

# William Quirk

## Design Engineer

Broomall, PA - Email me on Indeed: [indeed.com/r/William-Quirk/e84bf7a469878918](https://www.indeed.com/r/William-Quirk/e84bf7a469878918)

### WORK EXPERIENCE

#### Design Engineer

Decrane Aerospace - Georgetown, DE - October 2008 to July 2010

Provided design and liaison support for mechanical systems (ECS, Water and Waste, etc.) and interior monuments during multiple VIP aircraft completion and upgrade programs:

- o Boeing 737 (BBJ) 700, 800 & 900 series aircraft
- o YG095
- o YD412 & 414
- o YG123
- o Embraer Lineage series aircraft
- o ECJ 001 - ECJ 005
- o Provided liaison & design support for installation of VIP interior

> Manufacturing engineering support for all PATS Aircraft products; auxiliary fuel system components, auxiliary power units (APU) and components required for VIP interior completion projects.

- o Act as main engineering liaison and POC for primary manufacturing facility and fuel cell assembly lines.
- o Review EAI's in logs daily to determine priority.
- o Research EAI's and provide valid engineering solutions.
- o Provide alternate methods of manufacturing to reduce cost and delivery times.
- o Develop tooling for both manufacturing and test equipment, provided product improvement designs to aid in ease of manufacturing.

> MRB support liaison.

- o Work as liaison on production floor with mechanics and quality personnel to assess MRB's.
- o Investigate MRB's generated and the affect on discrepant product.
- o Depending on severity of MRB written disposition or ERD is developed to provide repair instructions and if required repair parts.
- o Approved disposition is entered into Q-Pulse for final approvals and electronic filing.
- o Familiar with MMPDS, aerospace hardware, materials, and processes.

> Utilizing AutoCAD Mechanical and Autodesk Inventor 3D modeling software to provide design solutions. Approximately 6000 hours of AutoCAD.

> Embraer Lineage Design Engineer - Engineered, re-engineered and reversed engineered VIP interior completions of Embraer Lineage ECJ001 - ECJ005. Daily interface with Program Management, Procurement and Manufacturing to support completion project. Dealt with outside vendors to provide on-site engineering support for aircraft monuments.

> Korean Air Lines Design Engineer - Designed overhead layout for entire interior cabin that has two different passenger configurations. Worked with three separate outside companies, dealing with placement of cabin lights, reading lights, oxygen boxes, Pa and music speakers, smoke detectors, sonalerts, PSU's and ordinance signs.

o While designing systems/components worked with Technical Publications in order to have AMM's, IPC's and aircraft system/component descriptions written for the customer.

### **July 2010 - Aug 2013 Lead Mechanic**

Decrane Aerospace - Georgetown, DE - June 2005 to October 2008

Repairman Certificate Number 3638462

- Accomplished elaborate Mechanical System Interior Installations on over twenty BBJ (Boeing Business Jets) 700, 800 and 900 series aircrafts by comprehending and using the assembly and install drawings.
- o Skilled in redesigning IR or subsequent drawings in order to improve the functionality of the intended system and making it more cost effective by utilizing original parts and/or OEM removed parts.
- o Assembly and Installation experience includes but is not limited to ECS, water to include (potable, grey and waste systems), component installations i.e. dishwashers, coffee makers, steam ovens, etc. and system testing.
- o Received Letter of Appreciation from The Director of Program Management for work done on the BBJ Interior Completions.

- Completed complex mechanical maintenance programs on numerous BBJ 300, 600, 700, 800 & 900 series aircrafts by utilizing Boeing AMM's, IPC's, T.O.'s, Service Bulletins, Task Cards, etc.
- o Maintenance experience includes but is not limited to unscheduled and scheduled (A, B, C & D checks) maintenance, flight control installation and rigging, engine component removal and replacement, landing gear, ECS, fuel systems, APU, bleed air systems and troubleshooting.

- Accomplished over twenty complicated Auxiliary Fuel Tank Installations on BBJ 700, 800 & 900 series aircraft by applying the assembly and install drawings along with the Boeing AMM.

o Auxiliary fuel tank installation experience includes but is not limited to tank installations (multiple configurations), bleed air, pressure switch installation, fuel tank drain line routing, center wing tank plumbing modifications, sheet metal alterations, testing and troubleshooting of the entire AUX fuel system.

### **Mechanic**

DynCorp, Naval Airstation Patuxent - River, MD, US - September 2004 to May 2005

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- UH-1N, AH-1W plane captain and tester.
- Chadwick Helmuth 8500VASE vibration analysis/weight and balance equipment qualified.
- Perform organizational, intermediate and depot level maintenance.

### **Mechanic and Crew Chief**

U.S.M.C - Camp Pendleton, CA - September 1999 to September 2004

Experienced Plane Captain on the UH-1N Huey (Bell-212), and AH-1W super Cobra.

- Quality Assurance for both types of Aircraft.
- 25 hour, 50 hour, 100 hour, 400 hour, 14 day, 28 day, and hot section wash inspections.
- Power plants experience includes but is not limited to TESTING, TROUBLE SHOOTING, BORESCOPE INSPECTIONS to include (HOT, COLD, AND COMPRESSOR SECTIONS), ANTI-ICE BLEED AIR SYSTEMS, FUEL CONTROL RIGGING, FUEL NOZZLES, HMU'S, ODV'S, and REMOVAL, INSTALLATION, ANJ) CONDITIONING OF T-400-CP-400/401/402, AND T-700-GE-401 engines.

- Airframe and general experience includes, but is not limited to FLIGHT CONTROLINSTALLATION and RIGGING, FUEL SYSTEMS, SHEET METAL REPAIR, WEIGHT AND BALANCE, GEAR BOXES, DRIVE TRAIN R/R and TROUBLE SHOOTING, ELECTRICAL SYSTEMS and MAIN/TAIL ROTOR SYSTEMS.
- AH-1W and UH-1N engine, vibrex and vibe analysis tester.
- Chadwick Helmuth 8500 VASE vibration analysis/weight and balance equipment qualified.
- All necessary ground support equipment licenses.
- Vibration Analysis Program Manager
- UH-1N Crew Chief, UH-1N Combat Crew Chief, AH-1W and UH-1N testing hrs-61.6, crew chief hrs-86.0, O.I.F. combat hrs-41.2, night hrs-21.5.

## EDUCATION

Jet Blue University  
2009

### **Mechanical Engineering**

Delaware Technical Community College  
2006

UH - Camp Pendleton, CA  
2004

### **degree, Airframe and Power**

Embry-Riddle Aeronautical University extended campus - Camp Pendleton, CA  
2004

## ADDITIONAL INFORMATION

### COMPUTER SKILLS:

- Microsoft Office Software
- Auto CAD 2005 & subsequent
- CAD Key (3-D modeling)
- CATIA V5 (3-D modeling)
- Microsoft Windows XP-Windows 8.1
- Linux/Ubuntu
- Android
- Virtualbox for Windows & Ubuntu
- Languages: C++, HTML & Unix

REFERENCES SHALL BE PROVIDED UPON REQUEST