

MAHMOUD AL-TAMIMI

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STRUCTURAL STRESS ANALYSIS | AIRCRAFT MODIFICATIONS | AIRWORTHINESS | CERTIFICATION

- **Aeronautical Engineer** with an **M.Eng. in Mechanical Engineering**, a **B.Sc. in Aeronautical Engineering**, and **4+ years** of aerospace engineering experience in **Structural Analysis**, **Airworthiness**, **Aircraft Modifications**, and **Certification**.
- Experienced in **Static Stress Analysis**, **Analytical Hand Calculations**, **Finite Element Modelling (FEMAP/NASTRAN & ANSYS)**, **Engineering Substantiation**, and **Certification Compliance** for **TCCA**, **FAA**, and **EASA**.
- Strong background in **Aircraft Structural Repairs**, **Aircraft Modifications**, **Failure Investigation**, **Service Bulletin (SB)** and **Airworthiness Directive (AD)** assessments, **Continued Airworthiness**, and **Regulatory Compliance**.
- Experienced in **Python Engineering Automation**, **Engineering Data Analysis**, and collaborating with **Design Engineering**, **Certification**, **Maintenance**, **Suppliers**, and **Regulatory Authorities** to deliver engineering solutions.
- **Canadian Citizen** based in **Ottawa**, eligible to obtain and maintain the required **Security Clearance**.

CORE QUALIFICATIONS

Structural Engineering	Airworthiness & Certification
▪ Static Stress Analysis ▪ Analytical Hand Calculations ▪ Finite Element Analysis (FEMAP/NASTRAN & ANSYS) ▪ Structural Substantiation ▪ Aircraft Structural Repairs & Modifications ▪ Damage Tolerance & Fatigue Analysis (NASGRO)	▪ Engineering Substantiation Reports ▪ TCCA / FAA / EASA Compliance ▪ Continued Airworthiness ▪ Service Bulletin & Airworthiness Directive Assessment ▪ Engineering Investigations ▪ Certification Support
Engineering Software	Aircraft Engineering
▪ FEMAP ▪ NASTRAN ▪ ANSYS ▪ SolidWorks ▪ Python ▪ Microsoft Excel	▪ Aircraft Structures ▪ Mechanical Systems ▪ Failure Investigation ▪ Root Cause Analysis ▪ Engineering Data Analysis ▪ Technical Reporting

RELEVANT WORK EXPERIENCE

Airbus Canada	QC, Canada
Engineering Professional, Airworthiness	December 2025 – Present
▪ Conduct Engineering Investigations of in-service and production aircraft technical events to evaluate Airworthiness, Continued Operational Safety, and engineering impact. ▪ Investigate Aircraft Failures using Engineering, Operational, and Fleet Data to determine Root Causes, assess risk, and develop Corrective Actions. ▪ Coordinate technical resolutions with Design Engineering, RMAS, Suppliers, Production Teams, and Certification Authorities. ▪ Evaluate Service Difficulty Reports, Service Bulletins, and operational data to identify Safety Concerns, recurring issues, and engineering improvements. ▪ Support engineering decision-making through Risk Assessments, Technical Reports, Safety Review Boards, and Engineering Recommendations. ▪ Perform Design Approval Organization (DAO) compliance audits, including Repair Engineering Orders, Non-Conformance Reports, and delegated airworthiness activities.	

- Performed Static Stress Analysis using Analytical Hand Calculations and Finite Element Modelling (FEMAP/NASTRAN).
- Prepared Structural Substantiation Documentation supporting Aircraft Modifications, Structural Repairs, and Certification Activities.
- Supported Certification Compliance with TCCA, FAA, and EASA requirements.
- Performed engineering assessments of Aircraft Structures, structural modifications, and repair solutions.
- Utilized SolidWorks to support mechanical design activities and engineering development where required.
- Supported Aircraft Load Monitoring through Engineering Data Analysis and Python Programming.
- Developed Python Engineering Tools to automate engineering calculations, including Arbitrary Cross-Section Property Calculations.
- Collaborated with Design Engineers, Airworthiness Engineers, and project stakeholders to resolve technical challenges and deliver engineering solutions.
- Participated in Engineering Reviews, Technical Problem Resolution, and Aircraft Modification Projects.

- Performed Engineering Assessments of Service Bulletins, Airworthiness Directives, OEM Technical Documentation, and maintenance requirements to support Continued Airworthiness.
- Developed Customized Maintenance Programs (CMPs) in accordance with Manufacturer Recommendations, Regulatory Requirements, and operational needs.
- Prepared and maintained Minimum Equipment Lists (MELs) supporting safe and compliant aircraft operations.
- Developed Annual Maintenance Forecasts for fleet planning and resource management.
- Analyzed Operational, Maintenance, and Reliability Data to identify recurring defects, engineering trends, and opportunities for corrective action.
- Presented Fleet Reliability Reports and engineering findings to senior management and the Jordan Civil Aviation Regulatory Commission.
- Coordinated with Maintenance, Operations, and Engineering Teams regarding Continued Airworthiness and technical issues.

EDUCATION

CERTIFICATIONS & PROFESSIONAL REGISTRATION

- **NASGRO® Fatigue & Fracture Mechanics Training**, *Southwest Research Institute* (Apr 2026)
- **Design Approval Organization (DAO) Training**, *Airbus Canada* (Jun 2026)
- **A220 PW1500G General Familiarization**, *Trans Global Training Ltd., England/IKAROS Aviation Training Center*, *EASA Part-147 Approved* (Aug 2024)
- **Canadian Aviation Regulations (CARs)**, *Canadian Council for Aviation & Aerospace (CCAA)* (Oct 2023)
- **Quality Systems Auditor (QSA)**, *Canadian Council for Aviation & Aerospace (CCAA)* (Jul 2024)
- **Advanced Quality Systems Auditor (AQSA)**, *Canadian Council for Aviation & Aerospace (CCAA)* (Jul 2024)
- **Corrective Action Plans (CAP)**, *Canadian Council for Aviation & Aerospace (CCAA)* (Jul 2024)
- **Engineer-in-Training (EIT)**, *Professional Engineers and Geoscientists Newfoundland & Labrador, Canada* (Apr 2022)