MIL-R-8573A(ASG)
31 JULY 1957
Superseding
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1 April 1953

MILITARY SPECIFICATION

RESERVOIRS, AIR, NONSHATTERABLE STEEL

This specification has been approved by the Department of the Air Force and by the Navy Bureau of Aeronautics.

1. SCOPE

1.1 Scope.- This specification covers steel air reservoirs, both cylindrical and spherical, for aircraft and missile high-pressure pneumatic systems.

1.2 Classification.- Air reservoirs shall be of the types, classes, and sizes, as specified (see 6.2).

1.2.1 Types.- Air reservoirs shall be divided into types in accordance with their nominal storage pressure and the maximum intermittent pressure permissible during flight. If no spring-loaded thermal relief valve is used in the system, the maximum pressure during flight will, in general, depend upon the maximum temperature attained (see 6.1).

1.2.1.1 Type 15 - Storage pressure 1,500 psig.- All air reservoirs of this type are intended to be so charged that the pressure does not exceed 1,500 psig at an ambient temperature of 70°F, or the maximum intermittent pressures, as follows:

Type 15-20	Charging pressure 1,500 psig. Maximum intermittent pressure 2,000 psig.
Type 15-26	Charging pressure 1,500 psig. Maximum intermittent pressure 2,600 psig.

1.2.1.2 Type 30 - Storage pressure 3,000 psig.- All air reservoirs of this type are intended to be so charged that the pressure does not exceed 3,000 psig at an ambient temperature of 70°F, or the maximum intermittent pressures, as follows:

Type 30-40	Charging pressure 3,000 psig. Maximum intermittent pressure 4,000 psig.
Type 30-45	Charging pressure 3,000 psig. Maximum intermittent pressure 4,500 psig.
Type 30-52	Charging pressure 3,000 psig. Maximum intermittent pressure 5,200 psig.
Type 30-58	Charging pressure 3,000 psig. Maximum intermittent pressure 5,800 psig.

1.2.2 Classes.- Air reservoirs shall be further divided into classes in accordance with the maximum temperature permissible during flight, as listed below:

Class A	200°F maximum temperature.
Class B	250°F maximum temperature.
Class C	325°F maximum temperature.
Class D	400°F maximum temperature.

1.2.3 Sizes.- Each of the above types shall be provided in the following net cubic inch capacities and shall be designated as specified in table I.

TABLE I

Reservoir types, sizes, and designations

Cylinders		Spheres	
Size (cubic inches 1/)	Designation	Size (cubic inches 1/)	Designation
30	30C	50	50S
50	50C	100	100S
100	100C	200	200S
200	200C	300	300S
300	300C	400	400S
400	400C	500	500S
500	500C	650	650S
650	650C	900	900S
850	850C	1,300	1,300S
		1,800	1,800S

1/ The net cubic inch capacities shall be within a tolerance of -2 +5 percent.

2. APPLICABLE DOCUMENTS

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

SPECIFICATIONS

Federal

TT-P-664	Primer, Coating, Synthetic, Rust-Inhibiting, Lacquer-Resisting

Military

MIL-C-490	Cleaning and Preparation of Ferrous and Zinc-Coated Surfaces for Organic Protective Coatings
MIL-R-3043	Resin-Coating, Permanent (for Internal Engine Parts)
MIL-L-4343	Lubricating Grease, Pneumatic System
MIL-T-5021	Tests; Aircraft Welding Operators' Certification
MIL-C-5056	Coating, Permanent Resin; Process for Application of, to Aircraft Parts
MIL-C-5501	Closure, Aircraft, Tubing, Protective
MIL-I-6868	Inspection Process, Magnetic Particle
MIL-L-7178	Lacquer, Cellulose Nitrate, Gloss, for Aircraft Use
MIL-S-7742	Screw Threads, Standard, Aeronautical
MIL-E-7729	Enamel, Gloss, for Aircraft Application
MIL-P-8564	Pneumatic Components, Aeronautical - General Specification for

STANDARDS

Federal

Fed. Test Method Std. No. 151	Metals; Test Methods

Military

MIL-STD-129	Marking for Shipment and Storage
MIL-STD-130	Identification Marking of U. S. Military Property

Bureau of Ships

NAVSHIPS No. 250-692-2	X-Ray Standards for Production and Repair Welds

PUBLICATIONS

Air Force-Navy Aeronautical Bulletin

No. 143	Specifications and Standards; Use of

3. REQUIREMENTS

3.1 Preproduction sample.- Prior to beginning quantity production, preproduction samples shall be subjected to preproduction testing. (See 4.2.1 and 6.2.)

