DEPARTMENT OF THE ARMY SUPPLY BULLETIN

Storage Serviceability Standard for USAECOM Materiel

INTERROGATOR SET AN/TPX-50

Headquarters, Department of the Army, Washington, D.C.
3 February 1971

Section I. INTRODUCTION

1-1. Purpose. This bulletin provides a storage serviceability standard which establishes uniform criteria for determining the acceptability of the items designated herein for continued storage and/or issue. on the condition that all specifications and requirements applicable to the items have previously been met at the time of receipt from new procurement, or after repair, overhaul, or rebuilt by a CONUS depot maintenance shop.

1-2. Scope. This bulletin applies to all activities engaged in the receipt, storage, and issue of USAECOM Interrogator Set AN/TPX-50 (FSC 5895) listed in appendix B with the applicable Federal stock numbers.

1-3. Definitions. a. Definitions for the majority of specialized terms used can be found in MIL-STD-109B.

b. Definitions for other specialized terms are as follows:

(1) Storage serviceability standard. A written procedure providing storage methods and standards and prescribing the necessary requirements for the surveillance of materiel in storage.

(2) Storage quality level (SQL). That quality level applicable to storage sampling inspection expressed in terms of percent defective or defects per 100 units. whichever is applicable, specified for a given group of defects of a product. It is the maximum allowable accidental departure from specification requirements which can be tolerated.

1-4. General. It is the Army's objective to attain and maintain a constant materiel rediness status for materiel in depot stocks. The scope of such an objective is of such magnitude that only general

guidelines are provided by chapter 3, section VIII of TM 743-200-1 for the quality evaluation of materiel in the custody of supply and storage activities. This standard supplements TM 743-200-1 by providing a systematic procedure for storage cyclic inspection of Interrogator Set AN/TPX-50 specified in paragraph 1-2 and indicates the limiting degree of deterioration, damages, unsatisfactory storage practices, and other characteristics which are acceptable. It also establishes the basis for identifying materiel requiring segregation. remedial care and preservation, or reclassification action. Applicable requirements of the standard may be used for performing receipt and reshipment quality control inspections.

1-5. Reporting of Supply Bulletin Improvements. The Reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Report should he submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commanding General. U.S. Army Electronics Command, ATTN: AMSEL-ME-NMP-EM, Fort Monmouth. N.J. 07703.

Section II. STORAGE AND SPECIAL INSTRUCTIONS

2-1. Preservation, Packaging, and Packing. Preservation, packaging, and packing will be in accordance with the requirements listed in appendix C.

2-2. Marking. Marking Interrogator Set AN/TPX-50 will be in accordance with MIL-STD-129E.

2-3. Storage. a. Type. The preferred type of storage environment for Interrogator Set AN/TPX-50 is a controlled humidity warehouse or heated warehouse (Class A3, MIL-M-55524 (EL)).

b. Age Control. Interrogator Set AN/TPX-50 will be issued on a first-in-first-out (FIFO) basis by date of manufacture, or date of rebuild. The dates can be established from the original government procurement contract number the rebuild lot number.

c. Shelf Life. Interrogator Set AN/TPX-50 is subject to deterioration during storage and is required to be inspected and tested as specified in appendix I)

d. Special Handling. When Interrogator Set AN/TPX-50 is to be stored, a fork lift or six men are required for handling.

e. Precautionary Actions. When Interrogator Set AN/TPX-50 is being prepared for storage or issue, be sure there are enough personnel and sufficient hoisting or moving apparatus available to eliminate the possibility of damage to the equipment or injury to the personnel. Personnel should stand clear of the shipping crates when removing steel bands

2-4. Disposition of Rejected Materiel. Rejected materiel will be tagged and reclassified into the proper condition code in accordance with AR 725-50. For other than new materiel, all defective units in a lot shall be repaired, or disposition requested in accordance with AMC and depot procedures.

