

# Alfred Fazio

## Airframe Design Engineer (Contract) - The Boeing Company

Glen Mills, PA - Email me on Indeed: [indeed.com/r/Alfred-Fazio/005a9727dede9338](https://www.indeed.com/r/Alfred-Fazio/005a9727dede9338)

- Solid written and interpersonal communication skills.
- Skilled member of diverse and cross-functional teams in performing aircraft integration and executing engineering projects.
- Complex technical problem solver.
- Adept in machined and composite design including layout and design of components, assemblies and installation
- Proficient in the use of PC's plus experienced in CATIA V4 (3,000+ hrs) and CATIA V5 (10,000 hrs).
- Possess a strong commitment to continuous quality and process improvement.
- Member of small team responsible for integrating parametric CATIA V5 design processes for the PHL Rotorcraft site.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

### WORK EXPERIENCE

#### Airframe Design Engineer (Contract)

The Boeing Company, H-47 Design - Philadelphia, PA - May 2012 to Present

- Identified as lead engineer for critical Interface Control Models, and structures work packages. This involves gathering requirements, creating statements of work, schedules, design concepts, and winning concurrence at Gated Design Reviews. It requires close coordination with the customer and partner, and presenting findings during Technical Interchange Meetings with US government. This also involves achieving cost and schedule targets, while actively managing scope growth.
- Design of airframe details, assys, & Installs in support of G newbuild, BLOCKII and various H-47 configurations, as well as assisting the less experienced engineers w the tools & process suit and design best practices.
- Identified by management as a SME on Teamcenter, CATIA, Teamcenter Integration, and relational design best practices.
- Specifically requested by program executives to work on the engine fairing skin redesign effort, and other critical items such as fuel pod bridge contract work, which included flat pattern development, and core cutting templates for GKN.

#### Airframe Design Engineer (Contract)

The Boeing Company, EMARSS Design - Philadelphia, PA - May 2011 to May 2012

- Design of airframe structure in support of a special programs aircraft modification.
- Activities included conceptual layout, trade studies, interface solutions for mounting of exterior equipment, and the design and release of detail parts, assemblies and installations as well as mentoring less experienced engineers.
- Incorporation of rejection report tags required for FAA conformity
- Worked all details, subassemblies, and installation for the EMARSS Aft TCDL payload. The existing King Air tailcone was incorporated in the new design, which eliminated the need for a new composite tail cone. This was a substantial cost savings.

#### Airframe Design Engineer (Contract)

The Boeing Company, CATIA V5 / Teamcenter / TCIC Test, Evaluate and Deployment Team -  
Philadelphia, PA - March 2008 to May 2011

Specific Contributions to the team that has drastically changed the way Boeing Philly does business.

- Participated in Teamcenter / Catia integration testing in support of initial deployment (and subsequent Blockpoints). Worked closely with IT, CAD/CAM, US Government & Siemens to identify shortcomings, deployment risks and expected functionality.
- Participated in downstream application testing, such as how catia files can be formatted to optimize JT, adobe pdf, Tech Data Package & STEP creation. (Worked closely with IT, CAD/CAM, VISUALIZATION & Supplier Management). Gathered reqts from SUPPLIER MANAGEMENT and US Government on expected engineering content, and flowed into upfront engineering documentation.
- Site focal for LTD (Learning, Training & Development) in developing the CATIA V5 Relational Design Course (TR014696). This entailed documenting the non-enovia relational design approach for LTD course developers, reviewing their work and providing feedback. This course is now used throughout the Boeing Company.
- Focal from the V5 deployment team for the H-47 aft section data conversion (UG •V5) effort. This included:
  - Developing the Statements of Work, generating RFPs and RFQs, and participating in supplier down select. Actively supported winning Supplier for a high quality end product. This project allowed the site to transition out of UG. Cost savings for the H47 program, and the entire site are unquantifiable. A single CAD solution has positively impacted each H47 group and role, from initial design to fly away product and fleet support.
- Provided on site support in Boeing UK (Yeovil) design office to assist with loading / testing / validating the CV5 / TCENG image. Assisted Boeing UK employees w the TCENG / catia familiarization. 1 month assignment.

