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MILITARY SPECIFICATION

SPRAY GUNS AND ACCESSORIES, PAINT AND DOPE, AIRCRAFT USE

This specification has been approved by the Departments of the Army, the Navy, and the Air Force.

1. SCOPE

1.1 Scope.- This specification covers paint spray guns and accessories for use in class A and B Aeronautical Overhaul and Repair Departments, Reserve Naval Air Stations, and the Air Force where fast production spraying of the materials specified in table I is required. This equipment shall be equal to the best commercial type designed for fast spraying and for long rugged service requiring minimum maintenance.

1.2 Classification.- Items of paint spray equipment covered by this specification shall be furnished in the following types and classes, as specified:

Type I- Spray guns (paragraph 3.3.3)
  Class A, Siphon feed, furnished with 1-quart cup
  Class B, Pressure feed, for pressure tank us

Type II - Pressure tanks (paragraph 3.3.4)
  Class A - 2-gallon size
  Class B - 5-gallon size
  Class C - 10-gallon size
  Class D - 15-gallon size
  Class E - 30-gallon size
  Class F - 60-gallon size

Type III - Hose (paragraph 3.3.5)
  Class A - Air hose
  Class B - Material hose

Type IV - Oil and water separators (paragraph 3.3.6)

Type V - Nozzle extension for spray guns, type I, class B. (paragraph 3.3.7)

2. APPLICABLE SPECIFICATIONS, STANDARDS, DRAWINGS, AND PUBLICATIONS

2.1 The following specifications, standards, and publication, of the issue in affect on date of invitation for bids, form a part of this specification to the extent specified herein:

SPECIFICATIONS

Federal

NN-B-601	Boxes; Wood-Cleated-Plywood, for Domestic Shipment
NN-B-621	Boxes; Wood, Nailed and Lock-Corner
QQ-A-357	Aluminum-Alloy Forgings, Heat-Treated
QQ-A-591	Aluminum Alloy Dle-Casting
QQ-B-611	Brass, Commercial; Bars, Plates, Rods, Shapes, Sheets, and Strips
QQ-B-621	Brass, Commercial-Yellow, High-Copper-Yellow, and Naval; Castings
QQ-B-636	Brass, Naval; Bars, Plates, Rods, Shapes, Sheets, and Strips
QQ-S-624	steel, Alloy; Bars (General Purpose)
QQ-S-763	Steel, Corrosion-Resisting; Bars and Forgings (Except for Reforging)
QQ-Z-363	Zinc-Base Alloy; Die Castings
ZZ-H-521	Hose; Spray
ZZ-H-461	Hose; Gas (Acetylene-Hydrogen, Air, and Oxygen)
LLL-B-631	Boxes; Fiber, Corrugated (For Domestic Shipment)
LLL-B-636	Boxes; Fiber, Solid (For Domestic Shipment)

Military

MIL-P-116	Preservation, Methods of
JAN-P-105	Packaging and Packing for Overseas Shipment - Boxes, Wood, Cleated, Plywood
JAN-P-106	Packaging and Packing for Overseas Shipment - Boxes; Wood, Nailed
JAN-P-139	Packaging and Packing for Overseas Shipment - Plywood, Container Grade

STANDARDS

MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129	Marking of Shipments
MIL-STD-130	Identification Marking of U. S. Military Property

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

2.2 Other publications.- The following publication, of the issue in effect on date of invitation for bids, unless otherwise stated, forms a part of this specification to the extent specified herein:

National Bureau of Standards Publication

Handbook H28	Screw-Thread Standards for Federal Services (1944 and 1950 Supplement)

(Copies of Handbook H28 may be obtained upon application, accompanied by money order, coupon, or cash to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.)

3. REQUIREMENTS

3.1 Materials. - Materials used in the construction of the items and components shall be sound, of uniform quality and condition, and shall conform in composition, heat treatment, and suitability, to the standard practices of reputable manufacturers producing equipment of the types called for in this specification. Items and parts shall be new and of high-grade commercial quality.

3.1.1 Castings. - All castings shall be of uniform quality, free from blow holes, hard spots, shrinkage defects, cracks, or other injurious defects. Sand casting shall not be used in the construction of spray guns. The strength and other essential physical properties shall be adequate throughout for the purpose intended.

3.1.2 Neutral reaction .- Materials subject to contact with the spray materials shall be neutral to chemical reaction with the spray materials.