3.2 General.- The requirements of Specification MIL-P-8564 shall apply, except as specified below.

3.3 Materials.- Materials and processes used in the manufacture of nonshatterable reservoirs shall be of high quality, suitable for the purpose and shall conform to applicable Government specifications. Materials and processes conforming to contractor's specifications may be used provided the specifications are released by the Government and contain provisions for adequate tests. The use of contractor's specifications will not constitute waiver of Government inspection.

3.3.1 Selection of materials.- Specifications and standards for all materials, parts, and Government certification and approval of processes and equipment, which are not specifically designated herein and which are necessary for the execution of this specification, shall be selected in accordance with AMA Bulletin No. 143.

3.4 Design and construction.-

3.4.1 Wall thickness.- The recommended minimum wall thickness of steel reservoirs shall be determined by the thick-wall stress formulas below or similar thick-wall formulas. These formulas give the resulting tangential stress at the inside of the reservoir wall caused by an internal pressure p. These formulas do not consider gunfire requirements. The symbols are defined as follows:

p = Test pressure in psig as follows:

Type 15-20	3,000 psig
15-26	3,000 psig
30-40	5,000 psig
30-45	5,000 psig
30-52	5,700 psig 1/
30-58	6,400 psig 1/

1/ Based on maximum in-flight pressure +10 percent. See 1.2.1.2.

t = Minimum wall thickness in inches.

D = Outside diameter in inches.

d = Inside diameter in inches.

E = Joint efficiency - 1.0 nonwelded; 0.85 welded, brazed, or threaded joints. The 0.85 factor need be applied only to the main structural joint area, including the heat-affected zone, the minimum width of which shall be considered as six times the wall thickness from centerline of weld.

3.4.1.1 The formula for a cylindrical steel reservoir shall be as follows:

$$S = \frac{P(1.3\ D^2 + 0.4d^2)}{4t\ (D-t)} \times \frac{1}{E} \qquad (1)$$

3.4.1.2 The formula for a spherical steel reservoir shall be as follows:

$$S = \frac{pD}{4tE} \qquad (2)$$

3.4.2 Wall stress.- The allowable stress at test pressure shall not exceed the 20-percent offset-yield strength of the material or 5/3 of the endurance strength.

3.4.3 Joints.- Where welded joints are used, they shall be of the highest quality. The welding operator shall be qualified under Specification MIL-T-5021. All welded joints shall be heat-treated after welding. Where joints are threaded, O-rings or other sealing devices shall be provided for proper seal.

3.4.4 Draining.- Provisions shall be incorporated in the air reservoir or its valve for the discharge of accumulated water either by gravity or air pressure with the reservoir in the mounted position. Air inlets and outlets, if located in the bottom of the reservoir as mounted in the aircraft, shall be provided with a tube extending into the reservoir approximately 30 percent of the reservoir height to permit trapping of water and prevent possible plugging of the air passages by ice.

3.4.5 Temperature range.- The air reservoir shall be suitable for operation through an ambient temperature as specified below:

Class A reservoirs -65° to +200°F.
Class B reservoirs -65° to +250°F.
Class C reservoirs -65° to +325°F.
Class D reservoirs -65° to +400°F.

3.5 Finish.- Unless otherwise requested and approved by the procuring activity, the finish of steel air reservoirs shall be as follows.

3.5.1 Interior finish.- The interior surface of reservoirs of all types of steel other than corrosion-resistant steel shall be coated with phenolic resin in accordance with Specification MIL-R-3043 or other coating specifically approved by the procuring activity, applied by the fill and drain method. The viscosity and number of coats and the draining interval shall be adjusted to produce a coating thickness of 0.0005 inch minimum. Phenolic-resin shall be baked to not less than 325°F. Processing and inspection of resin coating shall be in accordance with applicable requirements of Specification MIL-C-5006, and prior treatment of the interior surface shall be in accordance with best practice for the coating employed.