### **Airframe Design Engineer (Contract Employee)**

Middle River Aircraft - Baltimore, MD - June 2007 to March 2008

- Lead engineer for metallic details for transcowl installation of the 747-8 thrust reverser.
- Responsible for design and release of transcowl structure, management of schedule and maintenance of Bill of Materials.
- Developed and coordinated designs for the transcowl and interfaces, and prepared and checked design work prior to release.
- Performed Trade Studies to remove obsolete requirements and consolidate structural details.

### **Airframe Structural Analyst**

The Boeing Company - Philadelphia, PA - November 2005 to June 2007

- Performed structural analysis to support both engineering releases, and engineering corrective action for the CH-47 F cargo helicopter.
- Responsible for developing Finite Element Models of Airframe Structure, to enhance initial sizing, conceptual lay-outs, and detailed stress analysis. This involved meshing parts in Catia V5, and importing the Mesh into Patran.
- Assist lead engineer in developing / documenting airframe stress report for the program customer.

### **Airframe Design Engineer**

The Boeing Company - Philadelphia, PA - June 2001 to November 2005

- Design and installation of CH-47 F airframe components and assemblies. Airframe components included machinings, castings, extrusions, and composite structure. This program was a full Model Based Environment; the catia dataset was the full definition; drawings were not developed. Since this was a Model Based Environment, advanced tools and processes were used such as: Parametrics, IGES, Functional Dimensioning and Tolerancing (FD&T), TeamCenter product control, extensive design concept proposals to suppliers thru PowerPoint and webex conferencing.
- This job also required the extensive use of conceptual layouts, and trade studies.

- Assisted lead engineer in developing Statements of Work to redesign / consolidate details of the CH-47 F Chinook. This involved quantifying the scope of work, determining the complexity of detail parts / assemblies, and estimating the number of hours required for completion. This SOW was presented to Chinook management with an initial budget request.
- Group lead in developing corrective action plan with machined part supplier. This included developing a schedule, developing & delivering the change board presentation, development of production memos (both suspend and resume) and actual engineering dataset revision. This also involved working with the machined part supplier to determine issues and concerns, and developing an optimal engineering revision.

### **Airframe Design Engineer**

The Boeing Company - Philadelphia, PA - June 2000 to June 2001

- Worked in LEAN Airframe design and integration group, assisted team in developing and deploying innovative tools and processes to support rotorcraft programs in Philadelphia. These tools included PDM (Product Data Manager), and COVERS (Boeing composite management software), while the processes included MBD (Model Based Definition) and supplier integration.
- Authored the Boeing Philadelphia Teamcenter (TCEng) V8 training manual, as well as delivered TCEng training to over 90 V-22 users.

### **EDUCATION**

#### **Master of Engineering in Mechanical Engineering**

Widener University - Chester, PA

August 2004

#### **Bachelor of Science in Mechanical Engineering**

Widener University - Chester, PA

May 2000

### **SKILLS**

Software/Skills: CATIA V4, V5, VISMockUp, Teamcenter, TCIC, Windows XP, Excel, PowerPoint, Adobe, MS Word, MS Excel, MS Outlook.

### **MILITARY SERVICE**

Service Country: US

Branch: USCG & USCGR

Rank: MK1 / E6

June 1997 to August 2008

Machinery Technician First Class - United States Coast Guard Reserve,  
Philadelphia, PA; Cape Fear, NC 6/97-8/2008

- Graduate of USCG Engineering school, qualified as Boat Crewmember, Boat Engineer, Boarding Team Member, and Engineer Of the Watch
- Conducted port security, search and rescue, and maritime law enforcement missions, in addition to duties as a machinery technician.
- As boat engineer, responsibilities included the safe & reliable operation of boat systems (hydraulic, propulsion, dewatering and electrical) in all weather and sea conditions.
- Served as reserve EOW (Engineer Of the Watch), responsible for the engineering department, and engineering systems on Coast Guard assets during duty period.

Commendations:

Awards include USCG Reserve Good Conduct Medal, Transportation 9-11 medal, Commandant's Letter of Commendation and Team Commendation ribbon.