



L3 MAS

Aircraft Modification and Maintenance with Robotics

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Spécialiste Stratégique - Solutions d'Ingénierie

ORGANISÉ PAR

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Company Presentation

- Company Size
 - L3 MAS is a Canadian company with 700 employees
 - A subsidiary of L3 Technologies with \$10.5B USD annual sales and 38,000 employees
- Market Sectors
 - L3 MAS Mission is to become Canada's Premier In-Service Support and Systems Integrator on the Defence Market
- Products and Services
 - Complete and integrated in-service support (ISS) capabilities
 - Fleet Management
 - Engineering Solutions
 - Integrated Logistics Support (ILS) including Supply Chain Management
 - Integrated Information Management including technical publications and fleet management tools
 - Modifications, upgrades and Maintenance Repair and Overhaul (R&O)
- Certifications
 - Transport Canada DAO/AMO, RCAF and RAAF ATO/AMO on several military platforms

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Conseil national de
recherches Canada

National Research
Council Canada

SEMAINE
INTERNATIONALE
L'AÉROSPATIALE

Capabilities and Needs

- **Capabilities:** use of robotics in maintenance, modification and repair activities
 - 20 years of experience on the use of robotics in a fully automated shot peening process used for **On-Aircraft** modifications and repair. Process developed and certified produces life improvement factors of up to 20.
 - 10 years of experience on the use of robotics on-aircraft for geometry reprofiling, crack machining and surface polishing.
- **Needs:** aircraft inspections using robotics
 - Gantry system to allow inspection of control surfaces on small aircraft
 - Inspection heads adaptable for robotic use
 - Automated diagnostic system (AI) to identify defects
 - Automated optical inspection (Vision System)

Potential Partners

- **Customers** interested in:
 - High quality repairs of hard to access areas
 - In-situ complex reprofiling of machined parts where simpler tooling is not sufficient



- **Partners** with expertise and products that can be integrated in an **in-situ robotic inspection system**
 - Stiff lightweight gantry system easy to assemble and disassemble
 - Inspection heads for accurate defect detection in composites (honeycomb and solid laminates)
 - Automated diagnostic system to identify defects with various ultrasonic inspection technologies

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