APPENDIX A
REFERENCES

Publication	*Title*
AR-725-50	Requisitioning, Receipt, and Issue System
MIL-B-117	Bags, Interior Packaging
MIL-P-116E	Preservation Methods of
MIL-STD-105D	Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-108	Definitions of and Basic Requirements for Enclosures for Electric and Electronic Equipment.
MIL-STD-109B	Quality Assurance Terms and Definitions
MIL-STD-129E	Marking for Shipment and Storage
PPP-B-566	Boxes, Strapping Flat
PPP-B-636	Box, Fiberboard
PPP-C-843	Cushioning Material Cellulosic
PPP-F-00320	Fiberboard, Sheets, Cut and Cut Shapes
TM 743-200-1	Storage and Materials Handling

APPENDIX B

FEDERAL STOCK NUMBERS AND TEST REQUIREMENTS

Type	FSN	Publication	Test Requirements
Interrogator Set AN/TPX-50	5895-782-5296	TM 11-5895-687-35-1	Chapter 11 (DOS)

APPENDIX C

PRESERVATION, PACKAGING, AND PACKING

C-1. Preservation and Packaging. Preservation and packaging shall be level A, B. or C as specified.

a. Level A.

(1) Cleaning. Cleaning shall be accomplished in accordance with process C-1 of MIL-P-116E.

(2) Drying: Drying shall be accomplished in accordance with applicable procedure of MIL-P-116E.

(3) Preservation application. None required.

(4) Unit packaging. Unit packaging shall be in accordance with the methods prescribed in MIL-P-116E and as specified in this appendix

(a) Technical literature. Technical literature shall be packaged in accordance with method 1C-1.

(b) Packaging development. Each Interrogator Set AN/TPX-50 shall be packaged individually in accordance with method III of MIL-P-116E. Packaging shall be developed in accordance with method III. using kinds and types of materiels which, when applied, will afford adequate protection against corrosion, deterioration, and damage during worldwide shipment. handling, and storage The container, of a method III package, shall conform to the requirements of PPP-B-636, type CF, class weather-resistant.

b. Level B. Each Interrogator Set AN/TPS-50 shall be preserved and packaged in a manner that will afford adequate protection against corrosion, deterioration, and physical damage during multiple domestic shipments, handling, and covered storage.

c. Level C. Each Interrogator Set AN/TPX-50 shall be preserved and packaged in a manner that will afford adequate protection against corrosion, deterioration, and damage during shipment from the supply source to the first receiving activity.

C-2. Packing. Packing shall be level A, B, or C as specified.

a. Level A.

(1) Interrogator Set AN/TPX-50 shall be packaged as specified in paragraph C-l, shall be packed in containers selected from table C-l, based on the most economical container required to provide minimum, adequate protection for the packaged item for this packing level of protection.

(2) Enclosure shall be in accordance with the applicable container, specification appendix thereto.

(3) Metal strapping, conforming to QQ-S-781, Type 1, Class B, shall be applied to wood and wood-cleated shipping containers in accordance with the requirements of the applicable crate specification or appendix thereto.

b. Level B. Interrogator Set AN/TPX-50, packaged as specified in paragraph C-1, shall be packed as specified in Table C-1.

c. Level C. Interrogator Set AN/TPX50 shall be packed in shipping crates in a way that will afford adequate protection against damage to the interrogator set and its components during shipment from the supply source to the first receiving activity. Shipping containers shall comply with the rules and regulations of the common carrier as applicable to the mode of transportation.

C-. Inspection. Inspection of military packaging shall be in accordance with MIL-P-116E.

Table C-1. Container Requirements.

Container	Specification	Level A	Level B	Max Gross Weight Limitation (lb
Wirebound	PPP-B-585	Style 2 or 3 Class2	Style 3 Class 1	200
Wood Cleated Fiberboard	PPP-B-591	Overseas	Domestic	200
Box, Cleated Plywood	PPP-B-601	Overseas	Domestic	200
Boxes, Wood, Nailed, and Lock-Corner, Style 2	PPP-B-621	Class 2	Class 2	Spec Limit
Boxes, Wood, Nailed, and Lock-Corner, Style 4	PPP-B-621	Class 2	Class 1	200
Box, Fiberboard	PPP-B-636	Type 1 Class 2	Type 1 Class 1	Table II
Wood Cleated, Veneer, Paper Overlaid	MIL-B-10377	Overseas	Domestic	200
Crates, Wood	MIL-C-104	Sheathed		Spec Limit
Crates, Wood	MIL-C-132		Open	Spec Limit
Crates, Open, Wood	MIL-C-3774			Spec Limit

APPENDIX D
STORAGE QUALITY ASSURANCE PROVISIONS

D-1. Index Number. The four-digit index number of this storage quality assurance provision (SQAP) (reserved for future use in automatic data processing) is to be assigned.