3.1.3 Spray materials.- Spray equipment shall be suitable for use with spray materials of average consistency, including primers, surfacers, lacquers, paints, varnishes, enamels, dopes, etc, as indicated in table I.

3.2 Design.- Items of paint spray equipment shall be essentially the contractor's latest approved design. All parts shall be of such size, material, and strength as to properly sustain the maximum allowable load imposed upon them, with an adequate factor of safety, maximum working efficiency, and with minimum wear during operation.

3.2.1 Current model.- Insofar as practicable, all items furnished under this specification shall be the contractor's current production model as previously manufactured and placed in successful operation.

3.3 Construction.- All items and parts shall be constructed as specified herein, in order to be free from any functional characteristics or effects in operation that may render the units unsuitable or inefficient for the intended purpose. Workmanship shall be of the quality necessary to produce complete units of good appearance, with safe and efficient operating characteristics as is customarily found in high-grade commercial quality items of a similar nature. Parts shall be held to a minimum and shall be accessible for easy cleaning.

3.3.1 Welding, brazing, and soldering.- When such operations are required in the assembly of an item, they shall be performed in accordance with the best recognized commercial practices. In no event shall they be resorted to as a repair measure.

3.3.2 Fastening devices .- All screws, pins, bolts and similar parts shall be assembled sufficiently tight to assure that they. will not work loose due to vibration.

3.3.3 Spray guns, type I, class A and B. - The spray gun shall be of the class specified in the invitation for bids. The gun shall satisfactorily spray the spray materials specified in table I on the vertical, horizontal, overhead, or intermediate surfaces, without undue fatigue to the operator. Air and material passages shall be adequate for the maximum air and material demand required for satisfactorily spraying with a minimum drop in pressure. Threads of parts subject to wear shall be of strength and abrasion resistance not less than that of brass, conforming to Specification QQ-B-611, composition B. All working parts shall be replaceable without the use of special tools. The gun shall withstand, without injury, an air pressure of 250 psi and shall consist essentially of a body, head, the necessary parts for a nozzle assembly, air and material valves and connection, and a trigger. The gun shall be suitable for volume production spraying. Type I, class A spray gun shall be designed for operation on 10 to 12 cfm at 50 to 60 psi air pressure. When specified, an additional air cap shall be furnished with a type I, class A spray gun for converting it to a type I, class B spray gun. The nozzle furnished, shall be for suction feed and a cup as described in paragraph 3.3.3.8, shall be provided. Type I, class B spray gun shall be designed for operation on 12 to 14 cfm at 50 to 60 psi air pressure. The nozzle provided shall be for pressure feed.

