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608 Gem Street

Winchester, TN 37398

**Objective:**

An Electrical/Mechanical Engineer with over twenty-five -year experience in aerospace design, integration, system installation and manufacturing engineering. Able to provide technical leadership within multidisciplinary team environments. Familiarity with testing - design validation, and certification. Have intimate knowledge of and ability to assign wires/cables to their correct harness assembly, based on EMI/EMC and system separation or system functionality requirements while meeting all installation and maintainability requirements in manufacturing environment. Familiar with the following specification D0-160D, DO-178, Mil-STD-85, MIL-STD-470, and MIL-STD-1629 FAA Part 23 and Part 25 and FAA and military certification. I have over 25 years of computer aid design software such as Catia V4, V5, Solid work, AutoCAD, inventor, familiar with mentor graphics harness routing. I have over fifteen years in program management from concept to launch. In process of obtain project management Professional (PMP) certification, I have over ten years in the testing of wind tunnel model and bird strike testing and qualification of aircraft canopy and windshield component. I have experience in avionic system integration laboratory, Familiar with the following system propulsion, rocket engine testing, hydraulic system, navigation communication and ground support Equipment etc..

**Work Experience:**

**Electrical Control Engineering**

PPG Engineering Huntsville, ala (Aerotek contract) (September 2017 to present)

* Participated on teams or alone to design, develop, and deliver power arch flashing labeling project, plus upgrading furnace and oven projects within budget, and within schedule.
* Supervised the work of junior engineers or designers, drafters, technicians, etc.
* Independently plan, schedule, conduct and coordinate engineering work.
* Perform debug and power systems.
* Specify and select power distribution and control equipment and related components based on user requirements such as substations, switchgear, distribution panels, motor control centers, transformers, VFDs, etc.
* Develop drawings and specifications for power systems.
* Reviewed submittals and answer RFIs to support implementation of designed systems.
* Perform facility startup, checkout and commissioning of power systems at client facilities.
* Provide electrical power for 480 Volt 3 phase powers to electric motor and robotic and plc programming
* Review the design details on a frequent basis to assure the continuity and correctness of the design effort.
* Assist with the electrical installation of transformer and power panel for equipment on the manufacturing floor.
* Provide assistance on the manufacturing floor for installation to vendor specification.
* Provided design packages for power controls systems and assist in the debug of these systems on the manufacturing floor.

**Electrical Application Consultant Engineering**

Gulfstream, Savannah Georgia (Advance Technology contract) (April l2016 to March 2016)

* Develop Electrical Wiring Interconnect System (EWIS), capable of resolving all technical issues relating to EWIS.
- Produce and maintain wire harness assemblies, utilizing the CATIA V5 Electrical Work Benches and capital harness familiar with mentor VeSystem.
- Capable of interfacing with wiring diagrams, system and EMI/EMC requirements.
- have intimate knowledge of and ability to assign wires/cables to their correct harness assembly, based on EMI/EMC and system separation or system functionality requirements while meeting all installation and maintainability requirements.
* Contributes to planning, developing and coordinating of important engineering projects
* Provides specialized technical assistance to team member
* Uses advanced techniques and modified extension of theories to provide technical solutions to a wide range of difficult problems
* Determines and develops own approach to solutions within schedule and cost objectives
* Works under limited supervision; work should only be required to be reviewed for accuracy and consistency with meeting overall objectives
* Acts as liaison with representatives outside of the assigned group/area Additional Functions:
* Actively works to improve daily processes and ensures all work meets customer requirements
* Maintains a current knowledge of developments in the field of specialty and/or other related aircraft fields to recommend innovations to improve quality and effectiveness of company product
* Performs other duties as assigned Other Requirements.
* Provides information for FAA order 8110 for Military Derivative for military on Gulfstream aircraft.
* Generate drawing and prepare new STC (Supplemental Type Certification) for radio installation, navigation, cockpit and special mission equipment.

