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FEDERAL SPECIFICATION

PLASTIC MATERIAL, POLYESTER RESIN, GLASS FIBER BASE, LOW PRESSURE LAMINATED

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers the requirements for glass fiber base, low pressure polyester resin laminated plastic material. The material may be furnished as sheets or formed parts, as specified.

1.2 Classification. The glass fiber base low pressure polyester resin laminated plastic material shall be classified by the fabric and mat number in table I and shall be of the following types:

Type I - General purpose.
Type II - Radio frequency.
Type III - Radar frequency.

2. APPLICABLE DOCUMENTS

2.1 The following specifications and standards, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Federal Standards:

Fed. Std. No. 123 - Marking for Domestic Shipment (Civilian Agencies).

Fed. Test Method Std. No. 406 - Plastics: Methods of Testing.

FSC 9330

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402.

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Specifications:

MIL-P-116	- Preservation, Methods of.
MIL-R-7575	- Resin, Polyester, Low Pressure Laminating.
MIL-P-7936	- Parts and Equipment, Aeronautical, Preparation for Delivery.
MIL-C-9084	- Cloth, Glass, Finished, for Polyester Resin Laminates.
MIL-P-9400	- Plastic Laminate Materials and Sandwich Construction, Glass Fiber Base, Low Pressure Aircraft Structural, Process Specification Requirements.
MIL-M-15617	- Mats, Fibrous Glass, for Reinforcing Plastics.

Military Standards:

MIL-STD-105	- Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129	- Marking for Shipment and Storage.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 Precedence of requirements. The products furnished under this specification shall be as specified herein and in accordance with the drawings, specifications, or contract requirements for the specific part or end item. In the event of discrepancy between this specification and the requirements of the applicable drawings, specifications, or contract for the specific part or end item, the requirements of the latter shall govern.

3.2 Preproduction. The glass fiber base plastic laminate furnished under this specification shall be a product which has been subjected to and passed the preproduction inspection specified herein.

3.3 Materials. Materials used in the laminated product shall be as follows:

3.3.1 Fabric. The fabric shall be continuous filament type glass cloth and shall be in accordance with the requirements of MIL-C-9084 for finished cloth.

3.3.2 Mat. The mat shall conform to the requirements of MIL-M-15617.

3.3.3 Resin. The laminating resin shall conform to the requirements of MIL-R-7575. Any grade and class of resin under MIL-R-7575 is acceptable provided the finished laminated product conforms to the requirements for the applicable class and type under this specification and the requirements for the specific part or end item.

3.3.4 Fillers. Finely divided, inert, inorganic fillers may be used in mat laminates only, provided other applicable requirements of this specification are met by the laminates.

3.4 Process specification. When required by the drawing, specification, or contract applicable to the specific part or end item, the supplier shall furnish to the Government, prior to commencement of production, a detailed description of the manufacturing and fabricating process in the form of a titled, numbered, and dated process specification. The process specification shall conform, in content and format, to MIL-P-9400 with regard to identification of materials and processing equipment and in describing the raw material preparation, lay-up, and fabrication procedures. It shall also state the minimum Barcol hardness of the product and limiting values for specific gravity and resin content. When a process specification is not so required, the supplier shall provide a data sheet or label containing the following information:

(a) Number of this specification.

(b) Classification and type of material being furnished (1.2).
(c) The supplier's designation for the product.
(d) Certified minimum Barcol hardness of the product (3.5.1).
(e) Certified minimum and maximum values for specific gravity of the product (3.5.1).
(f) Certified minimum and maximum values for resin content of the product (3.5.1).
(g) Identification of glass finish and resin.

3.5 Finished product. The finished laminated product shall conform to the following requirements:

3.5.1 Physical properties. The minimum Barcol hardness value and the minimum and maximum values for specific gravity and for resin content of the laminated material shall be as specified in the contractor's process specification or data sheet.

3.5.2 Flammability. The rate of propagation of flame, when tested in accordance with table V, shall not exceed 1.0 inch per minute.

3.5.3 Mechanical properties. Unless otherwise specified, the mechanical properties of the laminated material shall conform to the requirements of table I when tested in accordance with table V.

