

# We're looking for a Stress Analysis Engineer Position Location: Fort Erie, ON

The Stress Analysis Engineer is primarily responsible for ensuring structural modification designs and repairs meet the necessary structural airworthiness requirements, and through close collaboration with design engineers ensuring adequately robust and efficient designs are achieved to satisfy customer requirements or exceed expectations. The Stress Analysis Engineer determines load inputs and uses finite element analysis and basic structural calculations to determine structural margins of safety.

### MAIN RESPONSIBILITIES

#### 1. Structural Modifications

Loads determination and analysis for new structural modifications (and repairs) necessary to demonstrate compliance with the relevant structural airworthiness standards.

#### 2. Guidance

Provide guidance to design engineers during all phases of design to ensure robust and efficient solutions.

#### 3. Authorize Drawings

Stress analysis check signature authority for engineering drawings.

#### 4. Analysis Reports

Preparation of analysis reports, for submission to the airworthiness authority, that accurately and clearly communicate the analyses performed.

# 5. Submission to Airworthiness Authority

Preparation and compliance authority signature, where applicable, on certification documents for submission to the airworthiness authority.

# **EDUCATION AND POSITION REQUIREMENT**

- University Education; Bachelor of Science in Mechanical or Aerospace Engineering or similar.
- Master's Degree a strong asset.
- Professional Engineer's License.
- Transport Canada delegation or delegation eligibility is preferred.
- Occasional travel within North America and abroad to Europe may be required.
- 15+ years of experience analyzing aeronautical structures, including metallic and composite structures.
- Excellent knowledge of airworthiness certification standards for normal category helicopters (FAR 27, AWM 527).
- Exceptional Communication Skills Bilingualism (French-English) an asset.
- Must be able to legally work in Canada





# **KNOWLEDGE, SKILLS, DEMONSTRATED CAPABILITIES**

- Accurate, clear and timely completion of tasks necessary to develop aeronautical products.
- Strong initiative and motivation necessary to work independently and in a team environment to drive development.
- Ability to learn, understand and follow departmental and company procedures.
- Ability to bring the context of long term strategic objectives and goals and apply them to day to day activities and decisions making (keep the big picture in mind).
- Engagement to consistently make positive contributions to a small diverse engineering team as part of a large global company.

# **TECHNICAL SYSTEMS PROFICIENCY**

- Advanced proficiency using finite element analysis tools, preferably Nastran and HyperWorks, supported by more than 10k hours.
- Strong computer skills, with high proficiency using MS Office and other software applications.

# PHYSICAL JOB REQUIREMENTS

The Stress Analysis Engineer's job responsibilities and tasks are all performed in an open office workplace setting, typically with four person cubicles. Long durations working at computer workstations with daily intermittent need to walk up and down stairs to interact with other departments (flight line, avionics shop, composites manufacturing). Personal protective equipment is required in certain areas, which can include safety shoes and eye protection.

To apply for this position, please send an up-to-date resume and cover letter to HR@eurocopter.ca

We would like to thank all applicants, however, only those selected for an interview will be contacted.

