Additional Research and Development Facility

Facilities developed through AICTE - Modernization and Removal of Obsolescence Scheme (MODROBS)

Centre for Flight Simulator Training

Facility / Equipment Established: Flight Simulator

Principal Investigator: Dr. K P Dhanabalakrishnan

Co-Investigator: Mr. M Moses Devaprasanna

Cost of the equipment: Rs. 15, 96,078/-

Date of sanction: 20.07.2020



Benefits to students and scope for research:

- The primary purpose of flight simulator is to give students hands-on experience of what goes on in the cockpit of an aircraft, and to understand the basic fundamentals of flight.
- Flight simulation would help enhance skill sets of students in cock-pit management, decision-making during critical manoeuvres and major malfunction of engine and other systems.
- Enhances the research into aircraft characteristics, control handling qualities, and so forth.
- Bridging of gap between industry needs and curriculum can be accomplished through exposure to various flight operating skills.

Centre for High Speed Testing

Facility / Equipment Established: Supersonic Wind Tunnel

Principal Investigator: Dr. K P Dhanabalakrishnan

Co-Investigator: Mr. M Harish

Amount Sanctioned: Rs. 11, 00,000/-

Date of sanction: 12.02.2019



Benefits to students and scope for research:

- Determination of pressure distribution along a convergent/divergent (Laval) nozzle with subsonic and supersonic air flow. For comparison of theoretical and actual pressure distributions.
- For comparison of actual and theoretical area ratios of a nozzle at supersonic air velocities (Mach numbers).
- Determination of pressures measurements around a two-dimensional model in subsonic and supersonic flow conditions, at different angles of incidence.
- Determination of Lift coefficients for aerodynamic models in supersonic flow.
- Prediction of Shock waves and expansion patterns around a two dimensional model in supersonic flow conditions (when used with the optional Schlieren Apparatus).