TABLE I

Spray material specifications of finishes referred to in MIL-S-15847A

Material	Specification
Primer, Oil-Type, for Wood (For use with Camouflage Paint)	JAN-P-629
Primer, Synthetic, Lacquer Resisting	JAN-P-72
Primer, Zinc-Chromate, for Aircraft Use	MIL-P-6889
Dope; Cellulose-Acetate-Butyrate, Clear	MIL-D-5549
Dope; Cellulose-Acetate-Butyrate, Clear	QPL-5549-1
Dope; Cellulose-Acetate-Butyrate, First Coat, Fungicidal	MIL-D-7850
Dope; Cellulose-Acetate-Butyrate, Pigmented, Camouflage	MIL-D-5550
Dope; Cellulose-Acetate-Butyrate, Pigmented, Camouflage	QPL-5550-1
Dope; Cellulose-Acetate-Butyrate, Pigmented, Gloss	MIL-D-5551
Dope; Cellulose-Acetate-Butyrate, Pigmented, Gloss	QPL-5551-1
Dope; Cellulose Nitrate, Clear	MIL-D-5553
Lacquer; Aromatic Fuel-Resistant	MIL-L-6047
Lacquer; Aromatic Fuel-Resistant	QPL-6047-2
Lacquer; Camouflage	MIL-L-6805
Lacquer; Camouflage	QPL-6805-2
Lacquer; Cellulose Nitrate, Gloss, for Aircraft Use	MIL-L-7178
Lacquer; Cellulose Nitrate, Gloss, for Aircraft Use	QPL-7178-1
Lacquer; Clear, Aluminum Clad Aluminum Alloy Surfaces	MIL-L-6806
Lacquer; Spraying, Acid-Resistant (For Aluminum Surfaces Around Storage Batteries)	TT-L-54
Lacquer; Clear, Aluminum Clad Aluminum Alloy Surfaces	QPL-6806-2
Enamel; Gloss, for Aircraft Use	MIL-E-7729
Enamel; Aircraft, Gloss	ANA-148
Enamel; Camouflage, Quick Drying	MIL-E-5556
Enamel; Camouflage, Quick Drying	QPL-5556-1
Enamel; Gloss, Synthetic (For Exterior and Interior Surfaces)	TT-E-489-1
Enamel; Heat-Resisting, Glyceryl-Phthalate, Black	MIL-E-5557
Enamel; Heat-Resisting, Glyceryl-Phthalate, Black	QPL-5557-3
Enamel; Interior, Semigloss, Tints and White	TT-E-508-1
Enamel; Lustreless Synthetic, for Ground Equipment	AN-E-13
Enamel; Wrinkle-Finish, Black	MIL-E-5558
Varnish; Decalcomania Adhesive	QPL-6093-2
Varnish; Phenol-Formaldehyde Spar	MIL-V-6893
Varnish, Spar Alkyd-Resin	TT-V-109
Varnish; Spar, Glyceryl Phthalate	MIL-V-6894
Varnish; Spar, Glyceryl Phthalate	ANA-104
Varnish, Phenol-Formaldehyde Spar	QPL-6893-1
Varnish; Wood Propeller	MIL-V-6895
Resin-Coating, Permanent (For Internal Engine Parts)	MIL-R-3043
Paint; Anti-Fouling, for Aircraft Hull Bottoms	MIL-P-5052
Paint; Blended-Type, Coal-Tar-Pitch Base, Bituminous	QPL-6883
Paint, Oil-Type, Ready-Mixed (For Camouflaging)	JAN-P-630
Paint, Outside, Ocean-Gray, No. 17 (Formula No. 5-0)	MIL-P-1265
Surfacer; Sanding	MIL-S-974
Coating; Aircraft Walkway, Nonslip, Brush and Spray	MIL-C-5044

3.3.3.1 Body. - The body shall be sufficiently rugged to adequately withstand rough usage while supporting all other parts of the gun and shall be of one-piece construction designed to confortably fit the operator's hand for good balance. The gun body shall be a heat-treated aluminum-alloy forging, complying with Specification QQ-A-367, composition 1, 3, or 5, in the shape of a pistol grip suitable for full-size two-finger trigger control. A hook shall be provided at the top for hanging gun when not being used. The body shall be smooth and suitably finished.

3.3.3.2 Head. - The head shall be accurately machined and shall provide support and correct alinement for nozzle parts. It shall be of drop-forged brass, complying with Specification QQ-B-636, class C, or QQ-B-611, composition A, and shall include the entire passageway for the flow of spray material through the gun from material connection to material valve. The head shall be of the removable type, and shall be securely fastened to the body of the gun. The exterior surfaces of the head shall be finished with a polished and buffed chromium or nickel metallic protective coating.

3.3.3.3 Nozzle assembly.- The nozzle assembly shall consist essentially of an air cap, material needle valve, and fluid nozzle, and necessary auxiliary parts-suitable for spraying the materials listed in table I. These parts shall be permanently and legibly marked with manufacturer's size designation. The nozzles provided shall be designed specifically for the type and class spray gun with which they are furnished. (See paragraph 6.2.)

3.3.3.3.1 Air cap.- The air cap shall provide suitable air openings for complete atomization without spattering or splitting the spray pattern and shall be held fast to gun head by means of a retainer ring. It shall be fabricated from a brass drop forging or rod, complying with the applicable requirements of Specification QQ-B-636, class C, or QQ-B-611, composition B.

3.3.3.3.2 Fluid nozzle.- Fluid nozzle shall be made of alloy steel, and heat treated and carburized to 55-66 Rockwell C. Fluid nozzle shall be ground or lapped on all seating surfaces. All interior surfaces affecting material flow such as the fluid orifice, and all exterior surfaces affecting air flow, shall be smooth and finished to standard commercial tolerances for parts of this type. Material is to conform to Specification QQ-S-624 in average physical properties and hardenability.

3.3.3.3.3 Auxiliary parts.- Baffle plates, tension washers, retainer rings, and other auxiliary parts, shall be of noncorrosive material suitable for the purpose.

3.3.3.4 Valves.- The material and air valves shall be operated by the trigger and shall be held normally closed by coil springs enclosed within the gun body. Valves shall seat to provide cut-off of liquid and normal shut-off of air. Valve stems and needles shall be of stainless steel complying with the applicable requirements of Specification QQ-S-763, class 5, 6, or 7. Valve packing shall be graphited type, or treated leather.

