MIL-L-7158E(ASG)
15 SEPTEMBER 1969
Superseding
MIL-L-007158D(USAF)
14 March 1969

MILITARY SPECIFICATION

LIGHT, BEACON, ROTATING, 24-INCH

This specification has been approved by the Department of the Air Force and by the Naval Air Systems Command.

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1. SCOPE

1.1 This specification covers 24-inch, rigid, drum-type, rotating beacon lights for use by the Department of Defense and the Pederal Aviation Agency in locating airports and airways.

2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

SPECIFICATIONS

| F | ed | e | r | a | 1 |
|---|----|---|---|---|---|
| | | | | | |

| QQ-A-601 | Aluminum-Alloy Sand Castings |
|----------|--|
| QQ-C-390 | Copper Alloy Castings (Including Cast Bar) |

Military

| MII_P-116 | Preservation, Methods of |
|-------------|--|
| MIL-E-5272 | Environmental Testing, Aeronautical and Associated |
| | Equipment, General Specification for |
| MIL-B-26195 | Box, Wood-Cleated, Skidded, Load-Bearing Base |

STANDARDS

Military

| MIL-STD-100 | Engineering Drawing Practices |
|--------------|--|
| MIL-STD-129 | Marking for Shipment and Storage |
| MIL-STD-130 | Identification Marking for US Military Property |
| MIL-STD-143 | Specifications and Standards, Order of Precedence for |
| | the Selection of |
| MIL-STD-831 | Test Reports, Preparation of |
| MIL_STD-1186 | Cushioning, Anchoring, Bracing, Blocking, and Waterproofing, With Appropriate Test Methods |

FSC 6210

| MS15006 | Fitting, Lubrication (Hydraulic) Leakproof, 1/8 Pipe |
|---------|--|
| • | Threads, Steel, Type VI |
| MS20003 | Indicator, Humidity, Card, Three Spot, Impregnated |
| • | Areas (Cobaltous Chloride) |
| MS25015 | Lamp, Incandescent, T-20 Bulb, Mogul, Bipost Base |
| MS25443 | Light, Rotating Beacon, 24 Inch, Single |
| MS25444 | Light, Rotating Beacon, 24 Thch, Duplex |

DRAWINGS

Air Force-Navy Aeronautical Standard Issues of Federal Aviation Agency

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| D-2311 | Rotating Mechanism, Assembly |
|--------|--------------------------------------|
| D-2312 | Duplex Drum Support |
| E-2321 | Rotary Lamp Changer, Assembly |
| E-2331 | 24-Inch Rigid Drum Housing, Assembly |
| E-2341 | Tri-leg Drop Pan Base, Assembly |

(Copies of specifications, standards, drawings, and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

- 3.1 Preproduction. This specification makes provisions for preproduction testing.
- 3.2 Components. The light assembly shall consist of the base, rotating mechanism, and projector housing(s) with optical system.
- 3.3 <u>Selection of specifications and standards</u>. Specifications and standards for necessary commodities and services not specified herein shall be selected in accordance with MIL-STD-143.
- 3.4 <u>Materials</u>. Materials shall conform to applicable specifications as specified herein and on the drawings or standards. Materials which are not specifically designated shall be of the best commercial quality and suitable for the purpose intended.

3.4.1 Metals. -

- 3.4.1.1 Bronze castings. Bronze castings shall be in accordance with QQ-C-390, alloy No. B6.
- 3.4.1.2 Aluminum-alloy castings. Aluminum-alloy castings shall be an alloy conforming to QQ-A-601, class 2M or 5M.

