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INCH POUND

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DEPARTMENT OF DEFENSE STANDARD PRACTICE

PAINT SCHEMES AND EXTERIOR MARKINGS FOR US NAVY AND MARINE CORPS AIRCRAFT



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MIL-STD-2161A(AS)

FOREWORD

1. This military standard is approved for use by the Naval Air Systems Command and is available for use by all Departments and Agencies of the Department of Defense.
2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commanding Officer, Naval Air Warfare Center - Aircraft Division Lakehurst, Systems Requirements Department (Code SR3), Lakehurst, NJ 08733-5100, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
3. In furtherance of the Defense Standardization Program and to provide a single point of reference that gives clear and concise direction for the paint schemes and exterior markings for U.S. Navy and Marine Corps aircraft, this document has been prepared to be a readily available reference source to all concerned.
4. This standard contains integrated instructions for paint schemes and exterior marking for U.S. Navy and Marine Corps aircraft.
5. For additional guidance on the contents of this document, contact the Naval Air Systems Command, Attention: (AIR 5164), Washington, DC 20361-5110, the Naval Air Warfare Center - Aircraft Division, Lakehurst (at the above address), or the appropriate Naval Aviation Depot.

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1. SCOPE

1.1 General. This military standard establishes the requirements for paint schemes and markings to be applied to the exterior surfaces of U S. Navy and Marine Corps aircraft, including those procured for other government agencies and foreign countries under Navy contracts, in accordance with the directive of the Chief of Naval Operations. The requirements for paint scheme and markings include size, color, and approximate locations, where applicable, as shown in illustrations. This standard also provides a mechanism to obtain approval for deviation from these requirements.

1.2 Purpose. The purpose of this document is to standardize paint schemes and application of naval insignia and markings. In addition, this standard provides procedures to obtain approval for deviations from these requirements.

1.3 Foreign government aircraft. The requirements for the insignia and markings for foreign government aircraft procured under Navy contracts shall be as shown in Appendix A, except that the U.S. national insignia shall be replaced by that of the purchasing government, and naval insignia will not be applied. Foreign insignia, and flash insignia for vertical tail surfaces or rudders, and markings are shown in Appendix F. Insignia not shown will be furnished by the Naval Air Systems Command (AIR 5164) as required. Paint schemes for foreign government aircraft are as specified by that foreign government and, as such, are not contained in this document.

1.4 Military aircraft used in research projects. The provisions of this standard are not applicable to military aircraft research projects. The color and marking schemes of such aircraft is subject to case by case approval by the Naval Air Systems Command (AIR 5164).

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2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

- | | | |
|----------|---|---|
| L-S-300 | - | Sheeting and Tape, Reflective: Nonexposed Lens |
| TT-E-489 | - | Enamel, Alkyd, Gloss Low VOC Content |

MILITARY

- | | | |
|-------------|---|--|
| MIL-F-7179 | - | Finishes, Coatings, and Sealants for the Protection of Aerospace Weapons Systems |
| MIL-R-7705 | - | Radomes, General Specification for |
| MIL-F-18264 | - | Finishes, Organic, Weapons System Application and Control of |
| MIL-L-19537 | - | Lacquer, Acrylic-Nitrocellulose, Gloss (for Aircraft Use) |
| MIL-C-22750 | - | Coating, Epoxy, VOC Compliant |
| MIL-P-23377 | - | Primer Coatings, Epoxy, Chemical and Solvent Resistant |
| MIL-P-38477 | - | Plastic Material, Pressure-Sensitive Adhesive, for Aircraft Identification and Marking |
| MIL-M-43719 | - | Marking Materials and Markers, Adhesive, Elastomeric, Pigmented, General Specification for |
| MIL-C-83286 | - | Coating Urethane, Aliphatic, Isocyanate, for Aerospace Applications |

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- MIL-C-83413/9 - Connectors and Assemblies, Electrical, Aircraft Grounding: Decalomania for Grounding Receptacle Identification, Decal
- MIL-C-85285 - Coating, Polyurethane, High-Solids
- MIL-P-85582 - Primer Coatings: Epoxy, Waterborne

STANDARDS

FEDERAL

- FED-STD-595 - Colors Used in Government Procurement

MILITARY

- MIL-STD-100 - Engineering Drawing Practices
- MIL-STD-130 - Identification Marking of U.S. Military Property
- MIL-STD-970 - Standards and Specifications, Order of Preference for the Selection of
- MIL-STD-1247 - Markings, Functions and Hazard Designations of Hose, Pipe, and Tube Lines for Aircraft, Missile and Space Systems
- MS29525 - Cap, Pressure Fuel Servicing, Nominal 2-1/2 Inch Diameter Flush Type
- MS90327 - Aircraft Markings, Access Numbering System

AIR FORCE - NAVY AERONAUTICAL

- AN 815 - Union - Flared Tube
- AN 6207 - Valve - 1500 PSI Hydraulic Check

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government publications. The following other Government publications form a part of this standard to the extent specified herein. Unless otherwise specified, the issue shall be those in effect on the date of the solicitation.

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PUBLICATIONS

NORTH ATLANTIC TREATY ORGANIZATION (NATO)

STANAG 3104 - Identification of Aircraft and
Missile Pipe Lines and Electrical
Conduits

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for related associated detail specifications, specification sheets or MS standards), the text of this document shall take precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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3. DEFINITIONS

3.1 Tactical paint scheme. A color scheme to reduce visual detection comprised of shades of flat gray with exterior markings in a contrasting shade of gray.

3.2 Land camouflage paint scheme. A color scheme which blends into land backgrounds which is comprised of flat green, black and gray colors with exterior markings applied in a contrasting color.

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4. GENERAL REQUIREMENTS

4.1 Paint schemes and insignia markings. Contractors and all U.S. Navy and Marine Corps activities (including unit level maintenance activities) shall apply all insignia and markings (including identification plates for the aircraft and major assemblies, and warning and instruction markings) in accordance with this standard. The following markings are normally applied by unit level activities, but may be applied by Naval Aviation Depots and contractors, when specified by the Program Managers or Type Commanders.

- Unit identifier
- Unit aircraft numbers
- Station or unit name
- Naval aviation insignia
- Radio call markings

4.2 Material.

4.2.1 Finishes. Unless otherwise specified by the Program Manager or Type Commander of a specific aircraft, all U.S. Navy and Marine Corp aircraft shall be finished in accordance with MIL-F-7179. The standard primer coating shall be MIL-P-23377 or MIL-P-85582. Type II of both MIL-P-23377 and MIL-P-85582 is for use when low infrared (IR) reflective pigments are required. The standard topcoat shall be MIL-C-83286 or MIL-C-85285.

4.2.2 Compatibility. The coating material for insignias and markings shall be the same material or material compatible with the finish on the surface to be marked.

4.2.3 Applicable limitation. Paint or other markings shall not be applied to aircraft or weapon systems when such application interferes with launching, operation, thermal reactance, reflection, or aerodynamics.

4.2.4 Metal marking instruments. Sharp-pointed metal marking instruments shall not be used in the layout of insignia or other markings on aircraft or weapon systems.

4.2.5 External finish identification. On all aircraft receiving paint finish coatings on the exterior surfaces (ie., wing, or section, if painted in sections, fuselage, fixed and movable control surfaces, land gear, or engine cowlings), their shall be an identification of the finish system consisting of a circular patch (2 1/2 to 4 inch (in.)) (63.5 to 102 millimeters (mm) in diameter). The identification patch shall be located on the starboard side of the fuselage, under or over the horizontal stabilizer, and contain the following information:

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- a. Contractor or overhaul activity and location.
- b. Month, day and year of completion of paint application.
- c. Identification by military specification number of all paint coating applied to the exterior of the aircraft.

Lettering shall be a minimum of 1/2 inch (12.7mm) in height. Stencils or approved decals may be used for this identification. Item c, above, may be stenciled on immediately below or alongside a circular patch containing only items a and b. Appendix B, figure B-10, is a sample of this identification.

4.2.5.1 Record of finish application. Complete information concerning the coating used, identified by the applicable military specification, the preparation of the area to be coated, and the touch-up or replacement procedure for the material used shall be included in the applicable aircraft structural repair instruction(s). A note shall be stenciled on the interior of the nose wheel well door, indicating the last major paint finish (see 4.2.5). For those aircraft that have fixed landing gear, the marking shall be applied on the fuselage under the right horizontal stabilizer for fixed wing aircraft and on the tail boom for helicopters.

Note: For paint materials not included in a military specification, identification of material and name of manufacturer shall be listed.

4.3 Drawings. On all production contracts, the contractor shall submit for approval to Commander, Naval Air Systems Command (AIR 5164), via the contracting officer, three-dimensional drawings, and any revisions thereof, showing paint schemes and the size and location of the insignia and markings (except those markings specified in paragraph 4.1) prescribed in this standard. A copy shall be sent to Commanding Officer, Naval Air Warfare Center Aircraft Division Lakehurst, Systems Requirement Department (Code SR3), Lakehurst, New Jersey, 08733-5100, for information. Naval Aviation Depots shall submit for approval to Commander, Naval Air Systems Command (AIR 5164), copies of all paint scheme and marking drawings and revisions thereto.

4.4 Service requirements. Naval Aviation Activities, including Naval Aviation Depots and unit level maintenance activities, shall apply other markings, which are not required to be applied by the contractor. In addition, markings duplicating those specified herein, may be applied to other areas of the aircraft at the discretion of cognizant commands as operational aids, provided such markings are not prohibited by tactical paint scheme requirements or other considerations, and do not conflict with the markings prescribed herein in the area selected.

4.5 Foreign government aircraft. The exterior colors and markings of aircraft procured for foreign governments under naval contracts shall be as specified by that foreign government.

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4.6 Color and style of marking materials and paint schemes. The color and gloss of materials shall be as specified in 4.6.1. For nontactical paint scheme aircraft, the marking materials and decalcomanias used shall be glossy, unless otherwise specified by the Program Manager or Type Commander. For aircraft with tactical paint schemes or land camouflage schemes, the marking materials and decalcomanias used shall be nonspecular in areas coated with nonspecular finish.

4.6.1 Color standard. Only colors listed in FED-STD-595 shall be used on U.S. Navy and Marine Corps aircraft. The list below includes, but is not limited to, colors used on naval weapons systems.

TABLE I. Color standard.

| Color | Gloss | Lusterless (camouflage) |
|--------|----------------|--|
| White | 17925 | 37925 |
| Black | 17038 | 37038 |
| Blue | 15044 | 35044 35237 |
| Red | 11136 | 31136 |
| Orange | 12197 | 28915 |
| Yellow | 13538 | 33538 |
| Green | 14097 | 34095 34097 34064 |
| Gray | 16081 16440 | 36081 36440 36320 36375 36495 36099 |

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5. DETAILED REQUIREMENTS

5.1 Aircraft paint schemes. Paint schemes for utility, cargo, trainer, search and rescue (SAR), fighter and attack aircraft shall be in accordance with Appendix C. Paint schemes for special purpose aircraft, including the presidential helicopter shall be in accordance with Appendix D; tactical paint schemes shall be in accordance with Appendix E.

5.1.1 High visibility color configurations. Aircraft in the training command (excluding reserve training), target control, SAR (excluding helicopters in combat SAR configuration) shall have a high visibility paint scheme in accordance with Appendix C. Additionally, target aircraft, drones, and test and evaluation aircraft shall have a high visibility paint scheme. Transparent areas, antiglare areas, hinges, openings, screens, and any part of the exhaust trail shall not be topcoated with a high visibility coating. Request for utilization of high visibility color configuration on other types of aircraft shall be submitted for approval to the Naval Air Systems Command (AIR 5164) via the Program Manager or Type Commander.

5.1.1.1 Application and color patterns. General principles applicable to the placement of high visibility paint schemes are as follows:

- a. Wing tip markings are placed on the top and bottom of the wings, extending inboard on the wings about one-third of the length of each wing, but extending inboard no less than 4 feet or more than 8 feet. Unless specific dimensions are given, the strip shall terminate at a natural break in the wing contour. Horizontal control surfaces are not to be coated with high visibility paint.
- b. The entire vertical tail section except control surfaces shall be painted to the zone where the vertical stabilizer flares into the fuselage.
- c. All aircraft, except transports, shall be painted on the bottom and sides on the front portion of the fuselage starting from the radome, if any, and extending aft and terminating at a line perpendicular to the forward edge of the front canopy. For transports, the bottom and the sides on the front portion of the fuselage shall be painted, starting from aft of the radome and extending aft 12 feet, or aft to a line perpendicular to the most forward portion of the engines, whichever distance is less. The customary insignia, markings, solar reflecting finish, antiglare, walkway materials, rain erosion resistant finish, deicer boots, exhaust trail finish, etc., shall retain the original color and these areas shall not be overpainted.

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- d. Wing tip tanks on aircraft finished with the high visibility paint scheme shall be painted international orange, FED-STD-595, color number 12197, except when these tanks are part of the areas where antiglare or polishing is required.
- e. High visibility paint schemes shall not be applied to any transparent or translucent plastic, metal frames or fittings on windows nor to painted nose sections having an area of less than 2ft².

5.1.2 Arctic paint scheme. The high visibility paint scheme may be advantageous for assisting in spotting downed aircraft against a snow background. Use of this paint scheme, however, shall be in accordance with 5.1.1. Fuselage markings, such as branch of service, etc., shall not be overcoated or overlapped with the high visibility paint scheme. The national insignia on the fuselage and the wings shall not be overcoated or overlapped by the high visibility paint scheme. The national insignia, however, may be applied over the high visibility paint scheme and shall not be altered in its size or location. The remainder of the aircraft shall retain the paint scheme prescribed for the aircraft type, with the exception that upper surfaces of the fuselage shall be painted gray, FED-STD-595, color number 16081, in place of insignia white, FED-STD-595, color number 17925. On helicopters, international orange, FED-STD-595, color number 12197, shall be applied overall, with the exception of areas requiring extensive marking. These areas shall retain the basic aircraft paint scheme.

5.1.3 Tactical paint schemes. Tactical paint schemes are used for deception, reduction of initial detection range, confusion of the observers as to the identity, extent, number of aircraft, and/or reduce the probability of visual or photographic detection (in flight or on the ground). Tactical paint scheme patterns are based on optical principles that dictate certain nonreflective colors, color configurations, and color proportions. Arbitrary application of markings and color schemes, other than those prescribed in this standard, are prohibited. Tactical paint schemes are comprised of either two or three shades of gray or blue (FED-STD-595, color numbers 35237, 36320, 36375, or 36495).

5.1.3.1 Tactical paint scheme materials. The standard topcoat for the tactical paint scheme and common insignia marking is polyurethane (lusterless) coating conforming to MIL-C-83286 or MIL-C-85285. Decals may be used in lieu of paint for insignia and markings provided that they are made of a non-reflective decal material meeting the gloss and color requirements of the coating system. Decals used to apply large markings (such as the national insignia) are not permitted. The use of MIL-C-83286 or MIL-C-85285 is not required for applying aircraft unit peculiar markings.

5.1.3.2 Tactical paint scheme patterns. Approved tactical paint scheme patterns shall be in accordance with Appendix E.

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5.1.3.2.1 Aircraft surfaces. The tactical paint scheme patterns shall be in accordance with the specific aircraft illustrations of Appendix E. These illustrations, however, are intended only as guides. Minor variations in pattern are acceptable. Care shall be taken that proportion and balance of the colors are approximately as shown in the illustrations. Boundaries between colors shall be irregular as illustrated and fade into each other with no sharp lines of demarcation. A 6 inch blend line shall be used at all color boundaries.

5.1.3.2.2 Bottom surfaces. Most tactical paint schemes use a single color on the underside of the fuselage, wings, horizontal stabilizer, and control surfaces. The color on the underside of the aircraft shall be brought up the sides of the fuselage to give the approximate side view appearance in accordance with the application illustration of Appendix E. The transition from the underside color to the upper surface pattern shall be an irregular, indistinct, countershaded, blend area. A sharp line and any regular repeating pattern (such as a scallop) will raise the risk of detection and compromise the overall effect. On low-wing aircraft, the color on the bottom of the fuselage shall be brought into the wing root to meet the color under the wing.

5.1.4 Paint scheme for drones. Drones shall have the upper surfaces (except fuselage), vertical stabilizer, and rudder, painted insignia white, FED-STD-595, color number 17925. The entire fuselage shall be painted international orange, FED-STD-595, color number 12197. The bottom of all aerodynamic surfaces shall be painted insignia red, FED-STD-595, color number 11136. See Appendix C, figure C-50 for an example of the drone paint scheme.

5.1.5 Paint scheme for target aircraft. All exterior surfaces of target aircraft shall be painted fluorescent yellow-orange, FED-STD-595, color number 28915, with the exception of the QF-4 and QF-86, which shall have only the wing tips and vertical tail painted fluorescent yellow-orange, FED-STD-595, color number 28915.

5.1.6 Solar heat reflection. With the exception of where tactical paint schemes are employed, the upper surfaces of the fuselage of all land-based cargo, transport, and utility planes shall be painted insignia white, FED-STD-595, color number 17925. The white color shall begin at the top, forward edge of the pilot's enclosure, extending aft to include the vertical stabilizer and elevator, and extending down each side of the fuselage to the bottom of the windows, in accordance with Appendix C, figures C-8, C-11, C-12, D-1, D-7, D-8, D-9. Aircraft used in a transport or staff capacity may employ stripes below the white area and a chevron on the nacelles for decorative purposes.

5.1.7 Antiglare. On all pilot-operated aircraft, nonspecular (lusterless) paint shall be employed on all airframe surfaces which may produce glare in the pilot's or copilot's eyes, or induce eye strain due to excessive brightness. These areas shall be painted nonspecular (lusterless) black, FED-STD-595, color number 37038, with the exception of aircraft painted with tactical paint schemes. Aircraft painted with tactical paint

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schemes shall use nonspecular gray, FED-STD-595, color number 36320, or blue, FED-STD-595 color number 35237.

5.1.8 Glass fiber reinforced plastic assemblies. The color of assemblies fabricated of glass-fiber reinforced plastic, (such as radomes, radio antenna housings, noses, fairings, wing tips, and intake ducts), for which rain-erosion-protective finishes are required, shall match the color of adjacent surfaces, with the exception of the frontal areas. These frontal areas shall be in the natural color of the rain erosion protective finish and shall not be overcoated for color matching purposes. The extent and location of the frontal areas thus finished shall be in accordance with MIL-R-7705. For aircraft with the tactical paint scheme where plastic assemblies require rain erosion coatings, the rain erosion coating shall be applied in the same color as adjacent areas.

5.1.9 Landing gear.

5.1.9.1 Fixed landing gear. Fixed landing gear shall be painted to match the prescribed color scheme of the particular aircraft.

5.1.9.2 Retractable landing gear. Retractable landing gear, wheel well areas, wheel assemblies, inner surfaces of landing gear well covers, hydroskis (including the strut and trunnion doors) and nose gear doors (auxiliary, including the strut door), etc., shall be colored insignia white, FED-STD-595, color number 17925, except for Marine Corps helicopters, where the color shall be field green, FED-STD-595, color number 34095, or black, FED-STD-595 color number 37038. For tactical paint schemes, the color shall be either black, FED-STD-595, color number 37038 or the same gray used on the aircraft. The edges of the landing gear door shall be painted insignia red, FED-STD-595, color number 11136, without overcoating the white. The outer surfaces of the well covers shall be painted to match the prescribed color scheme of the aircraft.

5.1.10 Speed brakes, wing flaps, etc. Interior surfaces of speed brakes and wing flaps shall be colored insignia red, FED-STD-595, color number 11136. Exterior surfaces of speed brakes and wing flaps shall be colored to match the prescribed color scheme of the aircraft. Wing flap areas which are covered by the wing when they are in the retracted position shall be colored insignia red, FED-STD-595, color number 11136. Conformance to these requirements will be determined on a case-by-case basis by the Program Manager in conjunction with the Naval Air Systems Command (AIR 5164). In case of hostility, fleet commanders have the authority to overpaint these red areas for tactical advantage.

5.1.11 Wing leading edge slats. The interior (lower) surface and inboard end of wing leading edge slats, and the wing area covered by the slat, when in a fully retracted position, shall be colored insignia red, FED-STD-595, color number 11136, with the exceptions of new aircraft to be delivered with a tactical paint scheme. On these new aircraft, the interior surface covering color shall be determined by the Program Manager in

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conjunction with the Naval Air Systems Command (AIR 5164). Exterior surfaces of wing leading edge slats shall be colored to match the required color scheme of the aircraft (see the applicable figure in Appendices C, D, or E).

5.1.12 Walkways and steps. Where anti-skid material is applied, the color shall be as follows: for conventionally painted aircraft, the color shall be gray, FED-STD-595, color number 36231, or black, FED-STD-595, color number 37038. For aircraft with land camouflage schemes, the color shall be black, FED-STD-595, color number 37038, or field green, FED-STD-595, color number 34095. For aircraft with tactical paint schemes, the color shall match the color of adjacent areas.

5.1.13 External stores (including ordnance). External fuel tanks, pylons, rocket launchers, missiles, pods, and other mounted equipment shall be colored to conform with the aircraft paint scheme. For tactical paint schemes, gray, FED-STD-595, color number 36375, shall be used, with the exception of external stores peculiar to the A-4 and SH-60 aircraft. For these items, the color shall be gray, FED-STD-595, color number 36495. Land camouflage paint schemes (excluding AV-8 aircraft) shall be green, FED-STD-595, color number 34095, and all other paint schemes will use FED-STD-595, color number 17925. External stores peculiar to the AV-8 shall be painted gray, FED-STD-595, color number 36440. Stores used on multiple aircraft with different color schemes will be painted to match the primary user. If temperature problems occur, the use of a lighter shade of gray is acceptable upon approval of the Naval Air Systems Command (AIR 5164). Safety color coded markings shall be implemented as specified in other directives.

5.1.14 Radomes, antennae, and antennae covers. Blade type antennae, antenna mast, antennae covers and radomes shall be painted to match the color of adjacent areas except as noted in paragraph 5.1.8.