3.5.4 Electrical properties. When tested in accordance with table V, the electrical properties of type II and type III laminated material shall conform to the requirements of table II. There are no electrical property requirements for type I laminated material.

3.5.5 Shape, dimensions, and make-up of laminate. The shape, thickness, and surface dimensions of the laminate, the number of component plies of the various fabrics or mat in the laminate, the position and direction of the plies, and other specific details of the laminated parts or end items shall be as specified herein and in the drawings, specifications, or contracts for the part or end item (3.1). Dimensional tolerances shall be as shown in table IV.

3.5.5.1 Gaps or laps in fabric plies. Unless otherwise approved by the procuring activity, there shall be no gaps between pieces of glass fabric in any lamination. When laps are necessary, they shall be laid up with a lap width of at least 1/2 inch. No two laps shall be superimposed upon each other in the plastic material.

3.5.5.2 Resin overlays. Unless specifically approved by the procuring activity, the laminated plastic material shall not be made with a gel resin overlay, integrally molded or otherwise, or with any other such thick resin surface or surfacing material.

TABLE I. Longitudinal mechanical properties of low pressure laminated (0.125 ±0.010 inch thick) glass fiber base polyester resin plastic materials 1/

Fabric number	Tensile strength thousands of psi (method 1011) 2/		Compressive strength thousands of psi (method 1021) 2/		Flexural strength thousands of psi (method 1031) 2/		Flexural modulus of elasticity (initial) millions of psi (method 1031) 2/	
	Standard conditions	Wet conditions	Standard conditions	Wet conditions	Standard conditions	Wet conditions	Standard conditions	Wet conditions
112	40	38	33	30	50	45	2.6	2.5
116	40	38	30	27	45	40	2.6	2.5
120	40	38	33	30	50	45	2.6	2.5
128	40	38	23	21	45	39	2.6	2.5
128-150	40	38	23	21	45	39	2.6	2.5
143	80	75	48	45	90	78	4.7	4.5
143-150	80	75	48	45	90	78	4.7	4.5
162	40	38	16	15	35	30	2.2	2.1
164	33	30	22	20	35	30	2.2	2.1
164-150	33	30	22	20	35	30	2.2	2.1
181	40	38	35	30	50	45	2.7	2.5
181-150	40	38	35	30	50	45	2.7	2.5
182	43	40	32	29	50	45	2.6	2.5
182-150	43	40	32	29	50	45	2.6	2.5
183	43	40	30	27	45	40	2.6	2.5
184	43	40	26	23	45	40	2.6	2.5
184-150	43	40	26	23	45	40	2.6	2.5
Mat	20	18	20	18	25	22	1.4	1.2

1/ Properties listed are for parallel laminated panels except for mat.
2/ Method numbers refer to Fed. Test Method Std. No. 406.

TABLE II. Electrical requirements for types II and III materials (see also 6.3.)

Material type	Standard conditions	Immersion conditions
Type II (At 1 megacycle)		
Dielectric constant (max)	4.4	4.6
Loss tangent (max)	0.045	0.055
Type III (At 8,500 to 10,000 megacycles) 1/		
Dielectric constant (max)	4.2	4.4
Loss tangent (max)	0.020	0.025

1/ "X-band" frequency range. The recommended test frequency for this band is 9,375 megacycles per second (6.3).

3.5.6 Foreign materials. No metal staples, paper tape, fillers (except in mat laminates (3.3.4)), or other foreign materials shall remain in the finished plastic laminate, unless permitted by the applicable drawings, specifications, or contract. Parts to which rain-erosion resistant coatings or other coatings are subsequently to be applied, shall be cleaned free of surface contamination, such as parting agents, which might adversely affect the adhesion of the coating.

3.5.7 Workmanship. Except as otherwise specifically approved (3.5.7.1), the plastic material shall be uniform, smooth, and free from uncured or unbonded areas, gaps, cracks, holes, blisters, resin pockets, areas lacking resin, tackiness, excess surface resin, incorrect laps, wrinkles, delamination, air or gas pockets, patches, porosity, and other similar defects as defined in MIL-P-9400. The material shall be essentially void free and sufficiently translucent to make visual inspection possible with a light source, except for very thick laminates over 1/4 inch.