3.5.2 External finish.- The external surface of reservoirs of all types of steel other than corrosion-resistant steel shall be processed in accordance with Specification MIL-[illegible], grade 1. The entire external surface shall be painted with one coat of primer

conforming to Specification TT-P-664, and two coats of lacquer conforming to Specification MIL-L-7178. As an alternate, one coat of enamel conforming to Specification MIL-E-7729 applied over an acceptable rust-inhibiting surface may be used for exterior of the cylinder in lieu of the two coats of lacquer and one coat of primer specified above.

3.6 Markings.- Steel stamping, if used, shall be located in low-stress areas.

3.7 Identification of product.- A metal or metallic-foil nameplate shall be permanently attached to the reservoir, containing the following information. Marking shall be in accordance with Standard MIL-STD-130.

RESERVOIR, AIR, NONSHATTERABLE STEEL
Specification MIL-R-8573A
PSI service
Type 1/ Class _____ Size_____
Manufacturer's name or trade-mark
Serial No.
Reservoir Part No. 2/ Test date
Assembly Part No. 2/
Mount 3/

IMPORTANT: It is dangerous to use a reservoir of incorrect pressure (type) or temperature (class) rating.

1/ Include type, e.g., type 30-40.
2/ Use manufacturer's part numbers.
3/ Use term "Inverted" or "Upright," as applicable.

3.8 Workmanship.- Workmanship shall conform to the best commercial practice covering this type of product. Air reservoirs shall be free from slag inclusions, seams resulting from pipes, and the walls shall be free of apertures, perforations, cracks, laminations, or fissures. The interior of all finished reservoirs shall be dry, clean, and free from scale, corrosion, oil, or other foreign matter.

4. QUALITY ASSURANCE PROVISIONS

4.1 Classification of tests.- The inspection and testing of reservoirs shall be classified as follows:

(a) Preproduction tests. (See 4.2 and 6.2.)
(b) Acceptance tests. (See 4.3.)

4.2 Preproduction tests.-

4.2.1 Sampling instructions.- The preproduction samples shall consist of five reservoirs of each size representative of the production reservoir, with suitable connections, and shall be tested in a place and manner designated in the contract, purchase order, or invitation for bids. (See 6.2.)

4.2.1.1 Detailed drawings and test reports shall be submitted with the test samples. In order to obtain reservoirs with walls approximating the minimum allowable thickness, samples weighing not less than 90 percent or not more than 95 percent of the maximum weight permitted on the drawing shall be submitted. At least two of the samples shall have received no pressurization subsequent to heat treatment and shall be so identified.

4.2.1.2 Test data.- The test reports shall be accompanied with the applicable manufacturer's or governmental specification, including chemical composition, physical properties, and heat treatments, in addition to complete drawings, clearly showing the construction of the reservoir. Gunfire test reports are not required.

4.2.3 Tests.- The Preproduction tests of reservoirs shall consist of the tests specified in table II conducted in the order listed, and as described under "Test methods."

TABLE II

Preproduction tests

Tests		Number of reservoirs
Permanent volumetric expansion	(4.4.4)	1 (not previously pressurized)
Normal temperature leakage	(4.4.5.1)	
Extreme temperature leakage 1/	(4.4.5.2)	
Permanent volumetric expansion	(4.4.4)	1 (not previously pressurized)
Hydrostatic burst	(4.4.10)	
Macrostructure	(4.4.8)	
Permanent volumetric expansion	(4.4.4)	1
Cycling	(4.4.3)	
Permanent volumetric expansion	(4.4.4)	
Permanent volumetric expansion	(4.4.4)	2
Gunfire	(4.4.11)	
Physical 2/	(4.4.6)	
Internal finish 2/	(4.4.7)	

1/ Permissible to perform this test on equivalent test fixture.
2/ Samples shall be taken from either reservoir after gunfire. The local affects of gunfire or the resulting shock may effect the results of these tests. If satisfactory results are not secured, an additional cylinder may be tested.

