



MCC Software Officer



MCC Team Description:

The MCC team is responsible for everything revolving around the Mission Control Center of the Asclepios Mission: from training the officers that will serve in the control room during the mission to advancing the tools used inside the control room for the mission planning, communication with the base, sensor data acquisition and more. Ensuring the safety of the astronauts during the mission is paramount, and so having a strong team behind the MCC is essential for the success of the mission.

MCC Software Officer Description:

As a MCC Software officer, you will design, configure and maintain the software architecture of the MCC. This will ensure seamless integration of systems for mission planning, data acquisition and communication. Asclepios has built its own in-house communication software - as a MCC Software officer, you will help develop this further to better simulate the communication systems of a real space mission.

Key information for role:

- **Approximate start date** - 01/10/2025
- **Average hours required per week** - 3-6 hours
- **Tasks and Responsibilities:**
 - Attend regular meetings with the MCC team to give and collect updates for the heads.
 - Deploy and manage tools like YAMCS (Yet Another Mission Control System) for mission planning, data acquisition, telemetry, and system monitoring.
 - Establish and manage the TCP/UDP communication protocols for data transfer between MCC, the analog mission habitat, and external systems.
 - Manage the MCC's communication systems, including voice loops, text communication channels, and data sharing networks to ensure clear and reliable communication between MCC and the analog mission crew.

- Ensure redundancy in communication channels and troubleshoot potential disruptions, ensuring all parties can communicate effectively during the mission.
- Create and teach standard operating procedures (SOPs) for various mission contingencies.
- **Essential Requirements for Role:**
 - Dedication
 - Communication Skills
 - High interest in space related fields
 - Fluent english speaker
 - Good understanding of TCP/UDP protocols, telemetry, and data acquisition systems.
 - Familiarity with system integration, troubleshooting, and software customization
- **Desirable traits for role**
 - Expertise in mission control systems software (especially YAMCS or similar platforms).
 - Ability to work under pressure and adapt to real-time mission challenges.
 - Experience with real-time communications software and networking within a mission-critical environment.

Inclusivity Statement

Don't meet all the requirements? That's okay, one thing all applicants that are chosen show in common is their passion for Asclepios and their passion for the mission. Feel free to apply for any role you think you will enjoy. At Asclepios, we have a very welcoming environment and ensure no one is left behind. We are one big international family!