

RISK MANAGEMENT PLAN FOR AUTOMATED SYSTEMS

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Polar Dynamics Robotics, Inc.

Effective Date: January 15, 2024

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Classification: Confidential

1. PURPOSE AND SCOPE

1. This Risk Management Plan ("Plan") establishes the framework for

2. This Plan applies to all Company automated systems, including but not limited to:

- a) Navigation and control systems
- b) Temperature-hardened mobility components
- c) Safety and emergency protocols
- d) Human-machine interface systems
- e) Data collection and processing mechanisms

2. DEFINITIONS

1. "Automated System" means any self-operating or self-regulating machine or system.

2. "Critical Failure" means any malfunction that results in:

- a) Complete system shutdown
- b) Safety protocol breach

c) Navigation system failure

d) Temperature control anomaly

e) Communication system interruption

3. "Risk Level" shall be classified as:

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Level 1: Minor - Minimal operational impact

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Level 2: Moderate - Limited functionality affected

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Level 3: Serious - Significant system degradation

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Level 4: Critical - System failure imminent

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Level 5: Catastrophic - Complete system failure

3. RISK ASSESSMENT PROCEDURES

1. Systematic Risk Evaluation

- a) Quarterly assessment of all automated systems
- b) Monthly review of operational data
- c) Continuous monitoring of safety parameters
- d) Regular stress testing in extreme conditions
- e) Analysis of user feedback and incident reports

2. Documentation Requirements

- a) Risk assessment reports
- b) Incident logs
- c) Mitigation strategy documentation
- d) Testing protocols and results

- e) Compliance verification records

4. MITIGATION STRATEGIES

1. Technical Controls

- a) Redundant safety systems
- b) Fail-safe mechanisms
- c) Emergency shutdown protocols
- d) Environmental monitoring systems
- e) Real-time diagnostic capabilities

2. Administrative Controls

- a) Standard operating procedures
- b) Training requirements

- c) Maintenance schedules
- d) Change management protocols
- e) Documentation requirements

5. INCIDENT RESPONSE

1. Response Protocol

- a) Immediate system assessment
- b) Activation of contingency measures
- c) Stakeholder notification
- d) Investigation procedures
- e) Recovery operations

2. Documentation Requirements

- a) Incident reports
- b) Root cause analysis
- c) Corrective action plans
- d) Follow-up assessments
- e) Compliance verification

6. COMPLIANCE AND REPORTING

1. Regulatory Compliance

- a) OSHA requirements
- b) ISO 13849 safety standards
- c) ANSI/RIA R15.06 robotics safety standards
- d) Industry-specific regulations
- e) State and federal requirements

2. Internal Reporting

- a) Monthly status reports
- b) Quarterly risk assessments
- c) Annual compliance reviews
- d) Executive briefings
- e) Board updates

7. REVIEW AND UPDATES

1. This Plan shall be reviewed and updated:

- a) Annually at minimum
- b) Following any Critical Failure
- c) Upon significant system modifications
- d) When required by regulatory changes

- e) As directed by executive management

8. RESPONSIBILITY AND AUTHORITY

1. The Chief Robotics Officer shall maintain primary responsibility for
2. The Risk Management Committee shall:
 - a) Review and approve changes to this Plan
 - b) Oversee risk assessment activities
 - c) Evaluate mitigation strategies
 - d) Authorize resource allocation
 - e) Ensure compliance with this Plan

9. CONFIDENTIALITY

1. This document contains confidential and proprietary information of

APPROVAL AND EXECUTION

IN WITNESS WHEREOF, the undersigned have executed this Risk M
of the Effective Date.

POLAR DYNAMICS ROBOTICS, INC.

By:

Name: Dr. James Barrett

Title: Chief Robotics Officer

Date: January 15, 2024

By:

Name: Sarah Nordstrom

Title: Chief Operating Officer

Date: January 15, 2024