4.3 Acceptance tests.- Acceptance tests shall consist of Individual tests and Sampling tests.

4.3.1 Individual tests.- Each production air reservoir shall be subjected to the following tests, in the order listed, as described under "Test methods":

(a) Wall thickness check.
(b) Radiographic inspection of welds.
(c) Permanent volumetric expansion.
(d) Examination of product.
(e) Normal temperature leakage.

4.3.2 Sampling tests.- Three reservoirs shall be selected at random from each lot of 200 reservoirs of the same type, class, shape, and size, and shall be subjected to the tests specified in table III, in the order listed, and as described under "Test methods."

4.3.3 Rejection and retest.- When any routine representative sample fails to meet the requirements of the Sampling tests, three other samples shall be selected at random from the lot represented and subjected to the failed test. If any of the group selected for retest fails to meet the requirements of the test, the lot represented shall be rejected and returned at the contractor's expense. Reservoirs which have been rejected may be resubmitted for all specified tests. Before resubmitting, full particulars concerning previous rejections and the action taken to correct the original defects shall be furnished to the Inspector. Units rejected after retest shall not be resubmitted without the specific approval of the procuring activity.

TABLE III

Sampling tests

Tests		Number of reservoirs
Permanent volumetric expansion Normal temperature leakage	(4.4.4) (4.4.5.1)	1
Permanent volumetric expansion Hydrostatic burst Macrostructure	(4.4.4) (4.4.10) (4.4.8)	1
Permanent volumetric expansion Gunfire Physical 1/ Internal finish 1/	(4.4.4) (4.4.11) (4.4.6) (4.4.7)	1

1/ The local effects of gunfire or the resulting shock may affect the results of these tests. If satisfactory results are not secured, an additional cylinder may be tested.

4.4 Test methods.-

4.4.1 Wall thickness check.- During manufacturing and prior to closing, each production reservoir shall be inspected and identified as being at least the minimum wall thickness specified on the approved drawing.

4.4.2 Examination of product.- The reservoir shall be carefully examined to determine conformance with the requirements of this specification for material, workmanship, and conformance with applicable drawings and markings.

4.4.3 Cycling.- The air reservoir shall be subjected to 18,000 hydrostatic cycles varying from 0 psig to the rated charging pressure for the type, followed by 2,000 hydrostatic pressure cycles varying from rated charging pressure to the maximum flight pressure corresponding to the type as defined in 1.2. The cycling shall be preceded by a 5-hour soak at the maximum temperature for which the reservoir is to be tested. The cycling may then be done hydrostatically at room temperature ambient conditions, (unless the steel used is temperature-sensitive) at approximately 6 cpm and the tolerance on maximum pressure shall be -0 +10 percent. The pressure gage shall be so located as to give the actual reservoir pressure. The setup employed and all necessary data shall be recorded. If the reservoir design consists of more than one part, utilizing threaded or similar joints and packings or gaskets, the cycling shall be preceded by a 72-hour soak period at the maximum temperature for which the reservoir is designed. Twenty-five percent of the cycles shall be performed at maximum temperature and 75 percent at 82 percent of the maximum temperature. No change of packings will be allowed. This test shall be completed without the reservoir proper showing any signs of leakage, deformation, or cracking.

4.4.4 Permanent volumetric expansion.- The permanent volumetric expansion shall be determined by subjecting the reservoir to the specified test pressure specified in 3.4.1 and maintaining the pressure for a period of not less than 30 seconds. The test shall be performed individually in an enclosed jacket, and the volumetric expansion of the reservoir shall be determined to 0.1 milliliter or to 1 percent accuracy and recorded in milliliters. The total expansion under pressure and the permanent expansion after the release of pressure shall be recorded. No pressure in excess of 90 percent of the test pressure shall have been applied prior to this test, except where such pressurization has been followed by complete and uniform heat treatment. The permanent volumetric expansion must not exceed 10 percent of the total volumetric expansion.

4.4.5 Leakage tests.-

4.4.5.1 Normal temperature leakage.- The air reservoir shall be subjected to a pneumatic leakage testing at the rated storage pressure.- The reservoir shall be immersed in water at a temperature between 70° and 95°F. The leakage testing period shall be 4 hours for Preproduction tests (4.2.3) and Sampling tests (4.3.2) with all ports and seams covered with a suitable bell jar for collection of bubbles. For Individual tests (4.3.1), the test period shall be 2 minutes beginning 30 seconds after the required pressure has been reached. There shall be no leakage during the 4-hour and the 2-minute test periods. Any leakage up to 3 cc/hr standard air shall be considered as "no leakage."