3.3.3.4.1 Material valve.- The material valve shall be stainless steel needle type complying with the applicable requirements of Specification QQ-S-763, class 5 and 6, hardened to a Brinell of 425-510 and ground. If class 7 is furnished, it shall be (fully hard), machined, and ground. Valve is to be in contact with an adjusting screw at back of gun above grip suitable for changing the quantity of flow of material through the gun when trigger is pulled.

3.3.3.4.2 Air valve.- The air valve shall be a stainless-steel cartridge-type valve fabricated from material complying with Specification QQ-S-763, class 5, 6, or 7. The part of the valve in direct contact with the valve seat shall be of a material other than steel, shall be corrosion resistant, and entirely suited for the intended purpose.

3.3.3.5 Connection on spray guns.- Material and air hose connections shall be male standard straight pipe thread with 60-degree bevel taper seat. The air hose connection shall be 1/4 inch. The material hose connection shall be 3/8 inch. The air hose connection shall be a detachable connector, fabricated from drawn brass rod conforming to Specification QQ-B-611, composition B, and located in the butt of the grip, and the material nose connection shall be underneath the head, so positioned as to allow use of a sipnon cup and to comply with dimensional requirements of figure 1.

3.3.3.6 Spray pattern control.- A spray pattern control or air valve mechanism to b easily operated from the pack of the gun above the grip shall be provided, which shall be adequate to change the spray pattern from round to fan shaped, or vice verse.

3,3.3.7 Trigger. - The trigger shall be designed for full-size two-finger control and shall operate to hold the fingers in a normal position when spraying, and to aid in balancing the gun. Trigger control shall be free and positive and operate to permit air flex before material flow and material shut-off before air shut-off. Trigger shall contain a hardened steel plate at points of contact with valve stems except when trigger is made from steel. Trigger shall be nickel or chrome plated if made of steel.

3.3.3.8 Siphon cup for spray gun, typeI, class A.- The cup shall be suitable for use with the materials of average consistency specified in table I. (See figure 2.)

3.3.3.6.1 Cup. - The cup shall have a capacity of not less than 1 quart and be of seamless drawn aluminum, cylindrical in shape, 4-1/4 inches, ±1/8 inch outside diameter. The throat of the cup shall have a minimum diameter of 3-1/4 inches to allow for ease in cleaning. The cup shall have external lugs for attaching to the cover and have a steel reinforcement ring suitably attached to bottom of the cup to provide support and protect the cup from injury and wear. The steel is to conform to Specification QQ-S-624 in average physical properties.

3.3.3.8.2 Cover.- The cover of the cup shall be of aluminum alloy, and have a recessed groove to hold a gasket of treated leather or other suitable composition for sealing between the cup and cover. The cover shall have a 3/8-inch female swivel standard straight pipe thread with 60-degree bevel taper seat connection for securely attaching cup to material connection of spray gun. The material tube snail be of brass, complying with Specification QQ-B-611 and of adequate size to handle materials specified, and shall extend as near to the bottom of the cup as possible without impairing the flow of material. The cover shall have a vent hole for the admission of air as the material in the cup is withdrawn. Near the vent hole marked in a permanent way shall appear the words, "Keep Clean" or "Keep Open". The clamping arrangement shall be of sturdy reinforced stamped, cast or forged construction, that will not distort or loosen in normal use.

3.3.4 Pressure tanks, type II.-

3.3.4.1 General.- The pressure material tank shall be suitable for storage and feeding the spray material specified herein under air pressure, The tank shall comply with the requirements of the American Society of Mechanical Engineers code for unfired pressure vessels with a maximum working pressure 110 psi, and when specified, the tank shall be furnished with a suitable castered base for easy mobility. (See paragraph 6.3.) The label required by this code shall be permanently attached to the shell.

3.3.4.1.1 Shell. - The tank shell shall be constructed of seamless draw steel, zinc coated inside and outside, cylindrical in shape, with a concave bottom. A steel band or other suitable means shall be securely fastened to the bottom of the shell to provide solid support. Handles adequate for lifting the tank filled with paint shall be diametrically opposite each other and near the top of the tank. Clamps fitted into permanent brackets attached to the shell, or other suitable means to make a tight joint, shall fasten cover to shell, which shall permit quick and easy removal.

