



Job Description Title : Aviation Design Engineer
Department : Engineering
Reports to : Engineering Lead

GENERAL ACCOUNTABILITIES

Engineers are responsible for the planning, organization and directing of projects from concept through the design, prototype, manufacturing and commissioning stages. Engineers are also responsible for ensuring that work meets established internal quality standards as well as customer specifications. Incumbents operate under general direction and report into an Engineering Lead or Manager.

KEY ACCOUNTABILITIES

- Establishes methods to meet work schedules and co-ordinates work activities with the Flying Colours Operations Managers
- Provide specialized expertise in the design, testing, commissioning and troubleshooting of structure and mechanical components of aircraft design.
- Manage multiple projects & tasks of varying complexity
- Provide advice, consultation and leadership to other team members in the operations group
- Carry out hazard and risk assessments
- Interpret federal codes (Transport Canada), particularly as they pertain to the design and modification of components and subassemblies
- Implements project management methodologies for the planning and control of a project or campaign
- Communicates routinely and thoroughly with all departments involved in projects and aircraft completions
- May compile and analyze test data to ensure operating efficiency of equipment and processes; recommending and making adjustments as required.
- Prepares technical, client, production and other reports, as required.
- Verify the completeness and quality of design, ensuring compliance with Federal, Company and Avionics Standards, latest applicable revision or other applicable engineering authority
- When quality or timeliness of drawings or other tasks does not meet minimum expectations, advises immediate supervisor
- Ensures that drawing release dates support the operations aircraft schedule
- Inform or consult with supervisor in the event that the project schedule or milestones are not met as committed

- Notify supervisor of all schedule changes
- Provide RFE and troubleshooting support to aircraft crew leads as needed.
- When necessary, collaborate with the aircraft lead to resolve technical snags in the most efficient means possible.
- Will be responsible for quality control of in-house engineering and monitoring of engineering firms, to include:
 - Translating customer specifications to engineering design key characteristics
 - Review of design functional and physical attributes against customer and regulatory requirements
 - Managing engineering changes thru updates to drawings and drawing lists
 - Issue design corrections or updates as needed to ensure continued accuracy. Liaise with internal / external engineering firms as needed to support the RFE process
 - Promotes a team environment among staff
 - Must follow all *Health, Safety and Environment* policies at all times
 - Some off-site travel for projects and extended hours on/off-site may be required from time to time

WORKING CONDITIONS

- Frequent or occasional periods of time are spent standing or sitting in the same location with some opportunity to move about. Occasionally required to stop or lift light material or equipment.
- Located in a comfortable indoor area which is air conditioned or climate controlled. Conditions could produce mild discomfort on occasion, e.g.: moderate background noise levels.
- Occasional to frequent need to give concentrated attention, either hearing, seeing, visualizing, drafting, to what is happening and work being performed.
- Pressure from deadlines, production quotas, accuracy or similar demands exists.

EXPERIENCE & QUALIFICATIONS

- A degree in Aerospace or Mechanical Engineering;
- P.Eng. accreditation or eligibility for such registration in future;
- Minimum of 10 years of experience in a similar role;
- Excellent communication and project management skills;
- Demonstrated proficiency with AutoCAD and Solidworks;
- Expertise in design, testing, risk analysis, project management;
- Candidates must have excellent report writing, problem resolution, communication and presentation skills;
- Candidates must also have expert-knowledge of Project Management methodologies and have demonstrated experience in the use of this, together with Project Management software (such as MS Project or similar).

Please note: The above statement reflects the general details considered necessary to describe the principal functions of the job identified and shall not be considered as a conclusive description of all work required in the job.