5.1.15 Helicopter blades, hubs, transmissions and rotor mechanisms.

5.1.15.1 Rotor blades. Main and tail rotor blades shall be painted black, FED-STD-595, color number 37038, except when the tactical paint scheme is utilized. When the tactical paint scheme is utilized, the color of the rotor blades shall be black, FED-STD-595, color number 37038 or gray. The gray color will depend on the aircraft model. Marking of the main and tail rotor blades shall be in accordance with 5.2.2.10.3 and 5.2.2.10.3.5.

5.1.15.2 Hubs of helicopters. Helicopter hubs shall be painted black, FED-STD-595, color number 37038, except aircraft painted with the tactical paint scheme. For aircraft painted with tactical paint scheme, the color of the hubs shall match the tactical paint scheme. Overpainting of installed hubs shall be accomplished in accordance with MIL-F-18264.

5.1.15.3 Transmission and rotor mechanisms of helicopters. Helicopter transmissions and rotor mechanisms, other than blades and hubs, shall be painted black, FED-STD-595, color number 37038, with the exception of aircraft painted with a tactical paint scheme. For aircraft with a tactical paint

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scheme, the color of the transmission and rotomechanisms shall match the tactical paint scheme. Overpainting of the items shall be accomplished in accordance with MIL-F-18264.

Note: When the same model/series aircraft is used in both the Marine Corps and the Navy and each service requires a different paint scheme, the assemblies (including blades) shall be painted black, FED-STD-595, color number 37038, or gray on all the aircraft. The gray color number will depend on the aircraft model. The decision on which color to use will be based on which service has the most aircraft of this model/series.

5.1.16 Jet air intake ducts. The color of the adjacent aircraft exterior shall be carried around the lip of the duct and into the duct approximately 6 inches (except for the chevrons). All remaining interior surfaces of the duct shall be painted insignia white, FED-STD-595, color number 17925.

5.1.17 Propeller assemblies.

5.1.17.1 Blades. Blades shall be painted black, FED-STD-595, color number 37038, with the exception of aircraft with a tactical paint scheme. For aircraft with a tactical paint scheme the color of the blades shall match the tactical paint scheme. Markings shall be as specified in 5.2.2.10.3 and 5.2.2.10.3.5.

5.1.17.2 Spinners. Spinners shall be painted black, FED-STD-595, color number 37038, with the exception of aircraft with the tactical paint scheme. For aircraft with a tactical paint scheme, the color of the spinners shall match the tactical paint scheme.

5.1.17.3 Hubs and domes. Hubs and domes shall be painted black, FED-STD-595, color number 37038, with the exception of aircraft with tactical paint schemes. For aircraft with a tactical paint scheme, the color of hubs and domes shall match the tactical paint scheme.

5.1.18 Engine cowling interiors. The interior of engine cowlings shall be painted gray, FED-STD-595, color number 16440.

5.2 Aircraft exterior markings. Certain provisions of this military standard are subject to international standardization agreements and must not be changed, except under emergency conditions, without prior coordination with North Atlantic Treaty Organization (NATO) (STANAG 3104). Unless otherwise specified, the height of all characters shall be chosen from the following sizes: 12, 16, 20, 24, 30 or 36 inches.

5.2.1 Identification marking. Identification markings for all U.S. Navy and Marine Corps aircraft, with the exceptions of 5.2.1.1.1 through 5.2.1.1.7, shall be in accordance with 5.2.2 for mandatory markings, 5.2.6 for optional markings, and herein. Guidance is provided in 5.2.3 for markings applied to

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aircraft with the tactical and land camouflage paint schemes.

5.2.1.1 Letter and numeral (character) construction. All letters and numerals (characters) shall be constructed in a modified vertical block form (see Appendix A, figure A-4). All characters shall be uniform in shape and size. The width of the characters, excluding the dash (-) and the letters G, A, M and W, shall be 75 percent of the height of the character. The dash shall be constructed in accordance with Appendix A, figure A-4. The width of letters A and M shall be 92 percent of its height. The width of the letter W shall be 108 percent of its height. The width of the letter G, with the exception of its overhang on its right side, shall be 75 percent of its height. All overhangs on letters C, G, S and numerals 2, 3, 4, and 9 shall be 1/12 of the character's height. The height of characters shall be a minimum of one inch. In areas where this is not possible due to space limitation, the height of the characters may be reduced to 1/2 inch. Decalcomania conforming to MIL-P-38477 or MIL-M-43719 may be used for application of markings. Only small maintenance marking may be applied by decal to supersonic aircraft and in areas where it may become dislodged and cause foreign object damage (FOD). Decals used shall perform as well or better than the standard topcoat in appearance and durability. Decals shall not be applied where they may be deleterious to the surface to which they are applied. Decals shall not be applied over brazier head rivets.

5.2.1.1.1 Helicopters. The typical identification markings for helicopters shall be in accordance with applicable figures of Appendix C.

5.2.1.1.2 Research aircraft. The markings of military aircraft used for research projects are subject to Naval Air Systems Command (AIR 5164) approval in each case.

5.2.1.1.3 Experimental aircraft. Experimental aircraft shall be marked as specified in Appendix C, insofar as practicable. In addition, the marking "U.S. NAVY" shall be applied on the upper surface of the right wing and on the bottom surface of the left wing, in a similar location to the national insignia on the opposite wing. The height of the letters shall be the largest possible size that can be accommodated on the aircraft, selected from 5.2.

5.2.1.1.4 Target aircraft and guided missiles. Target aircraft and SS-type guided missiles with wings (excluding stabilizing fins) shall have the national insignia applied, in accordance with Appendix A, and shall be marked as specified in Appendix C insofar as is practicable. The size of the letters and numerals shall be as specified in Appendix C. If there are space limitations, the size may be reduced proportionately. For all other types of guided missiles, only the serial number and model designation, if applicable, shall be applied.

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5.2.1.1.5 Target aircraft. Target aircraft shall have the word "Target" applied along the port side of the forward and aft sections of the fuselage, the starboard side of the midsection of the fuselage, the top side of each wing assembly, inboard from the wing tips, the top side of each horizontal tail surface (as applicable), inboard from the tips, and the starboard side of each vertical tail surface.

5.2.1.1.6 Test and evaluation (T&E) aircraft. Aircraft assigned to T&E activities shall comply with the provisions of this standard to the extent that is practical. Deviations to meet specific test objectives or safety of flight require Naval Air Systems Command (AIR 5164) approval.

5.2.2 Mandatory markings for U.S. Navy and Marine Corps aircraft. The markings and insignia contained in this section will be applied to all U.S. Navy and Marine Corps aircraft, as specified herein. Paragraph 5.2.3 contains special instructions concerning markings and insignia for tactical and land camouflage paint schemes. Appendix A reflects specific instructions, dimensions, etc., for the proper application of these markings and insignia. Table II lists the standard markings and insignia for all aircraft.

5.2.2.1 Changes. Dimensioned drawings, showing the size and location of the insignia and markings applied to various types of aircraft, are prepared in accordance with applicable Naval Air Systems Command (AIR 5164) instructions. Any changes proposed to these insignia and markings must be coordinated with the Naval Aviation Depot (NADep) that prepared the service drawing and the Naval Air Warfare Center Aircraft Division, Systems Requirements Department (Code SR3) Lakehurst, NJ, 08733-5100. Approval must also be from the Naval Air Systems Command (AIR 5164). The views shown in the Appendices are conventionalized. Minor changes may be necessary due to space limitations or configuration to adapt the markings to the specific model of aircraft, including those shown herein. Any changes made shall not preclude the quick identification and recognition of the aircraft.

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TABLE II. Mandatory markings for U.S. Navy and Marine Corps aircraft.

| Item | General location | |
|----------------------------------|---------------------|---------------------------------|
| | Fixed wing | Rotary wing |
| National star | Wing and fuselage | Fuselage |
| Branch of service | Wing and fuselage | Fuselage |
| Model designation | Fuselage | Fuselage |
| Airplane serial number (BUNO) | Fuselage | Fuselage |
| Unit aircraft number | Fuselage | Fuselage |
| Squadron designation | Fuselage | Fuselage |
| Unit identifier | Vertical stabilizer | Aft pylon or upper tail boom |
| Station or unit name | Vertical stabilizer | As specified |
| Call numbers | Vertical stabilizer | Aft pylon or upper tail boom |
| Warning markings | As specified | As specified |

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5.2.2.2 Application. All identifying information, except the national insignia, on the under surface of the wing shall be so applied so that it can be read from left to right when standing in front of, and facing, the aircraft. On swept-back and variable sweep wings, all letters and numerals shall be applied symmetrically along the 50 percent constant chord line, as is required for application of the national insignia. Insofar as is practicable, all letters and numerals shall be positioned on the fuselage and vertical tail surface so as to be perpendicular to the fuselage reference line.

5.2.2.3 National star insignia. The national star insignia will be applied to all aircraft as delineated in Appendix A, figure A-1.

5.2.2.4 Branch of service marking. The branch of service marking shall be applied to all aircraft. The style, positions and size of this marking on the aircraft shall be in accordance with 5.2.2.4.1 and 5.2.2.4.2.

5.2.2.4.1 Branch of service marking - style. On aircraft operated by the U.S. Navy and Naval Reserve, the branch of service marking shall consist of "NAVY" or, on cargo/transport aircraft, "UNITED STATES NAVY", as specified in Appendices C, D, and E. On aircraft operated by the U.S. Marine Corps and Marine Corps Air Reserve, the branch of service marking shall consist of the word "MARINES". On aircraft operated jointly by the U.S. Navy and Marine Corps, and/or their Reserve components, the branch of service marking shall consist of "NAVY".

5.2.2.4.2 Branch of service marking - size and location. The size of the lettering of the branch of service marking shall be as large as possible on the aircraft. The height of the letters shall be selected from 5.2. Special sizing instructions for tactical and camouflage paint schemes are contained in 5.2.3, and Appendix A, figure A-15, bottom entry provides an example of the branch of service marking. The location of the branch of service marking shall be both sides of the fuselage, just forward of the empennage (aircraft tail).

5.2.2.5 Model designation and bureau airplane serial number (BUNO). BUNO shall be applied just below the model designation, in accordance with Appendices C, D, and E.

5.2.2.5.1 Model designation and BUNO - location. BUNO shall be centrally located on both sides of the fuselage under the horizontal stabilizer in the position shown in Appendices C, D, and E. For transport (VR) aircraft having twin booms, these markings shall be centrally located on the outboard side of each main boom, between the insignia and the horizontal stabilizer. The BUNO shall be symmetrically located 2 inches below the model designation.

5.2.2.5.2 Size. Model designation numerals and letters shall be 2 inches high and BUNO shall be 4 inches high.

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5.2.2.6 Unit aircraft number. The unit aircraft number shall consist of numbers only, to designate the number of the airplane within the unit. Where CNO directives specify, the use of the last three digits of the BUNO shall comprise the unit aircraft number. CNO directives permit tactical aircraft to be marked with the last four digits of the BUNO to differentiate it from another aircraft having the same last three digits.

5.2.2.6.1 Location. The unit aircraft number shall be located on the bow of the aircraft on both sides of the fuselage.

5.2.2.6.2 Size. Unit aircraft numbers shall be a minimum of 12 inches high and shall be the largest possible of the sizes specified in 5.2, not to exceed 50 percent of the height of the projection of the fuselage side at the point of application.

5.2.2.7 Unit identifier. The unit identifier shall consist of letters only, to designate the squadron or group of the airplane (letters are assigned in accordance with CNO directives).

5.2.2.7.1 Location. The unit identifier shall be applied to both sides of the vertical tail surfaces above the horizontal stabilizer, centered on the vertical surfaces. On multiple tail surfaces the marking shall appear on the outboard sides only. An effort shall be made to avoid applying the unit identifier on rudders finished in white, FED-STD-595, color number 17925; however, the specified height of the letters must be maintained.

5.2.2.7.2 Size. Letters shall be a minimum of 10 inches high and shall be the largest possible specified in 5.2. In case of double letters, the width of each letter may be reduced to accommodate the letters to the shape of the tail surface, retaining maximum clarity, visibility, and symmetry. The size of letters for tactical and land camouflage paint schemes is as specified in 5.2.3.

5.2.2.8 Station or unit name. On shore-based aircraft, where no unit identifiers are assigned, this marking shall consist of the name of the air station, e.g., Alameda, Corpus Christi, etc., or abbreviation of the unit's title, e.g., AIRON-81, employed in lieu of the unit identifier. If the station name is marked on the vertical tail surfaces, it shall not be applied on the fuselage.

5.2.2.8.1 Location. The station or unit name shall be applied on the vertical tail surfaces in the locations specified in Appendix C for the unit identifier.

5.2.2.8.2 Size. The size of the letters shall be such that the station or unit name can be accommodated on the vertical tail surfaces in the specified location. If necessary due to space limitations, the station or unit name may be divided to occupy two lines. If two lines are used for station names, the dash shall be omitted and the letters on the second line shall be centered below those on the top line.

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5.2.2.9 Call numbers. Each aircraft, except primary trainers not having radio equipment, shall have a call number painted on each side of the vertical stabilizer surface or on each outboard side, as applicable. The numbers or designators shall be discernible from a distance of 50 yards. The number height should be no less than 12 inches; however, if space does not permit a height of 12 inches, the height shall be as large as possible. The call numbers shall consist of at least the last four numbers of the bureau number. Arabic numbers shall be used when applying call numbers.

5.2.2.9.1 Location. The call numbers shall be applied to both sides of the vertical stabilizer and rudder assembly, or to each outboard side, as applicable. On rotary wing aircraft, or if space limitations do not permit on other aircraft, these numbers shall be applied aft along the fuselage, or aft along each side of the tail boom, as applicable.

5.2.2.9.2 Size. The height of the numbers shall be the largest size possible of the sizes listed in 5.2. Under no circumstances shall the height of the characters be less than 12 inches.

5.2.2.10 Mandatory safety markings. Mandatory standard safety markings are as follows. For tactical and land camouflage paint schemes, refer to 5.2.3 for special instructions.

5.2.2.10.1 Jet engine intake warning chevrons and signs. The areas of the leading edge of the wing, the fuselage, or the nacelle or pod, or combination thereof, which are adjacent to the sides of a jet engine intake shall be marked with warning chevrons and signs, as specified in the following subparagraphs.

5.2.2.10.1.1 Application. The chevrons shall be applied such that the ends of their outer sides contact the edge of the intake at points which are three-quarters of the diameter, or three-quarters of the short axis, of the intake port. The outer points of the chevrons shall be located at a distance of 4 feet outboard along the leading edge of the wing, or forward or aft, if applied on the fuselage, or aft, if applied on the nacelle or pod, from the center of the intake. The chevrons shall be 3 inches in width and shall be marked in insignia red, FED-STD-595, color number 11136, with the exception of tactical paint scheme aircraft. Superimposed on one side of a chevron shall be the word "Jet" and on the other side the word "Intake" in insignia white, FED-STD-595, color number 17925 (see Appendix A, figure A-8). The letters shall be 2 inches in height. The word "Danger" (with an arrow directed at the point of the chevron, see Appendix A, figure A-8) shall be applied along the leading edge of the wing, or on the fuselage, nacelle, or pod, as applicable. The letters and arrows shall be insignia red, FED-STD-595, color number 11136, and shall be superimposed on a stripe of insignia white, FED-STD-595, color number 17925, 3 inches in width. The height of the letters and length of the arrows shall be 2 inches. Aircraft painted with tactical or land camouflage paint schemes shall comply with the color requirements of 5.2.3.

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5.2.2.10.1.2 Variations. The dimensions specified above shall be adhered to in general. They may be varied, and the word "Danger" (with the arrows pointing to the edge of the intake) may be applied within the V of the chevrons if there are space limitations or other considerations. The general outline and appearance of the warning chevrons shall conform to Appendix A, figure A-8.

5.2.2.10.2 Jet engine blast warning. The areas of the fuselage, nacelle or pod, or combination thereof, which are adjacent to the sides of a jet engine exhaust shall be marked with the words "Beware of blast" as shown in Appendix A, figure A-8.

5.2.2.10.3 Propeller, rotor, and turbine safety markings. Application of safety markings to statically balanced propellers and rotor blades shall be limited to new blades or to overhauled blades, in accordance with 5.2.2.10.3.1.3. Lusterless (camouflage) colors only shall be used for propellers and rotor blade identification danger zone marking, or preservation and antiglare purposes, unless otherwise noted herein. Before topcoat and markings are applied, all surfaces shall be thoroughly cleaned and prepared with primer coating. Letters and numerals shall be 1 inch in height. If there are space limitations, letters and numerals may be reduced in height to 1/2 inch. For tactical and land camouflage paint schemes, the use of identification stripes on rotor blades is dependent upon whether they can be overpainted by field units. If the provisions of paragraph 5.2.2.10.3.1.3 can be met, identification stripes shall be used. On all other rotor blades, identification stripes shall be eliminated.

5.2.2.10.3.1 Main rotor blades.

5.2.2.10.3.1.1 Matched sets. For matched sets of main rotor blades, individual identification stripe shall be painted on both side of the blade from the tip to 2 inches from the tip. This stripe shall be insignia white, FED-STD-595, color number 17925, for one blade, insignia red, FED-STD-595, color number 11136, for the second blade, and light green, FED-STD-595, color number 14187, for the third blade. In addition, orange-yellow, FED-STD-595, color number 33538, warning stripes shall be applied inboard of the 2 inch stripe on both of the blades, and shall extend from the line 2 inches from the tip to a line 8 inches from the tip. FOR TACTICAL AND LAND CAMOUFLAGE PAINT SCHEMES, 5.2.2.10.3 SHALL APPLY.

5.2.2.10.3.1.2 Unmatched sets. For unmatched sets of main rotor blades, orange-yellow warning stripes, FED-STD-595, color number 33538, shall be applied to both sides of the blades from the tip to 6 inches from the tip. FOR TACTICAL AND LAND CAMOUFLAGE PAINT SCHEMES, 5.2.2.10.3 SHALL APPLY.

5.2.2.10.3.1.3 Static balance - preservation and maintenance. Paint or other marking, when applied to propellers, rotors, or statically balanced control surfaces for antiglare or protective purposes, shall be applied only by the manufacturer or an authorized facility, except when authorized by the

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Type Commanders. Between overhauls, when required, marking and finishes may be retained by a light maintenance touch-up. Touch-up shall be applied to all surfaces in proportionate amounts for retention of proper balance.

5.2.2.10.3.1.4 Classification numbers. Classification numbers shall be stenciled on the main rotor blades of all helicopters by any facility authorized to balance or alter the blade. These numbers shall consist of three parts as follows:

- a. The first shall be the weight in pounds of the blade, expressed in decimal form.
- b. The second shall be the distance in inches from the center of rotation to the center of gravity of the blade.
- c. The third shall be the distance in percent mean aerodynamic chord (MAC) from the leading edge of the blade to the center of gravity of the blade clockwise (Example 57.2-75.5-32.4, when the blade has a weight of 57.2 pounds with the center of gravity 75.5 inches from the center of rotation and with the chordwise center of gravity at 32.4 percent MAC).

Stenciling, 1/2 inch to 1 inch in height, shall be accomplished with a paint that contrasts well with the color of the blade. The preceding information shall be marked on the flat surface on the ground side of each blade at the inboard or butt end of the main rotor blade.

5.2.2.10.3.2 Tail rotor blades. Tail rotor blades shall be finished as shown in Appendix A, figure A-5, starting from the tip and on both sides of the blade, as follows:

- a. A 6 inch wide band of insignia red, FED-STD-595, color number 11136.
- b. A 6 inch wide band of insignia white, FED-STD-595, color number 17925.
- c. A 6 inch wide band of insignia red, FED-STD-595, color number 11136.
- d. A nonspecular black band, FED-STD-595, color number 37038, to within 6 inches of the hub.
- e. A 6 inch wide band of insignia red, FED-STD-595, color number 11136.

FOR TACTICAL AND LAND CAMOUFLAGE PAINT SCHEMES, 5.2.2.10.3 SHALL APPLY.

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5.2.2.10.3.3 Helicopter tail boom - warning marking. For helicopters having tail rotor blade(s) revolving in the vertical plane, a warning sign shall be painted on both sides of the tail boom, as shown in Appendix A, figure A-12. This shall consist of a 33 inch wide band orange-yellow, FED-STD-595, color number 13538, band encircling the tail boom. Centrally superimposed on this band shall be applied a insignia red arrow, FED-STD-595, color number 11136, of appropriate size, with the arrow pointing aft as indicated in Appendix A, figure A-12. Above the arrow shall appear the word "Danger" and below the arrow shall appear the words "Keep Away." The letters shall be black, FED-STD-595, color number 17038, and shall be approximately 2 inches in height.

5.2.2.10.3.4 Helicopter tail rotor - guards and stabilizers. On helicopters with tail rotor guards and/or stabilizers, the tail rotor guard and/or stabilizer shall have warning markings applied to prevent ground personnel from accidentally running into these components. The markings shall consist of 2 inch wide alternating stripes of orange-yellow, FED-STD-595, color number 13538, and bright red, FED-STD-595, color number 11136.

5.2.2.10.3.5 Propeller blades - warning markings. Blades shall be painted as shown in Appendix A, figure A-6. Propeller blades on multi-engine planes shall be painted on both sides from the tip to 3 inches from the tip with insignia white, FED-STD-595, color number 17925, followed by a 6 inch strip of insignia red, FED-STD-595, color number 11136, followed by another 3 inch strip of insignia white, FED-STD-595, color number 17925. The remainder of the blade shall be colored black, FED-STD-595, color number 37038. This may be eliminated on blades where both the following conditions are met:

1. Corrosion protection is not required and
2. The blades are so situated as to produce no glare or excessive brightness in the pilot's or copilot's eyes (in cases where the blades rotate in a plane aft of the pilot's seat).