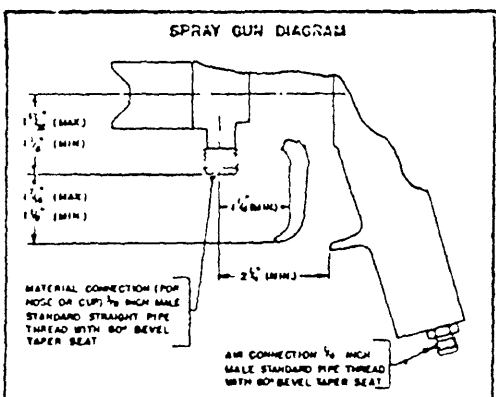

FIGURE 1

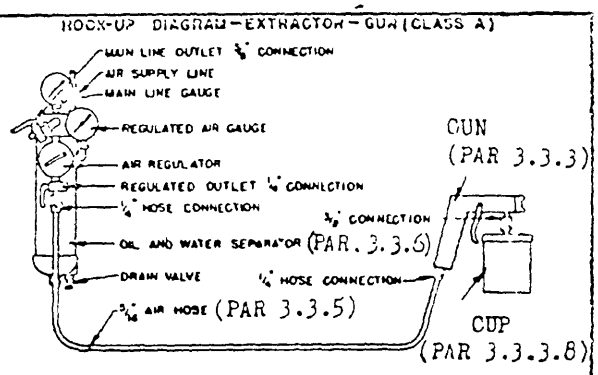

FIGURE 2

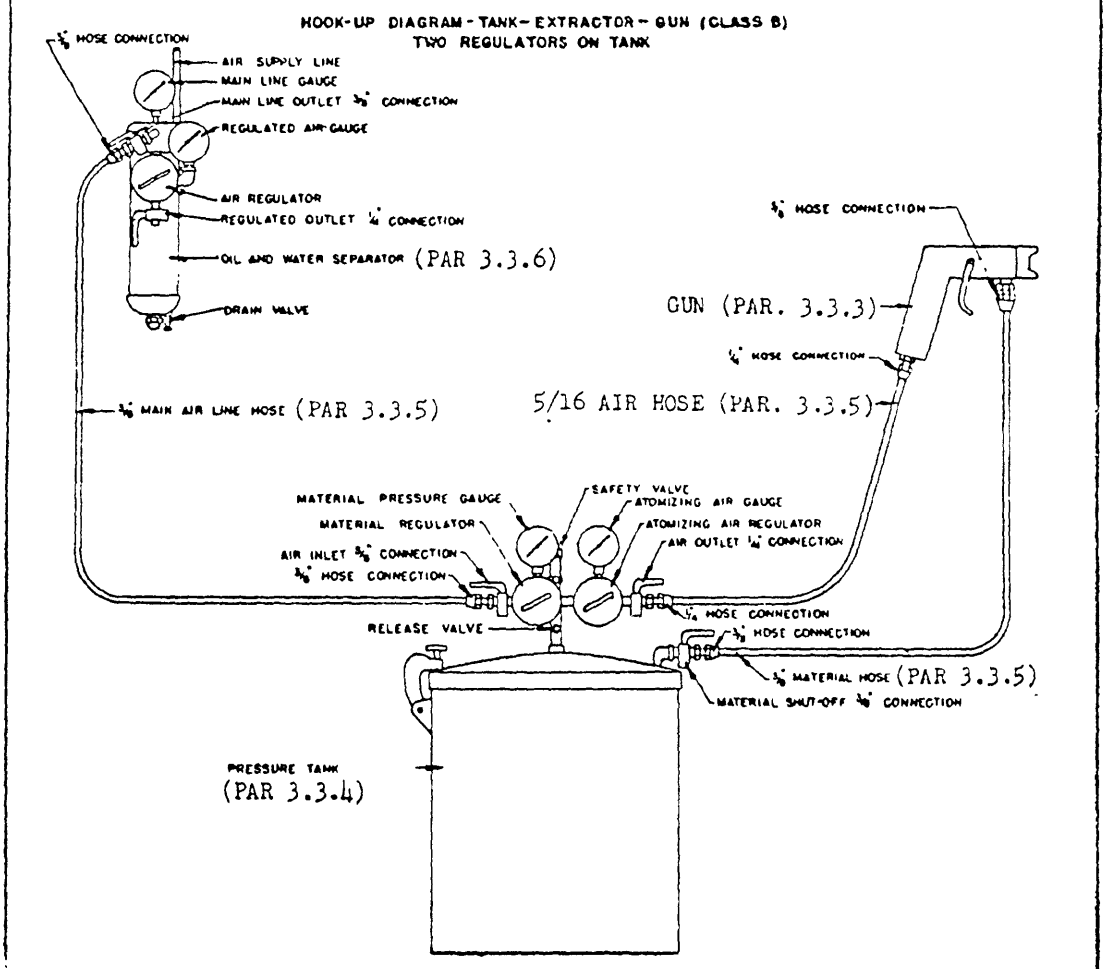

FIGURE 3

3.3.4.1.2 The cover shall be constructed of pressed steel and be cadmium or zinc plated. The cover shall include all necessary equipment for the operation and control of the tank and the atomizing air to the gun. Cover for tanks of 5 gallons and larger, shall include a filler opening in order that spray material may be added without removing cover from shell.

3.3.4.1.3 Agitator. - The agitator shall adequately agitate the spray materials specified herein to prevent settlement of pigments. The agitator shall be either hand or air motor driven, as specified. The air-motor drive shall be equipped with a speed adjustment and shut-off valve. Agitator shall be part of cover assembly.

3.3.4.1.4 The controls, which shall be part of the cover assembly, shall consist of a paint strainer, air and materials shut-off valves, two regulators with gages reading 0 to 100 pounds, one to control pressure in tank, one to control the atomizing air pressure to the gun, a release valve, and a safety valve set for 110 psi.

3.3.4.1.5 Connections on pressure tank cover.- Material hose connection of tank shall be a male 3/8-inch standard straight pipe thread with taper seat. Air connection inlet shall be a 3/8-inch male standard straight pipe thread (see figure 3).

3.3.5 Hose, type III.- Spray hose shall comply with the requirements of Specification ZZ-H-521 for type II, grade A hose for fluid material only, Specification ZZ-H-461, grade A, type I or II hose, for air only, and as specified herein. Connections shall be attached to each end and shall be female swivel standard straight pipe thread with taper seat, without rubber washers. Connections shall be made of forged, or turned bar stock and be the removable type. External clamps on connections are not acceptable. Hose with connections attached shall withstand a hydrostatic pressure of 250 psi. The following sizes and lengths of hose (one each) are required for one spray gun installation:

class A Air hose: (See figures 2 and 3.)
- Item I - 5/16-inch inside diameter, 15 feet in length. To be used between the oil and water separator and the type I, class A spray gun, or between the pressure tank and the type I, class B spray gun. (For longer lengths see paragraph 6.3.)
- Item 2 - 3/8-inch inside diameter main air line nose, 8 feet in length. To be used between oil and water separator and pressure tank. For use only with type I, class B spray gun.