D-2. Federal Stock Number. Each item listed in appendix B, with its Federal stock number, is subject to the provisions of this SQAP.

D-3. Definitions. Special terms used in this SQAP are defined as follows:

a. Acceptance Quality Level (AQL). The nominal value expressed in terms of percent defective or defects per 100 units, whichever is applicable, specified for a given group of defects of product. It is the maximum allowance accidental departure from specification requirements which can be tolerated.

b. Storage Quality Level (SQL). That quality level applicable to storage sampling inspection expressed in terms of percent defective or defects per 100 units, whichever is applicable, specified for a given group of defects of a product. It is the maximum allowable accidental departure from specification requirements which can be tolerated.

c. Defect. Any nonconformance of the unit of product with specified requirements.

d. Defective Unit. A unit of product which contains one or more defects.

e. Critical Defect. A defect that judgment and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the product performance of the tactical function of a major end item, such as a ship, aircraft, tank, missile, or space vehicle.

f. Major Defect. A defect other than critical that could result in failure or materially reduce the usability of the product for its intended purpose.

g. *Minor Defect.* A defect that does not materially reduce the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

h. *Mechnical-Visual Inspection.* An inspection by visual means to observe the item and/or its packaging and packing to detect deficiencies. Mechanical visual inspection may require disassembly.

i. *Technical Inspection.* A complete functional inspection, including disassembly, where required, and performance testing and/or laboratory testing.

D-4. **Specifications, Technical Manuals, and other Documents.** The following documents of the latest issue in effect contain inspection and testing information, data, and instructions applicable to these quality assurance provisions:

Publication	Title
DA Pam 310-4	Index Of Technical Manuals, Technical Bulletins, Supply Manuals (types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310-7	U.S. Army Equipment Index of Modification Work Orders.
AR 725-50	Requisitioning, Receipt, and Issue System.
MIL-P-11268F	Parts, Materials and Processes Used in Electronic Communication Equipment.
MIL-M-13231A	Marking of Electronic Items.
MIL-P-116E	Preservation, Methods of
MIL-STD-105D	Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-108	Definitions of and Basic Requirements for Enclosures for Electric and Electronic Equipment.
MIL-STD-252A	Wired Equipment, Classification of Visual and Mechanical Defects.
MIL-STD-726	Packaging Requirements Code.
TB SIG 355-1	Depot Inspection Standard for Repaired Signal Equipment.
TB SIG 355-2	Depot Inspection Standard for Refinishing Repaired Signal Equipment.
TB SIG 355-3	Depot Inspection Standards for Moisture and Fungus Resistant Treatment.
TB SIG 355-4	Depot Inspection Standard for Balancing Rotating Parts and Assemblies.
TB 750-236	Calibration Requirements for the Maintenance of Army Material.
TM 11-5895-687-12	Operator and Organizational Maintenance Manual Interrogator Set AN/TPX-50 (Confidential)
TM 11-5895-687-35-1	DS, GS, and Depot Maintenance Manual Interrogator Set AN/TPX-50

TM 38-750	The Army Maintenance Management System (TAMMS)

D-5. Other Directives

AR 34-1	General Policies and Principles for Furnishing Army Materiel on a Grant Aid Basis
AR 34-204	General Policies and Principles for Furnishing Defense Articles and Services on a Sale or Loan Basis

D-6. Inspection Criteria

a. Lot Criteria

(1) *Lot definition.* A lot is defined as a group of like items from which samples are to be drawn and inspected to determine conformance with the acceptability criteria. The following are examples:

(a) A group of like items in storage which were received in a shipment with the following identical marking:

1. Purchase order number.
2. Date packaged or packed.
3. Depot certification stamp and date.

(b) A group of like items repaired or rebuilt by the Maintenance Division in one production run.