**Electrical /Mechanical Component Integration Engineering**

Booz/Allen / Hamilton Huntsville, Alabama (Aerotek contract) (October 2015 to April 2016)

* Develops design data packages for mechanical assembly, avionics/electrical cabin and cockpit systems per airworthiness requirements and the project specification for Helicopter aircraft completions, refurbishments, modifications and upgrades.
* Creates and reviews avionics/electrical drawings, specifications, service bulletins, reports, etc.
* Performs aircraft avionics/electrical systems research and design relating to the production of engineering drawings necessary for installation and completion of custom aircraft interiors and other modifications.
* Supports suppliers of avionics/electrical systems with technical guidance per the project specifications.
* Creates aircraft wiring diagrams, wiring/equipment lists, test plans, and test reports.
* Write technical specifications and systems definitions.
* Supports production with the installation, testing, and certification phase of the modification package.
* Interface with production, purchasing, certification and other engineering trades.
* Prepare or develop electrical load data for modification projects.
* Develop non-specific documentation for avionics/electrical system modifications for internal and external use by company personnel and end customers or vendors.
* Coordinated electrical system integration and mechanical installation
* Have intimate knowledge of and ability to assign wires/cables to their correct harness assembly, based on EMI/EMC system requirements
* Provide design support for new night vison and led lighting modification for Army military equipment

**Electrical Power Engineering**

Jacobs Engineering Tullahoma, TN (Aerotek contract) (May 2015 to October 2015)

* Participated on teams or alone to design, develop, and deliver power system projects that achieve the technical requirements, are within budget, and within schedule.
* Supervised the work of junior engineers or designers, drafters, technicians, etc.
* Independently plan, schedule, conduct and coordinate engineering work.
* Perform engineering analyses on power and lighting systems.
* Specify and select power distribution and control equipment and related components based on user requirements such as substations, switchgear, distribution panels, motor control centers, transformers, VFDs, etc.
* Develop drawings and specifications for power systems.
* Coordinate and review the work of others for techniques and technical approach.
* Reviewed submittals and answer RFIs to support implementation of designed systems.
* Perform facility startup, checkout and commissioning of power systems at client facilities.
* Participated in proposal development and support marketing activities
* Provide electrical power for 480 Volt 3 phase powers to electric motor and robotic and plc programming

**Automotive Quality Engineer**

Formal D (Nissan contract) - Decherd, TN (March 2015 to May 2015)

* Implementation of measures in the production area to improve manufacturing efficiency
* Interface between OEM and Suppliers
* Responsible for ensuring high quality standards for the manufacturing of automotive engines
* Development and Support of suppliers doing OEM audit
* Certificated in the VDA 6.0 process Quality management for the automotive industry
* Familiar with quality standard ISO TS164949
* Develop Schedules and track for the project from Award letter to launch
* Familiar with injection mold design
* Inspect automotive parts as quality assurance engineer
* Key Customer contact until launch of project
* Attend & report trial & joint check results with team
* Attend and coordinate running rates with customer
* Oversee material trial orders and trial shipments to customer
* Lead APQP teams and report directly to Upper management constantly

 **Design Project Engineer Manager**

Axis Engineering (self-contract) – Leon KS (March 2014 to March 2015)

* Coordinated electrical system integration and mechanical installation as liaison
Engineer at customer sites.
* Prepared design requirement for electrical / mechanical system, selected antenna, Flight data, communication system, weapon system, displays, and system interface
* Familiar with manufacturing support of injection molding part use on aircraft faring and door assembly.
* Execute projects to meet schedule, budget, and Earned Value management and maintain quality Control.
* Monitors internal tooling, supplier tooling and suppler part delivery for pre-launch projects.
* Monitors Cost targets throughout trials and launch with other team members
* Monitors & track KPI targets for project
* Support the implementation, achievement, and maintenance of the Quality and Environmental Policies and Procedures.
* Develops and maintains electrical and Mechanical product detail, assembly and installation designs (e.g., equipment racks, power panels, cable routing and geometry, antennas).
* Provides engineering design disposition on discrepancies (e.g., rejection tags, production action requests, and shop revision requests).
* Follows documented processes, specifications and procedures that support the design and manufacture of electrical commodities.
* Supports the development of statements of work.
* Assists in the technical review of supplier capabilities to facilitate source selection.
* Analyzes functional and physical input used in the development of integrated design and system architecture.
* Generate design and carry out installation of FAA STC for Avionic upgrade system for Beechcraft T6 aircraft.