If the blades are so situated as to produce glare or excessive brightness in the pilot's or copilot's eyes, the insignia red, FED-STD-595, color number 11136, and insignia white, FED-STD-595, color number 17925, shall be replaced by red, FED-STD-595, color number 31136, and white, FED-STD-595, color number 37925, respectively, on the rear face of the blades only. Propeller blades on single engine planes shall be painted on the front side in the same manner as for multi-engine blades; the rear face, however, shall be colored black, FED-STD-595, color number 37038, with a 4 inch band of orange-yellow, FED-STD-595 color number 33538, at the tip for blades of less than 15 feet basic diameter or in a 6 inch orange-yellow, FED-STD-595, color number 33538, band for larger diameter blades.

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5.2.2.10.3.6 Fuselage propeller - warning stripe and signs. That area of the fuselage which is in the plane of the propeller path shall be marked with an insignia red, FED-STD-595, color number 11136, stripe 3 inches wide extending completely around the fuselage, as shown in Appendix A, figure A-9. The word "Propeller" reading vertically from top to bottom, on both sides, shall be superimposed on this stripe in insignia white, FED-STD-595, color number 17925, letters 2 inches in height, at sufficiently frequent intervals to indicate the dangerous area. The signs "Danger" and "Danger" shall be applied perpendicular to and centered with respect to the word "Propeller," one sign on each side thereof, with the arrow pointing toward the stripe. The letters and arrows shall be insignia red, FED-STD-595, color number 11136 and shall be superimposed on a stripe of white, FED-STD-595, color number 17925, 3 inches in width. The height of the letters and length of the arrows shall be 2 inches.

5.2.2.10.3.7 Bomb bay, hatch, etc., - exit warning stripe and signs. On all planes where bomb bays, hatches, or other openings exist within 6 feet of each side of the propeller disk, and which may be used as means of egress from the plane and there is danger of personnel walking into propellers after leaving such openings, warning stripes and signs shall be placed to warn personnel regarding the proximity of propellers. Those interior areas of the fuselage, bomb bay flaps, etc., which are in the plane of the propeller disk, shall be marked with insignia red, FED-STD-595, color number 11136, stripes 3 inches wide, extending on both sides from the center of the fuselage to the lowest extremity of the exit, when open. The word, "Propeller," reading vertically from top to bottom on both sides, shall be superimposed on this stripe in insignia white, FED-STD-595, color number 17925, letters 2 inches in height, at sufficiently frequent intervals to indicate the dangerous areas. The signs:

"DANGER → and ← DANGER
PROPELLER" PROPELLER"

shall be applied perpendicular to and centered with respect to the word "Propeller" one sign on each side thereof, with the arrow pointing toward the stripe. The letters and arrows shall be insignia red, FED-STD-595, color number 11136, and shall be superimposed on a stripe of insignia white, FED-STD-595, color number 17925, 3 inches in width. The height of the letters and length of the arrows shall be 2 inches.

5.2.2.10.3.8 Staggered engines. On aircraft having engines staggered in the wing, a marking similar to that described in 5.2.2.10.3.6 shall also be placed on the cowling of the next inboard engine to mark the plane of rotation of the propeller disk.

5.2.2.10.4 Arresting hooks. Arresting hooks shall be painted with gloss black, FED-STD-595, color number 17038, and insignia white, FED-STD-595, color number 17925, in alternate bands 4 inches wide, to produce maximum visibility.

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For tactical paint schemes, the arresting hook shall be painted in the surrounding gray/blue paint scheme. Paint shall not be applied to the arresting hook point.

5.2.2.10.4.1 Arresting hook warning marking. For aircraft having arresting hooks, a warning sign shall be painted on both sides of the fuselage Appendix A, figure A-3, and A-14 and shall be located in proximity to the hook point when in the retracted position. The marking must be clearly visible to maintenance personnel.

5.2.2.10.5 Loose and jettisonable equipment. The following loose equipment shall be marked in a contrasting color, using a stencil or other suitable marking, with the call numbers: life rafts, tool kits peculiar to the airplanes, aircraft covers (engine covers, dust covers, etc.).

5.2.2.10.6 Identification and markings of emergency escape system. All exits to be used in an emergency shall be identified by the words "Emergency Exit, Rescue, Auxiliary Exit" or other appropriate wording, followed by applicable instructions or symbols. Painted insignia, letters, and markings shall be visible in the dark. Painting shall be compatible with finishes applied to adjacent surfaces. Decals shall conform to the requirements specified herein and shall be edge-sealed with a clear finish (see Appendix A, figure A-20).

5.2.2.10.6.1 Application. All surfaces to be lettered shall be prepared to ensure good contrast between lettering and background. Standard application will be black, FED-STD-595, color number 17038, letters on an orange-yellow, FED-STD-595, color number 13538, background. In some applications, orange-yellow, FED-STD-595, color number 13538, lettering on a black, FED-STD-595, color number 17038, background will be specified. Other color combinations shall not be used without approval of the procuring activity. The background border shall extend 1/2 inch beyond the lettering. Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

5.2.2.10.6.2 Location. Lettering and marking of the emergency escape system shall be placed so as to be easily read.

5.2.2.10.6.3 Lettering size. All lettering identification marking shall be gothic type. Exit release signs shall have 2 inch high lettering. The lettering of instruction shall be at least 1 inch high.

5.2.2.10.6.4 Cutout area marking. Each area of the aircraft intended to be cutout for emergency rescue shall be marked with the wording "Cut here for Emergency Rescue" and corner markings at the limits of the cutout area (see Appendix A, figure A-17). The horizontal and vertical lines of the corner marking shall be 3 inches long and 1 inch wide. This marking scheme shall be applied to the interior and exterior of the aircraft at the intended cutout point. The lettering shall be a minimum of 2 inches in height.

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5.2.2.10.6.5 Exit control lever markings. Handles and levers used to actuate doors on hatches shall be identified by alternating orange-yellow, FED-STD-595, color number 13538, and black, FED-STD-595, color number 17038, stripes in a width ratio of 3 to 1, orange-yellow, FED-STD-595, color number 13538, to black, FED-STD-595, color number 17038. The orange-yellow, FED-STD-595, color number 13538, stripes shall be widths of 3/16 inch, 3/8 inch, or 3/4 inch; the black, FED-STD-595, color number 17038, stripes shall be corresponding widths of 1/16 inch, 1/8 inch, or 1/4 inch. Background striping shall be applied at a 45-degree angle from the vertical, rotated clockwise. Small handles and levers shall be striped with alternate colored rings with the above ratio and background. The striping shall not interfere with other types of markings. If the handles or levers are visible in the aircraft's clean flight configuration, markings of aircraft with tactical paint schemes shall be in accordance with 5.2.3.

5.2.2.10.6.6 Fire access panel marking. The fire access panel in the engine cowling shall be identified by a marking conforming to Appendix A, figure A-7. The words "Fire Panel" in red letters shall be placed inside the rectangle. Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

5.2.2.10.6.7 Explosive-actuated devices. Ejection seats and canopies, separable capsule escape system, or encapsulated ejection seats which are actuated explosively shall be marked at appropriate locations on the fuselage (see Appendix A, figure A-11 and A-16).

5.2.2.10.6.8 Axe and crowbar. When an axe and/or crowbar are carried aboard the aircraft, their positions shall be shown externally by the words "Axe (Crowbar) Stowed Here" in 1 inch high letters. The position of the axe and/or crowbar may be further identified by a silhouette.

5.2.2.10.6.9 Fire extinguishers. When fire extinguishers are carried aboard the aircraft and are accessible from the outside of the aircraft, their positions shall be shown by the words "Fire Extinguisher Stowed Here" and may be further identified by a silhouette of a fire extinguisher.

5.2.2.10.6.10 Asbestos gloves. When asbestos gloves are carried aboard the aircraft and are accessible from the exterior, their position shall be shown by the words "Asbestos Gloves Stowed Here" in letters 1 inch high, and may be further identified by a silhouette of gloves.

5.2.2.10.6.11 First-aid kit. When a first-aid kit is carried aboard the aircraft and is accessible from the outside through an emergency exit or access panel, a red, FED-STD-595 color number 11136, greek cross on a white, FED-STD-595, color number 17925, background shall be placed on the fuselage adjacent to this exit or panel (see Appendix A, figure A-19). Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

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5.2.2.10.6.12 Ejection seat markings. All parts of the ejection seat escape system (see Appendix A, figure A-6) shall be marked with a triangle, colored insignia red FED-STD-11136. A triangle colored insignia red, FED-STD-595, color number 11136, shall be placed over each crew entrance to indicate that the aircraft has such a system. The applicable words "Ejection Seat" or "Escape Capsule" shall be applied in 1 inch high letters under the triangle. Triangles shall be located on each side of the fuselage at approximately the midpoint of the canopy for fighter, fighter-trainer, and similar aircraft. The following warning shall be applied by paint or decal in 3/4 inch high letters, on an orange-yellow, FED-STD-595, color number 13538, background, beneath the triangles: "Warning - This aircraft contains a cartridge-actuated emergency escape system equipped with explosive charges" (see Appendix A, figure A-11 and A-16). See Appendix A for complete instructions. Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

5.2.2.10.6.12.1 Ejection seat markings for multiplace aircraft. If an aircraft is equipped with cartridge-actuated escape provisions other than ejection seats, at certain crew stations, along with ejection seats at other stations, the markings located on the exterior of the aircraft at each crew entrance not equipped with ejection seats shall read "Cartridge-Actuated Devices" instead of "Escape Capsule" or "Ejection Seat" under the triangle. In the event all crew members use the same entrances, both notes shall be printed under the triangle with the warning.

5.2.2.10.6.12.2 Other cartridge-actuated escape systems. For aircraft equipped with cartridge-actuated escape systems, such as hatch jettisoning systems, equipment stowage systems, etc., but no means to forcibly separate crew members from the aircraft, marking shall read "Cartridge-Actuated Devices."

5.2.2.10.6.13 Canopy release markings. External canopy release access on aircraft shall be painted orange-yellow, FED-STD-595, color number 13538. Release instructions from the outside shall be painted in black, FED-STD-595, color number 17038. A reflective placard applied near the canopy on the side of the flag opposite the canopy release shall show the location of the release. Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

5.2.2.10.6.14 External exit emergency release. Each external exit emergency release or handle shall be identified by a "Rescue" arrow applied on the fuselage. The arrow shall be in accordance with Appendix A, figure A-13, colored orange-yellow, FED-STD-595, color number 13538. Other markings (i.e. "Step" or "Access Door") may be omitted to accommodate this marking.

5.2.2.10.6.15 Transport aircraft. The compartments of transport aircraft shall be marked with individual compartment horizontal dimensional references, the compartment centroids, the compartment letter designations, and the compartment maximum structural capacity in pounds. Cargo compartments

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shall also be marked in inches from the horizontal reference datum at 20 inch intervals. This requirement does not apply to transport aircraft with executive interior configurations.

5.2.2.10.6.15.1 Internal removable escape panels. Identification marking of escape hatches, doors, and exits shall be colored orange-yellow, FED-STD-595, color number 13538, on non-yellow surfaces. On yellow surfaces, the marking shall be colored black, FED-STD-595, color number 17038. Retroreflective material, conforming to L-S-300 may be used for this marking. The periphery of the escape panels shall be identified by an intermittent band, colored orange-yellow FED-STD-595, color number 13538. The segments of the band shall be a minimum of 1 inch width and a maximum of 2 inch length, divided equally between the door mount and the escape door. Where the door lining will cover the marking on the inside of the aircraft, the marking shall continue onto the lining.

5.2.2.10.6.15.2 Emergency exit marking. The words "Emergency Exit" colored orange-yellow, FED-STD-595, color number 13538, shall be painted or stenciled onto the escape hatch, door or exit, or any covering thereof, in the most readily visible location. Letters shall be a minimum of 2 inches high and shall not be less than 1 inch wide.

5.2.2.10.6.15.3 Handles, releases, catches, and knobs for inside panels. Handles, releases, catches, and knobs for inside hatches, exit doors, and their soundproofing (or lining) shall be painted orange-yellow, FED-STD-595, color number 13538. Suitable descriptive wording, readily visible, shall be painted or stenciled on the door or structure of the aircraft, whichever is nearer the emergency release, to identify and explain its operation. This wording shall be at least 1/2 inch high, using standard English terminology such as "Pull", "Push", "Turn" or "Slide". Exits which are adequate for air, ground, and ditching escape shall have the words "Emergency Exit" centered in the most visible location on the inside of the door or hatch. Exits which are not adequate for the above three methods of escape shall be marked "Emergency Exit," and for specific usage, "Ground Use Only," "Ground and Ditching Use Only," etc.

5.2.2.10.6.15.4 External removable escape panels. Markings identifying external removable escape hatches, doors, and exits on the outside of aircraft shall be orange-yellow, FED-STD-595, color number 13538; on yellow surfaces, black, FED-STD-595, color number 17038, shall be used. Retroreflective material conforming to L-S-300 may be used for these markings to facilitate identification in the dark. Mark all external releases for operation of emergency exit panels "Exit Release" on the outside of the aircraft to facilitate identification. The writing that describes the operation of the exit release will be standard english terminology such as "Pull", "Push", "Turn" or "Slide". Letters shall be at least 1 inch high. Tactical paint scheme aircraft shall be in accordance with 5.2.3.

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5.2.2.10.6.15.5 Markings for forced emergency entry or exit. Markings for aircraft emergency entry or exit shall be orange-yellow, FED-STD-595, color number 13538. Black, FED-STD-595, color number 17038, shall be used on yellow-orange backgrounds. Retroreflective material conforming to L-S-300 may be for these markings. Tactical and land camouflage paint scheme markings shall be in accordance with 5.2.3.

5.2.2.10.6.15.6 Secondary openings. Secondary openings, such as auxiliary exits, windows, and navigator's domes, are usually smaller than primary openings, making entrance or exit more difficult. If the structure immediately surrounding secondary openings is free from heavy structural members (such as bulkheads and the main longitudinal member), and from oxygen, fuel, and oil lines, and battery leads, it shall be marked with an orange-yellow, FED-STD-595, color number 13538, broken band. The band shall be located at the extreme boundary of the above described area, both inside and outside of the fuselage. Segments of the broken band shall be 1/2 inch wide, 1 inch long and approximately 12 inches apart. Where the band will be covered with soundproofing, the soundproof (or lining) shall be marked also. "Cut Here for Emergency Rescue" shall be printed or stenciled inside of, parallel with and adjacent to the broken band identifying the area on the outside of the aircraft where forced entry can be made for rescue purposes. "Cut Here for Emergency Exit" shall be painted on a similar location inside the aircraft. Letters shall be 1 inch high. If the area to receive the lettering is covered by soundproofing (or lining), the letters shall also be stenciled on the soundproofing (or lining). Tactical and land camouflage paint scheme markings shall be corner markings in accordance with 5.2.3.

5.2.3 Tactical and land camouflage paint scheme markings. All markings specified in 5.2.2 and 5.2.5 are applicable to aircraft which have either a land camouflage (LC) scheme or tactical paint scheme (TPS). Requirements for the colors of all the markings and the size of some of the markings differ when applied to aircraft possessing the tactical or land camouflage paint scheme. These differences in requirements are specified in the following paragraphs.

5.2.3.1 Color of markings on land camouflage scheme painted aircraft. All exterior markings of 5.2.2 and 5.2.5 applied to aircraft possessing the green, black and blue land camouflage scheme shall be applied utilizing the following guidelines:

- a. If the background color is blue, FED-STD-595, color number 35237, or green, color number 34095, the marking shall be black, color number 37038.
- b. If the background color is black, FED-STD-595, color number 37038, the marking shall be green, color number 34095.

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5.2.3.2 Color of markings for aircraft with tactical paint schemes. All exterior markings of 5.2.2 and 5.2.5 applied to aircraft possessing a tactical paint scheme shall be applied in a contrasting shade of gray, the color of which is dependent on the gray colors used for the specific tactical paint scheme and the location of the marking. See Appendices A, B and C for examples.

5.2.3.2.1 Tactical paint scheme - general marking policy. Tactical paint schemes are comprised of either two or three shades of gray. If the tactical paint scheme is comprised of only two colors, the contrasting color specified is the color used in the scheme which is not located in the area where the marking is applied. This requirement applies except when the two colors used in the scheme are FED-STD-595, color numbers 36320 and 36375. In this case, all markings will be applied in FED-STD-595, color number 35237. If the tactical paint scheme is comprised of three colors, the following guidelines apply:

- a. If the background color is the darkest gray, medium gray is used for the marking.
- b. If the background color is the medium gray, the darkest gray is used for the marking.
- c. If the background color is the lightest gray, the medium gray is used for the marking.

5.2.3.2.2 Color of MODEX numbers. MODEX numbers applied to aircraft with the tactical paint scheme shall be FED-STD-595, color number 36081 instead of the colors specified in 5.2.3.2.1.

5.2.3.3 Size of markings when used on aircraft with tactical or land camouflage paint schemes. The size of the markings when used on tactical or land camouflage paint scheme painted aircraft are the same sizes as specified in 5.2.2 and 5.2.5 except that the branch of service marking, call number and national insignias shall be a maximum of 12 inches high. Additionally, branch of service markings will not be applied to the wings.

5.2.3.4 Paint scheme deviations approval. Deviations to paint schemes for one aircraft may be approved by the Type Commander. Deviations for more than one aircraft require prior approval by the Naval Air Systems Command (AIR 5164) and possibly CNO.

5.2.4 Marking materials. Marking materials must conform to the gloss and IR requirements of the coating used to apply tactical and land camouflage schemes. Decals may be used for small markings (maximum of 4 inches) if all other requirements are met.

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5.2.5 Exterior maintenance precautionary and warning markings.

5.2.5.1 Aircraft and missile service point identification symbols and markings. Service point identification and precautionary warning markings shall be applied on all aircraft and missiles, as required (see Appendix B, figures B-7, B-8, and B-9). All NATO markings, as referenced to in 5.2, are required. NATO markings are detailed in Appendix B, figures B-3, B-4, B-5, and B-6. The location of these markings will vary with airframe configuration. Each marking shall be displayed to provide the following:

- a. Rapid identification of each required servicing point.
- b. Identification of the type of ground servicing required.
- c. Hazard warning of safety precautions which will prevent injury to personnel or damage to aircraft equipment.
- d. Rapid entry or exit from vehicle under emergency conditions.

5.2.5.1.1 Application of service point identification symbols and marking. When applying these symbols and markings, the instruction provided by Appendix B shall be adhered to. The symbols shall not exceed 4 inches in width or height. Application may be accomplished using paint, or decals conforming to MIL-P-38477 or MIL-M-43719. When paint is used, stencils incorporating capital letters and arabic numerals not exceeding 1 1/4 inches in height shall be used; freehand application is prohibited. When applied to a gray or white background, the marking shall be black, FED-STD-595, color number 17038. On other backgrounds, the marking shall be white, FED-STD-595, color number 17925. A decal similar to Appendix B, figure B-6, shall be located inside the nose wheel well, or nose wheel door, defining the location of service points.

5.2.5.1.2 Location. The location of each service point marking shall be based upon the existing available space. They may be situated on the equipment concerned, directly below, adjacent to, or on applicable access panels. In the event that the service point or marking is concealed, arrows may be used to point out the location of the service point. The arrows shall bear a brief identification of the purpose for which it is applied.

5.2.5.1.3 Hydraulic system and landing gear/struts. Servicing instructions for hydraulic systems, landing gear, and shock struts, shall be provided on metal instruction plates, or stenciled in a permanent and legible manner, adjacent to charging points and test connections.

5.2.5.2 Fuel nozzle jumper plug receptacles. Fuel nozzle plug receptacles shall be marked in accordance with MIL-C-83413/9.

5.2.5.3 Aircraft grounding points. All grounding points on all U.S. Navy aircraft shall be marked in accordance with Appendix B, figures B-3, B-8, and B-9.

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5.2.5.4 Storage batteries. On all battery access doors, the word "BATTERY" shall be painted in insignia red, FED-STD-595, color number 11136. The lettering shall be 1 inch high on aircraft with a tactical paint scheme and the color shall be in accordance with 5.2.3. On the left side of the fuselage, as viewed from the rear of the aircraft, there shall be a notation "BATTERY LOCATION _____". The exact location shall replace the line "_____". The fore and aft positioning of the markings shall be approximately in line with the trailing edge of the wings, and the vertical positioning 2 to 3 feet above the bottom of the fuselage. For instances where there are windows, enclosures, etc., in this position, the storage battery for marking shall be placed as near to the specified position as possible. Where there are battery locations interior to the aircraft, the word "Battery" or "Batteries", as applicable, shall be permanently and conspicuously affixed to the battery casing or compartment. The marking shall be in 1 inch high letters.

5.2.5.5 Instrument static opening markings. Instrument static openings (except as noted below) shall have no finish applied within a 1 inch diameter circle around the opening. A red, FED-STD-595, color number 31136, 1/2 inch wide circular band shall be applied around this area. The following legend shall also be applied adjacent to the marking: "Instrument Static Opening - Do Not Cover". Aircraft painted with the tactical and land camouflage schemes shall be painted in accordance with 5.2.3.

5.2.5.6 Wing fold warning flag. On aircraft having wing fold warning flags, the flags shall be painted red, FED-STD-595, color number 31136. Aircraft painted with the tactical and land camouflage schemes shall be painted in accordance with 5.2.3.

5.2.5.7 Markings for electrical connections. The following caution note shall be placed at points where it is necessary to break electrical connections when folding back or removing wings, or removing tail surfaces, etc: "CAUTION, Disconnect Electrical Wiring Before Removing Part". The color of the letters shall be black, FED-STD-595, color number 17038.

5.2.5.8 Markings for engine removal. All points of disconnect will be painted either black, FED-STD-595, color number 17038, or with contrasting gray for tactical paint schemes (see 5.2.3).