(2) *Lot formation.* The items shall be assembled into identifiable lots. Each lot shall as far as practicable consist of units of product of a single type, grade, class, size, and composition manufactured, repaired, or rebuilt at the same time and stored under the same conditions.

(3) *Lot size.* The lot size is the total number of individual like items in the lot that is to be inspected.

b. Sampling Procedure.

(1) *Sample selection.* Select samples of materiel in a way which will assure that each unit in the lot has an equal chance of being selected. Biased methods such as selecting items from the same position in a container, pallet, or rack, taking items all from one location, or selecting items that appear defective will not be used.

(2) *Sample size.* Use table II of MIL-STD-105D, General Inspection Level II, to obtain the sample size code letter and then use table IIA of MIL-STD-105D to obtain the sample size, using the acceptable quality level specified below.

(3) *Sample size.* Use

(a) Mechanical [illegible] major SQL 40 percent major SQL 10 percent.

(b) Electrical [illegible] major SQL 10 percent.

(c) Preservation, packaging, packing, and marking major SQL 40 percent major SQL 10 percent.

(4) The acceptance or reject number for the above SQL shall be the same as those shown for comparable acceptance quality levels (AQLs) in table IIA of MIL-STD-105D.

c. Inspection Requirements. The following mechanical visual inspections shall be performed:

(1) Inspect equipment cases for physical damage, condition, and finish.

(2) Inspect all control and switches for proper operation and loose or missing hardware.

(3) Inspect all connectors, plugs, and cord receptacles for condition and damage.

(4) Inspect assembly for physical damage, condition, missing parts, foreign objects, and finish.

(5) Inspect cabling and wiring for potential short circuits, cuts, breaks, fraying, deterioration, kinks, and strain.

(b) Inspect solder connection for missing solder, cold solder, insufficient solder, excessive solder, and improper wrap.

(7) Inspect for illegible, incorrect, or missing markings.

(8) Inspect for corrosion, dirt, moisture, and fungus.

(9) Inspect all parts and hardware for damage and condition.

d. Test Requirement. Perform those tests that are specified for each Interrogator Set AN/TPX-50 listed in appendix B.

e. Defect Classification.

(1) *Mechanical Visual:*

(a) *Critical.* Refer to the definition of a critical reject.

(b) *Major:*

1. Damage due to handling or storage (crushed, deformed, or broken).

2. Soldering defects as listed in MIL-STD-2552A.

3. Solderless connectors defect as listed in MIL-STD-2552A.

4. Cabling and wiring defects as listed in MIL-STD-2552A.

5. Hardware defect as listed in MIL-STD-2552A.

6. Foreign object defect as listed in MIL-STD-2552A.

7. Printed board circuit defects as listed in MIL-STD-[illegible]A.

8. Interconnection defects as listed in MIL-STD-2552A.

9. Marking Defects as listed in MIL-STD-[illegible]A.

10. Parts defects as listed in MIL-STD-2552A.

11. Contacts: defects as listed in MIL-STD-252A.

12. Plating, painting, or MFP missing.

13. Dimensional: a dimensional defect which directly affects interchangeability, assembly, or operation.

(c) Minor.

1. Soldering: defects as listed in MIL-STD-252A.

2. Solderless connectors: defects as listed in MIL-STD-252A.

3. Cabling and wiring: defects as listed in MIL-STD-252A.

4. Hardware: defects as listed in MIL-STD-252A.

5. Finish: defects as listed in MIL-STD-252A.

6. Marking: defects as listed in MIL-STD-252A.

7. Parts: defects as listed in MIL-STD-252A.

8. Contacts: defects as listed in MIL-STD-252A.

(2) Electrical.

(a) Critical. Refer to the definition of a critical defect.

(b) Major. Any electrical defect, other than critical, that does not meet the requirements specified for each item shall be considered a major defect.

(c) Minor. None. All electrical defects shall be considered critical or major, as applicable.

