	3rd Year

3. Design Overview

Design specifications :

- Power Series Nosecone
- Hinge system payload compartment
- Transition tube
- 3 Bulkheads
- 3 Centering Rings
- Free form 4 fin design

4.(a) Payload Bay



Design specifications :

- Power Series Nosecone
- Hinge system payload compartment
- Transition tube
- 3 Bulkheads
- 3 Centering Rings
- Free form 4 fin design

4.(a) Parachute Bay

Design specifications:

- Power Series Nosecone
- Hinge system payload compartment
- Transition tube
- 3 Bulkheads
- 3 Centering Rings
- Free form 4 fin design