5.2.5.9 Markings for tank and filler areas.

5.2.5.9.1 Tank. Aircraft tanks shall have notations indicating tank capacity, type of liquid, and level restrictions. Tank markings shall be the same color as that used on attaching lines. Additional data, such as coolant mixture, water-alcohol mixture, and grade of liquid shall be stenciled near the filler caps in letters 1/2 inch high in the same color as that used to indicate tank capacity. Stenciling on the fuel tanks shall read: "Use _____ Octane Fuel or Better," or "Use Grade _____ or Better," as applicable.

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5.2.5.9.2 Filler caps. Filler caps for fuel and oil tanks and other external parts and attachments for which identification is necessary and desirable shall be painted the color assigned to the applicable fitting and shall be indicated by appropriate markings. Where flush-type pressure fueling caps, conforming to MS29525 are installed, three radial black lines, FED-STD-595, color number 37038, 3/8 inch wide by 1 inch long, shall be located as to form extensions to the lines on the cap when the cap is in the locked position. Tactical paint scheme aircraft shall be painted in accordance with 5.2.3. The type and grade of fuel to be employed in the aircraft shall be indicated adjacent to the filler caps in accordance with Appendix B, figure B-3, and B-5.

5.2.5.10 Lift points, hand grips, caution legends, etc. These shall be indicated by appropriate wording painted in black, FED-STD-595, color number 17038 adjacent to the applicable point. Tactical or land camouflage paint scheme aircraft shall be painted in accordance with 5.2.3. Appendix B, figures B-4 and B-7 provide examples of this marking.

5.2.5.11 Baggage compartment, life raft stowage, etc. These shall be indicated by means of appropriate signs painted in black, FED-STD-595, color number 17038, adjacent to the area. Color of the marking for aircraft painted with a tactical or land camouflage paint scheme shall be in accordance with 5.2.3.

5.2.5.12 Wing access panel latches and safety straps. On aircraft which have wing access panel latches and safety straps, the inside lever and wing area under the latch safety strap shall be painted insignia red, FED-STD-595, color number 11136, in such a manner that no red color will show when the latches and straps are properly secured.

5.2.5.13 Actuating mechanism warning signs. A black, FED-STD-595, color number 17038 warning sign shall be located adjacent to any actuating mechanism which can cause damage to the weapons systems from improper or out-of-sequence operation. The color of the marking for aircraft painted with a tactical or land camouflage paint scheme shall be in accordance with 5.2.3.

5.2.5.14 Recessed lubrication fittings. Flush type (female receptacle) grease fittings, recessed set screws, or depressed adjustments, such as may be found on rotor control and drive shafts, but which require periodic servicing or inspection, shall be identified with a circumscribed band of orange, FED-STD-595, color number 12197, not exceeding 1 inch in width. Color for aircraft with tactical or land camouflage paint schemes shall be painted in accordance with 5.2.3.

5.2.6 Optional markings.

5.2.6.1 Squadron designation. The squadron designation identifies with letters and numerals the squadron to which the aircraft is assigned. It shall be placed on both sides of the fuselage, just forward of the empennage, and centered under the branch of service marking. If this is not practical due to

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space limitations, the squadron designation may be applied in an aft location designated by the cognizant command. The squadron designation on low-wing transports shall be applied along the centerline on both sides of the fuselage, just forward of the empennage. On high-wing transports, if the branch of service marking is placed on the fuselage either, under the wing, or aft of the trailing edge of the wing, the squadron designation shall be centered symmetrically under the marking. If this is not practical, it shall be centered under the marking, or placed aft, along the fuselage, below the centerline.

5.2.6.2 Reserve aircraft markings - station names. The name of the home station may be placed on both sides of the fuselage just forward of the empennage and centered under the branch of service marking. This shall be in addition to the station letter on both sides of the vertical fin and rudder. On transport aircraft (VR), where the branch of service marking is placed along the fuselage above the windows, the station name shall be placed along the centerline on both sides of the fuselage, just forward of the empennage. This shall be in addition to the station letter on both sides of the vertical fin and rudder. The letters used for reserve station identification shall be one half the size of the branch of service marking.

5.2.6.3 Battle "E". Squadrons selected for the battle "E" are entitled to display a white, FED-STD-595, color number 17925, letter "E" on all assigned aircraft for the length of one competitive cycle following the date of award. The "E" shall be painted on the starboard side of the aircraft in the vicinity of the cockpit, in a rectangular block type letter not to exceed 8 inches in height and in proportional width. Where the "E" is awarded to the same squadron for consecutive competitive cycles, a service hash mark shall be painted under the letter. This hash mark shall be the width of one stroke and of the same color as the "E". The hash mark shall be 30 degrees to the horizontal from the lower left hand of the "E". When applied to aircraft with a tactical or land camouflage paint scheme the color of the "E" and hash mark shall be gray, FED-STD-595, color number 36081, and for land camouflage schemes black, FED-STD-595, color number 37038.

5.2.6.4 Safety "S". Squadrons winning this award are authorized to display an "S" for safety marking on their aircraft. Authorization will extend through the calendar year subsequent to the year for which the award was won. An appropriate hash mark is approved only for squadrons who are repeat winners in consecutive years. The "S" for safety shall be white, FED-STD-595, color number 17925, or black, FED-STD-595, color number 17038, and is to be of an appropriate size not more than 8 inches in height. It is to be displayed under the squadron insignia (when used) and shall not interfere with required markings. For tactical paint schemes the color of the "S" shall be gray, FED-STD-595, color number 36081, and for land camouflage schemes black, FED-STD-595, color number 37038. Lettering shall be in accordance with 5.2.1. Consecutive year marking shall be accomplished in the same way as the battle "E" hash mark (see 5.2.6.3).

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5.2.6.5 Hospital aircraft red cross. When aircraft are assigned air evacuation or hospital duty, this marking is mandatory. It shall be centered on both sides of the vertical tail surface, above the horizontal stabilizer, in the space normally allotted to the unit identifier. It shall also be placed on the upper surface of the right wing with the center of the marking at a distance from the wing tip equal to one third of the distance from the fuselage to the wing tip, and in a similar location to the national insignia of the opposite wing, and on the under surface of the right wing, located symmetrically between the national insignia and fuselage. Hospital aircraft shall be identified by a Geneva Red Cross consisting of a symmetrical glossy insignia red, FED-STD-595, color number 11136, cross on a glossy white, FED-STD-595, color number 17925, disc (see Appendix A, figure A-19). The insignia shall consist of five red squares arranged in the form of a symmetrical cross centered inside the white circumscribed circle. The length of the red cross shall be $15/19$ of the diameter of the circumscribed circle. The diameter of the circumscribed circle shall be $2/3$ of the mean chord of the vertical tail surface.

5.2.6.6 Aircraft pilot and crew chief names. The names of the regular aircraft pilot and/or the aircraft crew chief may be applied to the nose wheel door of camouflaged and non-camouflaged aircraft at the option of the Type Commander. Block lettering 2 inches high in black, FED-STD-595, color number 17038, on a white background, FED-STD-595, color number 17925, may be applied inside of the nose wheel well door.

5.2.7 Special purpose marking for U.S. Navy aircraft. Unless otherwise specified, the dimensions, colors, and materials markings shall also apply to special purpose markings. Due to variance in equipment configuration and restrictions in the uses of some markings, special purpose markings may or may not be applicable to all aircraft. However, when applicable and authorized for use, special purpose markings will be applied in the dimensions, colors and locations as specified herein.

5.2.7.1 Identification of naval attache (ALUSNA) aircraft. The marking for naval attache also applies to naval mission. Either marking may be applied, as applicable.

5.2.7.1.1 Fuselage marking. The United States Navy marking will be located on the fuselage in the same place as for the transport aircraft (see 5.2.2.4). The lettering shall be the largest possible size which can be accommodated on the aircraft, selected from 5.2.

5.2.7.1.2 Naval attache fuselage marking. ALUSNA markings may be deleted on the basis of local, diplomatic, or other considerations. Fuselage markings for ALUSNA aircraft shall consist of the following words: "United States Naval Attache to (name of country)." For the benefit of foreign personnel, the same wording in the language of the country to which the attache is accredited, shall be placed approximately 2 inches below the American wording. This foreign language inscription shall be applied under

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the supervision of personnel who have a thorough knowledge of the foreign language involved. In the event that there is more than one form of script of the foreign language, the selection shall be determined by the foreign country. All letters shall be painted or stenciled in white on a dark background or in black on a light background.

5.2.7.1.2.1 Location. The attache fuselage marking shall be forward on the aircraft, approximately under the pilot's cockpit, on both sides of the fuselage. For C-1A and larger aircraft, the English language inscription shall be located above the centerline of the fuselage and the foreign language inscription shall be located below the centerline of the fuselage. For smaller aircraft, the English and foreign language inscriptions shall be located just below the pilot's window.

5.2.7.1.2.2 Size. For C-1A and larger aircraft, the lettering of the English and foreign language inscription shall be 4 inches high. For smaller aircraft, the size of the lettering shall be reduced proportionately.

5.2.7.1.3 Naval attache wing marking. The wing marking for naval attache aircraft shall consist of an American flag, conforming to Appendix A, figure A-18.

5.2.7.1.3.1 Location. The American flag shall be located on the underside of the left wing, approximately under the national insignia on the top side of the left wing. The branch of service marking shall not be used on the wing for ALUSNA aircraft. The flag shall be centered and applied so that an observer on the ground, with airplane approaching, will view the flag with the blue field forward and to his left, and with the stripes extending outboard. If more positive identification is required because of local conditions or other considerations, an additional American flag may be applied to the top side of the right wing on an interim basis. This flag shall be removed when local considerations permit. The flag size shall be the same as that applied to the underside of the left wing and shall be located approximately over the national insignia on the underside of the right wing.

5.2.7.1.3.2 Size. The flag shall be in the proportions of 1.9 feet in length to 1.0 foot in width, in accordance with standard American flag requirements. In no case, however, shall the width exceed 75 percent of the distance between the leading edge of the wing and the aileron cutout at the point of application. In all cases, the largest size flag which can be accommodated on the wing shall be used.

5.2.7.1.4 Naval attache vertical stabilizer marking. The vertical tail surface marking for naval attache aircraft shall consist of an American flag.

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Note: At the discretion of cognizant commands, American flags, similar to the configuration specified for ALUSNA aircraft, may be applied (except on tactical or land camouflage scheme painted aircraft) on both sides, or on the two outboard sides of the vertical tail surface of transport aircraft to facilitate recognition by foreign countries over-flown, or for other important considerations. Such markings shall be deleted after their purpose has been served.

5.2.7.1.4.1 Location. The American flag shall be positioned horizontally and in such a manner that the union shall be uppermost on both sides of the vertical tail surfaces. For aircraft having multiple vertical tail surfaces, the flag shall appear only on the two outboard sides. On both sides of the aircraft the flag shall be applied with the blue field forward and the stripes extending aft. The bars of the flag shall appear to be trailing at all times. The flag shall be centered on the surface and placed above all other marking.

5.2.7.2 Standard American flag sizes. Appendix A, figure A-18, the following standard sizes (length by width) are specified for American flag markings used on U.S. Navy aircraft:

- a. 19 x 36 inches
- b. 21 x 40 inches
- c. 25 x 48 inches
- d. 31.4 x 60 inches

The flag or national insignia/emblem of any country, other than the United States of America, will not be displayed on any U.S. Navy aircraft for any reason.

5.2.7.3 Presidential helicopter. For layout and description of markings required on presidential helicopters, refer to Appendix D, figure D-6.

5.2.8 Marking of foreign aircraft. Aircraft procured by foreign countries through the Department of Defense shall be marked in accordance with this standard, except that the U.S. national insignia will be replaced with the foreign country's national insignia. National insignias for various countries are provided in Appendix F.

5.2.9 Access panel identification. Interior and exterior aircraft panels, plates, and access doors which require opening or removal at the time of inspection or overhaul shall be identified by the access numbering system in accordance with MS90327.

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5.2.10 Walkways and honeycomb panels. Walkways and honeycomb panels shall be marked as follows:

5.2.10.1 Walkways and steps. In cases where they do not contrast in color with adjacent areas, walkway areas shall be bounded by a camouflage black, FED-STD-595, color number 37038 line for a light background or a camouflage white, FED-STD-595, color number 37925 line for a dark background, 1/2 inch wide, and marked with the word "Walkway" at sufficiently frequent intervals to indicate the walkway area. Steps shall be suitably indicated at all points on the aircraft. On the exterior of aircraft with a tactical or land camouflage paint scheme, the walkway areas shall conform to 5.2.3.

5.2.11 Honeycomb panels on airplanes. Honeycomb panels (thin skin) for wing upper surfaces shall be distinctly marked by a 1 1/2 inch wide stripe of hash marks; each hash mark shall be 2 inches long, measured along the stripe with 2 inches between marks. The marks shall slope 45 degrees. The markings shall be painted on, with a material which is compatible with the finish on the aircraft, in the area of application. On the exterior of aircraft with the tactical or land camouflage paint scheme, the markings shall conform to 5.2.3.

5.2.12 Powerplant.

5.2.12.1 Powerplant removal. When making a powerplant assembly change, all systems, lines, conduits, control rods, cables, bell ranks and castings flanges shall be marked at the point of disassembly. The marking shall be a painted band not exceeding 1 inch in width, of a material which is compatible with the finish on the aircraft, in the area of application.

5.2.12.2 Powerplant controls. All engine control units shall be marked in the vicinity of the lever and in such position that the lever marking association is clear as shown in table III.

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TABLE III. Powerplant control markings. 1/

| Control 1/ | Extreme positions | |
|----------------------------------|-------------------|--------------|
| Throttle | Open | Closed |
| Mixture | (see 5.2.12.2.1) | |
| Shutter | Open | Closed |
| Carburetor heat | Hot | Cold |
| Propeller | Decrease rpm | Increase rpm |
| Supercharger (if turbo) | On | Off |
| Supercharger (if 2-speed geared) | High | Low |

1/ In marking the control levers, the abbreviations T, M, S, P, and B may be used for the throttle, mixture toggle switch, propeller, and supercharger levers, respectively. Standard control knobs (other than landing gear and fire extinguisher) shall be gray, color number 16473, of FED-STD-595.

5.2.12.2.1 Mixture control lever. A plate on which the carburetor control positions are marked shall be installed adjacent to the mixture control lever. The markings shall be white letters on a black background, except IDLE CUT-OFF, which shall be white lines on a red background. The lines shall indicate the position of the middle of the control lever when the lever on the carburetor is in the appropriate notch.

5.2.12.3 Fuel system diagram. A fuel system diagram shall be provided in the cockpit of each aircraft. The fuel system diagram shall be a simple schematic layout of the fuel system with the fuel selector valve or valves displayed in a prominent manner. Lines such as normal tank vent lines, primer lines, and pressure-gage lines need not be shown on the fuel system diagram, which is intended to aid the pilot in obtaining a clear picture of that part of the fuel system with which he is concerned in flight. All fuel system diagrams shall be of sufficient size and clearance for the purpose intended.

5.2.13 Fluid line identification. All fluid lines shall be marked in accordance with MIL-STD-1247.

5.2.13.1 Color code (identification chart). Identification chart color codes in accordance with MIL-STD-1247 shall be installed in all aircraft, as follows:

- a. One identification chart color code shall be installed in each engine nacelle on all aircraft for the use of the ground crews. For multiengine aircraft, additional identification chart color codes shall be installed, one per engine.

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- b. Identification chart color codes are not needed in single-place aircraft for the use of the pilot. One such code shall be installed at each crew station in two-place aircraft, and one shall be installed near each crew station in multiplace aircraft, with a maximum of four per aircraft.

5.2.14 Parts markings. Markings for parts, structural assemblies, fluid lines, wiring controls, servicing points, etc., shall be in accordance with MIL-STD-1247, MS90327, and as specified herein.

5.2.15 Reworked or special parts. Parts, equipment, and assemblies, including special bolts and reworked items as altered or selected for special fit, performance, or tolerance, shall be marked in accordance with MIL-STD-130. Such markings shall be accomplished in a manner that will not adversely affect the life and utility of the item.

5.2.16 Identification of tubes, hoses, and pipelines for aircraft. The means for identification of the function, content and, if applicable, the hazard and direction of flow of pipe, hose and tube lines used in U.S. Navy aircraft shall be in accordance with MIL-STD-1247. The proper use of colors, words, symbols, tags and painted bands to identify functions, contents and hazards is specifically prescribed. Lines refer to any pipe, hose or tube used to convey liquids or gases as well as rigid conduits used to house electrical wires or cables. Fittings, valves, conduit outlets and accessories such as pipe covering and hose clamps are considered parts of a line.

5.2.17 North Atlantic Treaty Organization (NATO) code numbers. The application of NATO code numbers is described in Appendix B. The codes are applied immediately adjacent to the service symbol. NATO code numbers may be omitted on training-type aircraft and other aircraft not serviced overseas. Application of the code numbers is supplemented by applicable service points described in Appendix B.

5.2.18 Data cards. Data cards and check lists shall be mounted in the cockpit or in an accessible position. These cards shall be given a coat of clear shellac, or other transparent protective material. A drawing of the data cards, properly filled in, shall be furnished with drawings, in accordance with MIL-STD-100.

5.2.19 Marking of loose and jettisonable equipment. The following loose equipment shall be marked in a contrasting color, using a stencil or other suitable marking, with the call numbers: life rafts; tool kits peculiar to the airplanes; aircraft covers, that is engine covers, dust covers, etc., equipment specifically calibrated for the airplane, such as drift meters, tuning units, etc., and jettisonable equipment such as canopies, wing tanks, and ejection seats. Ejection seats shall include abbreviation of the operator; such as PLT, CO-PLT, NAV.

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5.2.20 Identification of escape system ballistic hose and tubing.

5.2.20.1 Propellant gas system. The hose, tubing or mild detonating cord assemblies used to transmit propellant gas pressure between the various cartridge-actuated devices of an escape system shall be taped in accordance with MIL-STD-1247 (compressed gas) with the following information printed in black letters on the tape:

ESCAPE SYSTEM
NORMAL -- EMPTY
EMERGENCY -- HOT GASES

5.2.20.2 Escape subsystem. The particular subsystem of the escape system in which the hose, tubing, or mild detonating cord assemblies are installed shall be identified directly adjacent to the identification tape required by 5.2.20.1 by affixing white tape with black lettering that identifies the particular subsystem. An example is:

| | |
|------------------------------|----------------------------------|
| CANOPY JETTISONING SYSTEM | CONTROL COLUMN STOWAGE SYSTEM |
|------------------------------|----------------------------------|

5.2.20.3 Hose, tubing, and detonating cord assemblies. The extremities of the hose, tubing, or mild detonating cord assemblies shall be identified by applying white tape with black lettering that indicates the component, device, AN fitting, etc., to which the particular extremity is to be attached. Examples are:

| | | | |
|--------------------------------|-------------------------------|---------------------------------------|------------------------------|
| CONNECT TO UNION AN815-4 | CONNECT TO M3 INITIATOR | CONNECT TO CHECK VALVE AN6207-4 | CONNECT TO M5 CATAPULT |
|--------------------------------|-------------------------------|---------------------------------------|------------------------------|

5.2.20.4 Ground rescuer marking of hose and tubing assemblies. For ground rescue purposes all ballistic hose or tubing assemblies leading to the catapult shall be painted. The area painted shall be approximately 8 inches long and shall be between the initiator for the catapult and the catapult. The area selected shall be easily visible, readily accessible, and as close as possible to the catapult.

5.2.21 Emergency light switch. The emergency light switch, when installed, shall be indicated by a self-luminous marker with the phosphor and exciter sealed in a plastic and metal container. Radioactive paints shall not be used.

5.2.22 Dinghy (raft) release and flotation controls. Operating handles and levers shall be striped orange-yellow and black alternating lines; the title and operating instructions shall be orange-yellow. The letters of titles shall be at least 1 inch high and the letters of operating instructions not less than 1/2 inch high. If the control is in the form of a switch, then the size of the letters may be reduced to a size appropriate to the location.

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5.3 Workmanship. Insignia and markings shall be uniform in quality and shall be free from irregularities, defects or foreign material which could adversely affect performance, reliability or durability. Insignia or markings not applied in accordance with acceptable level of workmanship or not in accordance with the requirements of this standard shall be removed and reapplied.

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6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The purpose of this standard is to specify paint schemes and insignia markings for all U.S. Navy and Marine Corps aircraft, including identification plates for the aircraft and major assemblies, and warning and instruction markings.

6.2 Issue of DODISS. When this standard is used in acquisition, the applicable issue of the DODISS must be cited in the solicitation (see 2.1.1).

6.3 Data requirements. The following Data Item Descriptions (DID's) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this specification is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

| <u>Reference Paragraph</u> | <u>DID Number</u> | <u>DID Title</u> | <u>Suggested Tailoring</u> |
|----------------------------|-------------------|---------------------|----------------------------|
| 4.3, 5.2.2.1 & 5.2.18 | DI-DRPR-80651 | Engineering drawing | Use contractor format |

The above DID's were those cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DID's are cited on the DD Form 1423.

6.4 Toxicity. Some free isocyanate is released during the mixing and application of multi-component polyurethane coatings. Released free isocyanates can produce a significant irritation to the skin, eyes, and respiratory tract. Personnel exposed to free isocyanates may develop and allergic pulmonary sensitization, particularly if there is an inhalation of the vapor and mist produced during spray application. This sensitization may cause an asthmatic reaction with wheezing, dyspnea, and cough. Once sensitized, further exposure cannot be tolerated. For this reason, there is a restriction of the issuance and use of this material. Personnel exposed to free isocyanates on a regular basis should receive a periodic medical exam that includes a chest roentgenograph (X-ray), pulmonary function tests, and an evaluation of any respiratory disease or history of allergy. Periodic testing of pulmonary functions may aid in detecting the onset of pulmonary sensitization.

6.4.1 Personnel protective methods. Eye protection and appropriate clothing to prevent repeated or prolonged skin contact should be worn while applying material that contains free isocyanates. Additional information pertaining to protective equipment and other necessary precautions should be available from the coating application facility's occupational safety and health office.

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6.5 Subject term (key word) listing.