(3) Packaging and marking - minor.

(a) Use of improper or defective material.

(b) Quantity in unit package not as specified.

(c) Incorrect packaging method applied

(d) Cushioning or padding omitted.

(e) Cushioning or padding inadequate for the protection of the barrier material from projection?;. sharp edges, or other similar features of the item.

(f) Cushioning inadequate for the physical and mechanical protection of the item.

(g) Unsealed, punctured, or improperly sealed barrier bag, wrap, or envelope.

(h) Stock number omitted, incorrect, or illegible.

(i) Nomenclature omitted, incorrect, or illegible.

(j) Marking of quantity of items in package omitted, incorrect, or illegible.

(k) Different stock numbered items in the same unit package.

(4) *Packaging and marking - minor.*

(a) Item not properly blocked or braced within the unit package to prevent movement.

(b) Packaging material damaged.

(c) Conforming or cushioning wraps are not snug fitting and contain voids.

(d) Air not expelled from barrier prior to sealing.

(e) Any item of marking information other than (3) (h), (i), and (j), listed above under major defects, omitted, incorrect, or illegible.

(5) Packaging and marking - major.

(a) Use of improper or defective materiel.

(b) Quantity in pack not as specified.

(c) Gross weight in excess of specified amount.

(d) Box closure not as specified.

(e) Type, grade. class, and style of the shipping container not as specified.

(f) Strapping omitted (when required)

(g) Strapping inadequate or incorrectly applied (when required).

(h) Items not adequately blocked, braced, or cushioned within the shipping container to prevent movement or damage.

(i) Shipping documents or packing list omitted.

(j) Stock number omitted, incorrect, or illegible.

(k) Nomenclature omitted, incorrect, or illegible.

(l) Marking or quantities of items in pack omitted, incorrect, or illegible.

(m) Destination marking omitted, incorrect, or illegible.

(u) Special marking or labeling (when required) omitted, incorrect. or illegible.

(o) Oversea code marking (when required) omitted, incorrect, or illegible.

(6) Packaging and marking - minor.

(a) Unsealed carton.

(b) Defective taping or sealing of carton

(c) Any other box defect which may be considered minor by definition of MIL-STD-105D.

(d) Any item of required marking information other than (5) *(j)*, through *(o)*, listed above under major defects, omitted, incorrect, or illegible.

f. Calibration of Measuring and Test Equipment. All measuring and test equipment shall have been calibrated and certified within its prescribed period, in accordance with TB 750-236, before use. Certification shall be affixed in such a way as to preclude any altering or tampering.

g. Storage Inspection Records. Results of inspections and test shall be recorded on data sheets and a copy attached to each unit

D-7. Inspection Frequency. *a.* Controlled humidity warehouse: 60 months.

b. Heated warehouse: 36 months.

c. Unheated warehouse: 18 months.

D-8. Type of Storage. Controlled humidity warehouse or heated warehouse.

D-9. Other Instructions. a. Rejected Lots. Each rejected lot shall be tagged and reclassified into the proper condition code in accordance with AR 725-50. For other than new materiel, all defective units in a lot shall be repaired or disposition requested in accordance with AMC and depot procedures

b. Repackaging of Samples Inspected. Restore the packaging of the samples inspected and accepted to the level of the lot from which the samples were drawn.

D-10. Special Requirements. If the subject items are allocated for Foreign Military Sales, Grant Aid, or Loan, the following additional requirements must be met:

a. Policies and Special Conditions.

Publication	*Title*
AR 795-17	General Policies and Principles for Furnishing Army Materiel on a Grant Aid Basis.
AR 795-204	General Policies and Principles for Furnishing Defense Articles and Services on a Sale or Loan Basis.
DD Form 1513	Offer and Acceptance.

