DEVIN PAYNE

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CAREER OBJECTIVE

To work on the cutting edge of the aerospace industry in an organization where I can help advance humanity into the sky and stars.

WORK EXPERIENCE

Signature Aviation, Bedford MA September 2019-Present
Line Service Technician, Trainer, AFQC

- Provided services essential to aircraft operations including fueling, towing, deicing, marshalling, etc.
- Serviced broad aircraft set from single engine piston(PA32, C172) to wide-body airliners (B773, B742).
- Served as trainer for new-hire employees, training safe and efficient completion of services for aircraft.
- Ensured flight safety by completing AFQC procedures both on a daily basis and on inbound fuel loads.
- Enabled efficient ramp/hanger use with over 300 tow movements including hanger and taxiway moves.

Frontier Technologies, Brewton AL August 2019 - December 2019
Automation Specialist

- Investigated integrating industrial automation into Frontiers existing production lines for the first time
- Trained new technicians to meet GE specifications while complying with Port of Pensacola regulations

Frontier Technologies, Long Beach CA February 2019 - August 2019
Fabrication and Assembly-Special Architectural Projects

- Directed the fabrication, welding, and finishing of a 24' diameter spiral handrail for Apple's 5th Ave. retail store which was completed and delivered in only 2 months
- Devised the safe assembly techniques for a pair of four ton clevises that used a state-of-the-art tension relief spring system that with over 4000 pounds of pretension force
- Oversaw a team of interns performing rework on 23 wind turbine nacelles in the port of Pensacola

Summer School for the Performing Arts, Westford MA July 2018 - August 2018
Technical Director

- Oversaw design processes for productions especially focused on evaluating strength and stability in structural designs to ensure safety for everyone involved
- Lead technical staff to successfully construct and execute 13 productions in 6 weeks, while also introducing campers to the world of technical theater
- Collaborated with Directors to determine how to bring their concepts to life in the spaces available
- Ensured clean, safe, and organized working areas

EDUCATION

Rensselaer Polytechnic Institute, Troy, NY
Courses in the Bachelor of Science in Aeronautical Engineering Program

Continued on back.

PERSONAL TRAITS

Fast learner who can quickly assess and adapt to new situations.

Strong motivational and leadership skills.

Ability to remain calm and composed in stressful situations with a focus on task completion.

PROJECTS

Frontier Industrial Automation
I spent five months completing research and testing on the feasibility of using robots to paint/seal pieces of specialized plywood for use in General Electric wind turbines. Due to the traction requirements and size of the features needing painting it was determined there were no existing painting heads that could complete the required tasks. With the assistance of automation experts I attempted to develop an attachment customized for Frontier's needs, but was ultimately unsuccessful. The project concluded with a determination that it was not cost-efficient to integrate automation at present. To complete my involvement, a report was compiled outlining the challenges presented in the project as well as the areas of technology that would need to advance to make this automation feasible in the future.

Apple 5th Avenue Rebuild-Handrail
Directed the fabrication and use of a full sized fixture that held spiraling steel bars for a 24' diameter spiral handrail in Apple's 5th Ave. retail store. The parts were held in place for welding and initial polishing. The work was completed, and the parts were delivered in only 2 months. Fabrication involved geometries complicated enough that it necessitated machining components in five axes, along with training in the use of Frontier's Faro laser coordinate measuring system, a tool used to measure and build structures as large as 100 feet in any direction accurately to 0.0004". The finished segments were over 20' long yet were held to tolerances ±0.060" for every point along the handrail, with attachment points being held to ±0.005" in 3D space.

Wind Turbine Reworks
With the assistance of a team of interns, I developed the procedures to rework GE wind turbine pillow-blocks inside the fully assembled nacelle while within the port of Pensacola. This required high precision as well as accountability in order to prove to both GE, and the original supplier that the parts were out of spec, and that, after our work, they had been corrected to be within the requirements. Additionally, due to the completed state of the nacelle during our rework, it was imperative that no hot sparks be created nor could any other components be marred. Upon completion of the project, my procedure was formalized to be used for any future similar reworks and continues to be the procedure in use today.

TECHNICAL STRENGTHS

Modeling and Analysis	AutoCad, SolidWorks, NX11, Vectorworks
Software & Languages	MS Office, Latex, C++, Java,
Aviation Services	AFQC, Lektro Towing, Fueling, Fuel Shipment Receipt, Deicing

EXTRA-CURRICULAR

Private Pilot

Cadet in AFROTC Det. 550

Assistant Technical Director for RPI Players

Stage Manager for *Spring Awakening* w/ $120,000 budget, 40+ person team