**Staff Manufacturing Engineer**

Goodrich/ Adecco (contract) - Tullahoma, TN (March 2013 to January 2014)

* Generate manufacturing lineups, shop travelers, machine requirements, and tool requirements/application
* Prepare, maintain and revise tool sheets, op sketches, and W.O. cards and rework schemes
* Maintain continuous process improvement to reduce cost, improve quality, increase throughput
* Provide shop floor support Resolve quality issues (non-conformances) by defining and eliminating 'root' cause Assist with design of durable tooling, perishable tooling, and work gages
* Perform required duties to meet customer and ISO standards Promote a safe working environment
* Provided support for implementation of automotive process into the aerospace manufacturing
* Assist in Value Stream mapping process and lean manufacturing process.
* Familiar with the Toyota Production System, Kaizen and Toyota Way
* Responsible for providing component part manufacturing and processing support consistent with cell, facility, and division goals & objectives

**Technical Lead Engineer Electrical Component Integration**

Sikorsky Aircraft - Huntsville, AL (March 2009 to March 2013)

* Provide leadership for the UH 60 Blackhawk Engineering group, including mentoring, career development, performance appraisals, and performance feedback
* Coordinated electrical system integration and mechanical installation as liaison
Engineer at customer sites.
* Prepared design requirement for electrical / mechanical system, selected antenna, Flight data, communication system, weapon system, displays, and system interface
* Execute projects to meet schedule, budget, and Earned Value management and maintain quality.
* Responsible for quality, timely release, and technical oversight of Technical Engineering analysis and documentation including specifications, certification plans, test plans, reports, etc.
* Coordinate with other aircraft engineering functions, Program Management Office, Technical Publications, Manufacturing, Quality Assurance, Finance, Supply Chain Management, and other internal disciplines to ensure successful execution of projects, support of the production line, and resolution of field issues
* Work extensively with government representatives of the program office
* Work with suppliers regarding qualification testing and Government Validation, as well as field-related issues
* Conduct meetings with and make presentations to internal and external customers, including Preliminary Design Reviews, Critical Design Reviews, Program Management Reviews, etc.
* Support bid and proposal efforts for future US Army Program and other variants for domestic and international marketplace
* Perform onsite inspection for electrical system install and hardware installation to military and FAA regulation.
* Perform technical training for gross training of electrical, structural and avionic engineer.
* Provide primary interface on behalf of Sikorsky with Airworthiness Authorities (FAA/EASA etc.) to obtain certification of design changes commercial aircraft. Able to interpret U.S. (FAA) and foreign civil regulations and advice technical specialists to assure the proposed qualification approaches and methods of compliance will be acceptable to the Airworthiness Authorities.
* Provide interface to FAA / Military airworthiness authorities regarding continued airworthiness issues. Develop and maintain department procedures and policies.

**Manager Engineer Electrical Component Integration**

Sikorsky Aircraft - Huntsville, AL (March 2006 to March 2009)

* Supervise the day to day activities of an engineering staff representing a variety of engineering disciplines
* Execute projects to meet schedule, budget, and Earned Value management and maintain quality.
* Responsible for quality, timely release, and technical oversight of Technical Engineering analysis and documentation including specifications, certification plans, test plans, reports, etc.
* Coordinate with other aircraft engineering functions, Program Management Office, Technical Publications, Manufacturing, Quality Assurance, Finance, Supply Chain Management, and other internal disciplines to ensure successful execution of projects, support of the production line, and resolution of field issues
* Work extensively with representatives of the program office for US Army and Navy, as well as representatives from the U.S. Army user community AMCOM and CECOM.
* Work with suppliers regarding qualification testing and Government Validation, as well as field-related issues
* Conduct meetings with and make presentations to internal and external customers, including Preliminary Design Reviews, Critical Design Reviews, Program Management Reviews, etc.
* Support bid and proposal efforts for future US Army Program and other variants for domestic and international marketplace.
* Coordinate data review for UH60 aircraft windshield and window improvement program

**Aeronautical Staff Engineer Electrical System Integration**

Lockheed Martin Aircraft - Fort Worth, TX (January 2003 to March 2006)