4.4.5.2 Extreme temperature leakage.- The threaded connection design shall be evaluated by performance of the following test. The successful testing of a given design, either on a sample reservoir or equivalent test fixture, shall constitute approval of the connection on all reservoirs using this design. Successful testing at one temperature range shall constitute approval of the connection for all lesser temperature ranges.

"No leakage" for these tests shall be considered as 3 cc/hr standard air for normal temperature test. At extreme temperatures, the class shall be multiplied by the following factors:

Class	Factor
A	2
B	3
C	5
D	10

4.4.5.2.1 Procedure.- The following testing shall be conducted:

(a) Subject the assembly to 2 hours at maximum pressure and temperature as applicable to its type and class. Check for leakage.
(b) Soak at -65°F and resulting pressure for a period of 2 hours. Check for leakage.
(c) Repeat (a).
(d) Reduce temperature to -65°F and soak for 2 hours. Check for leakage.
(e) Release pressure and soak for 2 hours at -65°F.
(f) Charge to equivalent pressure for -65°F and check for leakage.
(g) Repeat (a).
(h) Raise temperature to 70°F.
(i) Remove pressure, recharge to class pressure and check for leakage at 70°F.

NOTE: All soaking times given above are time of exposure subsequent to stabilization at test temperature.

4.4.6 Physical.- The reservoir shall be subjected to physical tests in accordance with Fed. Test Method Std. No. 151 to determine conformance to the approved manufacturer's or Government material specification. For spheres, specimens may be cut from flat representative sample plates of the same heat taken at random from the steel used to produce the sphere and which has received the same heat treatment as the spheres themselves.

4.4.7 Internal finish.- Sections from the reservoir shall be inspected in compliance with the applicable requirements of Specification MIL-C-5541 to determine that the interior surface has been completely and adequately covered with the resin coating, and that there is satisfactory bonding to the reservoir wall.

4.4.8 Macrostructure (deep etch).- Longitudinal sections from the air reservoir shall be removed and etched in an appropriate manner and for sufficient time to indicate freedom from defects, including abnormal segregation, pipes, cracks, seams, abnormal change in structure throughout the cross section, and flow lines.

4.4.9 Radiographic inspection of welds.- After heat treatment, all welded joints which are subjected to internal pressure and are greater than 25 percent of the container diameter must be subjected to radiographic inspection. Defects indicated shall not exceed Group I of NAVSHIPS Standard No. 250-692-2. All parts made of magnetizable materials shall be subjected to magnetic particle inspection in accordance with Specification MIL-I-6868.

4.4.10 Hydrostatic burst.- The reservoir shall not rupture when hydrostatically pressurized for 1 hour to 1.33 times the test pressure specified in 3.4.1 at a temperature of 65° to 95°F. The pressure shall not be permitted to fall below 95 percent of the required bursting pressure. Loss in pressure caused by expansion or to packing leakage shall be offset by restoring the pressure to the original value each time repressurization is necessary.

4.4.11 Gunfire.- The air reservoirs shall be subjected to gunfire under the conditions specified in the following paragraphs:

(a) Pressure: The reservoirs shall be charged with air to rated storage pressure (-0 +50) psig at the ambient air temperature of the gun range.

(b) Mounting: The air reservoirs may be supported but not constrained.

(c) Ammunition: The ammunition shall be .50 calibre M-2 armor piercing, with a nozzle velocity of 2,800 ±100 fps.

(d) Range: The range shall be 50 yards maximum.

(e) Position: The reservoirs to be gunfired shall be mounted with the longitudinal axis of the reservoir 45 degrees from normal away from the gun position. The projectile shall be tumbled and shall not be considered tumbled unless the projectile produces an "in" hole at least 1/2 inch wide by 1-1/2 inches long.

4.4.11.1 For Preproduction tests.- For Preproduction tests, two reservoirs shall be gunfired.

4.4.11.2 For Sampling tests (Acceptance).- For Sampling tests, 1 reservoir from each lot of 200 shall be gunfired in accordance with 4.4.12.4.

