**Facilities**

- **Model Mounting in Subsonic Wind Tunnel (Model orientation changing mechanism)**
- **Supersonic Tunnel-Mach No: 2 (Test section size 15cm x 15cm x 30 cm)**
- **Subsonic Wind Tunnel Test Section (6’ x 4’ x 3’, Max. wind speed 40 m/s)**

**Description**

The Department of Aerospace – Aerodynamics Lab has the expertise and infrastructure for subsonic flows across automotive, aircraft and missiles. Lab consists of Subsonic wind tunnels of 20 m/s and 30 m/s, Supersonic Wind tunnel of Mach 2. Three Component balance is used for lift, drag and pitching moment, Six Component Balance is used to find Lift, Drag, Side forces and three moments roll, yaw and pitch.

**Highlights**

- Total grant of funded projects: Rs. _approx. 174.53_ lakh/
- No of patents filed/granted/published: 03
- No of Publications: Approx. 38
- No of PhD/MS Scholars completed/On roll:
  - No. of PhD Scholars Enrolled: 14
  - No. of PhD Scholars Completed: 9
  - No. of PhD Scholars Ongoing: 5
- No of International Conferences: 07
- No of ME projects (last 5 years): Approx. 20

**Equipments**

- Strain Gauge Calibration Rig
- 3 and 6 Component Balance
- An Airplane Model Mounted in Test Section with Internal Strain Gauge Balance

**Research & Development works**

- Evaluation of Stall Characteristics of Wing & Control Surface and Overall Characteristics of a Typical Missile Configuration (2016-17) - DRDL, Hyderabad.
- Setting up of Combustion Driven Shock Tunnel.
- Development of Mathematical Model for Prediction of Energy losses in Canister during Missile Launching.

Lab in charge: Dr. C. Senthil Kumar, Professor; Dr. V. Suresh, Assistant Professor