Microgravity Science Glovebox Engineer (Documentation Engineer)

Marshall Space Flight Center, Huntsville, AL

Description

The Microgravity Science Glovebox (MSG) team is a POIC FCT position responsible for managing real-time operations of the MSG Facility and is the primary liaison between the POIC, MLSG Project, and sub-rack Payload Developer teams. MSG Operator responsibilities include real-time commanding and telemetry monitoring of the facility, ground system maintenance/checkout, increment specific training, supporting sub-rack payload operations, and facility maintenance operations.

The LSG/MSG Ops teams are under the leadership of the LSG and MSG Facility Operations Leads.

Responsibilities:

In addition to being a certified member of the MSG team and completing necessary assignments, this individual will have the following duties:

- Coordinate with the HP26 NASA Branch Chief, Assistant Branch Chief and Sub-Team Lead, and HP26 TBE Level II Manager as needed to ensure excellent customer support
- Report directly to the TBE Level II Manager for technical performance of the contract for the MSG position
- Accountable to the TBE Level II Manager for cost and manpower assessment of the MSG team requirements and ensuring contractual responsibilities are met/exceeded
- Provide overall leadership and technical direction for their portion of MSG contractor support personnel, including performance, time & attendance, policies, issue resolution, corrective measures, etc.
- Interface with NASA project management for MSG position health and status reporting
- Solicit WAR inputs and finalized final overall MSG team rollup
- Provides LSG/MSG planning inputs, develops/submits LSG/MSG facility crew procedures, GCPs, Flight Rules and PL Regulations
- Supports product development and review for LSG/MSG investigations including crew procedures, PARD/PPO, PL Regulations, Flight Rules
- Maintains and teaches Ground Support Personnel (GSP) courses
- Develops and maintains console tools, builds console schedule
- Supports JSC SPI in ground crew training development
- Reviews command/telemetry databases
- Performs CoFR interface verification procedures, supports rack and investigation testing, and provides SIM support
- Representative to MEP and MOCG
- Supervise payload assignments
- Chair MSG team meetings and yearly offsite meetings

Requirements

- **U.S. CITIZENSHIP REQUIRED**
- Bachelor of Science Degree in Engineering or Science.
- Familiarity with ISS Program and POIC Stakeholders
- Understanding of HOSC Systems
    - EPC
        - Display Studio
        - Exception Monitoring
    - AEON
    - Trek 3.1 and 5.2
    - Stancil
    - Antman
- Working knowledge of ISS Command Data and Handling (CD&H/CCSDS)
- Experience with Payload Safety Requirements, the Payload Anomaly Report Tool (PART), and the payload life cycle
- Proficiency in increment planning (OOS, PPO/PARD)
- Knowledge of crew procedure development
- Experience with ISS microgravity science, objectives, technologies, and trends
- Understanding of current/emerging display architectures, including laptop computer, touchscreen, tablet, Smartphone, LCD/LED/OLED front panel and wearables (incl. VR/AR)
- Ability to apply a defined set of processes and work to a product integration milestone schedule with proactive workflow management
- Strong technical leader with ability to coordinate technical team activities as well as an independent, critical, and analytical thinker who can rapidly adapt to changing business and organizational demands
- Limited travel requirement (CONUS: 4-6 trips/year OCONUS: possible)

Preferences

- Software Engineering, Information Technology, and/or Electrical Engineering degrees would be a preferred

About Us

ZIN Technologies, Inc. is an award-winning AS 9100 registered small disadvantaged business (SDB) headquartered in Northeast Ohio. Established in 1957, ZIN is a leader in providing advanced engineering services and product development solutions for NASA, DoD and private industry.

ZIN provides full lifecycle development of aerospace systems including design, development, engineering, integration, test, evaluation, orbital operations, systems modeling, simulation, verification, and validation. The flight hardware lifecycle spans concept definition, design, development, fabrication, verification, integration, launch, operations, and data processing.

We offer expertise in multi-discipline engineering, system and product development, production, and research and technology development. ZIN'S engineering capabilities include systems, mechanical, electrical, fluids, propulsion, structural, thermal, integration and test.

ZIN has a strong heritage in the areas of Space Operations including payload operations, space communications, navigation and network reconfigurable testbed. ZIN supports exploration systems (ORION, SLS, ISS, commercial vehicles) and space technologies (advanced communications, power, propulsion, cryogenics).

Our award-winning 250+ person organization consists of scientists, engineers, designers, and technicians. ZIN employs an integrated performance-based management approach, providing experienced people, proven processes and tools and exceptional cost, schedule, and technical performance while identifying and managing program and project risks.

Offering Unsurpassed Product, Process and Service:

- Prime contractor
- Sub-contractor
- Product manufacturer
- Value-added service provider

Company Benefits and Programs

In addition to competitive salaries, ZIN offers excellent benefits to our associates, including medical, vision, and dental insurance; short- and long-term disability; life insurance; paid leave and paid holidays; 401(k) retirement plan (immediate vesting); education and training reimbursement; professional development opportunities; employee assistance program; flexible spending plans; credit union membership; and direct deposit.

As a federal contractor, ZIN Technologies strives to comply with all applicable customer, federal, state, and local requirements, up to, and including, COVID-19 vaccine regulations. ZIN Technologies may require its employees to obtain full COVID-19 vaccination, provide proof of vaccination status as a condition of employment, provide documentation to substantiate a valid exemption, as defined by law, and/or comply with all safety protocols related to COVID testing, mask wearing, and physical distancing while in covered contractor workplaces.

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