- 3.4.1.3 <u>Fasteners</u>. Fasteners shall be of nonferrous metal or corrosion-resistant steel, and shall be provided with self-locking nuts, lockwashers, or other equal means of preventing the parts from working loose under prolonged vibration. Bolts subject to frequent removals shall be threaded into nonferrous metal or corrosion-resistant steel inserts.
- 3.5 Design and construction. The light to be supplied shall consist of the item covered by the part number on MS25443 or MS25444, as specified (see 6.2).
- 3.5.1 Alternate design. Lights manufactured with parts of slightly different designs than those shown on the applicable FAA drawing numbers will be considered satisfactory, provided the difference in design does not affect the performance or interchangeability of the assemblies.
- 3.5.2 Operating conditions. The light shall be designed and constructed for continuous outdoor use under all weather conditions at any ambient temperature from a minimum of -54° C $(-65^{\circ}$ P) to a maximum of $+55^{\circ}$ C $(131^{\circ}$ P).
- 3.6 <u>Performance</u>. The light shall satisfy the performance requirements specified in section 4, when subjected to the applicable tests.
- 3.6.1 Candlepower distribution. With the cover glass (lens) removed, the vertical light distribution through the focal axis of the beacon shall be essentially as shown by the solid line on figure 1. Measurements shall be taken using a MS25015-2 lamp. The hypothetical curve (solid line) defines an area of 13.55 by 10⁶ candle-degrees. In no instance shall the vertical light distribution (through focal axis) enclose an area of less than 13.0 by 10⁶ candle-degrees within the limits defined by the solid line shown on figure 1. In no instance shall the vertical distribution curve fall inside the area defined by the inner (dashed) line shown on figure 1. In addition, the horizontal width of the beam shall be not less than 1 degree at the vertical angles and intensities defined by the dashed line shown on figure 1. The required distribution shall be obtained by properly positioning the lamp and the auxiliary reflector with respect to the principal reflector and by tilting the drum if necessary. No means of focusing, other than that required to obtain the intial factory adjustment, need be provided.
- 3.7 Base. The base, conforming to Drawing E-2341, shall consist of an aluminum-ailoy bedplate, a bearing support, three supporting stude or legs, and a pan enclosing the operating mechanism.
- 3.8 <u>Rotating mechanism</u>. The rotating mechanism, conforming to Drawing D-2311, shall consist essentially of a turntable and vertical spindle, main bearings, clutch, gears, and motor. The entire rotating mechanism shall be so assembled that there will be no objectionable vibration of the lamps at any speed up to 24 rpm.

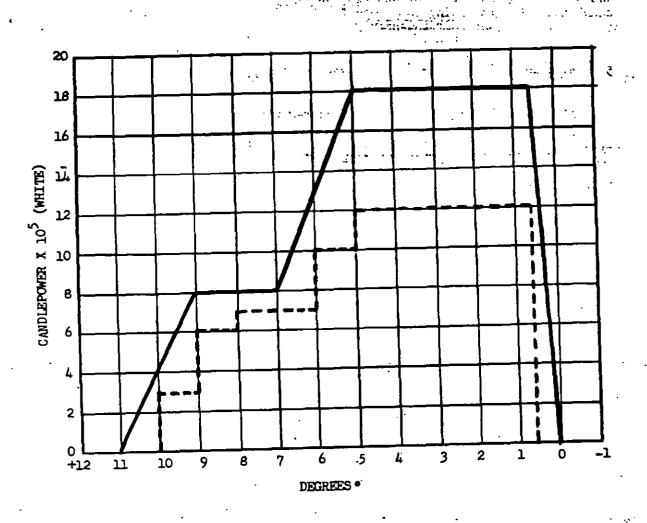


FIGURE 1. Candlepower distribution (vertical)