3.5.7.1 Allowable defects. Allowable defects in the plastic laminate, including repairable defects corrected by the manufacturer, shall be limited to those described in the applicable drawing, specification, or contract. All allowable defects shall be fully described, in such procurement documents, as to type, size, number, extent, and spacing. Defects other than those so described shall be counted as workmanship defects.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all

inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Classification of inspections. The inspections performed under this specification shall be of the following classifications:

(a) Preproduction inspection (4.3).
(b) Quality conformance inspection (4.4).

4.3 Preproduction inspection. Preproduction inspection shall include all the examinations and tests of this specification except the examination for dimensional defects (4.5.2.2) and the examination of preparation for delivery (4.5.4). Unless otherwise specified, no material shall be submitted for acceptance under any contract or order until the preproduction samples prescribed in 4.3.1 have been subjected to preproduction inspection and pronounced satisfactory by the procuring activity. However, approval of the preproduction samples or of equivalent data (4.3.2) shall not relieve the contractor of his obligation to meet the quality conformance inspection.

4.3.1 Sampling for preproduction inspection. For preproduction inspection, the supplier shall submit at least two copies of the process specification or data sheet (3.4) together with the following samples, as applicable, certified as representative of the materials to be used and the laminate to be produced for the contract or order.

Finished glass cloth - 1 linear yard, full width.
Fibrous glass mat - 4 linear yards, full width
Laminating resin - 1 gallon.
Inorganic filler - 1 pound.
Finished laminate - 1 or 2 sheets, as applicable, of dimensions and description specified for sample sheets in 4.5.3.1.

4.3.2 Preproduction inspection in repeat orders. In repeat orders or orders for different parts, the requirement for preproduction inspection in this specification may be met, at the discretion of the procuring activity, by submittal of applicable test data from previous preproduction testing, provided the materials and processes have not been changed and provided the supplier submits a certified statement to that effect. However, the procuring activity may, at any time, require the performance of any preproduction test deemed necessary to assure the conformance of the material to the specification requirements.

4.4 Quality conformance inspection. Quality conformance inspection shall include all examinations and tests of this specification except the tests of component materials (4.5.1). Quality conformance inspection shall be performed on every lot of plastic laminate procured under this specification.

4.4.1 Sampling for quality conformance inspection. Sampling for quality conformance inspection shall be performed as provided in MIL-STD-105 for the inspection level and acceptable quality level (AQL) prescribed under the applicable examination or test. For purposes of sampling, an inspection lot shall consist of all laminated material of the same type, class, and part number subjected to inspection at one time.

4.4.2 Rejection criteria. The acceptable quality levels (AQL's) in this specification are expressed in defects per 100 units in accordance with MIL-STD-105. If in any of the specified quality conformance examinations and tests, the number of defects in the sample units exceeds the MIL-STD-105 acceptance number for the applicable AQL, the lot represented by the samples shall be rejected.

4.5 Examinations and tests.

4.5.1 Examination and tests of component materials (preproduction inspection only). The fabric, mat, or resin components which are to be used in quantity production shall be inspected for conformity to the applicable reference specification. Filler, if used, shall be inspected for conformity to 3.3.4.

4.5.2 Examination of parts or end items. Examination of the end items for visual defects and for dimensional defects shall be made in accordance with 4.5.2.1 and 4.5.2.2 respectively, at the inspection levels and acceptable quality levels (AQL's) specified in 4.5.2.3. The unit of product for determining lot size for these examinations shall be one plastic sheet or part, as applicable, and the sample unit shall also be one sheet or part.

4.5.2.1 Examination of parts or end items for visual defects. Examine in accordance with table III.

TABLE III. Examination of parts or end items for visual defects

Examine	Defect
Shape	Not shape specified.
Appearance	Not uniform in translucence or color. Finish not as specified, not uniform.

