

STANLEY SEBASTIAN

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Profile Summary

- Dedicated, highly skilled professional with more than 2 Years of experience in Aerospace Stress.
- Experienced in Aircraft wing fatigue analysis.
- Expertise in Finite Element Modeling and Nastran deck preparation.
- Good understanding of aircraft metallic and composites stress analysis.
- Theoretical knowledge on aircraft structures and Strength of materials.

Teaching experience

- Subject Handled for Kerala Technological University
 1. Aircraft structure I
 2. Aircraft structure II
 3. Avionics and control systems
 4. Composite materials
- Subject Handled for Mahatma Gandhi University
 1. Rocketry and space mechanics

Work Experience

- Currently working as an Assistant Professor for the last 3 years in Mount Zion College of Engineering Pathanamthitta.
- Worked in JETWINGS TECHNOLOGIES as junior stress analyze engineer
- Worked in AGNI AERO-SPORTS ADVENTURE ACADEMY as trainee engineer

Experience details

- **Static analysis of engine mount for Ultra-light Aircraft quicksilver**
Jetwings technologies (Bangalore)

Description : Analysis of engine mount for quicksilver (ultra-light aircraft) at static condition. Task included to find out the structural efficiency of fasteners of engine mount.

Role : Development of Finite Element Model for engine mount of the most popular Ultra-light Aircraft, Quick Silver. Checked fasteners attachment load carrying capability under static loading.

Tools : MSc. Nastran & Patran, MS Excel.

- **Static analysis of trolley component for METSO**
Jetwings technologies (Bangalore)

Description : Development of Finite Element Model for trolley component. 3D meshing as well as 1D meshing provided over geometry using Patran. Find out load transformation Path and nodal force concentration at critical areas.

Tools : MSc. Nastran & Patran, MS Excel.

➤ **Elastic plastic Analysis of Rectangular plate with a circular hole**
Jetwings technologies (Bangalore)

Description : A fairly simple problem is chosen for the current study. The problem is that of a plate with hole under the action of in-plane loading. The Problem was simulated and solved in patran. Various element configurations was chosen, and obtained into converged results.

Tools : MSc. Nastran & Patran, MS Excel.

➤ **Quad copter IFEM Modification and Validation**
Jetwings technologies (Bangalore)

Description : Task including Validating and Modifying Quad copter IFEM. Compiles reports of IFEM

Validation as per standard.

Role : Static, Dynamic and ground checks are performed on IFEM Model. Preparing the FEM books for the validated models. Weekly reporting to FEA Management Engineering Team Leader.

Tools : MSc. Nastran & Patran, MS Excel/Word.

➤ **Weight reduction analysis for glider of albatross flying club (ON GOING PROJECT)**
Jetwings technologies (Bangalore)

Description : Development of 1D Finite Element Model for ultra-light aircraft. Finding out the RF of the structure

and removing the unutilized area as an optimization

Methodology.

Tools : MSc. Nastran & Patran, MS Excel.

Maintenance experience

Maintenance of airframe and power plant systems of the following aircraft covering 50 Hrs., 100 Hrs. annual inspection, trouble shooting and snag rectification

- Cessna 340 Aircraft (Pressurized) fitted with continental TSIO-520 Engine.
- Cessna 180 Aircraft fitted with continental IO 520 Engine.
- Cessna 188 Aircraft fitted with continental O 470 Engine.
- Zen Air STOL 701 AND 601 fitted with Rotax 912 Engine.

Manufacturing experience

- Fabrication of structural parts sub-assemblies and final assembly of Micro light Aircraft.
- Integration of sub and major assemblies.
- Erection of major components like Horizontal Stabilizer, Vertical Stabilizer and control surfaces.
- Installation of power plant and propeller.
- Rigging of flight controls and engine controls.
- Assist during engine ground run and trouble shooting
- Preparation of manuals and procedure sheet.

Professional Qualification

M.Tech Aeronautical, full time, from Hindustan University, Hindustan Institute of Technology and Science Chennai (2015-2017).

BE-Aeronautical engineering, full time, from **Anna University Tirunelveli**, PSN College of engineering and technology (year 2011).

Technical Skills

NDT level II	- Radiography testing (RT) Ultrasonic testing (UT) Magnetic particle testing (MT) Penetrant testing (PT)
CAD tools	- MSC Nastran & Patran, CATIA V5, AUTO CAD,
Office tools	- MS Office