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- 3.8.1 <u>Turntable</u>. The housing drum shall be supported on a rectangular steel turntable, threaded, and then welded to the top of the vertical hollow steel spindle. The free joint between the turntable and the bearing support shall be protected by a weather skirt terminating below the joint and at least 1 inch from any part of the base. When duplex units are furnished, a drum support, as shown on Drawing D-2312, shall be supplied to support the two lights.
- 3.8.2 Main bearings. The main bearings shall consist of two bearings supporting a vertical spindle within a bearing support. The upper bearing shall be a tapered roller-bearing. It shall be backed up with an oil seal similar and equivalent to Victor Seal No. 60771. The lower bearing shall be a permanently lubricated ball bearing. It shall keep the spindle vertically aligned, and shall be provided with a double seal similar and equivalent to New Departure seal No. 88509. The upper bearing shall be provided with a lubricator in accordance with MS15006.
- 3.8.3 Clutch. A clutch assembly shall be provided to permit the gear train to rotate without injury in case the drum is prevented from rotating by an ice lock or other obstruction to rotation. The clutch shall consist of a cadmium-plated spring steel plate attached to a bronze mut, threaded to a gear sleeve, and so designed as to permit the clutch tension to be adjusted by compressing the plate against the continuous boss on the web of the cast—iron control section of the worm wheel. The nut shall be arranged for locking to the gear sleeve by a setscrew engaging slots at 90 degree intervals on the sleeve. The clutch shall be adjusted to provide a torque of not less than 10 pound-feet nor more than 15 pound-feet initially on the vertical spindle for single drum beacons, and not less than 15 pound-feet nor more than 20 pound-feet for duplex beacons.
- 3.8.4 Gears. Each light shall be provided with a worm and a worm wheel reduction gear designed to provide the specified angular velocity (see 6.2). The worm gear shall be of bronze, 1-inch pitch diameter, double thread for 12-rpm beacons, single thread for 6-rpm beacons, and shall ride a free fit on a 1/2-inch motor shaft. The worm shall be engaged by a pin carried by a driving collar attached to the motor shaft. The worm wheel shall have a cast-iron center section, treated with a rust-preventive slushing compound, and a micarta ring seating against a flange and shoulder, and held in place by eight equally spaced No. 10 brass machine screws. The micarta ring shall be threaded to mesh with the bronze driving worm. A bronze gear sleeve (same sleeve to which the clutch adjusting nut is threaded) shall be threaded to the vertical spindle and shall be provided with lugs and flanges for the mounting of the two upper slip-rings and the contactor or blank cam. It shall also support the worm wheel in vertical alignment with the driving worm. Clearance between the gear sleeve and the worm wheel hub shall provide a running fit. The gears shall be so arranged that the rotation speed of the light may be readily changed from nominal 12 rpm to nominal 24 rpm or to nominal 6 rpm by changing the driving worm and the micarta ring on the worm wheel. The driving worm shall be shielded to prevent the throwing of grease.

- 3.8.5 Motor. Each beacon shall be equipped with a 1/6-hp, 115V, 60-cycle 1,140 rpm motor of the squirrel-cage type. Each motor shall be equipped with single-row, deep-groove, sealed, prelubricated, double-shield, annular-type bearings. The sealed, prelubricated bearings shall not require additional lubrication for the life of the bearing. The motor shall drive the rotating mechanism through the worm gear. It shall be ceiling-mounted on machined bosses on the underside of the bedplate in such a manner as to insure exact alignment and meshing between the worm gear and worm wheel without the use of shims. All motors shall be fully interchangeable with each other as to mounting and shaft dimensions and shall be dynamically balanced to prevent setting up any objectionable vibrations.
- 3.8.5.1 Motor details. All motors shall have separate starting and running windings, and a centrifugal switch which disconnects the starting winding from the line when the speed exceeds three-fourths of the rated speed. There shall be no friction introduced by the disconnecting means at any time other than at the instant of opening or closing the starting circuit. The locked rotor current with both starting and running windings in the circuit shall not exceed 19 emp at rated voltage. The locked rotor current with only the running winding in the circuit shall not exceed 11 amp at rated voltage. When operated continuously for not less than 12 hours at rated voltage and frequency and with the drum held to prevent rotation and the clutch slipping, the temperature rise shall not exceed 40° C (104° F). Readily accessible external binding posts shall be made for reversing rotation by interchanging leads of the windings terminating at the binding posts.
- 3.9 Projector housing. The projector housing shall be in accordance with Drawing E-2331 and shall consist of a drum, lamp changer, auxiliary reflector, principal reflector, and cover glass and lens. Unless otherwise specified (see 6.2), the cover glass or lens shall be furnished with the beacon. The cover glass or lens to be used shall be as specified on the applicable MS standard.
- 3.9.1 Drum. The drum, in accordance with Drawing E-2331, shall be cast in one piece of aluminum alloy. The principal reflector shall be installed in the back of the drum, provision being made for a 0.5-inch airspace between the drum and the reflector. The drum shall be rigidly fixed on the turntable so that the light emitted meets the requirements specified on figure 1 when the turntable is horizontal. Six C-clamps shall be provided at 60 degree intervals around the face of the drum and shall afford means for drawing the cover gasket into watertight contact with the edge of the drum.
- 3.9.2 Cover. The cover, in accordance with Drawing E-2331, shall consist of a frame attached to the drum by a hinge for mounting a cover glass or lens. The frame shall be one-piece cast-aluminum alloy. The arrangement to mount the cover... glass shall consist of 12 clips separated from the glass by cork in a manner that provides for expansion without breakage. Presstite caulking compound, or equivalent, shall be used to waterproof the joint between the glass and frame in those lights which are procured with the lenses or cover glasses installed. A pliant rubber or rubber substitute gasket of rectangular cross section shall be inserted and cemented in the groove provided in the frame to render the joint between the cover and the drum weathertight. A suitable door stop shall be provided to permit the door to open at least 90 degrees but not more than 100 degrees.

