CHRIS W. BIERMAN
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PROFESSIONAL SUMMARY

Senior Mechanical Engineer with a strong background in hardware design and team leadership. Led the development of award-winning astronaut training simulators for NASA, demonstrating a strong work ethic and meticulous attention to detail with a focus on cost savings and design for manufacturability. Skilled in 3D CAD modeling using Creo, contributing to innovation and design efficiency in complex engineering projects.

SKILLS

- Creo Parametric
- Creo 2D Drawings
- Creo Sheetmetal
- Creo Simulate FEA
- Windchill/PDMlink
- Electronics Packaging
- Fiber Optics Packaging
- Additive Manufacturing
- GD&T (ASME Y14.5)
- Large Assembly Management
- Aerospace Simulators
- Hydraulics
- Tolerance Analysis
- Product Development
- Project Management

CAREER HISTORY

KBR INC. Houston, TX

Senior Mechanical Engineer 05/1998 to Current

- Design flight hardware simulators, mockups and part-task trainers for use in Orion, International Space Station and Commercial Crew Vehicle astronaut training, mission planning, real-time mission support and engineering analysis for the Mission Systems Division of NASA's Flight Operations Directorate at Johnson Space Center.
- Designed multiple iterations of the Orion Crew Exploration Vehicle for use in cockpit design analysis and training for Artemis I, II and III.
- Team Leader in design, procurement and assembly of Boeing's Starliner BMT crew module.
- Designed mechanical and hydraulic subsystems of the Space Station Remote Manipulator (SSRMS) trainer including design and testing of the rotary actuator braking system, remote joint processor housing, and hydraulic power unit for NASA's Neutral Buoyancy Laboratory.
- Team Leader in the design, procurement, and assembly of the Multi-Purpose Logistics Module (MPLM) trainer that won a NASA award for exceeding engineering and quality expectations.
- Led design of full-scale simulators and mockups for International Space Station including the Russian Service Module (Zvezda), Japanese Transfer Vehicle (HTV-II) and Node 3 (Tranquility), ECLSS Rack Trainers, Integrated Cargo Carriers, International Docking Adapter, and the Carbon Dioxide Removal Assembly (CDRA).
- Designed handrails flown on International Space Station used as astronaut intravehicular mobility aids in microgravity.
- Developed a web based Creo fastener database that standardizes hardware selection and streamlines the design and procurement processes for dozens of engineers.

RELTEC Corporation LaGrange, GA

Mechanical Design Engineer 11/1996 to 05/1998

- Designed electronics enclosures for various industrial applications.
- Managed engineering projects from conceptual design through documentation, prototype development and testing.
- Redesigned major product line to reduce parts and enhance manufacturability, saving $750K annually.

GC Technologies Atlanta, GA

Mechanical Engineer 12/1995-11/1996

- Designed rack mounted and tabletop fiber optic enclosures for use in testing, monitoring, and switching equipment in telecommunications.

Parametric Technology Corporation Waltham, MA

Quality Assurance Engineer 06/1994-11/1995

- Developed and executed test plans for Pro/ENGINEER (Creo) software applications to enhance reliability and functionality.

EDUCATION

BACHELOR OF SCIENCE: MECHANICAL ENGINEERING 05/1994
Rensselaer Polytechnic Institute, Troy, NY
Magna Cum Laude

ASSOCIATE OF SCIENCE: MECHANICAL ENGINEERING TECHNOLOGY 05/1991
Wentworth Institute of Technology, Boston, MA
Summa Cum Laude