

THE MECHANICAL SYSTEMS ENGINEER IS RESPONSIBLE FOR TYPE DESIGN CHANGES AND PRODUCT DEVELOPMENT INCLUDING THE CREATION AND REVIEW OF CERTIFICATION PLANS, DESIGNS, DRAWINGS, TEST PLANS & REPORTS, DESIGN REVIEWS, CALCULATIONS & ANALYSIS, AND COMPLIANCE REPORTS RELATED TO AIRCRAFT MECHANICAL, POWERPLANT, FUEL AND ENVIRONMENTAL SYSTEMS.

Responsibilities:

- Support the mechanical engineering specialists, and mentor intermediate/junior engineers as required
- Implement type design and/or manufacturing process changes related to aircraft mechanical, propulsion and fuel systems to improve, quality, safety, and performance of aeronautical products
- Review engineering change requests and participate in the classification of type design changes
- Develop certification plans for changes to existing type designs or new aeronautical products
- Create and review test plans, analysis reports, design reviews and other substantiating documents
- Design and prepare flight test change orders for test aircraft modifications and installation of test equipment
- Participate in testing (ground & flight), perform post-test analysis, create and review test reports
- Generate and review compliance reports to document compliance to the regulations
- Develop and review engineering, material, and process specifications
- Coordinate with TCCA and/or delegates as required throughout the type design change approval process
- Support Continuing Airworthiness activities including review of technical publications and investigation of occurrences and service difficulties
- Participate in research and development activities for new products or designs.
- Other duties as assigned

Skills & Experience:

- 10 years relevant Aerospace Engineering experience in aeronautical product development
- Knowledgeable in Airworthiness Manual Chapter 523 of the Canadian Aviation Regulations
- Experience performing type design changes to aeronautical products
- Familiar with FADEC engine control systems and software
- Knowledgeable in aircraft controls, landing gear, powerplants, fuel and hydraulic systems
- Experience with CATIA V5, AutoCAD / DraftSight, and Solid Edge
- Proficiency in MS Office products and collaboration tools
- Excellent time management skills
- Works well within a team environment
- Capable of independent decision making
- Able to prioritize tasks based on company needs
- Previous or current delegation experience with a civil aviation authority is an asset
- Previous MRB authority is considered an asset
- Professional Engineering Licence is an asset
- Private pilot license is an asset

Academic Requirements:

Bachelor's and/or Master's degree in Aerospace and/or Mechanical Engineering