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- 3.9.3 Lamp changer. The lamp changer, in accordance with Drawing E-2321, shall provide a means of mounting a service lamp and reserve lamp. It shall automatically interchange the lamps when the service lamp fails. The current-carrying parts of the lamp changer, the series coil being shorted, shall not overheat when a lamp drawing 30 amp is operated continuously in either holder for 18 hours. The total contact voltage drop shall not exceed 0.03V with a 30-amp current. The rotation of the lamp changer shall be adequately damped to prevent the lamps from being unduly joited when interchanged. The lamp changer shall not introduce a voltage drop or more than 0.5V or consume more than 3 watts, except during the operation of interchanging lamps. The lamp changer platform shall be mechanically locked both before and after interchanging lamps. When the lamp changer operates, it shall open the circuit to the service lamp and automatically close the circuit through the reserve lamp. The trip coil shall be so wired into the circuit that it is automatically disconnected after performing its function of relaxing the turntable catch and shall not be re-energized on failure of the reserve lamp. When lights being furnished are to be arranged for use with 1,200-watt lamps, the design of the contact blocks (parts 217 and 218), and the position of the receptacle supports (parts 213 and 219) with respect to the rod (part 207) shall be changed to accommodate this lamp.
- 3.9.4 Auxiliary reflector. The auxiliary reflector shall be in accordance with Drawing E-2321, and shall be made of aluminum. It shall have a spherical reflector surface, electrically brightened, and anodized for protection. The surface of the reflector shall be bright and free from any haze that would cause an image to appear blurred.
- 3.9.5 Principal reflector. The principal reflector shall consist of a commercial glass parabolic reflector having an effective diameter not less than 24 inches and a focal length of 10 ±0.20 inches. The reflector shall be silvered, coppered, and backed with a commercial black backing. The reflector shall be legibly and permanently marked on the front surface of the glass near the rim to indicate the distance in inches and hundredths of an inch from the vertex of the reflecting surface to the focus, minus the thickness of the glass.

3.10 Light source. -

- 3.10.1 <u>Lamps</u>. The beacons shall be designed and socketed to use the lamps specified on the applicable drawing or standard.
- 3.11 Conductors. All electrical connections shall originate at a suitable terminal block having eight terminals. The terminals shall be the type shown on Drawing D-2311. The block shall be mounted on a support attached to the bedplate. The terminals shall be marked designating each circuit. Conductors supplying current to the lamp changer shall be No. 8 AWG single-conductor, rubber or rubber-like synthetic insulated, braid-covered, flexible cable and shall rum from the terminal block to brush holder supports. Copper-graphite composition brushes of 60-amp capacity shall supply current to two bronze collector rings mounted on a molded asbestos plate attached to a flange on the gear sleeve. The brushes shall be held in holders mounted on the contactor panel. These holders shall have adjustable springs to hold the brushes in proper contact pressure against the collector rings. Conductors from the terminal block to the motor shall be No. 12