Class B Material hose: 3/8-inch inside diameter, 15 feet in length, To be used between pressure tank and type I, class B spray gun. (For longer lengths see paragraph 6.3.)

3.3.5.1 Air hose.- Air-spray hose shall be 5/16-inch inside diameter, as specified in paragraph 3.3.5. The hose shall have a red rubber covering for easy identification. The connections shall be 1/4 inch.

3.3.5.2 Material hose. - Maaterial-spray hose shall be 3/8-inch inside diameter as specified in paragraph 3.3.5. The cover shall consist of black material for easy identification, Material for inside lining of hose shall be of a composition suitable for the purpose, which shall not be affected by spray materials specified herein. The hose material shall be in accordance with Specification ZZ-H-521, type II, grade A, which is suitable for the purpose intended, and the hose material shall not be adversely affected by spray material specified herein.

3.3.6 Oil and water separator, type IV.- The oil and water separator shall be suitsJh for removing oil, water, dust, and other foreign matter from the compressed air supply line, and shall be of durable construction, The unit shall have a capacity of at least 3.5 cu ft of free air per minute at 100 psi pressure to permit the operation of two guns from this unit at one time. Parts shall be constructed of brass or other noncorrosive materials. Die castings conforming to Specifications QQ-Z-365 and QQ-A-591 may be used. Provisions shall be made for wall mounting, and assembly shall be easily taken

apart for cleaning. The assembly shall consist of an extractor with suitable metal baffles and filters arranged within a metal case, with a minimum of 200 psi gage to show main air line pressure, one or two regulators as required, and necessary connections and adapters. When two regulators are used, each regulator is to be supplied with filtered high-pressure air and capable of independent air regulation. Each regulator shall be equipped with a 100-pound gage to show regulated pressure and a 1/4-inch male straight pipe thread bevel seat regulated outlet, with a shut-off. A minimum of one main-line filtered air outlet with a 3/8-inch male standard straight pipe thread shall be provided. A 200-pound gage to indicate main air line pressure shall be provided. The air inlet to separater shall be at least 1/2-inch tapered pipe thread. Bottom of separator shall be furnished with hand-operated drain valve. (See figures 2 and 3.)

