#### **MAINTENANCE LOG REQUIREMENTS - SUB-ZERO UNITS**

# **MAINTENANCE LOG REQUIREMENTS - SUB**

Polar Dynamics Robotics, Inc.

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Reference: PDR-MLR-2024-01

#### 1. PURPOSE AND SCOPE

1. This document establishes the mandatory maintenance logging red

2. These requirements apply to all Units deployed in customer facilities
2. DEFINITIONS
"Maintenance Event" means any scheduled or unscheduled service
2. "Critical Component" refers to any BlueCore(TM) technology component
3. "Qualified Personnel" means technicians certified by the Company
3. MAINTENANCE LOG REQUIREMENTS
1. Digital Log Format
All maintenance records must be entered in the Company's BlueCore

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Each Unit must maintain both cloud-based and local backup logs

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Records must be retained for a minimum of five (5) years

2. Required Log Entries

Each maintenance log entry shall include:

- a) Unit serial number and model designation
- b) Date and time of maintenance event
- c) Facility location and ambient temperature
- d) Technician name and certification number
- e) Detailed description of maintenance performed
- f) Parts replaced or serviced
- g) Operating hours since last maintenance

h) Temperature exposure history
i) Performance test results
j) Next scheduled maintenance date
4. INSPECTION AND TESTING PROTOCOLS
1. Pre-Maintenance Inspection
-
Visual inspection of all Critical Components
-
Diagnostic system readouts
-
Temperature sensor calibration check
-
Navigation system performance verification

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Power system efficiency assessment
2. Post-Maintenance Testing
-
Full system diagnostic scan
-
Minimum 2-hour operation test in target temperature environment
-
Navigation accuracy verification
-
Emergency stop system validation
-
BlueCore(TM) thermal management system performance check

### 5. COMPLIANCE AND REPORTING

1. Maintenance Schedule Adherence
-
Units must not exceed maximum intervals between scheduled mainte
-
Automated alerts must be enabled in BMMS
-
Deviation from scheduled maintenance requires written authorization
2. Quality Assurance
-
Monthly audit of maintenance logs by Quality Control Department
-
Quarterly compliance reports to Operations Management

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Annual third-party verification of maintenance records

### 6. SAFETY AND ENVIRONMENTAL REQUIREMENT

2. Personal Protective Equipment (PPE)
-
Required PPE must be documented in maintenance logs
-
Compliance with cold environment safety protocols
-
Proper disposal of maintenance materials
7. NON-COMPLIANCE AND CORRECTIVE ACTION
Failure to maintain proper logs shall result in:
-
Immediate Unit decommissioning until compliance is achieved
-
Investigation and root cause analysis

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Mandatory retraining of responsible personnel
-
Possible suspension of technician certification
8. AMENDMENTS AND UPDATES
This document shall be reviewed annually and updated as necessary
-
Changes in technology or operating conditions
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Regulatory requirements
Customer feedback and operational experience
Customer reeuback and operational expenence
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#### Industrygbest practices

# 9. AUTHORIZATION

This document is authorized and approved by:

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Dr. Elena Frost

Chief Executive Officer

Polar Dynamics Robotics, Inc.

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Dr. James Barrett

Chief Robotics Officer

Polar Dynamics Robotics, Inc.

Date: January 15, 2024

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