

DATA ITEM DESCRIPTION

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|---|---|--------------------------|----------------------|
| 1. TITLE | | 2. IDENTIFICATION NUMBER | |
| SPECIAL INSPECTION EQUIPMENT CALIBRATION PROCEDURES | | DI-QCIC-81007 | |
| 3. DESCRIPTION/PURPOSE | | | |
| 3.1 A Special Inspection Equipment Calibration Procedure (CP) describes the requirements and procedures for calibrating special inspection or special test equipment (SIE) as individual pieces of equipment or as a system or group of equipments. | | | |
| 4. APPROVAL DATE (YYMMDD) | 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) | 6a. DTIC APPLICABLE | 6b. GIDEP APPLICABLE |
| 890911 | DO | | |
| 7. APPLICATION/INTERRELATIONSHIP | | | |
| 7.1 This Data Item Description (DID) contains the format and content preparation instructions for CPs resulting from the work task described by 3.6.8 of MIL-T-31000 | | | |
| 7.2 This DID is applicable to acquisitions of military systems, equipments, and components that require the use of SIE to achieve the engineering requirements of the item. | | | |
| 'Continued on sheet 2) | | | |
| 8. APPROVAL LIMITATION | | 9a. APPLICABLE FORMS | 9b. AMSC NUMBER |
| | | | D4823 |
| 10. PREPARATION INSTRUCTIONS | | | |
| 10.1 <u>Reference documents.</u> The applicable issue of the documents cited herein, including their approval dates and the dates of applicable amendments and revisions, shall be as cited in the contract or purchase order. | | | |
| 10.2 <u>General.</u> CPs shall meet the requirements of MIL-T-31000. | | | |
| 10.3 <u>Content.</u> CPs shall specify each SIE characteristic to be calibrated; the acceptable tolerances for these characteristics; the calibration equipment to be used; the measurement standards to be used; and the applicable parameters, ranges, and accuracies of the measurement standards. CPs shall provide instructions as to how each instrument characteristic or measurement parameter is to be calibrated. | | | |
| 10.4 <u>Format.</u> Each CP will have a cover sheet, a first page, a list of effective pages, and four sections of text. | | | |
| (Continued on page 2) | | | |
| DISTRIBUTION STATEMENT | | | |
| DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited. | | | |

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Block 7. APPLICATION / INTERRELATIONSHIP (Continued)

7.3 This DID supersedes DI-CMAN-80787.

7.4 This DID is related to DI-DRPR-81004, "Special Inspection Equipment Drawings and Associated Lists"; DI-QCIC-81005, "Special Inspection Equipment Operating Instructions"; DI-QCIC-81006, "Special Inspection Equipment Descriptive Documentation"; and DI-R-7064, "Calibration System Description".

Block 10. PREPARATION INSTRUCTIONS (continued)

10.4.1 Heading and Title. The heading of each CP shall consist of the words "Equipment Calibration Procedure". The title shall be the nomenclature of the SIE to which the CP applies.

10.4.2 Cover sheet. The cover sheet shall contain the heading and title.

10.4.3 First page. The first page of the CP shall contain the heading and title, and the issuance, approval and change record.

10.4.4 Effective pages. The list of effective pages shall identify each active page of the CP by page number and page revision level.

10.5 Sections. The content of the CP shall be specified in sections and subsections numbered and titled as follows:

10.5.1 Section 1. The first section of the CP shall be numbered and identified as: "1. Introduction.".

10.5.1.1 Scope. The first subsection of the Introduction shall be identified as "1.1 Scope". It shall contain a statement that the CP prescribes the requirements for periodic calibration of the unit or system of SIE and identify the equipment by its nomenclature and part number.

10.5.1.2 Applicability. The second subsection of the Introduction shall be identified as "1.2 Applicability". It shall identify the SIE to be calibrated and any conditions which limit the applicability of the procedure.

10.5.1.3 Calibration Interval. The third subsection of the Introduction shall be identified as "1.3 Calibration Interval". It shall specify the intervals at which the SIE must be calibrated.

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10.5.1.4 Pre-calibration requirements. The fourth subsection of the Introduction shall be identified as "1.4 Pre-calibration requirements". It shall identify any requirements that must be met before the calibration procedure is started. Examples of pre-calibration requirements are the separate calibration of commercial equipment which is part of (or supplied with) the SIE to which the CP applies, and calibration of external equipment, such as transfer standards required to perform the calibrations.

10.5.1.5 Authorized Adjustments and Sequence. The fifth subsection of the Introduction shall be identified as "1.5 Authorized Adjustments and Sequences". It shall identify any adjustments that are permitted or prohibited that are not specifically covered in the CP. It shall also identify any restrictions on deviations from the sequence of the operations specified in the CP.

10.5.1.6 Safety precautions. The sixth subsection of the Introduction shall be identified as "1.6 Safety Precautions". It shall identify any preventive measures that must be taken during the calibration procedure to prevent damage or injury to the SIE, calibration personnel, or calibration equipment. This subsection is not a substitute for caution and warning notes that are to be placed in the text coincident with the operations that may pose a hazard to equipment or personnel.

10.5.2 Equipment and Facilities Required. The second section of the CP shall be identified as "2. Equipment and Facilities Required".

10.5.2.1 Major Equipment. The first subsection of Equipment and Facilities Required shall be identified as "2.1 Major Equipment". It shall contain a list of the major items of equipment needed to calibrate the unit or system to which the procedure applies. Examples of these are standard commercial instruments and transfer standards. The SIE to be calibrated and instruments which are part of or supplied with the SIE are not listed in this section.

10.5.2.2 Facilities. The second subsection of Equipment and Facilities Required shall be identified as "2.2 Facilities". It shall contain a list of facilities which are necessary to calibrate the SIE. Examples of facilities are power systems (sources), "clean rooms", and "screen rooms".

10.5.2.3 Miscellaneous. The third subsection of Equipment and Facilities Required shall be identified as "2.3 Miscellaneous". It shall identify any items required to calibrate the SIE that are not covered by 10.5.2.1 or 10.5.2.2 herein. Typical items to be identified are test leads, resistors, test aids, and reference documents.

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10.5.3 Initial Conditions. The third section of the CP shall be identified as "3. Initial Conditions". This section shall contain all instructions on all necessary actions which must precede the actual calibration process. Examples of these actions are making preliminary connections, setting controls, and warming up equipment.

10.5.4 Procedure. The fourth section of the CP shall be identified as "4. Procedure". It shall contain instructions covering all of the measurements, adjustments, recording of performance data, and any other operations necessary to complete the calibration procedure. Instructions for constructing calibration curves, charts, patterns and diagrams shall be included when such curves, charts, patterns or diagrams are required for the calibration of the SIE.