Aircraft color patterns
Emergency warnings
Hazard warnings
Identification
Insignias

6.6 International standardization. Certain provisions of this standard are the subject of international standardization agreement (ASCC 25/1, 25/3A and STANAG 1135, 3104, 3109). When amendment, revision, or cancellation of this specification is proposed which will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels, including departmental standardization offices, to change the agreement or make other appropriate accommodations.

6.7 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Preparing activity:
Navy - AS
(Project MFFP-N518)

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APPENDIX A

STANDARD MARKING, EMERGENCY AND HAZARD WARNING MARKINGS FOR AIRCRAFT

10. SCOPE

10.1 Scope. This appendix specifies the design of standard markings (including the national insignia), emergency, and hazard warning markings for fixed wing and rotary wing aircraft.

10.2 Use. This appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS

20.1 Government documents.

20.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

FEDERAL

DDD-F-416 - Flag, National, United States of America, and Flag, Union Jack

MILITARY

MIL-F-18264 - Finishes, Organic, Weapon System, Aircraft, Application and Control of

MIL-P-38477 - Plastic Material, Pressure Sensitive Adhesive, for Aircraft Identification and Marking

MIL-M-43719 - Marking Materials and Markers, Adhesive, Elastomeric, Pigmented, General Specification for

STANDARDS

FEDERAL

FED-STD-595 - Colors Used in Government Procurement

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(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

20.2 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated detail specifications, specification sheets or MS standards), the text of this document shall take precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

30. DEFINITIONS

30.1 Definitions. For purposes of the appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 National insignia.

40.1.1 National insignia design. The design of the national insignia shall conform to the requirements of this specification. As illustrated in figure A-1, it shall consist of an insignia-white, five-pointed star inside an insignia-blue circumscribed circle. A white rectangle, one radius of the blue circle in length and 1/2 radius of the blue circle in width, shall be located on each side of the star. The top edges of the rectangle shall be placed to form a straight line with the top edges of the horizontal two star points beneath the top star point. An insignia-red horizontal stripe, 1/6 the radius of the star, shall be centered in the white rectangles at each end of the insignia. A blue border, having a width of 1/8 the radius of the blue circle, shall outline the entire design except that when the insignia is to be applied on a sea blue, dark blue, or black background, the blue circle and border may be omitted. The inside edge of each interior rectangle shall be concave, and shall have the same arc as the inside blue circle. The inside edge of each outer rectangle shall not be depicted.

40.1.1.1 Size. The blue circle of the insignia for wing application, exclusive of border, shall have a maximum diameter of 40 inches and a minimum diameter of 10 inches. Sizes may vary by 5 inch increments in diameter. The blue circle diameter selected shall be the size which is closest to, but does not exceed, 50 percent of the distance between the leading edge of the wing and the aileron cutout at the point of application. For fuselage application, the blue circle shall have a maximum diameter of 40 inches and a minimum diameter of 10 inches. The diameter selected for fuselage application shall be closest to but not exceeding that which is 50 percent of the height of the projection of the fuselage or hull side. The most practical diameter shall be selected for helicopters and convertiplanes.

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40.1.1.2 Color. The standard colors of the national insignia are insignia red, FED-STD-595, color number 11136, insignia white, FED-STD-595, color number 17925, and insignia blue, FED-STD-595, color number 15044. Corresponding semigloss or lusterless finishes of the above listed gloss colors may be used to match adjacent surfaces only when specified by the procuring activity.

40.1.1.3 Application. Application of the national insignia by painting shall be in accordance with MIL-F-18264. When applying the national insignia by painting, a stencil shall be used to produce a sharp outline. The insignia shall be applied with coatings compatible with the finish applied to adjacent surfaces. Decals may be used in lieu of paint for application of the national insignia (see 40.1.5). The national insignia shall be so applied on horizontal surfaces that, in the normal flight attitude of the aircraft, the top star point of the insignia points forward, and a line through that point and the star's center is parallel to the line of flight, except for the swept wing or variable sweep wing configurations. On these aircraft, the national insignia shall be placed so that it will not extend onto flaps, slats, or control surfaces (see figure A-2). The constant 50 percent chord line of the wing which passes through the center of the star. For fuselage application, the insignia shall be placed so that the top star point points upward, and a line through that point and the star's center is perpendicular to the line of flight.

40.1.2 Wing insignia. One fixed wing aircraft, the national insignia shall be applied to the upper surface of the left wing, on the lower surface of the right wing, and on the fuselage, as shown in the figures of Appendix C. The insignia shall be placed at a distance from the wingtip equal to 1/3 of the distance from the fuselage to the wingtip, measured from the center of the insignia. It may be moved inboard where impractical (i.e. where wingtip floats of a seaplane interfere). The insignia shall not be applied to the wings of research aircraft when interference with aerodynamics will result. The size selected shall be that which is closest to, but does not exceed, 75 percent of the distance between the leading edge of the wing and the aileron cutout at the point of application. The wing insignia or other markings shall be omitted from the underside of wings or other surfaces on which thermal-resistant finishes are applied.

40.1.3 Fuselage or hull insignia. On fixed wing aircraft, the national insignia shall be applied to each side of the fuselage or hull. These locations are portrayed in the figures in Appendix C. The fuselage or hull insignia may extend over doors and emergency exits, but shall not extend over windows or openings used during combat. For aircraft with a tactical or land camouflage paint scheme the insignia shall be 12 inches in diameter, inclusive, or a contrasting color, and placed as directed by the applicable Naval Aviation Depot directive.

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40.1.4 Rotary wing aircraft insignia. Four national star insignias shall be applied to rotary wing aircraft, so as to be visible from either side and from above and below. If the configuration permits, an additional insignia may be applied to the nose of rotary wing aircraft for frontal identification. Symmetry of size and location shall be maintained on all like-model series aircraft.

40.1.5 Decalcomanias. Decals may be used for all small markings (less than 4 inches in size). For interior application, where they will not be affected by weather conditions, and for exterior application on low-performance aircraft, decals shall be applied in accordance with MIL-M-43719. For exterior application on high-performance aircraft and where subjected to extremes of temperature, speed, and altitude, MIL-P-38477 shall apply. MIL-P-38477 decals may be furnished with perforation holes upon request. These decals may be applied only over the complete paint system. Decal application shall not be deleterious to the aircraft surface. Decals shall not be applied over brazier head rivets.

40.1.6 Decalcomania letter heights. Letter heights shall be as follows:

Small: 1, 2, 3, 4 1/2, and 6 inches high
Medium: 9, 12, 15, 18, and 21 inches high
Large: 24, 30, 42, and 48 inches high

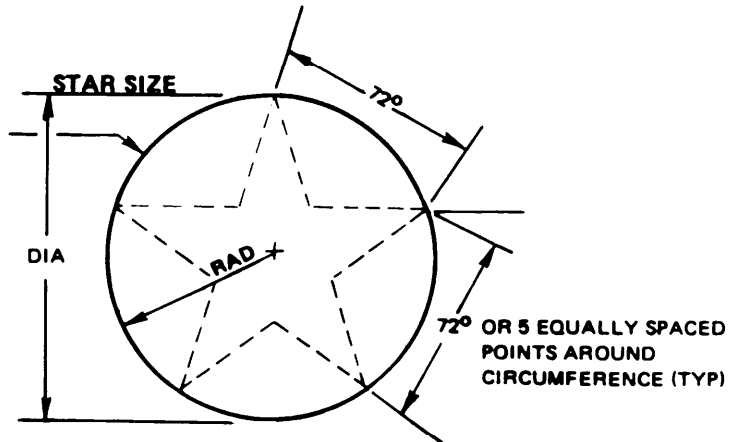
Decals larger than 48 inches in height may increase by 12 inch increments. Dimensions for letters shall maintain a 1/3 ratio for height, width, and stroke.

40.1.7 Tactical and land camouflage paint scheme national insignia. See 5.2.3 and figure A-1.

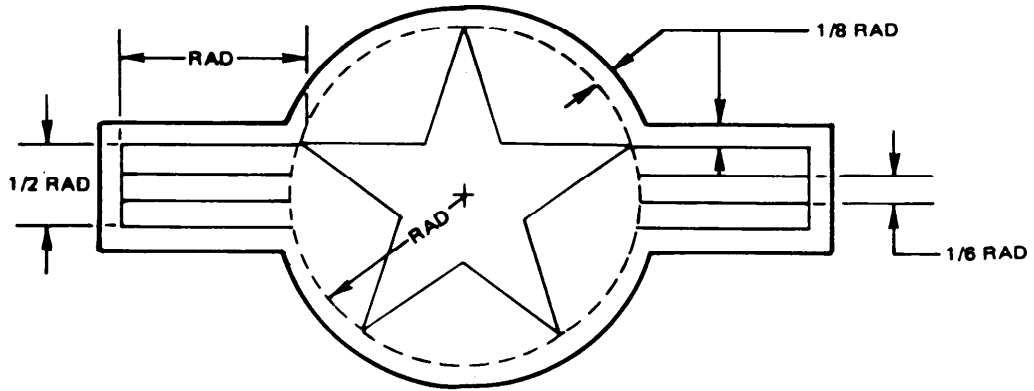
40.2 Aircraft markings. The following figures illustrate standard markings (including the national insignia), emergency, and hazard warning markings for fixed wing and rotary wing aircraft.

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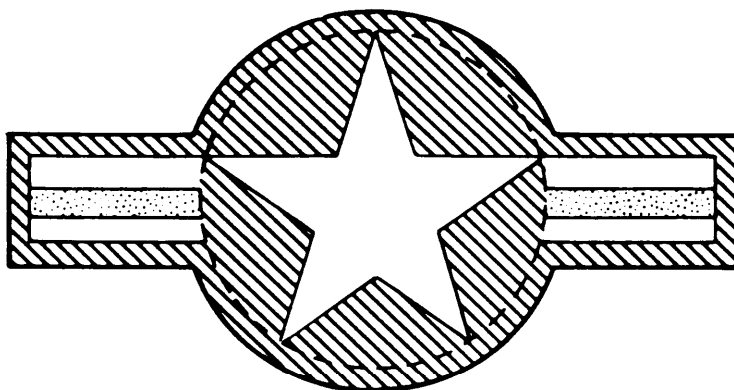
WHEN REFERENCE IS MADE TO SIZE OF INSIGNIA, THE REFERENCE IS TO THE SIZE OF THE BASIC CIRCLE ON WHICH THE WHITE STAR IS CONSTRUCTED AND NOT TO THE OUTER EDGE OF THE BLUE OUTLINE






TEMPLATE OR STENCIL LAYOUT



CONSTRUCTION DETAILS




CONVENTIONAL

-  INSIGNIA RED, COLOR NO. 11136
-  INSIGNIA WHITE, COLOR NO. 17925
-  INSIGNIA BLUE, COLOR NO. 15044

TACTICAL PAINT SCHEME

-  BACKGROUND COLOR
-  CONTRASTING GRAY

LAND CAMOUFLAGE SCHEME

-  BACKGROUND COLOR
-  CONTRASTING CAMOUFLAGE COLOR

COLOR DIAGRAM

FIGURE A-1. National star insignia.

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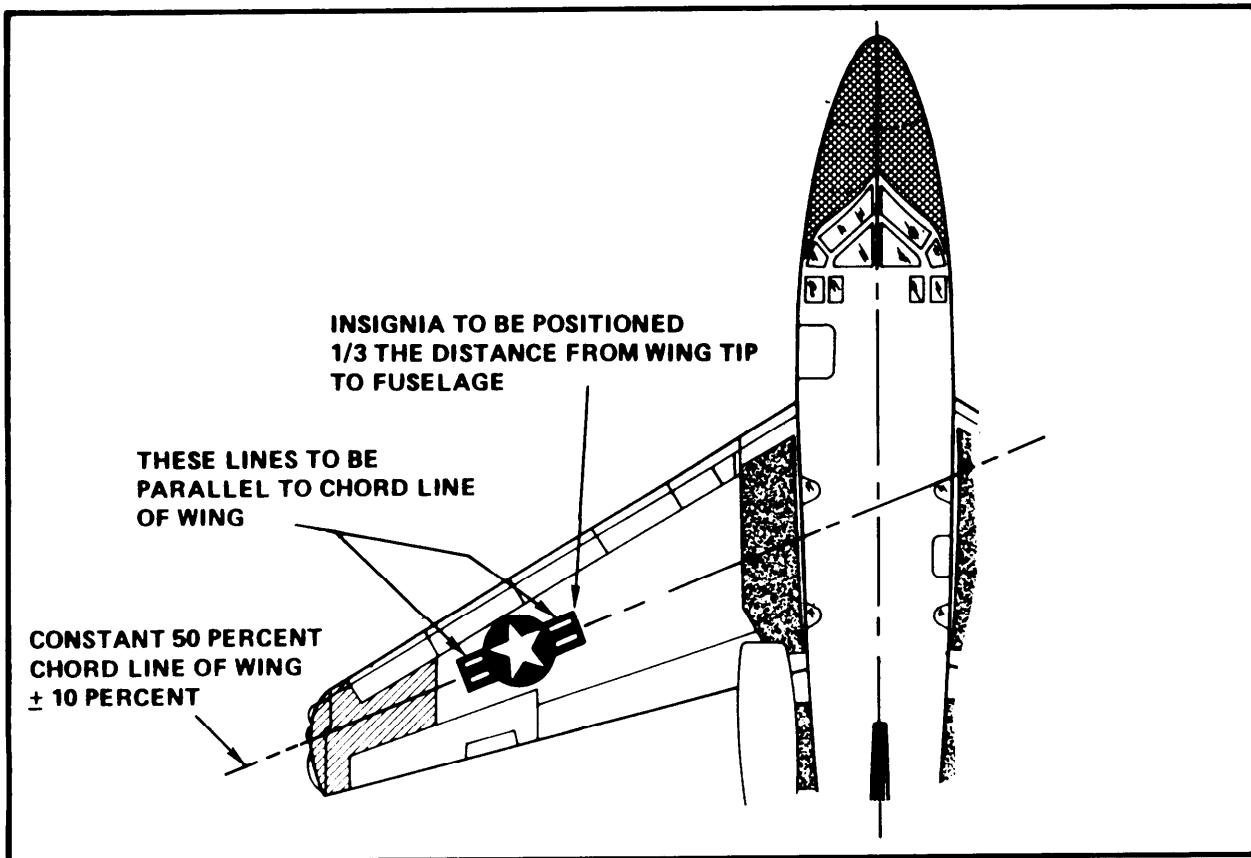


FIGURE A-2. National star insignia on swept wing aircraft.

WHITE BACKGROUND, COLOR NO. 17925



RED, COLOR NO. 11136
LETTERS AND ARROW

FIGURE A-3. Arresting hook warning.

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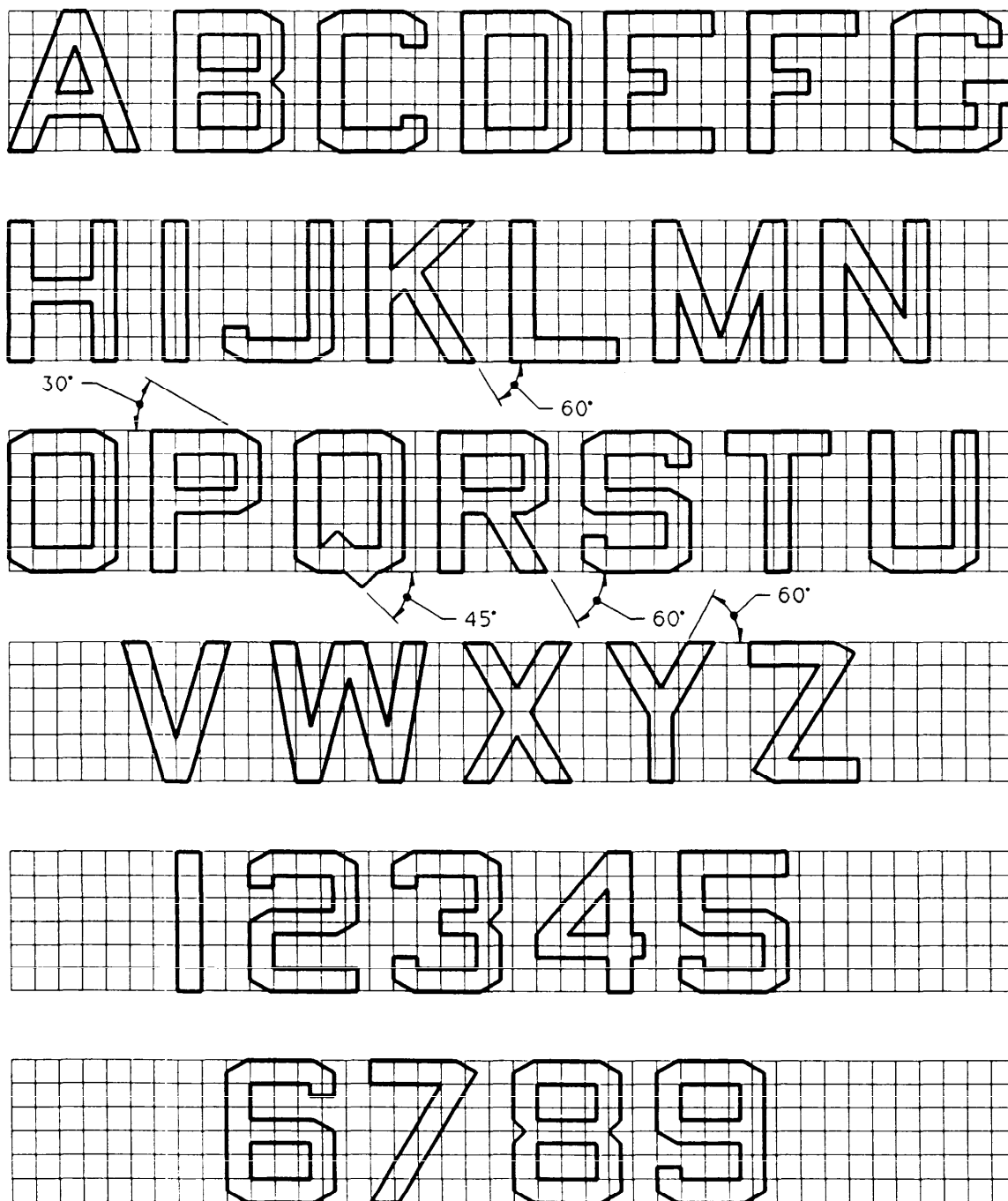


FIGURE A-4. Form of letters and numerals.

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1. The width of all letters and numbers (characters) shall be measured between the widest points of the characters.
2. The width of the characters is calculated as a percentage of the height. For example, as on the previous page.
 - a. All letters and numerals are 6 blocks high, and 4.5 blocks wide; therefore, the width of letters and numerals shall be 75 percent of the height.
 - b. The width of letters A and M shall be 92 percent of the letter's height.
 - c. The width of the letter W shall be 108 percent of its height.
 - d. The width of the letter G, with the exception of its overhang on the right side, shall be 75 percent its height.

To obtain the percentage of the height, divide the width of the character by its height.

The sides of the characters containing a corner wedge, (ie. B, C, D, G, 2, 3, etc.), shall be made to include an angle of 30 degrees to the horizontal, as shown on the previous page.

The spacing between characters shall be $1/6$ of the height of the letter or numeral. This spacing shall be measured from the point on each character nearest the other.

The dash (-) character is constructed such that its width is 50 percent of the width of the adjoining characters, and it shall be vertically centered. Spacing of the dash and adjoining characters shall be $1/6$ the height of the adjoining characters.

All overhangs (letters C, G, S and numerals 2, 3, 4, 9) shall be $1/12$ the character's height.

FIGURE A-4. Form of letters and numerals - Continued.

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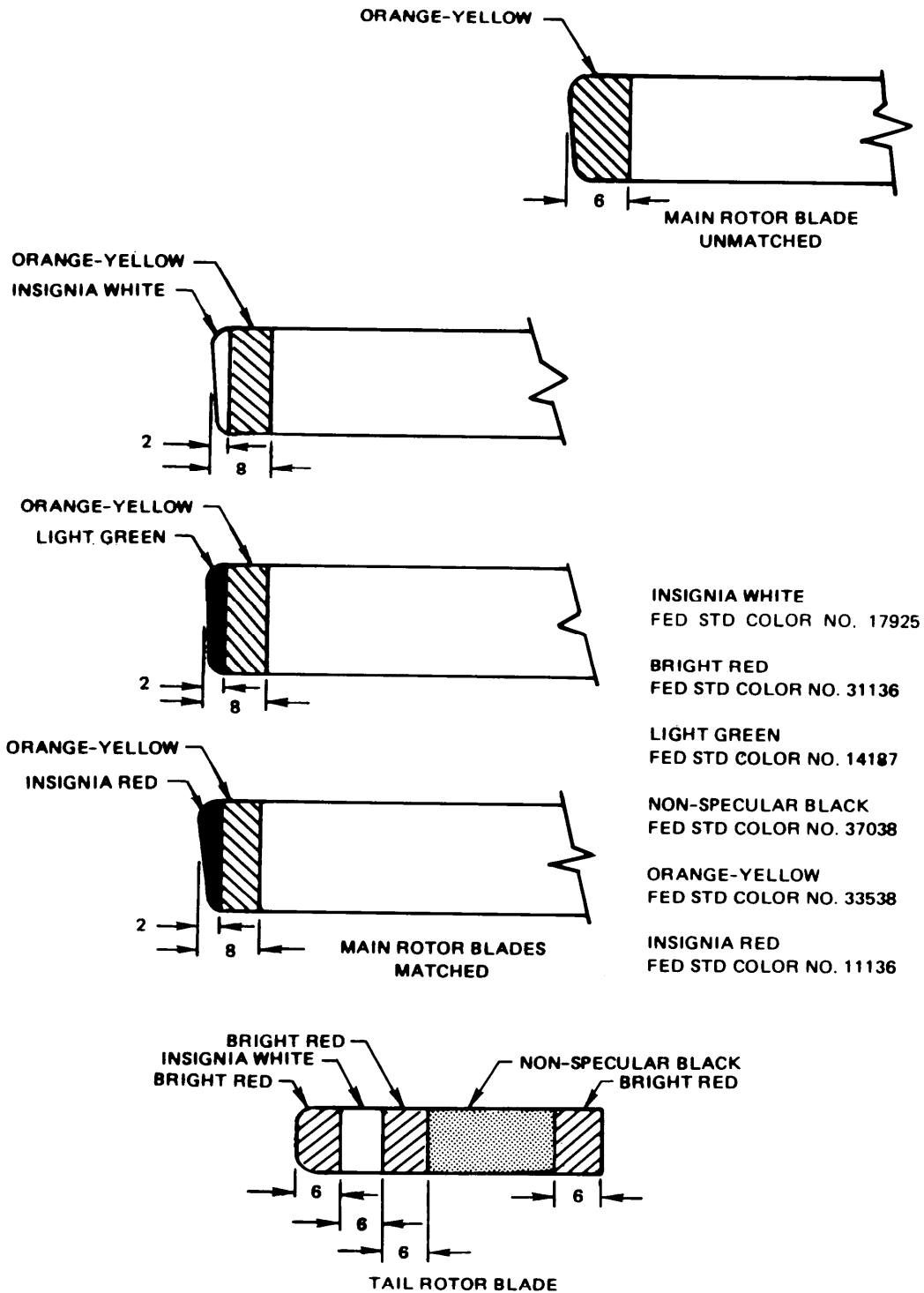


FIGURE A-5. Color scheme for helicopter blades.