NOTE

Special terms, conditions, and agreements with the customer country and shown on the DD Form 1513 must be complied with as well as any special instructions from the responsible commodity command.

b. Basic Issue Items List (BIIL). BIIL deck, normally furnished to the depot by USAECOM BIIL Office, Lexington Blue Grass Army Depot, Lexington, Ky, office symbol AMSEL-ME-NMP-MR-L, shall be used.

c. Level A Packaging and Packing. Level A packaging and packing is mandatory for Foreign Military Sales and Grant Aid shipments.

d. Depot Documentation. Depot documentation of final acceptance shall be furnished the ECOM quality check team before ECOM inspection.

By Order of the Secretary of the Army:

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

Distribution:

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CNGB (1)
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OS Maj Comd (4)
USASTRATCOM (2)
LOGCOMDS (3)
USAECOM (3)
USAMICOM (3)
USATECOM (3)
USAMUCOM (3)
USAMECOM (3)
USAMECOM (3)
USAWECOM (3)
Armies (2)
Corps (2)
USAESC (40)
USARV (5)
Army Deps (2) except
SAAD (50)
TOAD (20)
LBAD (20)
ANAD (10)
LEAD (7)
ATAD (10)
Gen Dep (2)
Sig Sec Gen Dep (5)
Sig Dep (12)
Units org under fol TOE:
11-158 (1)

NG: None.

USAR: None.

For explanations of abbreviations used, see AR 310-50.

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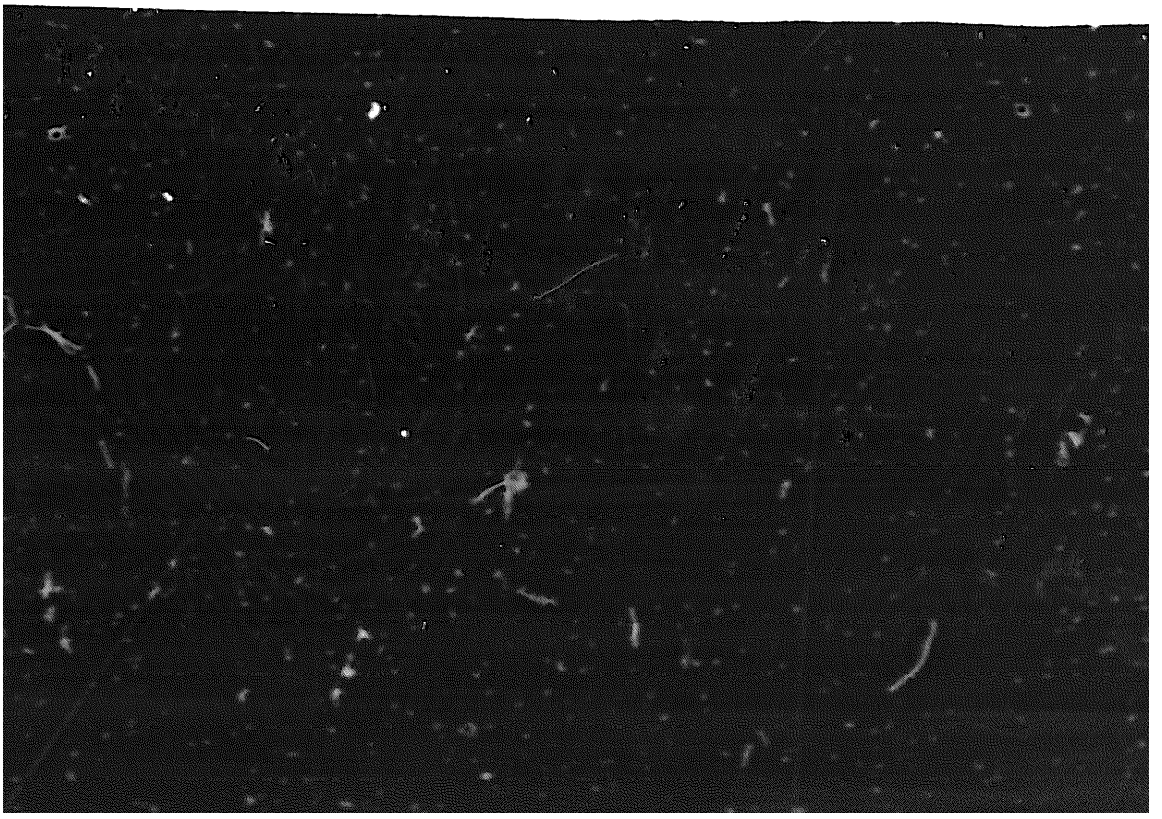