4.4.11.3 Gunfire requirements.- The air reservoirs, when struck by gunfire as specified above, shall remain in one piece and the greatest dimension of the opening (cut and tear) created by the projectile shall not exceed the dimensions of the hole (cut) created by the projectile by more than 3 inches in any one direction. "Cutting" shall be considered as the actual section of the reservoir cut by contact with the projectile and a "tear" shall be considered as an extension beyond the cut. Reservoirs of less than 2 inches in diameter cut in two by a tumbled projectile shall not be considered as having failed the test because of separation, provided the tear does not exceed 3 inches in length.

5. PREPARATION FOR DELIVERY

5.1 Application.- The requirements of section 5 apply only to direct purchases by or direct shipments to the Government.

5.2 Preservation and packaging.- Preservation and packaging shall be in accordance with Specification MIL-P-8564, except that the threads shall be coated with grease conforming to Specification MIL-G-4343 and the outlet provided with a shipping plug conforming to Specification MIL-C-5501.

5.3 Marking of shipments.- Interior packages and exterior shipping containers shall be marked in accordance with Standard MIL-STD-129. The identification shall be composed of the following information listed in the order shown:

Stock No. or other identification number as specified in the purchase document *
RESERVOIR, AIR, NONSHATTERABLE STEEL
Specification MIL-R-8573A
Manufacturer's Part No.
Name of contractor
Contract or Order No.
Date of manufacture (month and year)

* NOTE: The contractor shall enter the Federal Stock No. specified in the purchase document or as furnished by the procuring activity. When the Federal Stock No. is not provided or available from the procuring activity, leave space therefor and enter the Stock No. or other identification when provided by the procuring activity.

6. NOTES

6.1 Intended use.- Pneumatic reservoirs are intended for use in aircraft and missile pneumatic systems, which may include a compressor for recharging the system during flight, or may be of the ground-charge type.

6.1.1 The compressor-type system will usually include a spring-loaded pressure or thermal relief valve, which, upon increase in temperature, will serve to vent some of the content of the reservoir and thus avoid overpressure. For such systems, the type 15-20 or 30-40 reservoirs should generally be used, with class designation depending on the maximum in-flight temperature.

6.1.2 The ground-charge type system will usually not include a spring-loaded relief valve, therefor an increase in temperature will result in increased pressure. For such systems, the maximum in-flight temperature will determine the class used, and the resulting maximum temperature-induced pressure will determine the type used.

6.1.2.1 Pressure-temperature relationship for reservoirs without relief valves, and charged to rated (type) pressure at 70°F are listed in table IV.

6.2 Ordering data.- Procurement documents should specify the following:

(a) Title, number, and date of this specification.
(b) Type, class, and size of reservoir desired and whether of cylindrical or spherical shape. (See 1.2.)
(c) Whether overseas packing is required. (See section 5.)
(d) Where the Preproduction test samples should be sent, the activity responsible for testing, and instructions concerning the submittal of the test reports. (See 4.2.1.)

TABLE IV

Pressure-temperature values

Temperature °F	Reservoir air pressure	
	Type 15	Type 30
-65	1,010	1,885
-40	1,160	2,110
+32	1,320	2,700
+70	1,500	3,000
+100	1,600	3,485
+165	1,806	3,785
+200	1,920	4,085
+225	2,000	4,285
+350	2,080	4,485
+275	2,160	4,735
+300	2,240	4,935
+325	2,320	5,135
+350	2,400	5,335
+375	2,480	5,585
+400	2,560	5,735

Custodians:
Navy - Bureau of Aeronautics
Air Force

Preparing activity:
Navy - Bureau of Aeronautics

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ a. VENDOR ☐ b. USER ☐ c. MANUFACTURER ☐ d. OTHER *(Specify)*:
b. ADDRESS *(Street, City, State, ZIP Code)*	

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optional	b. WORK TELEPHONE NUMBER *(Include Area Code)* – Optional
c. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional	8. DATE OF SUBMISSION *(YYMMDD)*

DD FORM 82 MAR 1426 PREVIOUS EDITION IS OBSOLETE.

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