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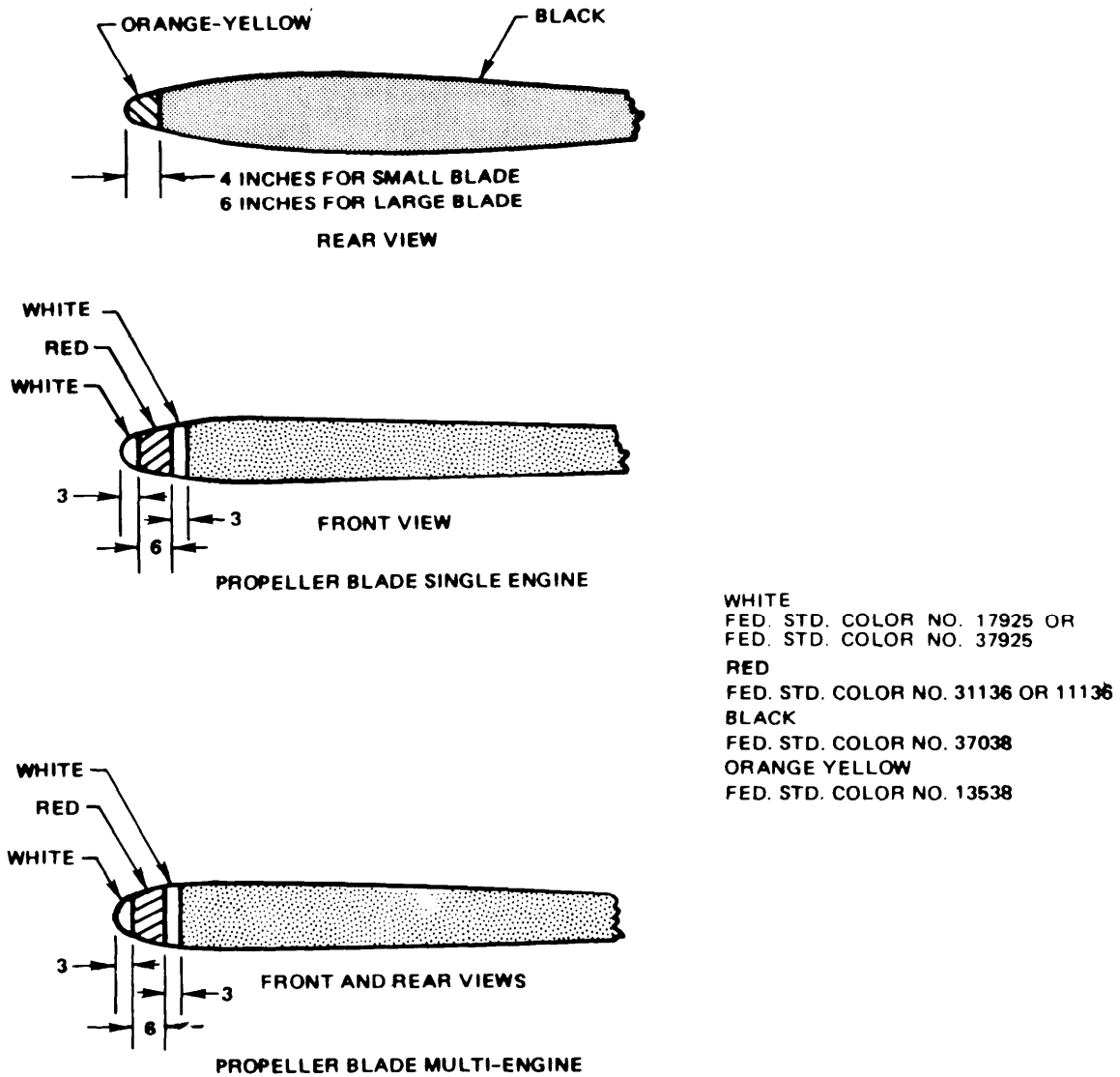


FIGURE A-6. Color scheme for reciprocating single and multi engine aircraft propellers.

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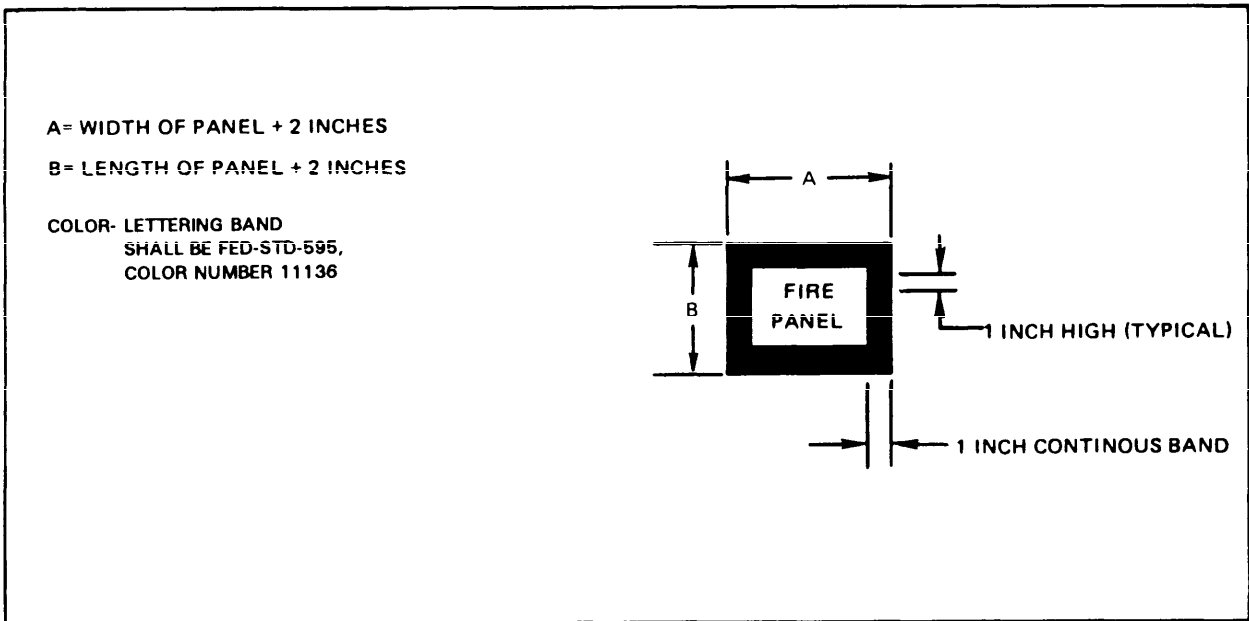


FIGURE A-7. Markings for fire access panel.

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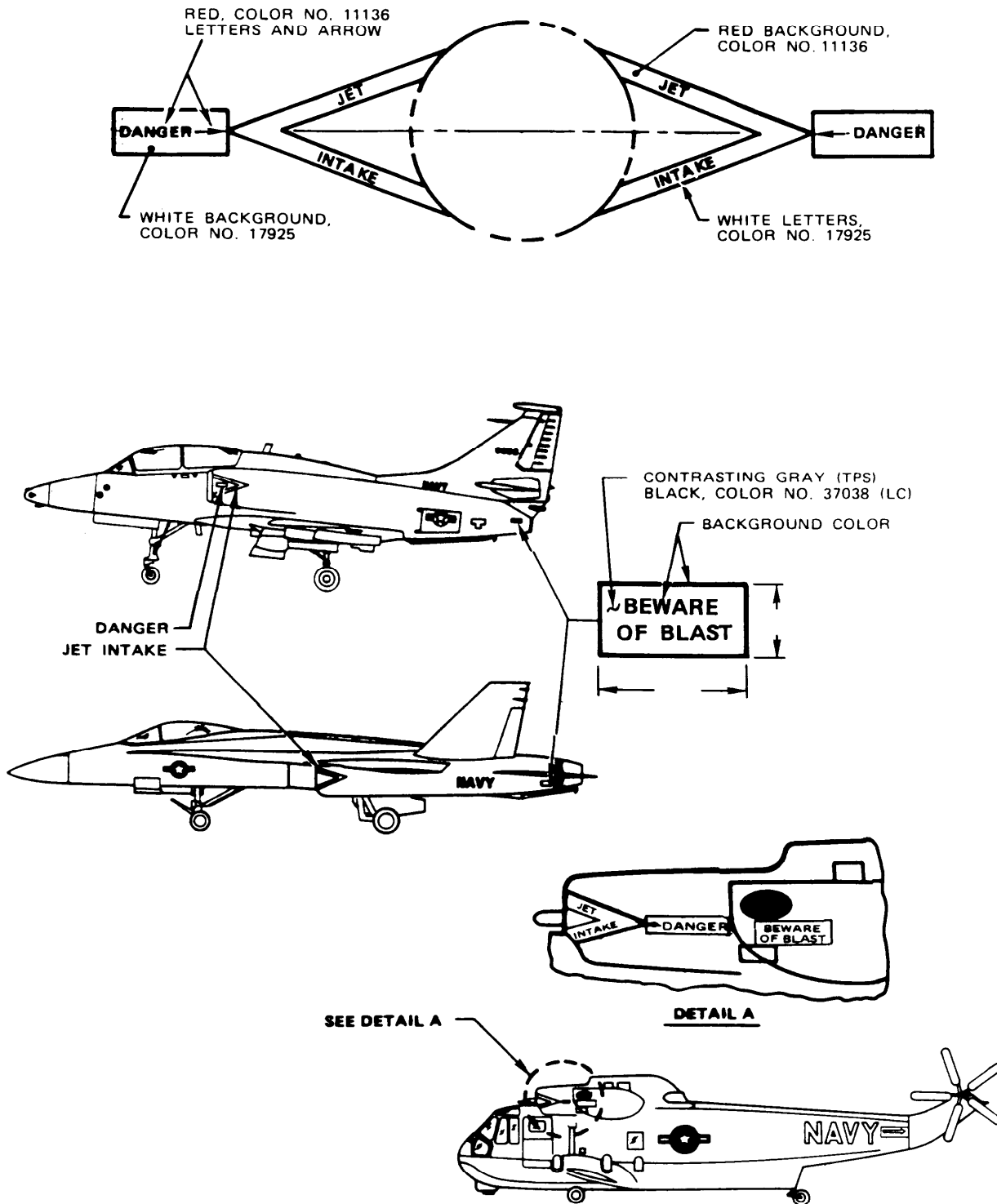
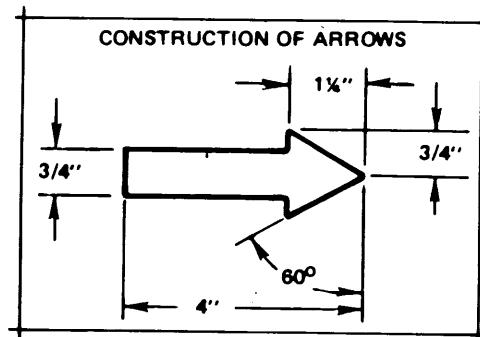


FIGURE A-8. Warning chevron and signs applied adjacent to jet engine intake and exhaust.

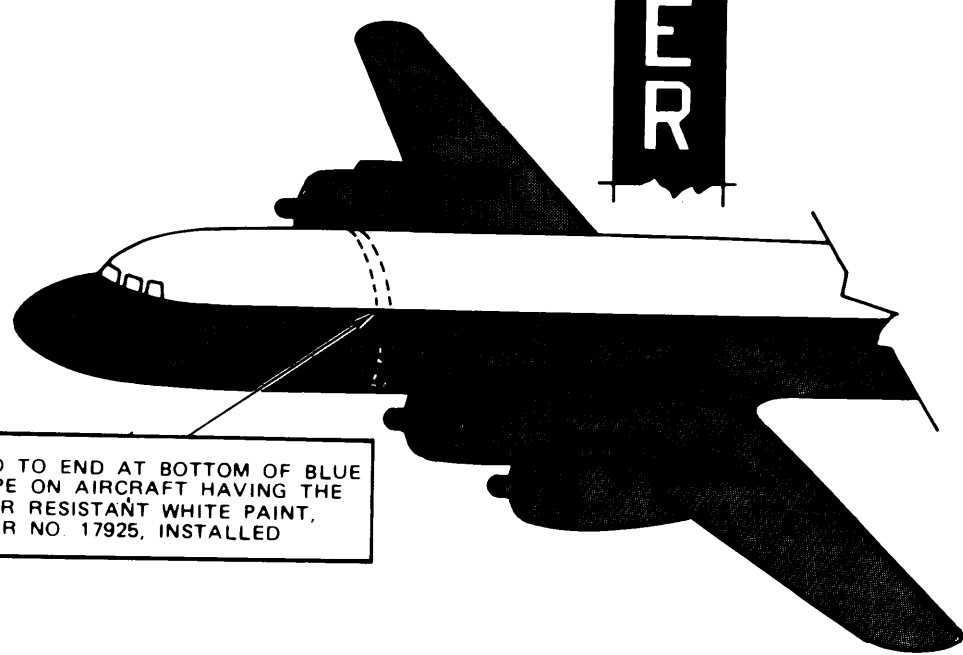
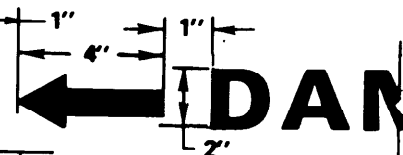
MIL-STD-2161A(AS)

PROPELLER WARNING STRIPES AND SIGNS

INSIGNIA RED, COLOR NO. 11136, CAUTION BAND TO BE 3" WIDE.
 INSIGNIA WHITE, COLOR NO. 17925, LETTERS, SUPERIMPOSED ON BAND, TO BE 2" HIGH.
 INSIGNIA RED, COLOR NO. 11136, WORDS, DANGER, TO BE 2" HIGH.
 INSIGNIA RED, COLOR NO. 11136, ARROWS TO BE 4" LONG.



DANGER →



BAND TO END AT BOTTOM OF BLUE STRIPE ON AIRCRAFT HAVING THE SOLAR RESISTANT WHITE PAINT, COLOR NO. 17925, INSTALLED

FIGURE A-9. Propeller warning strips and signs.

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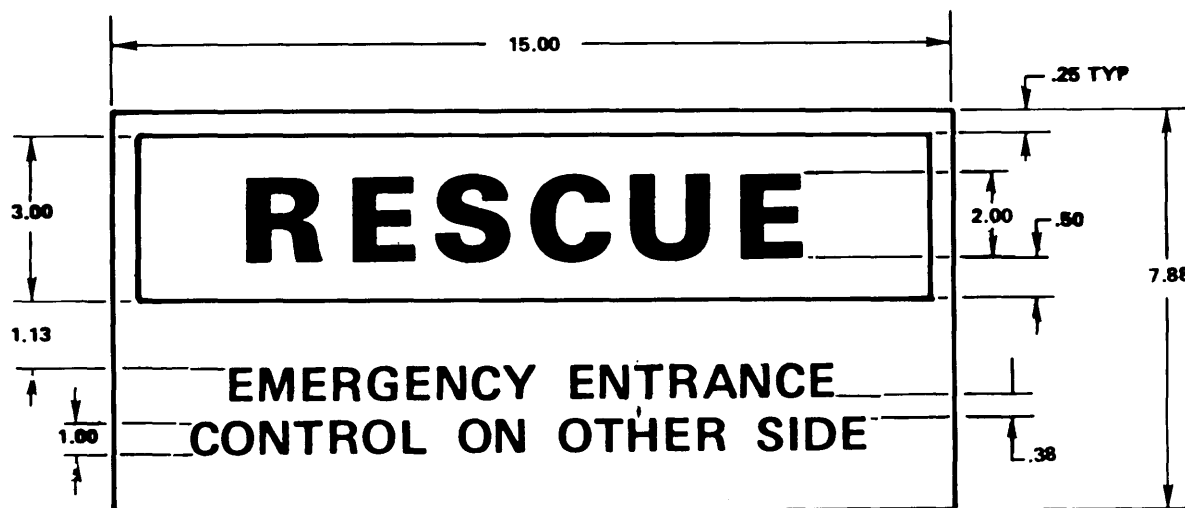


FIGURE A-10. Canopy release location.

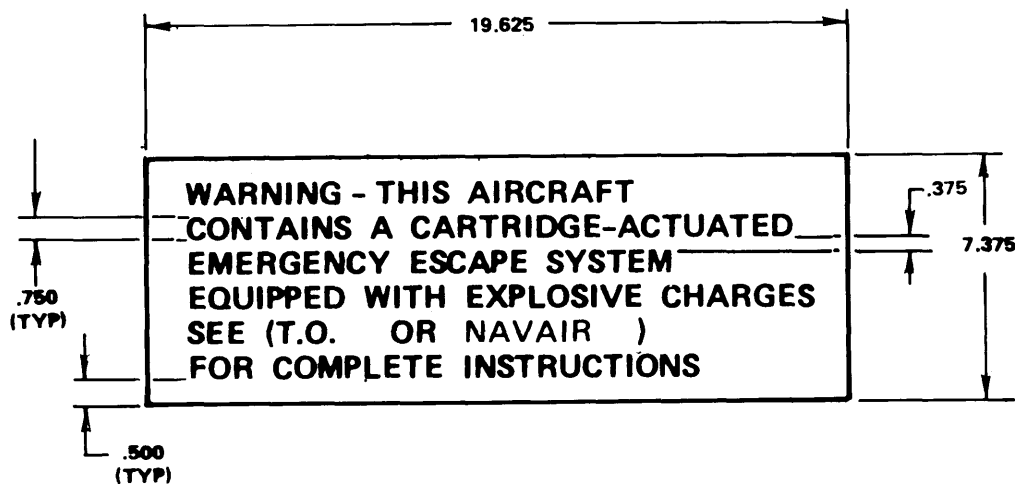


FIGURE A-11. Warning decal.

MIL-STD-2161A(AS)

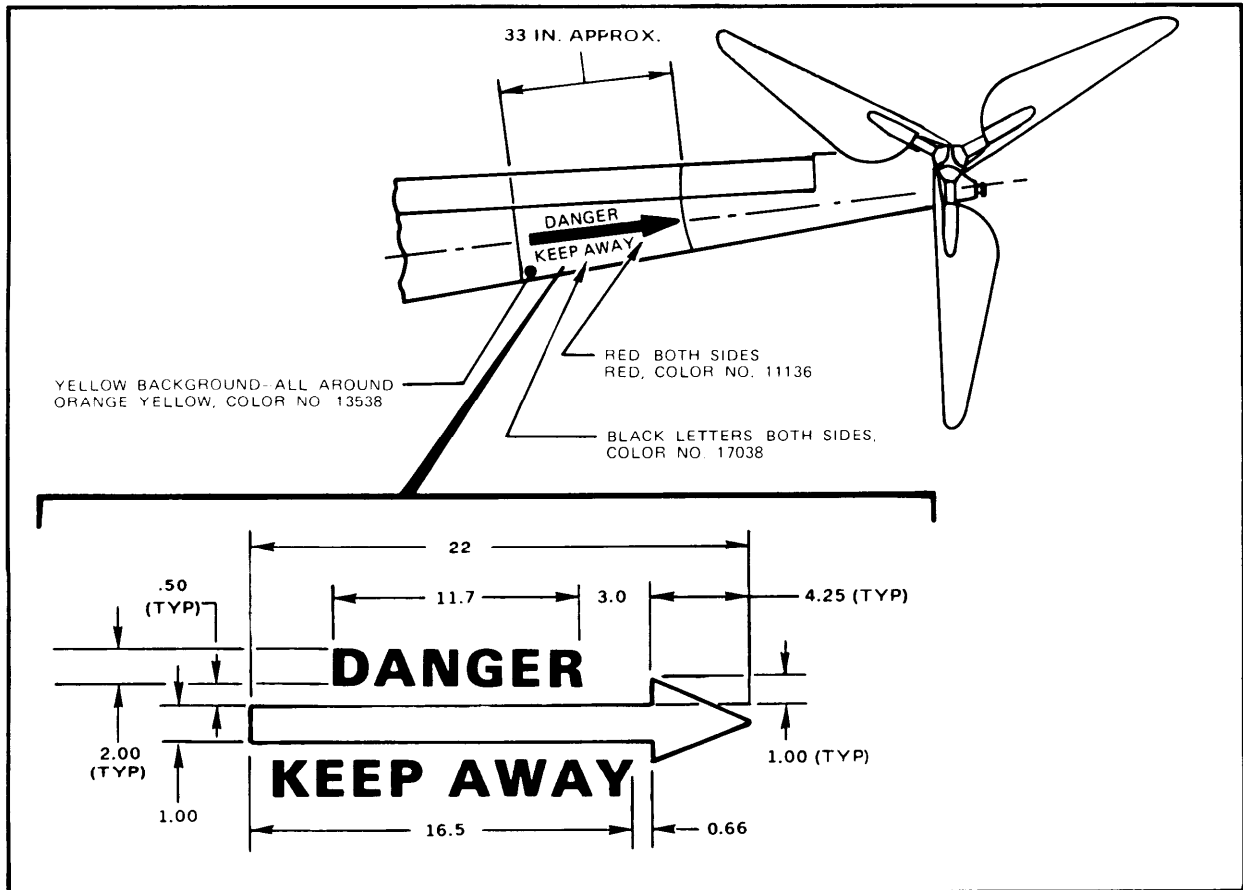


FIGURE A-12. Helicopter tail boom markings.