or 14 AWG single-conductor, rubber or rubber-like synthetic insulated, braid-covered, flexible cable. A fuse block and 10-amp plug-type fuse shall be provided in the power circuit to protect the motor. All wires, brushes, and brush holders shall conform to the requirements of the Underwriters' Laboratories.

3.12 Part numbering of interchangeable parts. All parts having the same manufacturer's part number shall be functionally and dimensionally interchangeable.

The item identification and part number requirements of MIL-STD-100 shall govern the manufacturer's part numbers and changes thereto.

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3.13 Markings. -

3.13.1 <u>Instruction plate</u>. - An instruction plate shall be securely attached to the outside of the pan which encloses the operating mechanism. The instruction plate shall include a wiring diagram, clearly showing the power connection terminals together with the voltage to be applied, description of the lamps required in the light, and information regarding lubrication of the light.

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- 3.14 Instruction data. An instruction manual shall be provided as follows, and when specified (see 6.2), drawings, parts lists, or other data shall be provided.
- 3.14.1 General instruction. Unless otherwise specified, one instruction manual shall be enclosed in a suitable waterproof envelop or case and shipped with each light. One manual shall be furnished to the procuring activity. Instruction manuals shall cover the installation, operation, and maintenance of the light. Manuals shall be prepared on 8- by 10-1/2-inch white paper with black lettering and lines.
- 3.14.1.1 <u>Installation section</u>. All information necessary for the installation of the lights shall be incorporated in the instructions. A mounting diagram shall be included. All holes to be drilled shall be specified by drill size and diameter in inches. A view showing interference dimensions shall be included.
- 3.14.1.2 Operation section. The operation section shall include a cutaway illustration of the light with the important parts labeled, and a three-quarter side view of the light. The illustration shall be clear and easily readable. The operation of the light shall be explained in detail, using the cutaway view for illustration. Drawings, wiring diagrams, and additional illustrations shall be supplied where their use would simplify the explanation. All instructions for the proper use of the light shall be included.
 - 3.14.1.3 Maintenance section. The maintenance section shall include:
 - (a) Procedure used in disassembly of the light
 - (b) Necessary information on the care and upkeep of the light.
 Important cautions, where necessary, should be printed in distinctive letters.

- 3.15 Identification of product. Equipment, assemblies, and parts shall be marked for identification in accordance with MIL-STD-130.
- 3.16 Workmanship. Workmanship shall be in accordance with high-grade commercial practice covering this class of work.

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 in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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 supplies and services conform to prescribed requirements.
- 4.2 Classification of inspections. The inspections of the light shall be classified as follows:
 - (a) Preproduction inspection (4.3)
 - (b) Quality conformance inspection (4.4)
- 4.3 Preproduction inspection. (see 6.2). The preproduction inspection shall consist of the examination and tests specified in 4.5.
- 4.3.1 Test sample. One light shall be subjected to the examination and tests specified in 4.5.
- 4.3.2 Test report. After completion of the preproduction inspection, a test report shall be prepared in accordance with MIL-STD-831 and three complete copies of the report furnished to the procuring activity.
- 4.4 Quality conformance inspection. The quality conformance inspection shall consist of the following:
 - (a) Individual tests (4.4.1)
 - (b) Sampling plan and tests (4.4.2)
- 4.4.1 Individual tests. Each light shall be subjected to the following examination and tests, as described under 4.5:
 - (a) Examination of product (4.5.1)
 - (b) Angular velocity (4.5.2) (c) Priction (4.5.3)

 - (d) Candlepower distribution (4.5.4)
 - (e) Auxiliary reflector (4.5.5)

