MIL HNBK 1823 NONDESTRUCTIVE EVALUATION SYSTEM RELIABILITY ASSESSMENT

CONTENTS

- 1 SCOPE
 - 1.1 Scope
 - **1.2** Limitations
 - 1.3 Classification
- 2 APPLICABLE DOCUMENTS
 - 2.1 General
 - 2.2 Government documents
 - 2.3 Non-Government publications
 - 2.4 Order of precedence

3 DEFINITIONS

- 4 GENERAL REQUIREMENTS
 - <mark>4.1 General</mark>
 - 4.2 Systems definition and control
 - 4.3 Demonstration design
 - physical characteristics of test system
 - test procedures
 - 4.4 Demonstration tests
 - 4.5 Data analysis
 - 4.6 **Presentation of results**
 - Philosophy
 - Summary results
 - 4.7 Retesting
 - 4.8 **Process control**
- 5 DETAILED REQUIREMENTS
 - 5.1 General
- 6 NOTES
 - 6.1 Intended use
 - 6.2 Trade-offs between ideal and practical demonstrations
 - 6.3 **Other topics**
 - Benefits
 - Limitations
 - 6.4 Subject term (key word) listing

APPENDIX A EDDY CURRENT TEST SYSTEM Incorporate Image-Based Approaches

APPENDIX B FLUORESCENT PENETRANT TESTING SYSTEMS

> APPENDIX C ULTRASONIC TESTING SYSTEMS (UT)

APPENDIX D MAGNETIC PARTICLE TESTING

APPENDIX E TEST PROGRAM GUIDELINES

APPENDIX F FABRICATION, DOCUMENTATION AND MAINTENANCE OF RELIABILITY ASSESSMENT SPECIMENS

> APPENDIX G MODELING PROBABILITY OF DETECTION

> > APPENDIX H ASSESSING SYSTEM CAPABILITY

APPENDIX J EXAMPLE DATA REPORTS

APPENDIX X TRANSFER FUNCTION EXTENSIONS

APPENDIX Y PHYSICS-BASED MODEL EXTENSIONS