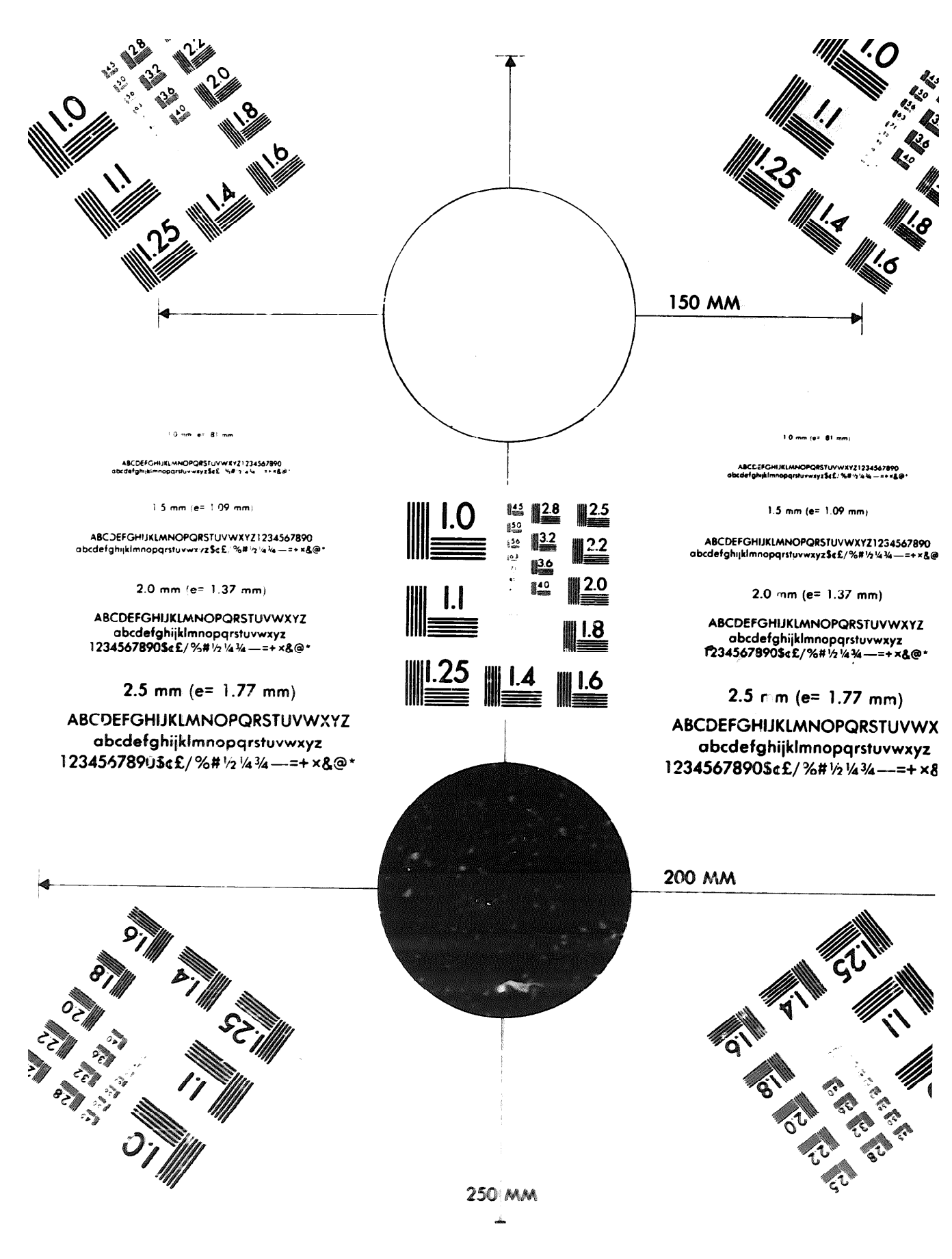
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