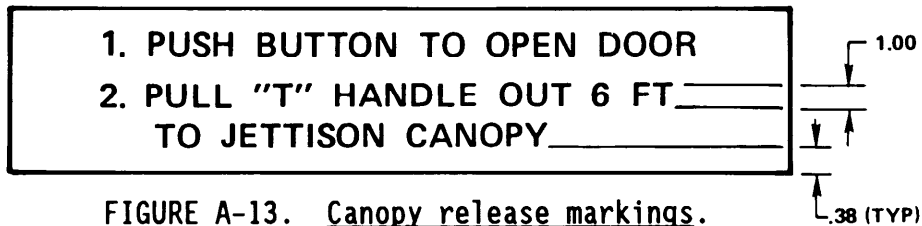
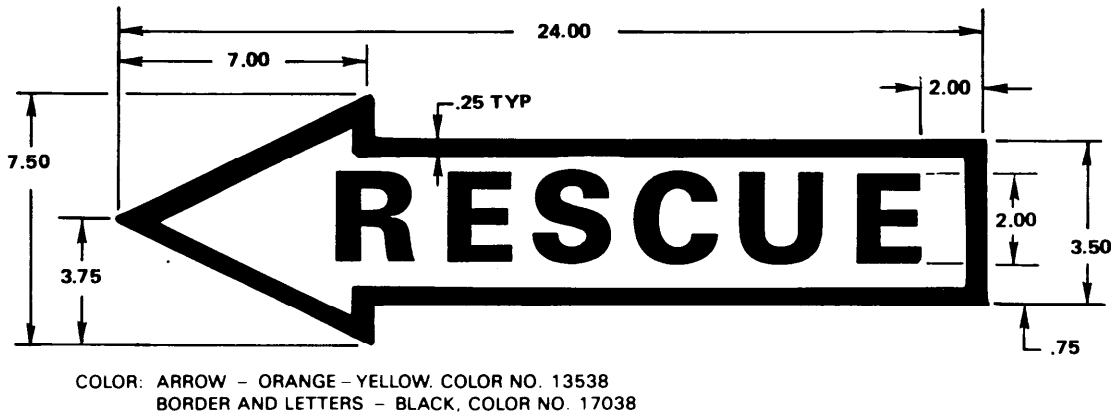


FIGURE A-13. Canopy release markings.

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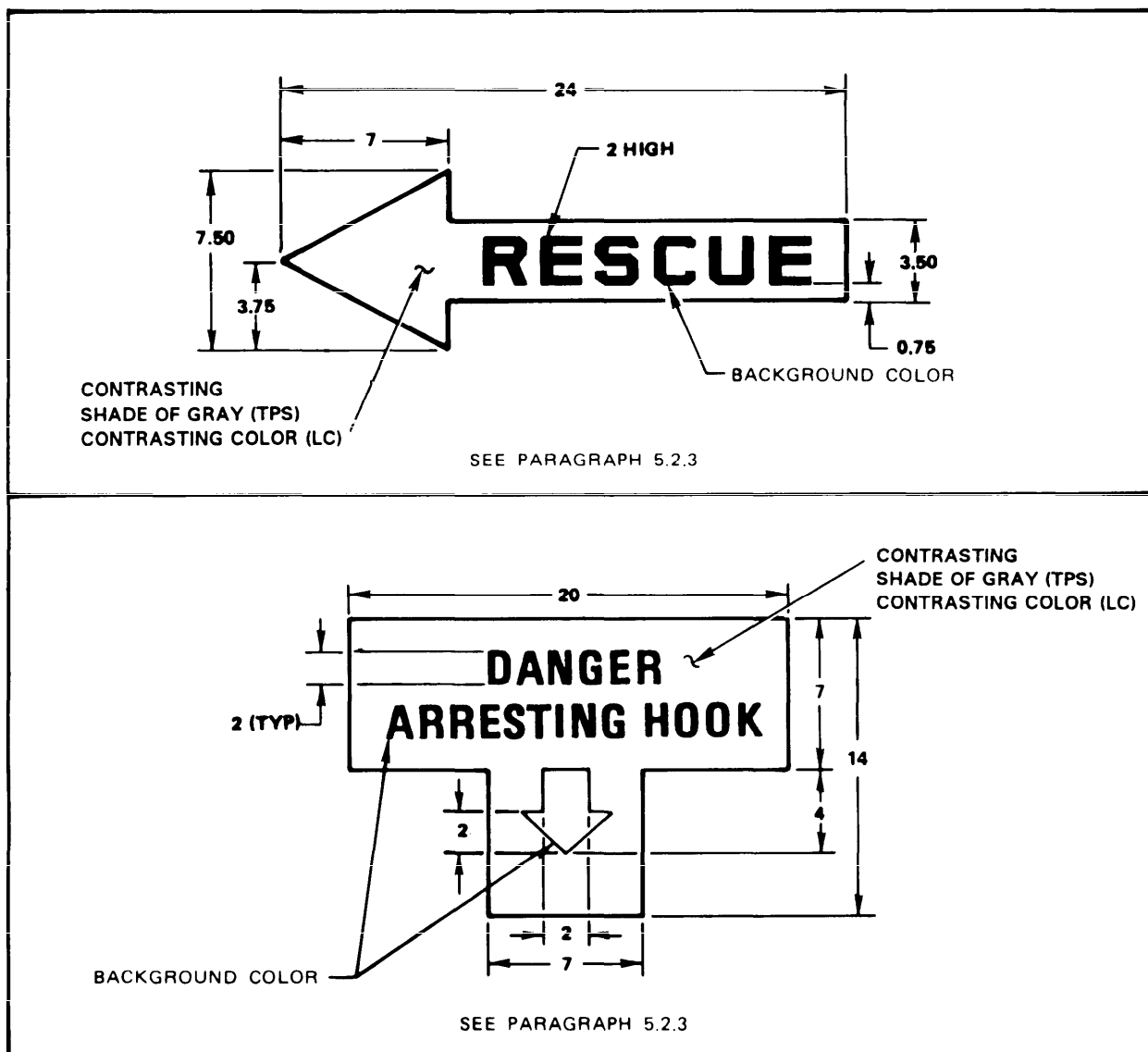


FIGURE A-14. Representative tactical and land camouflage paint scheme markings.

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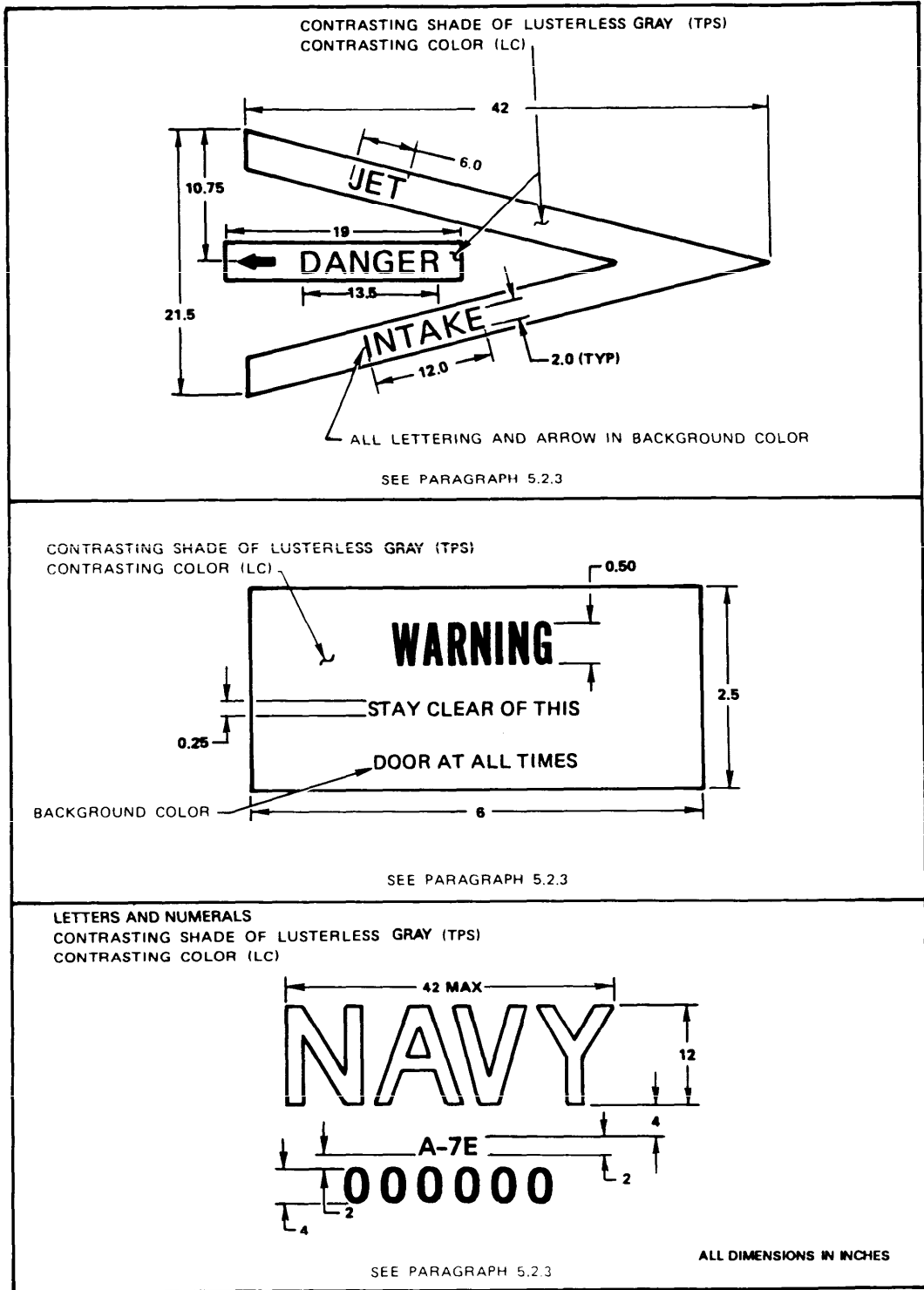


FIGURE A-15. Representative tactical and land camouflage paint scheme markings.

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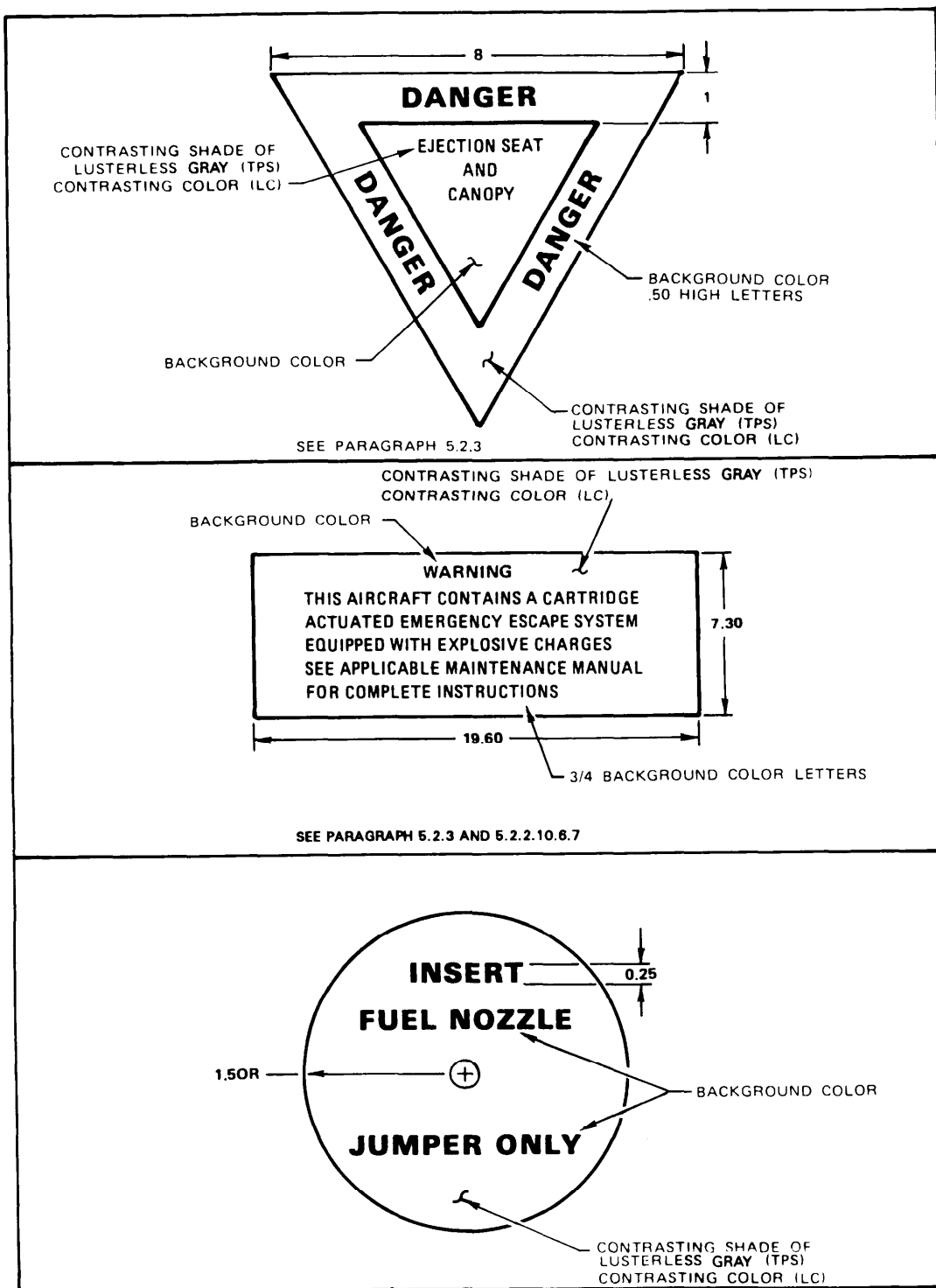


FIGURE A-16. Representative tactical and land camouflage paint scheme markings.

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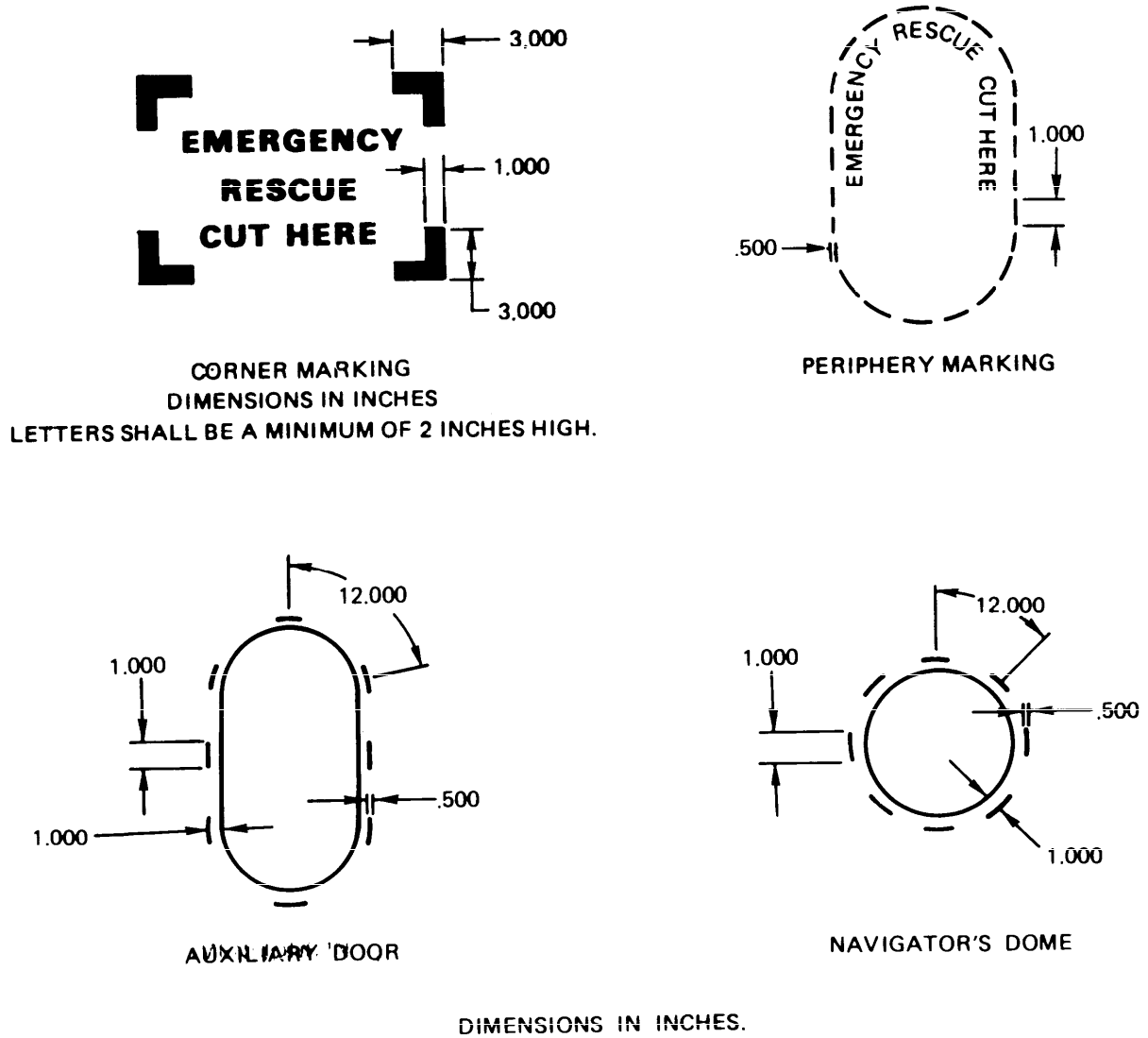


FIGURE A-17. Area cutout markings.

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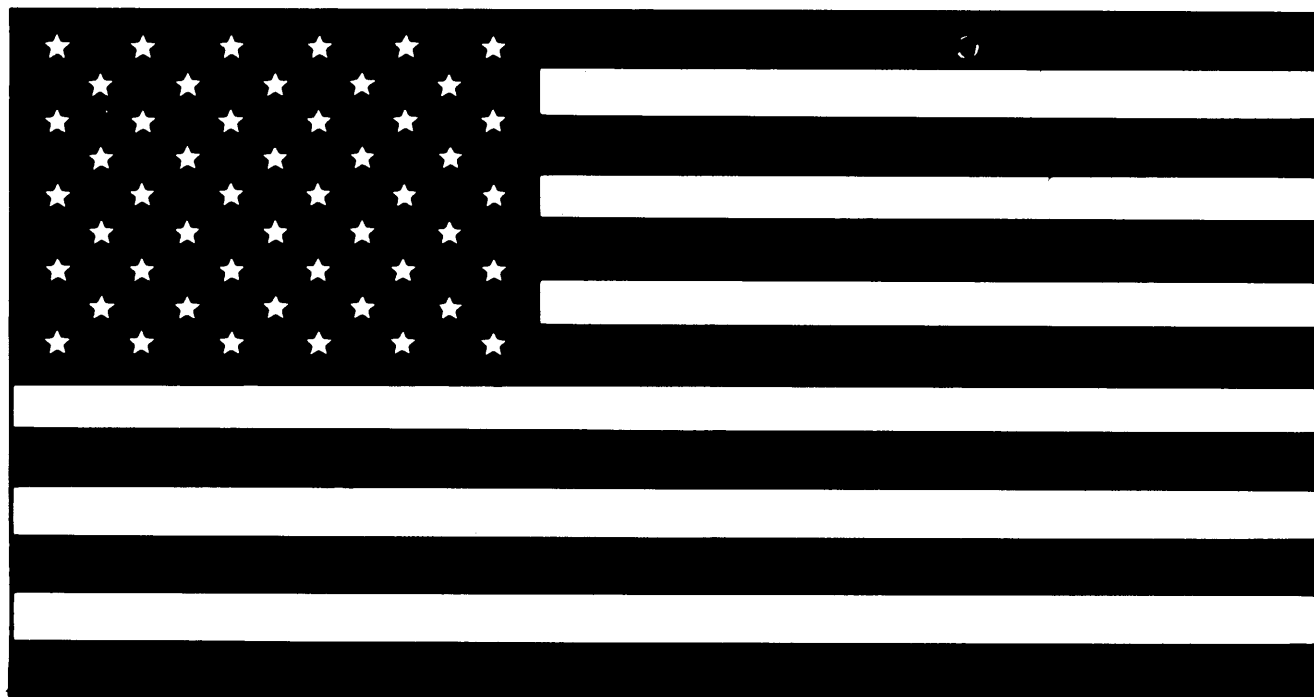
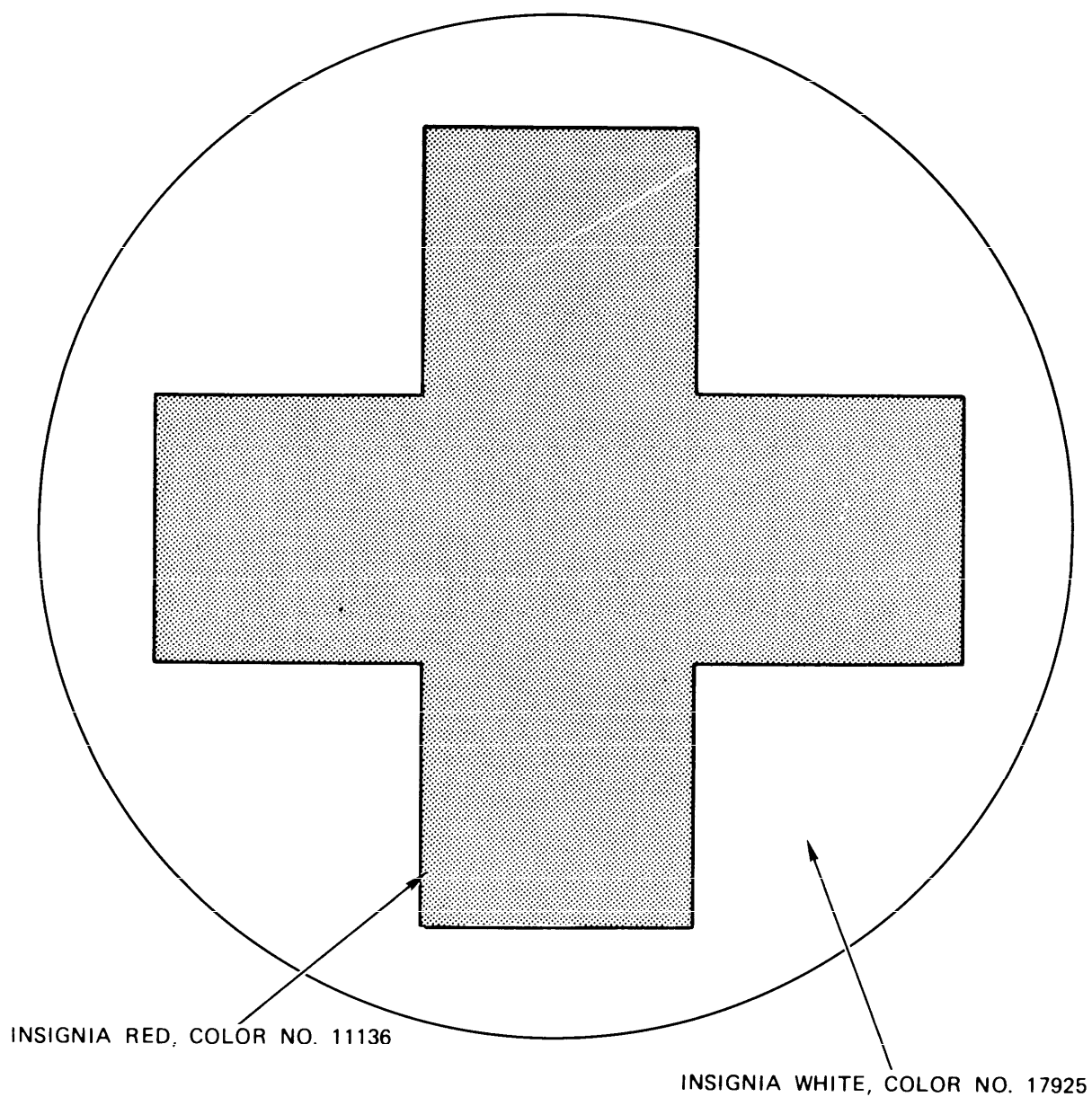