TABLE III. Examination of parts or end items for visual defects (cont'd)

Examine	Defect
Make-up	Not laminated as specified. Laminations gap. Overlaps less than 1/2 inch. Made with resin overlay or thick resin surface.
Foreign material	Embedded foreign material (other than fibrous glass). Surface dirt, parting material, or other contaminants.
Workmanship	Cracks, scratches, holes, blisters, wrinkles, tacky surface, resin-starved or porous areas, resin pockets, chipped or broken parts. Rough surfaces, rough edges. Sheets not flat when required (curvature exceeds 1/8 inch per foot of length or width). Reverse curvature, warped or distorted. Sheets delaminated, unbonded, or containing air pockets. Patches except when specifically permitted as allowable defects.

4.5.2.2 Examination of parts or end items for dimensional defects. Examine in accordance with table IV.

TABLE IV. Examination of parts or end items for dimensional defects

Examine	Defect
Length or width	Varies by more than 1/8 inch or by more than the tolerances indicated in drawings or contract requirements, as applicable.
Thickness	Varies by more than the tolerances indicated in drawings, specifications, or contract requirements. Unless otherwise specified, the following thickness-tolerance relationships shall apply:

Specified thickness (inches)	Tolerance (percent)
0.25 or less	±10
Over 0.25 through 0.50	± 7
Over 0.50	± 5

4.5.2.3 Inspection levels and acceptable quality levels (AQL's) for visual and dimensional defects. The inspection levels for determining sample size and the acceptable quality levels (AQL's), expressed in defects per 100 units, shall be as follows:

Examination paragraph	Inspection level	AQL
4.5.2.1, table III	I	1.5
4.5.2.2, table IV	S-3	2.5

4.5.3 Testing of the parts or end items. The end items shall be tested for the applicable characteristics listed in table V for each lot presented for inspection. The unit of product for lot size shall be one plastic sheet or part. The sample unit shall be a sufficient area of flat laminate of 0.125 ±0.010 inch thickness to perform all physical and mechanical tests and of 0.75 inch minimum thickness to perform all electrical tests, where applicable (4.5.3.1). The inspection level shall be S-1 and the acceptable quality level shall be 6.5 defects per hundred units, except that the minimum sample size shall be three units with an acceptance number of zero for a sample of that size.

4.5.3.1 Sample sheets. If the end items in the lot are unsuitable for test samples, the substitute sample unit shall be one laminate sheet, 0.125 ±0.010 inch thick, having a minimum area of four square feet with a minimum surface dimension of 12 inches, to be used for all tests of types I and II laminates and for all mechanical tests of type III laminates. For type III only, an additional 4 inch by 8 inch sample sheet shall be furnished at least 0.75 inch thick for tests of electrical properties. The sample sheets shall be made of materials identical to those employed in the manufacture of shapes or end items furnished for the contract, using the identical manufacturing process utilized in producing the shapes or end items. When required by the procuring activity (6.2), each sample sheet shall be cut by the supplier into specimens of the number and description specified for the tests of table V, machined to size and suitable for testing.

4.5.4 Examination of preparation for delivery. An examination shall be made in accordance with table VI to determine that packaging, packing, and markings comply with the requirements of section 5 of this specification. The sample unit for this examination and also the unit to determine lot size for sampling shall be one shipping container, fully packed, selected just prior to the closing operation. Shipping containers fully prepared for delivery shall be examined for closure defects. The inspection level for this examination shall be S-2 and the acceptable quality level (AQL) shall be 2.5 defects per 100 units.

TABLE V. Tests of finished laminate

Property	Requirement	Method 1/	Number of determinations per sample unit	Report average result for each sample unit to nearest: 2/
Specific gravity	3.5.1	5011 or 5012	1	0.01 unit
Resin content	3.5.1	7061	3	1 percent
Barcol hardness	3.5.1	4.7.1	10	1 unit
Flammability	3.5.2	2021	10	0.01 in./minute
Tensile strength:				
Standard conditions	Table I	1011 3/	5	1000 psi
Wet conditions	Table I	1011 3/	5	1000 psi
Compressive strength:				
Standard conditions	Table I	1021 4/	5	1000 psi
Wet conditions	Table I	1021 4/	5	1000 psi
Flexural strength, ultimate:				
Standard conditions	Table I	1031 5/	5	1000 psi
Wet conditions	Table I	1031 5/	5	1000 psi
Flexural modulus of elasticity:				
Standard conditions	Table I	1031 5/	5	100,000 psi
Wet conditions	Table I	1031 5/	5	100,000 psi
Dielectric constant at 1 megacycle (Type II only):				
Standard conditions	Table II	4021	4	0.1 unit
After immersion	Table II	4021	4	0.1 unit
Loss tangent at 1 megacycle (Type II only):				
Standard conditions	Table II	4021	4	0.001 unit
After immersion	Table II	4021	4	0.001 unit
Dielectric constant at 8,500 to 10,000 megacycles (Type III only):				
Standard conditions	Table II	4.7.2	4	0.1 unit
After immersion	Table II	4.7.2	4	0.1 unit
Loss tangent at 8,500 to 10,000 megacycles (Type III only):				
Standard conditions	Table II	4.7.2	4	0.001 unit
After immersion	Table II	4.7.2	4	0.001 unit