3.3.6.1 Gages.- The pressure gages shall be of the Bourdon-tube geared type, having a 1/4-inch male taper pipe threads stem extending from the bottom. The case shall be drawn steel with a black or grey enameled finish. The Bezel ring shall retch the case and be adequately attached to the case. The dial shall be not less than 2 inches diameter and shall have black lines and figures on a light background. Gages shall be calibrated bo commercial accuracy of 3 percent of the maximum pressure capacity on the upper third and lower third of the scale; and to 2 percent of the maximum capacity in the middle portion of the scale.

Pressure scale	Scale divisions
0 to 100 psi	2 pounds
0 to 200 psi	5'pounds

3.3.6.2 Regulators.- The regulator shall be of the conventional hand-screw type for adjusting air pressure and be capable of passing 15 cfm of air at 80 psi supply-line pressure with a maximum of 10 pounds pressure drop. Regulators shall be of durable construction capable of withstanding 250 psi and adjustable for any pressure of 5 to 90 psi. A diaphragm of not less than 2-1/8 inch diameter and a valve mechanism enclosed within the body shall be operated by a convenient handle for easy adjustment. Material for the body shall be operated by a convenient handle for easy adjustment. Material for the body shall be brass, complying with Specification QQ-B-621 or QQ-B-636, or of zinc die casting conforming to Specification QQ-Z-363, composition A, having a minimum tensile strength of 30,000 psi. The separators shall be furnished with either one. or two regulators, as specified in the invitation for bids.

3.3.7 Nozzle extension for spray guns, type I, class E.- The nozzle extension shall be approximately 18 inches long, shall be easily attachable to the spray gun, and shall utilize the same nozzle supplied for the class B pressure-type spray gun. The extension tubes shall be of lightweight corrosion-resistant metal and the head to which the nozzles are secured shall be mounted on the extension tubes at a 45-degree angle.

3.4 Interchangeability.- Replaceable parts and accessories shall be constructed to definite commercial standards, tolerances, and clearances in order that any such part or accessory of a particular type or model may be replaced or adjusted without requiring modification.

3.5 Protective finish.- The finish shall provide adequate protection against corrosion or other damage by weather elements. Parts made from ferrous material, unless otherwise specified, shall be made corrosion resistant with a coating of cadmium, chrome, or nickel.

3.6 Surface finish.- Functional surfaces shall be smooth and free from burrs or other harmful extraneous materials. Castings, forgings, molded or welded parts, and all other metal parts shall be thoroughly cleaned and free from sand, dirt, fins, sprues, scale, flux, or other harmful materials.

3.7 Screw threads.- Threads shall be in accordance with the applicable requirements of the Screw thread Standards for Federal Services Handbook H-28.

3.8 Identification of product. - Equipment, assemblies, and parts shall be marked for identification in accordance with Standard MIL-STD-130. The following data shall be included:

SPRAY GUNS AND ACCESSORIES, PAINT AND DOPE, AIRCRAFT USE
*Type
*Class
Specification MIL-S-15847A
Stock No. (USAF or Navy, as applicable)
Manufacturers Part No.
Manufacturer's name or trade-mark

* Applicable data to be entered by the contractor.

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 General.- All the tests required herein for the testing of spray guns are classified as Inspection tests, for which necessary sampling techniques and methods of testing are specified in this section.

4.2 Sampling.- A random sample of paint spray guns and accessories shall be selected from each inspection lot offered for Government inspection for visual and dimensional characteristics, with lot acceptance in accordance with Standard MIL-STD-105 with AQL (Major) = 1.0 percent defective and AQL (Minor) = 4.0 percent defective. A lot shall consist of all items or parts thereof offered for acceptance at any one time under one purchase.

4.3 Tests. -

4.3.1 Threaded parts of gun.- When requested by the Inspector, written certification of compliance (based on laboratory physical and chemical tests of the materials used in the manufacture of the threaded parts of the gun) with the required strength and abrasion resistance, shall be furnished and may be acceptable in lieu of actual tests.