* Designed and released all detail, assembly and installation for government F-16, (A/B, C/D, E/F, FSX/F2, AFTI, XL, KF-X, Peace Marble I, II, F-16 I, Belgium, Denmark, MLU,) F-22, F-111, (F-35) Aircraft and foreign military Aircraft.
* Prepared Catia 3D model for harness routing, provided engineer support for installation into multi- aircraft. Reviewed engineer design and provide input on design improvement perform design review for Harness Design and installation design.
* Develop statement of work, generated program management schedules.
* Coordinated electrical system integration and mechanical installation.
* Prepared design requirement for electrical / mechanical systems.
* Work extensively with representatives of the program office for Air Force and Navy, as well as representatives from the Dept. of Defense User community.
* Work with suppliers regarding qualification testing and Government Validation, as well as field-related issues.
* Conduct meetings with and make presentations to internal and external customers, including Preliminary Design Reviews, Critical Design Reviews, Program Management Reviews, etc.
* Support bid and proposal efforts for future US Air Force Program and other variants for domestic and international marketplace.
* Provide engineer support for F-35 and F-16 engine installation wiring harness Interface.
* Coordinate and review Bird strike data and coordinate testing with Arnold Research Center.

**Lead Design Engineer Component Integration**

Sikorsky Aircraft - Stratford, CT (April 2001 to January2003)

* Designed and released all detail, assembly and installation for government Blackhawk Helicopter.
* Coordinated electrical system integration and mechanical installation.
* Prepared design requirement for electrical / mechanical system, selected antenna, flight data, communication system, weapon system, displays, and system interface

**Senior Staff Engineer**

ARINC Inc. - Oklahoma City, OK (September 2000 to April 2001)

* Evaluate E-3 AWACS depot corrosion control process develop recommendations both to correct discrepancies and adopt improvements on the aircraft.
* Provided engineering support for depot maintenance problems encountered during maintenance. Also, provided technical support and Chair the E-3 AWACS Corrosion Prevention Advisory Board.

**Senior Design Engineer**

Lockheed Martin Aircraft Center (contract)- Greenville, SC (August 1999 to September 2000)

* Designed and released all detail, assembly and installation for government interior modification. Coordinated electrical system integration and mechanical installation. Perform flight evaluation on avionics and for P3 ASW aircraft.
* Responsibilities included defining system architecture design, interface control documentation, system integration debug and documentation.
* Provide FAA Interface for military certification for avionic upgrade on C130 commander Air craft and C5 Aircraft, L1011 avionic up grade.
* Analysis flight data for correction of sensor error, failure mode and suitability and reliability. Assisted in developed configuration management procedure and implementation data acquisition.
* Performed liaison activities on 29 aircraft for both electrical and mechanical modification crews.

**Senior System Engineer**

Aero structures Corporation - Nashville, TN (August 1998 to August 1999)

* Support in design of Boeing Bell 609 and V-22 tilt rotor aircraft Mechanical /Electrical system. Responsibilities included defining system mounting and installation, specification / envelope drawing preparation, design review and vendor’s coordination and qualification /acceptance test review.
* Responsibilities included defining system architecture design, interface control documentation, system integration debug and documentation
* Provide system review for FAA certification for commercial tilt rotor aircraft
* Review design for cockpit light and

**Senior Avionics Engineer**

Lockheed Martin Aircraft Center (contract)- Greenville, SC (February 1997 to August 1998)

* Assisted in the design and development of Navy DC9, C5 and P3 Orion avionics upgraded
* Responsibilities included defining system architecture design, interface control documentation, system integration debug and documentation
* Produce mechanical installation, electrical system drawings and prepared antenna installation drawing
* Correspondent with FAA and other government organization to received government certification.
Familiar with FAA Part 23 and Part 25
* Generate new STC for Auto pilot upgrade for military DC-9 (Boeing 707Airframe and 737 Airframe)

**Senior Avionics Engineer**

Raytheon Aircraft Company - Wichita, KS (April 1995 to Febuary1997)

* Performed installation of electrical, avionics system, hydraulic system and structure installation for the T6A, King Air, Beech Jet, Hawker, Baron and Premier aircraft.
* Coordinated budgeting, coordination and scheduling of technical resources as well as developing engineering procedure and controls.
* Correspondent with FAA and other government organization to received government certification. Determine wire harness penetration and location throughout aircraft structure. Composed harness routing drawing, interface drawing and electrical schematics drawing. Prepared design requirement for electrical / mechanical system, selected antenna, flight data, communication system, weapon system, displays, and system interface.
* Performed calculation and analyzes test data for crew station suitability testing.
* Familiar with the following specification D0-160D, DO-178, Mil-STD-85, MIL-STD-470, and MIL-STD-1629 FAA Part 23 and Part 25.
* Provide support for FAA certification of Pilatus aircraft into Airforce trainer (T6) certification of new wing, new cockpit, auto pilot, navigation, new fuel system, propulsion and communication.
* Provide Data review for bird strike and other canopy testing at Arnold Research Center.

