



JOB DESCRIPTION

JOB TITLE: Structural Engineer

JOB CODE:		EXEMPT/NON-EXEMPT:	EXEMPT
REPORTS TO:	Engineering Manager	DEPT.:	Engineering
DEPT. APPROVAL:	VP-GM	DATE:	04/24/2020
MANAGER LEVEL:		EEO CODE:	

BRIEF POSITION SUMMARY:

Develop load paths and airframe structural configuration layouts. Perform stress analysis to support development work, initial sizing or final sizing input for the following aircraft structures; wing and associated control surfaces and fixed leading and trailing edge structure, fuselage, empennage, control systems and primary secondary airframe components.

DUTIES and RESPONSIBILITIES:

- Experience in both classical structural analysis and finite element analysis of metallic and composite aircraft primary and secondary structure
- Analyses of the structures includes loads, dynamics, stress, stability, fatigue, aeroelastic and thermal.
- Analyses will be performed utilizing hand calculations and or finite element software.
- When finite element models (FEMs) are appropriate, critical thinking skills will be required to develop a FEM to capture appropriate behavior of complex non-linear structures.
- When FEMs are not appropriate a solid understanding of structural engineering core concepts will be required to analyze components.
- Able to demonstrate a comprehensive working knowledge of regulatory and applicable airworthiness criteria including Mil-hdbk-516C and/or 14 CFR Part 25 and ability to adapt rigorous certification-type requirements to a dynamic and fast-paced program for thorough and efficient stress analysis.

EDUCATION, EXPERIENCE & QUALIFICATIONS:

- B.S. degree in Mechanical, Aerospace, or Civil Engineering required
- 5 or more years of experience working with Stress Analysis related work
- Must pass pre-placement drug screen and background investigation.
- Ability to obtain and maintain a U.S. Security Clearance at the appropriate level (requires a U.S. Citizenship)

- Excellent verbal and written communication.
- Problem solving.
- FEMAP/NASTRAN.
- Excel and VBA experience



PHYSICAL REQUIREMENTS:

- Must be able to sit/stand for extended periods – 9 hours min.
- Must be able to stoop, kneel, climb, bend and be able to reach overhead and below the shoulder.
- Continuous use of both hands; including grasping, pulling and pushing.
- Frequently required to talk or hear.
- Work around occasional loud noises (examples: hydraulic equipment, airplane engine runs.
- May be exposed to high-level noise, dust, vibration and chemical fumes (within OSHA limits).