

MDA Space — Satellite On-Orbit Operation Engineer (MDA Space)

Montreal, QC | Remote (1–2 weeks on-site per quarter considered) | Urgent Hire

• Satellite On-Orbit Operation Engineer — MDA Space | Montreal, QC EXCLUSIVE — Fastwater Staffing first access

ROLE OVERVIEW: MDA is seeking a Satellite On-Orbit Operation Engineer to manage, monitor, and control safely and reliably early operation activities on LEO and MEO communication constellation satellites. Ensuring 24/7 mission success by analyzing telemetry, executing commands, and troubleshooting anomalies. Key duties: satellite health monitoring, orbit maintenance, collision-avoidance, ground station coordination, flight procedure development, validation & scripting automation.

TASKS:

- Prepare and support on-orbit tests during LEOP phase and on-station
- Detect & triage anomalies, analyzing telemetry data on satellite bus and telecom payload hardware (electrical, thermal, mechanical, software)
- Generate, validate, and uplink commands to satellite; manage on-board software
- Execute orbit maneuvers, station-keeping, and payload operations
- Lead collision-avoidance and space-safety activities: conjunction analysis, maneuver planning, ITU/FCC/ESA compliance
- Anomaly troubleshooting — investigate, document, and resolve on-orbit hardware/software anomalies
- Support Launch & Commissioning — LEOP campaigns and initial in-orbit testing
- Maintain comprehensive documentation: telemetry logs, command histories, incident reports
- Collaborate with mechanical, thermal, software, test, GNC, network teams
- May require shift work in SOCC and off-site ground/landing stations
- Support SOOH development and operator training
- Mentor junior engineers; act as technical liaison with customers and vendors

REQUIRED QUALIFICATIONS:

- B.Sc. in Electrical Engineering, Aerospace or relevant field
- 10+ years of experience in LEO/MEO mission planning, on-orbit testing, and operations
- Strong understanding of space system engineering fundamentals, space environment, orbit mechanics, RF telecommunications
- Strong understanding of ground segment and space segment
- Hands-on individual — systems integration, testing, problem resolution
- Experience with Confluence and JIRA
- Excellent English communication (written and oral); French is an asset
- Ability to work with minimal supervision

NOTE: Originally described by Martin Levesque as needing 15+ years / RF specialist, but official JD is operations-focused at 10+ years.