

JOB OFFER – Positive Aviation – Concepteur / Calculeur Structure

At **Positive Aviation**, we believe that aviation is a force for good for our society and our environment.

Positive Aviation was born based on two basic observations: civil protection authorities can perform in their mission to protect common and private assets, public health, nature and biodiversity only when equipped with the right means; and the iconic “Canadair” Super Scooper – a cornerstone of their firefighting activities – is no longer at the required level of reliability and availability.

Positive Aviation is an engineering and industrial company, developing and implementing modifications on second-hand ATR 72 transforming them into amphibious water scooper firefighter aircraft – the FF72. The pragmatic technical concept is based on proven technologies and combines the precious expertise of the aeronautical and the naval industries.

Starting with the FF72, Positive Aviation aims at being a key actor all along the aircraft lifecycle and companion to its operators.

Positive Aviation’s offices are located at the Toulouse Blagnac airport, inside the hangar H16. The H16 hosts Positive Aviation, the development plateau of the FF72 with its industrial partners and the assembly of the FF72-X1, a demonstrator that will make its first flight in early 2027.

Joining Positive Aviation means being part of the creation of a unique European seaplane design office, and living the adventure of a new aircraft development which will enter into service in 2029.

At Positive Aviation, we favor team work towards pragmatic and realistic solutions, and are proud to build on the rich aeronautical and naval legacy to **protect what is dear**.

About The Role:

Part of the Engineering team, you will be accountable for structural design and sizing of the aircraft and its components (metallic and composite structural modifications). You will achieve this by combining 3D CAD modeling with static, fatigue, and damage tolerance structural calculations at overall aircraft and component levels, from initial concept to certification.

In detail, you will:

- **Design & Sizing:** Define structural architecture, CAD 3D models, detailed drawings, and sizing policies/methods (both analytical and FEM-based) for metallic and composite primary and secondary structures.
- **Requirements Management:** Ensure structural requirements are properly defined, validated, verified, and flowed down to internal teams and external suppliers.
- **FEM & Numerical Modeling:** Specify, develop, and maintain global (GFEM) and local (DFEM) Finite Element Models, applying load cases provided by the loads team, and securing the full modeling, solving, and post-processing workflow.
- **Testing & Correlation:** Define and implement correlation approaches between calculation models (FEM/analytical) and static/dynamic test data. Validate structural analysis methods and tools based on physical testing.
- **Integration & Interfaces:** Feed structural sub-system and components teams with loads and geometric constraints, and check structural analysis/design reports from internal teams or sub-contractors.
- **Certification & Documentation:** Prepare aircraft-level and component-level structural analysis and design certification reports in compliance with CS-25/EASA framework and special conditions, and document methodology and results for internal stakeholders and certification authorities.

About You:

- **Experience:** Strong background in aerospace engineering with significant hands-on experience in structural design (CATIA V5/3DEXPERIENCE or equivalent) and structural analysis (static, fatigue, damage tolerance) for metallic and composite structures.
- **Tools & Methods:** Proven expertise in using Finite Element Analysis (FEA) tools (pre-processing, solving, post-processing such as Nastran/Patran, HyperMesh, Abaqus, or similar) and analytical hand calculations. Good programming skills (Python or equivalent) for calculation automation are required.
- **Vibration & Dynamics:** Solid knowledge of vibration analysis and structural dynamics.
- **Communication:** Ability to produce clear, concise, and rigorous technical documentation, design deliverables, and certification reports in English.
- **Soft Skills:** Autonomous, curious, pragmatic, solution-oriented, and willing to work in a colocated, collaborative team environment. Driven by a passion for aeronautics and eager to learn and grow in a fast-paced environment.

Overview of Key Responsibilities & Capabilities

Pôle d'intervention	Activités Principales	Livrables & Outils
Conception Structure (CAD)	Modélisation 3D, définitions géométriques, assemblage des modifications de structures métalliques et composites.	Modèles CAD 3D, plans de définition, maquette numérique de structure (DMU).

Pôle d'intervention	Activités Principales	Livrables & Outils
Calcul & Dimensionnement (FEM/Analytique)	Calculs de dimensionnement statique, fatigue et tolérance au dommage. Déploiement et exploitation du GFEM / DFEM.	Dossiers de calculs statiques/fatigue, GFEM/DFEM, scripts de post-traitement (Python).
Essais & Certification	Définition de la corrélation calculs/essais physiques et rédaction des rapports de certification pour l'EASA (CS-25).	Plan de corrélation, justification de certification structure (Certification Reports).

If you want to live the adventure of a new aircraft development, be part of a team of passionate experts, and evolve in a pioneering and flexible environment where care and hunger for growth are celebrated, join us!

Positive Aviation is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, sex, gender, sexual orientation, age, color, religion, national origin, protected veteran status or on the basis of disability.

Feeling inspired and wanting to apply, send your CV and motivation letter to **career@positive-aviation.com**, we get back to you shortly.