4.3.2 Air pressure test of gun.- A sample gun from each lot shall be tested for compliance with paragraph 3.3.3 for leakage. A lot shall be acceptable, if specified requirements are otherwise met, and if the gun permits not more than a 25-pound drop in pressure in 1 minute when connected to a 5/16-inch air hose, 20 ft long with 100 psi air pressure trapped therein, and with trigger in normal position.

5. PREPARATION FOR DELIVERY

5.1 Packaging. - The spray guns and accessories shall be preserved and packaged in accordance with Specification MIL-P-116, method III.

5.1.1 Technical data.- One copy of the instruction manual or other publications and bulletins shall be packaged with each item of paint spray equipment in a manner to preclude loss during transit or unpacking.

5.2 Packing. -

5.2.1 Domestic packing.- Paint spray items packaged as specified in paragraph 5.1 shall be packed in containers conforming to Specifications NN-B-601, NN-B-621, LLL-B-631, or LLL-B-636, to insure acceptance by common or other carriers for safe transportation at the lowest rate, to the point of delivery.

5.2.2 Overseas packing.- Spray guns and accessories shall be packed for shipment in containers conforming to Specifications JAN-P-105 and JAN-P-106. Plywood, if used, shall be in accordance with Specification JAN-P-139, type B, condition I.

5.3 Marking of shipments.- Exterior and interior shipping containers shall be marked in accordance sith Standard MIL-STD-129. The nomenclature shall be as follows: Spray Guns and Accessories, Paint and Dope, Aircraft Use, Type *, class * Specification MIL-S-15847A, Manufacturer's Part No. * , Federal Stock No, * , (if no FSN available, leave space therefor).

*Information to be entered by the manufacturer.

6. NOTES

6.1 Intended use.- The items of equipment covered by this specification are intended for use in the application of spray materials specified herein by air pressure to surfaces of aircraft and engine components, accessories, and to completed aircraft. It shall be possible to produce extra smooth, fine-grade finishes on high-speed aircraft surfaces with this equipment.

6.2 Nozzle assembly data.- It is intended that only one type of nozzle assembly (see paragraph 3.3.3.3) shall be supplied with each of the class A and class B spray guns. These nozzle assemblies shall be designed primarily for general use with the more common materials listed in table I which are listed as primers, dopes, lacquers, enamels, varnishes, and resin coatings. If the activity using the guns encounters difficulty in spraying the other materials listed in table I with the nozzle assembly supplied with the guns at the air pressures indicated in paragraph 3.3.3, it shall contact the manufacturer of the guns for specific recommendations.

6.3 Ordering data. - Requests, requisitions, schedules, invitations for bids, contracts, and orders should designate the name, type, class and size, where applicable, of each item of paint spray equipment. (See paragraphs 1.2, 3.3.4.1, 3.3.4.1.3, and 3.3.6.)

6.3.1 Ordering hose.- Paragraph 3.3.5 specifies that class A, item I air hose and class B material hose shall each be furnished in lengths of 15 feet. This length is suitable for use with spray booths up to 13 feet wide. If spray booths are wider, longer lengths in multiples of 5 feet may be ordered. The correct length of this hose is usually determined by adding 2 feet to the width of spray booth.

6.4 Bid sample. - Samples of items of equipment or parts thereof furnished with bidder's proposal shall be submitted for inspection as to compliance with the specifications and for actual performance tests, except when the bidder has previously produced identical equipment that has been tested and accepted under this specification.

6.5 Illustrations.- The illustration shown in figures 1, 2, and 3 are for the convenience of identification, requisitioning, purchasing, and inspection officers, and are not intended to preclude the purchase of spray guns alla accessories which are otherwise in accordance with the requirements of this specification.

6.6 Instruction manual. - The Instruction manual shall be the manufacturer's standard commercial literature and a complete list of replaceable parts.

NOTICE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the Unites States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnishes, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

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Air Force

Other interest:
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Navy - Or

SPECIFICATION ANALYSIS SHEET

Form Approved
Budget Bureau No. 119-R004

INSTRUCTIONS

This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity *(as indicated on reverse hereof)*.

SPECIFICATION

ORGANIZATION *(Of submitter)* | CITY AND STATE

CONTRACT NO. | QUANTITY OF ITEMS PROCURED | DOLLAR AMOUNT $

MATERIAL PROCURED UNDER A

☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES.

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

☐ YES ☐ NO IF "YES", IN WHAT WAY?

4. REMARKS *(Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)*

SUBMITTED BY *(Printed or typed name and activity)* | DATE

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