4.4.2 Sampling plan and tests. -

- 4.4.2.1 Periodic sampling. One light shall be selected at random from every fifty or fraction thereof produced, and subjected to the following tests, as described under 4.5:
 - (a) Locked drum (4.5.6)
 - (b) Strength (4.5.7)-
 - (c) Lamp changer (4.5.8)
- L.L.2.1.1 Rejection and retest. When an item selected from a production run fails to meet the specification, no items still on hand or produced later shall be accepted until the extent and cause of failure have been determined and appropriately corrected. The contractor shall explain to the Government representative the cause of failure and the action taken to preclude recurrence. After correction, all of the tests shall be repeated.
- 4.4.2.1.2 Individual tests may continue. For production reasons, individual tests or other sampling plans may be continued pending the investigation of a sampling test failure. But final acceptance of the items on hand or items produced later shall not be made until it is determined that all items meet all the requirements of the specification.
- 4.4.3 Defects in items already accepted. The investigation of a test failure could indicate that defects may exist in items already accepted. If so, the contractor shall fully advise the procuring activity of all the defects likely to be found and the method of correcting them.

4.5 <u>Inspection methods</u>. -

- 4.5.1 Examination of product. Each light shall be examined to determine conformance to this specification with respect to all requirements not covered by tests.
- 4.5.2 Angular velocity. The mean elapsed time, in minutes per rotation, of three cycles of not less than five successive rotations each, shall be determined for each unit. The reciprocal of the time so determined shall be taken as the angular velocity of the unit. The deviation of any one of the three cycles shall not differ by more than 1 percent from the mean of the three cycles.
- 4.5.2.1 Motors. The angular velocity of the housing with the motor operated at rated voltage and frequency shall be not less than 5.95 rpm nor more than 6.35 rpm for nominal 6-rpm units.
- 4.5.3 Friction. The light shall be rotated for 2 hours in insure that it is correctly assembled and adjusted. After this period of operation, the power comsumption required for rotation shall not exceed 10 watts. The consumed power shall be the difference between the no-load power input to the motor and the power input to the motor when it is driving a unit at normal rotation. The no-load input shall be taken as the average of the no-load inputs of five selected motors, except

when the computed consumed power is in excess of 10 watts, the no-load input of the motor undergoing tests shall be determined and used for the computation.

There shall be no evident vibration of the lamp filaments with the lamps in the place on the lamp changer.

4.5.4 Candlepower distribution. -

- 4.5.4.1 Photometric tests. Each light shall be aligned, leveled, and tested to determine compliance with the requirements of 3.6.1 and figure 1. Any light failing to meet these requirements shall not be accepted until it is adjusted so that it will meet these requirements.
- 4.5.4.2 Focusing gages. When specified (see 6.2), the candlepower measurements need be taken on only one light in each lot of 50, or less, of each contract or order. The lamp position of all other lights shall be checked by means of an adjustable gage capable of properly locating the filament of a dummy lamp with respect to the optical axis and the focal point of the reflector. The dummy lamp used with this gage shall simulate the CC-8 filament of the MS25015-2 lamp.
- 4.5.5 Auxiliary reflector. Each auxiliary reflector shall be visually inspected. Any reflector that has a cloudy or hazy surface causing an image to be blurred shall be rejected.
- 4.5.6 <u>locked drum</u>. With rated voltage applied to the motor, the drum of the light shall be locked and the clutch shall be allowed to slip continuously for 18 hours. At the end of this period, the motor shall not be overheated and there shall be no evidence of excessive wear to any part of the mechanism.
- 4.5.7 Strength. The light shall be bolted in place as when in service. A lateral thrust of 500 pounds shall be applied horizontally on any line through the center of the housing through a calibrated spring balance. There shall be no damage to any part of the light.
- 4.5.8 Lamp changer. The lamp changer shall be subjected to a current flow of 11.4 smp from terminal to terminal for a period of 2 hours. With the series coil shunted, it shall be subjected to a current of 30 smp for 18 hours. (This test may be abbreviated to 5 minutes with the approval of the procuring activity.) Immediately following this test, the lamp changer shall be subjected to a simulated service test in which the current through the service lampholder shall be periodically interrupted and the lamp changer allowed to interchange lamps. The lamp changer shall then be restored to the service position. The lamp changer shall operate for 200 such cycles without any failure. The lamp changer used in the test may be reconditioned to replace any worn or damaged parts and used in one of the lights on the order.
- 4.5.9 Low temperature. The light shall be subjected to the low temperature test, procedure I, of MILE-5272. The light shall be examined and operated to determine proper starting and operation, and lack of damage.
- 4.6 Inspection of preparation for delivery. Preservation, mackaging, packing, and marking shall be inspected to determine conformance to section 5.