**Senior Avionics System Engineer**

Lockheed Martin Tactical Aircraft - Fort Worth, TX (September 1988 to April 1995)

* Design avionics ground support equipment for use with simulation development and flight test hardware.
* Established design and test requirement for supplier furnished equipment.
* Assisted in electrical design, harness routing and mechanical installation.

**Senior Avionics System Engineer**

Lockheed Martin Tactical Aircraft - Fort Worth, TX (March 1985 to August 1988)

* Design avionics ground support equipment for use with simulation development.
* Established design and test requirement for supplier furnished equipment. Assisted in electrical design, harness routing and mechanical installation.
* Created estimate for design and manufacturing tasks.
* Supported all internal manpower assessment, cost management and estimating reviews.

**Associate Roadway Designer**

State of Tennessee - Nashville, TN (January 1984 to March1985)

* Developed roadway documentation on computer aid design. Prepared roadway elevation, slope and grade calculations.

**Electrical Designer**

Teledyne Brown (contract) - Huntsville, AL (July 1983 to January1984)

* Generated routing of electrical wiring harness, coordination of equipment location and other support hardware in missile launcher. Prepared electrical schematics and installation drawing.

**Mechanical Designer**

The Univ. of TN Space Institute (contract) - Tullahoma, TN (January 1983 to July1983)

* Generated conceptual design for installation of camera system for atmosphere test cell.
* Generated routing of electrical wiring harness, coordination of equipment location and other support hardware. Prepared electrical schematics and installation drawing.
* Provided production support on installation of Camera System Designed mechanical enclosure, panel and electrical packaging for NASA Space Station

**Flight Test Engineer**

General Dynamics Corporation (Contract) Fort Worth, TX (January 1982 to January1983)

* Generated conceptual layout, and design for installation of flight-test hardware system (such as strain gages, data computer, and flow meter) and other equipment.
* Installed other hardware and other mechanical component used in new test aircraft.
* Assisted in flight testing of F-16 upgrade, F-111 modernization program and NASA AFTI Development.
* Evaluated data from vendor new development component and existing flight problem.
* Assisted in installation of different engine configuration and analyze engine data for performance.
* Supported canopy impact testing and bird strike testing for the F-16 aircraft.

**Wind Tunnel Test Engineer**

Sverdrup Technology - Tullahoma, TN (May 1973 to January 1982)

* Responsible for conceptual design and documentation for modification to accommodate new test units.
* Composed testing requirement manual, test cell configuration manual, developed test procedure and analyze data for application in modeling and simulation
* Familiar with rocket and turbine propulsion system.
* Provided support for analysis of performance data, fluid flow analysis and elevated pre-test data.
* Preformed calculations for sensor, flow meter, data recorder, and other test hardware equipment.
* Assisted in testing of solid rocket engine for solid rocket booster.
* Familiar with testing and evaluation of aircraft engine component such as Compressor, Igniter, Flow meter, Fire control and Environmental system.
* Provided support and data acquisition for bird strike and impact range testing

**Education:**

 **Master Information Technology (course)**

 2000 to 2003 American International University - Atlanta, GA

**BS in Aerospace Engineering**

 1990 to 1994 American Century University - Albuquerque, NM

**BS Mechanical Engineering (120 hours)**

 **1973 to 1979** Tennessee State University - Nashville, TN

Skills

CatiaV4, Catia V5, Cad am, Cadre, AutoCAD, inventor, UN graphics, Solid work Microsoft Office, Microsoft Project. Program Management training, Earned Value Management (2007): Supervisory Management (2005) Program Management Skill (2004); Secret Clearance (2003), Six sigma training (2008), Program Logic Controller Certification