1/ Method references other than paragraph numbers refer to methods of Fed. Test Method Std. No. 406.
2/ Test reports should include results of the individual determinations.
3/ Tensile specimens to be type II of Method 1011.
4/ Compression specimens to be tested edgewise by thin-sheet procedure.
5/ Flexural specimens to be tested flatwise.

TABLE VI. Examination of preparation for delivery

Examine	Defect
Packaging	Not level specified in contract requirements. Not individually wrapped or interleaved, when specified. Packaging material not as specified.
Packing	Not level specified in contract requirements. Arrangement not as specified. Specified pads or liners missing or not as specified. Any nonconforming packing component, component missing, damaged or otherwise defective affecting serviceability. Closure not as specified.
Count	Less than specified or indicated quantity.
Weight	Gross weight exceeds specified requirements.
Markings	Interior or exterior markings (as applicable) omitted, illegible, incorrect, incomplete, or not in accordance with contract requirements.

4.6 Test conditions.

4.6.1 Standard conditions. Standard conditions shall be 23 ±1° C. (73.4 ±2° F.) and 50 ±4 percent relative humidity. Specimens shall be tested after being conditioned for 96 hours at this temperature and humidity.

4.6.2 Wet condition (for mechanical tests). Wet conditioning shall be a 2-hour immersion of the specimen in boiling distilled water. The specimens shall be cooled in water to 23 ±1° C. and shall be tested wet at that temperature immediately after removal from the water. In case of any question as to the validity of the test results, specimens shall be soaked for 30 days in distilled water at room temperature and then tested wet immediately after removal from the water. Results determined under the latter condition shall be final.

4.6.3 Immersed condition (for electrical tests). The specimens shall be immersed in distilled water at 23 ±1° C. for 24 hours. The specimen shall then be removed from the water, the surface moisture shall be wiped off, and the tests shall be conducted immediately at 23 ±1° C.

4.7 Test procedures. Tests of the parts or end items shall be conducted by the methods of Fed. Test Method Std. No. 406 prescribed in table V, except as follows:

4.7.1 Barcol hardness. Barcol hardness shall be determined by direct reading on a Barcol tester. Barcol tester model GYZJ 934-1 shall be used (6.4).

4.7.2 Electrical properties (type III laminate). Electrical properties tests, of the type III laminate only, shall be performed by the shunted line waveguide method or the resonant cavity technique (6.3.2) using the laminate sample of 0.75 inch thickness (4.5.3.1). If calculations (6.3.1) establish that thinner specimens would be preferable, the testing activity is permitted to abrade or otherwise mill the 0.75 inch specimens to the optimum thickness.

5. PREPARATION FOR DELIVERY

5.1 Packaging. The laminated plastic material shall be packaged in accordance with MIL-P-7936, level A or C, as specified in the contract or order (6.2). Level A packaging shall be in accordance with method III of MIL-P-116.

5.2 Packing. The laminated plastic material shall be packed in accordance with MIL-P-7936, level A, B, or C as specified in the contract or order (6.2). As far as practical, containers shall be of minimum tare and cube consistent with the protection required and shall contain identical quantities.

5.3 Marking.

5.3.1 Civil agencies. Unless otherwise specified in the contract or order (6.2), marking shall be in accordance with Fed. Std. No. 123.

