

# AUTOMATED SYSTEM CHANGE CONTROL PROCEDURE

## AUTOMATED SYSTEM CHANGE CONTROL

Polar Dynamics Robotics, Inc.

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### 1. PURPOSE AND SCOPE

1. This Automated System Change Control Procedure ("Procedure") e

2. This Procedure applies to all employees, contractors, and authorized personnel.

## **2. DEFINITIONS**

1. "Change Request" means a formal proposal to modify any component of the Company's information system.
2. "Emergency Change" means an urgent modification required to prevent or resolve a production environment issue.
3. "Production Environment" means the live operating environment where the Company's information system is used.
4. "Test Environment" means the Company's controlled testing facility used to validate changes before deployment to the production environment.

## **3. CHANGE REQUEST CLASSIFICATION**

1. Level 1 Changes: Minor modifications with minimal impact on the production environment.
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Parameter adjustments within pre-approved ranges

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Non-critical software patches

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Documentation updates

2. Level 2 Changes: Moderate modifications requiring review

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Navigation algorithm updates

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Sensor calibration modifications

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Interface modifications

3. Level 3 Changes: Major modifications requiring full approval

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Core system architecture changes

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Safety-critical component modifications

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BlueCore(TM) platform updates

## **4. CHANGE CONTROL PROCESS**

### **1. Submission Requirements**

a) All Change Requests must be submitted through the Company's C  
System

b) Requests must include:

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Detailed description of proposed change

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Technical implementation plan

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Risk assessment

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Rollback procedures

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Testing requirements

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Impact analysis on cold-environment operations

## 2. Review and Approval

a) Level 1 Changes: Technical Lead approval required

b) Level 2 Changes: Technical Lead and Department Manager approval required

c) Level 3 Changes: Change Control Board approval required, consisting of:

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Chief Technology Officer

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Chief Robotics Officer

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Head of Quality Assurance

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Safety Compliance Officer

## **5. TESTING REQUIREMENTS**

### **1. Pre-Implementation Testing**

a) All changes must be tested in the Test Environment

b) Cold-environment specific testing required for temperature-sensitive components

c) Minimum testing period:

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Level 1: 24 hours

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Level 2: 72 hours

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Level 3: 168 hours

## 2. Documentation Requirements

a) Test plans must be documented and approved

b) Test results must be recorded and maintained

c) Performance metrics must be validated against baseline standards

## 6. IMPLEMENTATION PROCEDURES

#### 1. Implementation Schedule

- a) Changes shall be implemented during designated maintenance windows
- b) Emergency Changes may be implemented outside maintenance windows with appropriate approvals

#### 2. Deployment Requirements

- a) Step-by-step implementation procedures must be documented
- b) Rollback procedures must be readily available
- c) Customer notification required for Level 2 and 3 changes

## **7. POST-IMPLEMENTATION REVIEW**

#### 1. Monitoring Period

- a) Level 1: 48 hours



b) Level 2: 96 hours

c) Level 3: 240 hours

## 2. Success Criteria

a) System performance metrics within specified ranges

b) No adverse impact on cold-environment operations

c) Customer operations unaffected

## 8. COMPLIANCE AND DOCUMENTATION

1. All Change Requests, approvals, test results, and implementation records shall be maintained for a minimum of 12 months.

2. Quarterly audits shall be conducted to ensure compliance with this standard.

## 9. AMENDMENTS

This Procedure may be amended only with the written approval of the  
Technology Officer and Chief Robotics Officer.

## **APPROVALS**

APPROVED BY:

Marcus Chen

Chief Technology Officer

**Date:**

Dr. James Barrett

Chief Robotics Officer

**Date:-** 10 -

Victoria Wells

Chief Financial Officer

**Date:**