.5. PREPARATION FOR DELIVERY

- 5.1 Preservation and packaging. Preservation and packaging shall be Level A or C, as specified (see 6.2).
- 5.1.1 Level A. Unless otherwise specified (see 6.2), each light shall be preserved and packaged in accordance with Method IIa of MIL-P-116. Each light shall be securely mounted on a suitable platform or base by means of cap acrews threaded into the supporting legs. When the light is packaged with the lens installed, the lens shall be cushioned as necessary to protect it from damage. When a lens is not required, a 1/4 inch plywood disk shall be fitted in the door and sealed in a manner to effect a waterproof cover when the door is closed. A humidity indicator conforming to MS20003 shall be secured in place so that it will face out, free from the position coincident with the inspection means provided.
- 5.1.1.1 <u>Unit container</u>. Each light shall be packaged in one unit container. Blocking, bracing, and cushioning shall be in accordance with MIL-STD-1186. The unit container shall be the shipping container and shall conform to the requirements of 5.2 and be of uniform shape and size.
- 5.1.1.2 Level C. Each light shall be preserved and packaged in a manner which will afford adequate protection against corrosion during shipment from the supply source to the first receiving activity for immediate use. This level may conform to the supplier's commercial practice when such meets the requirements of this level.
 - 5.2 Packing. Packing shall be level A, B, or C, as specified (see 6.2).
- 5.2.1 Level A. Each light, preserved, and packaged as specified in 5.1.1, shall be packed in a container conforming to type II, style A, class 1 (full plywood base) of MIL-B-26195. The side, top, and end panels shall be fabricated of plywood. Load bearing floor members shall be spaced as necessary to adequately support the packaged item.
- 5.2.2 <u>Level B</u>. Same as level A, except the container shall be type I of MIL-B-26195.
- 5.2.3 <u>Level C.</u> Each light, preserved and packaged as specified in 5.1.1.2, shall be packed in a manner which will afford adequate protection against damage during shipment from the supply source to the first receiving activity for immediate use. This level shall conform to applicable carrier rules and regulations and may be the supplier's commercial practice, when such meets the requirements of this level.
- 5.3 Marking. In addition to any special marking required by the contract or order (see 6.2), the interior packages and exterior shipping containers shall be marked in accordance with MIL-STD-129.

NOTES

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- 6.1 Intended use. The lights covered by this specification are intended for use in locating airports and airways.
 - 6.2 Ordering date. Procurement documents should specify the following:

(a) Title, number, and date of this specification.
(b) Applicable part number of the beacon desired (see 3.5 and 3.10.1).

(c) When the cover glass and lens are to be furnished with the beacon (see 3.9).

(d) Requirement for rpm (see 3.8.4).

(e) When drawings, parts lists, etc., are to be provided (see 3.14.1).

(f) Location and conditions for preproduction inspection and instructions for submitting test report (see 4.3).

(g) Whether the candlepower requirements are required on each light and whether the lamp position may be checked by means of a lamp focusing gage (see 4.5.4.2).

(h) Applicable level of preservation, packaging, and packing

(see section 5).

- (i) Any special marking required (see 5.3).
- 6.3 Marginal indicia: Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.

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Preparing activity: Air Force - 11

Reviewer activity: Air Force - 82

Project No. 6210-F338

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