5.3.2 Military agencies. Unless otherwise specified in the contract or order (6.2), marking shall be in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. The laminated plastic material covered by this specification is intended for use in airframe and missile structural parts such as radio and radar antenna housing, fairings, et cetera, and for use in other applications. All exterior airframe and missile plastic parts are considered structural parts.

6.1.1 Non-parallel laminations, vari-directional loading. The mechanical properties specified herein are for parallel laminated glass fabric materials and random layup mat materials. When the materials are used cross laminated or in other layup, or in combinations of layups or materials, the mechanical properties will vary, and for design use may be calculated in accordance with available procedures approved by the procuring activity, or determined empirically. Mechanical properties also may vary with the direction of loading, and may also be calculated with other procedures approved by the procuring activity or determined empirically (see MIL-HDBK-17, Part I, "Plastics for Flight Vehicles, Reinforced Plastics," November 5, 1959 edition). However, inspection tests are still to be carried out in accordance with this specification.

6.2 Ordering data. Purchasers should select the preferred options permitted herein and include the following information in procurement documents.

(a) Title, number, and date of this specification.
(b) Drawings, specifications, et cetera, applicable to part or end item (3.1).
(c) Classification and type of laminated material (1.2).
(d) Shape, thickness and surface dimensions of laminated material or part (3.5.5).
(e) Make-up as to number of plies and layup; also identification of plies as to mat or fabric number under this specification (3.5.5).
(f) Where the preproduction test samples should be sent, the activity responsible for testing, and instructions concerning the submittal of the test reports (4.3).
(g) Special electrical requirements, if applicable (6.3).
(h) Whether the required sample laminate sheets are to be processed into test specimens by the contractor (4.5.3.1).
(i) Level of packaging and packing required (5.1 and 5.2).
(j) Special marking, if applicable (5.3).

6.3 Special electrical requirements. In addition to the test frequency and values for electrical properties specified for type III material in table II, other electrical frequencies and specific values for the electrical properties may be of importance in particular applications and may be specified in the contract or order in lieu of the frequency and values given in table II. Typical frequencies are as follows, including the X-band.

Band	Test frequency (megacycles per second)
S	2,880
C	5,400
X	9,375
K_u	16,500
K	24,500
K_a	35,000

For tests above the K_a band, a possible test frequency is 58,500 megacycles per second, based on available oscillator tubes. Typical dielectric constants which may be specified in lieu of 4.2, maximum, may range from 3.6 to 4.2 at standard conditions, with a tolerance of ±0.1 at standard and a permissible increase of 5 percent, maximum, under immersion conditions.

6.3.1 Specimen thickness. The thickness of specimens required for electrical tests at the frequencies of 6.3 may be calculated by the following formula:

$$d = \frac{3\,\lambda O}{4\sqrt{\epsilon - (\lambda O/\lambda C)^2}}$$

Where: d = specimen thickness
λO = free space wavelength
λC = cut-off wavelength of wave guide
ϵ = approximate dielectric constant of sample

6.3.2 Source document. Further information on tests of type III material is available in ARTC report "ARTC-4 Electrical Test Procedures for Radomes and Radome Materials (Revised July 1960)," prepared by Aerospace Industries Association of America, Inc., 1725 De Sales Street, Washington, D.C., 20036.

6.4 Barcol tester. Information concerning Barcol tester, model GYZJ 934-1, is available from the Barber-Colman Company, Rockford, Illinois.

6.5 International standardization agreement. Certain provisions of this specification are the subject of international standardization agreement ABC-NAVY-STD-17C "Electrical Insulating Materials". When amendment, revision, or cancellation of this specification is proposed which will affect or violate the international agreement concerned, the preparing activity will take appropriate reconciliation action through international standardization channels including departmental standardization offices, if required.

MILITARY INTEREST:

Custodians:

Army - MR
Navy - AS
Air Force - 11

Review activities:

Army - MR
Navy - AS
Air Force - 11, 69

User activities:

Army - ME, MU
Navy - OS, SH
Air Force - 17

Preparing activity:

Navy - AS

CIVIL AGENCY INTEREST:

Interested activities:

COM-NBS
GSA-FSS
INT
VA

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