FIGURE A-18. American flag dimensions shall be in accordance with DDD-F-416.

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REFER TO PARAGRAPH 5.2.4

FIGURE A-19. Geneva red cross.

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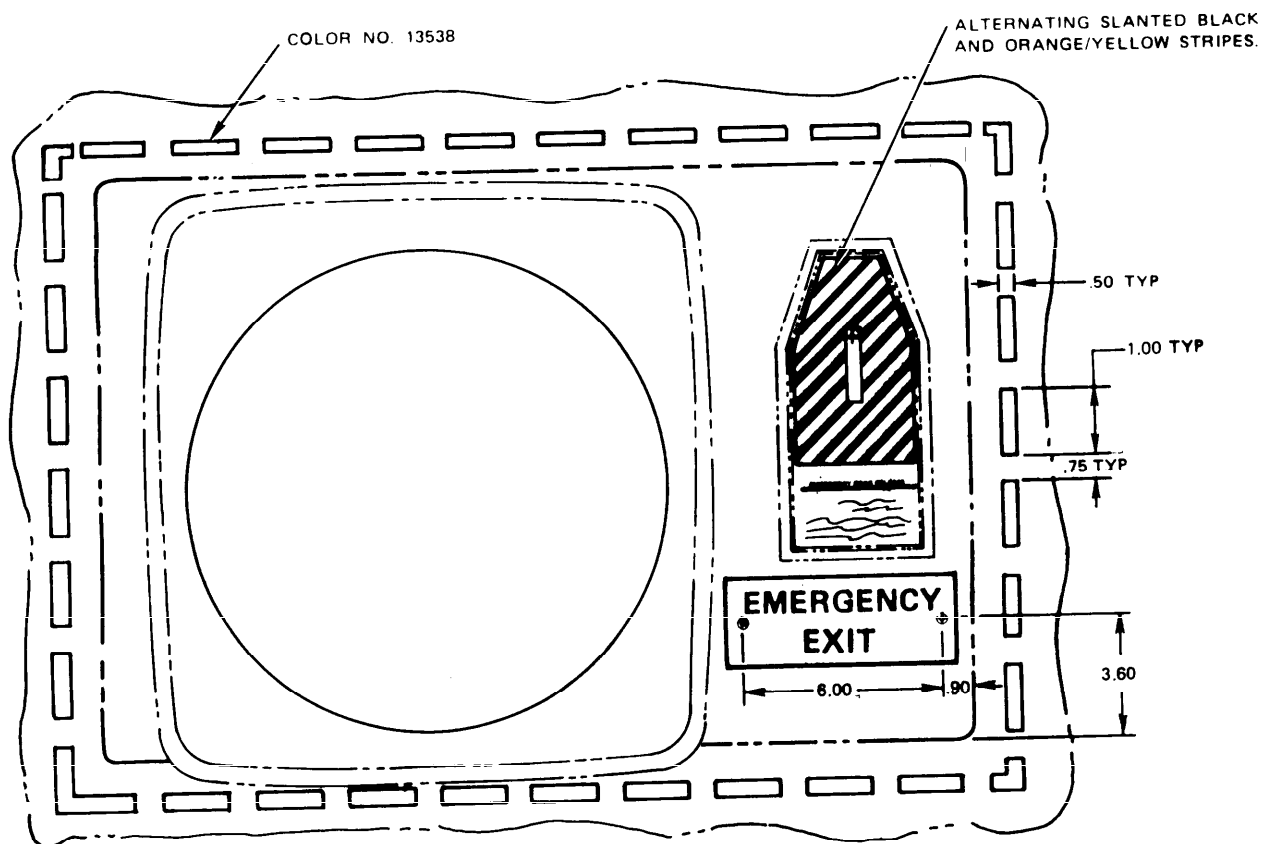


FIGURE A-20. Placard installation-identification, emergency escape hatch.

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APPENDIX B

SERVICING, GROUND HANDLING, HAZARD WARNING MARKINGS,
AND ARMAMENT PLACARD FOR AIRCRAFT

10. SCOPE

10.1 Scope. This appendix specifies aircraft servicing markings and appropriate NATO code number for cross servicing. Hazard warning markings for ground handling are included.

10.2 Use. This Appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS

20.1 Government documents.

20.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

FEDERAL

| | | |
|-----------|---|--|
| L-S-300 | - | Sheeting and Tape, Reflective: Nonexposed Lens |
| O-E-760 | - | Ethyl Alcohol (Ethanol), Denatured Alcohol, Proprietary Solvents and Special Industrial Solvents |
| O-M-232 | - | Methanol (Methyl Alcohol) |
| SS-G-659 | - | Graphite, Dry (Lubricating) |
| TT-I-735 | - | Isopropyl Alcohol |
| TT-S-1732 | - | Sealing Compound, Pipe Joint and Thread, Lead Free, General Purpose |
| VV-P-236 | - | Petrolatum, Technical |

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MILITARY

| | | |
|------------|---|---|
| MIL-C-4339 | - | Corrosion Preventive, Soluble Oil for Water Injection Systems |
| MIL-G-4343 | - | Grease, Pneumatic System |
| MIL-T-5544 | - | Thread Compound, Antiseize, Graphite Petrolatum |
| MIL-C-5545 | - | Corrosion Preventive, Aircraft Engine, Heavy Oil Type |
| MIL-H-5606 | - | Hydraulic Fluid, Petroleum Base, Aircraft, Missile and Ordnance |
| MIL-T-5624 | - | Turbine Fuel, Aviation, Grades JP-4, JP-5 and JP-5/JP-8 ST |
| MIL-G-6032 | - | Grease, Plug Valve, Gasoline and Oil Resistant, NATO Code Number G-363 |
| MIL-L-6081 | - | Lubrication Oil, Jet Engine |
| MIL-L-6082 | - | Lubricating Oil, Aircraft Piston Engine (Non-Dispersant Mineral Oil) |
| MIL-H-6083 | - | Hydraulic Fluid, Petroleum Base, for Preservation and Operation |
| MIL-L-6085 | - | Lubricating Oil: Instrument, Aircraft, Low Volatility |
| MIL-L-6086 | - | Lubricating Oil, Gear, Petroleum Base |
| MIL-C-6529 | - | Corrosion Preventive, Aircraft Engine |
| MIL-L-7808 | - | Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO Code O-148 |
| MIL-M-7866 | - | Molybdenum Disulfide, Technical, Lubrication Grade |
| MIL-L-7870 | - | Lubricating Oil, General Purpose, Low Temperature |
| MIL-C-8188 | - | Corrosion-Preventive Oil, Gas Turbine Engine, Aircraft, Synthetic Base |
| MIL-A-8243 | - | Anti-Icing and Deicing-Defrosting Fluids |

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| | | |
|-------------|---|---|
| MIL-S-8660 | - | Silicone Compound, NATO Code Number S-736 |
| MIL-C-11796 | - | Corrosion Preventive Compound, Petrolatum, Hot Application |
| MIL-C-16173 | - | Corrosion Preventive Compound, Solvent Cutback, Cold Application |
| MIL-G-21164 | - | Grease, Molybdenum Disulfide, for Low and High Temperatures NATO Code G-353 |
| MIL-L-22851 | - | Lubricating Oil, Aircraft Piston Engines (Ashless Dispersant) |
| MIL-L-23398 | - | Lubricant, Solid Film, Air Cured, Corrosion Inhibiting, NATO Code Number S-749 |
| MIL-L-23699 | - | Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO Code Number O-156 |
| MIL-G-23827 | - | Grease, Aircraft and Instrument, Gear and Actuator Screw, NATO Code Number G-354 |
| MIL-G-25013 | - | Grease, Aircraft, Ball and Roller Bearing NATO Code Number G-372 |
| MIL-G-25537 | - | Grease, Aircraft, Helicopter, Oscillating Bearing, NATO Code Number G-366, Metric |
| DOD-L-25681 | - | Lubricant, Molybdenum Disulfide, Silicone |
| MIL-I-27686 | - | Inhibitor, Icing, Fuel System |
| MIL-T-27730 | - | Tape, Antiseize, Polytetrafluoroethylene, with Dispenser |
| MIL-P-38477 | - | Plastic Material, Pressure Sensitive Adhesive for Aircraft Identification and Marking |
| MIL-M-43719 | - | Marking Materials and Markers, Adhesive Elastomeric, Pigmented, General Specification for |
| MIL-L-46010 | - | Lubricant, Solid Film, Heat Cured, Corrosion Inhibiting |
| MIL-H-46170 | - | Hydraulic Fluid, Rust Inhibited, Fire Resistant, Synthetic Hydrocarbon Base |

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- MIL-G-81322 - Grease, Aircraft, General Purpose, Wide Temperature Range
- MIL-L-81329 - Lubricant, Solid Film, Extreme Environment, NATO Code Number S-1737, Metric
- MIL-T-83133 - Turbine Fuels, Aviation, Kerosene Types, NATO F-34 (JP-8) & F-35
- MIL-H-83282 - Hydraulic Fluid, Fire Resistant, Synthetic Hydrocarbon Base, Aircraft, Metric, NATO Code Number H-537
- MIL-G-83363 - Grease, Transmission, Helicopter
- MIL-I-85470 - Inhibitor, Icing, Fuel System, High Flash, NATO Code Number S-1745

STANDARDS

FEDERAL

- FED-STD-595 - Colors Used in Government Procurement

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

20.1.2 Other Government publications. The following other government publications form a part of this Appendix to the extent specified herein. Unless otherwise specified, the issue shall be those in effect on the date of the solicitation.

PUBLICATIONS

AIR STANDARDIZATION COORDINATING COMMITTEE (ASCC)

- AIR STD 15/1 - Interchangeability Chart of Standardized Aviation Fuels, Lubricants, and Allied Products
- AIR STD 25/1 - Pressure Replenishment Connections for Engine Lubricating Oil
- AIR STD 25/3A - Aircraft Servicing/Hazard Markings

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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

- STANAG 1135 - Interchangeability Chart of NATO Standardized Fuels, Lubricants and Associated Products
- STANAG 3109 - Symbol Marking of Aircraft Servicing and Safety/Hazard Points

20.2 Non-Government publications. The following document forms a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are Department of Defense (DOD) adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of the documents not listed in the DODISS are the issue of the documents cited in the solicitation.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ASTM D910 - Standard Specification for Aviation Gasolines

(Application for copies should be addressed to American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103-1187.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

20.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated detail specifications, specification sheets or MS standards), the text of this document shall take precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

30. DEFINITIONS

30.1 Definitions. For purposes of this Appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 Servicing and precautioning marking. The servicing and precautionary markings for aircraft shall be in accordance with the symbols shown and as described herein. Symbols shall be approximately 4 inches in the lowest dimension, except where otherwise specified. However, smaller sized lettering which supplement the symbols may be used if required by the item or area to be marked. Lettering which supplements the symbols shall be in the scale 1 to 4 in relation to the symbol (see figure B-1).

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40.2 Servicing instructions. Servicing instructions for hydraulic systems, hydraulic reservoirs, landing gear shock struts, wheels and tires, and pneumatic systems shall be provided on instruction plates or on a permanent and legible manner adjacent to charging points and test connections. Access doors or panels to servicing points shall be marked with the appropriate servicing symbol(s).

40.3 Service warning markings. Service markings shall be used to give warning and minimize possible errors in servicing, handling or aircraft and safety of flight. Symbols approved by international agreement shall be displayed on all "in production" and "in service" aircraft. These symbols shall be in accordance with those shown on figures B-6 and B-7. Marking for trainer and liaison aircraft shall be included. Paint or decals may be used when applying service point identification and precautionary service markings. Decalcomanias shall be in accordance with MIL-M-43719, L-S-300, ASCC AIR STD 25/3A and plastic material per MIL-P-38477.

40.4 Printed information. Information required in connection with servicing symbols shall be printed in accordance with 5.2.5.1, unless otherwise specified by the procuring activity.

40.5 Colors. Colors for ground handling, hazard warning, filling, and atomic flash markings shall be as follows:

- a. Ground handling: The servicing symbols used to mark ground handling servicing points shall be aviation yellow, FED-STD-595, color number 13538.
- b. Hazard: Hazard symbols shall be insignia red, FED-STD-595, color number 11136.
- c. Filling Points: The servicing symbols used to mark filling points shall be colored in black, FED-STD-595, color number 17038 or insignia white, FED-STD-595, color number 17925, according to the background.
- d. Atomic flash: Aircraft which may be subjected to atomic flash, will have servicing markings painted in suitable pale colors, having a reflectivity of at least 50 percent.

40.6 International standardization. Certain provisions of this standard are the subject of international standardization agreements ASCC AIR STD 25/1, ASCC AIR STD 15/1, NATO STANAG 3109, and NATO STANAG 1135. When revision or cancellation of this standard is proposed which will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels including departmental standardization offices, to change the agreement or make other appropriate accommodations.

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50. DETAIL REQUIREMENTS

50.1 Aircraft markings and placard. The following figures illustrate aircraft armament placards, NATO codes and markings, ground handling and hazards and NATO code numbers for cross servicing.

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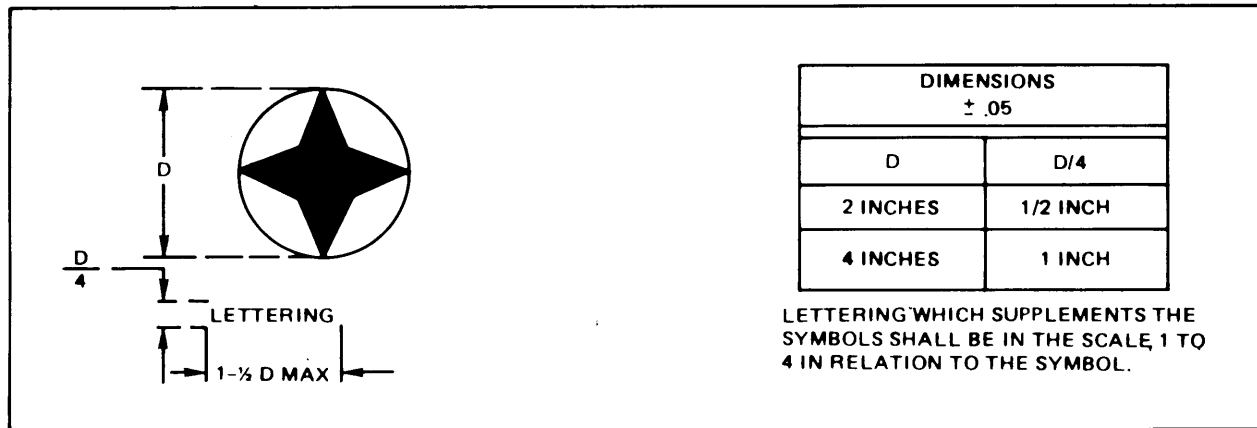


FIGURE B-1. Typical symbol dimensioning.

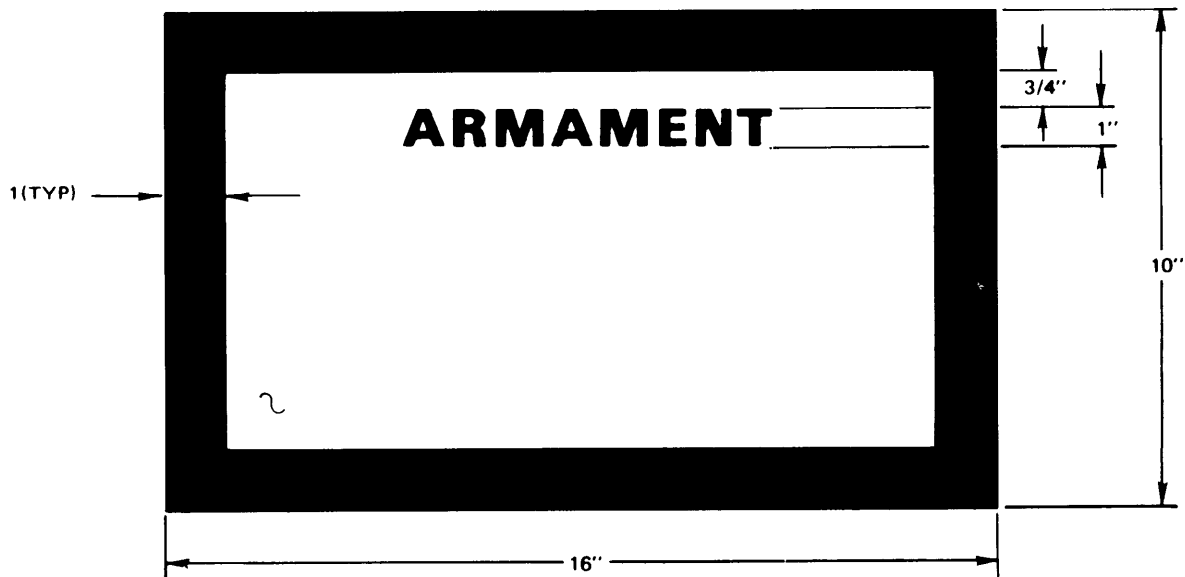





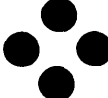












FIGURE B-2. Armament placard.

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| FILLING (a) | |
|---|--|
| FUELING FILLED FOUR POINTED STAR WITH NOTATION OF NATO CODE NUMBER FOR FUEL  (NATO CODE NO.) | OXYGEN (BREATHING) TWO HORIZONTAL FILLED RECTANGLES WITH NOTATION OF EITHER "GAS" OR "LIQUID" FOR GASEOUS OXYGEN INCLUDE CHARGING PRESSURES IN ENGLISH AND METRIC UNITS. FOR LIQUID OXYGEN INCLUDE CAPACITY IN LITRES. WHEN NECESSARY  |
| ROCKET FUELS FILLED FOUR POINTED STAR IN CRESCENT WITH NOTATION OF NATO CODE NUMBER FOR ROCKET FUEL  (NATO CODE NO.) | ANTI-DETONANT OR THRUST AUGMENTATION FILLED CHEVRON WITH NOTATION OF NATO CODE NUMBER  (NATO CODE NO.) |
| ROCKET OXIDIZER FILLED CRESCENT WITH NOTATION OF NATO CODE NUMBER FOR ROCKET OXIDIZER  (NATO CODE NO.) | AIR CONDITIONING DOT PATTERN  |
| ENGINE LUBRICATING OIL FILLED SQUARE WITH NOTATION OF NATO CODE NUMBER FOR ENGINE LUBRICATING OIL  (NATO CODE NO.) | NITROGEN SERVICES FILLED SQUARE WITH A QUARTER ARC REMOVED FROM EACH CORNER, WITH TYPE OF GAS USED AND PRESSURE IN ENGLISH AND METRIC UNITS  NITROGEN — psi — Kg/Cm ² |
| HYDRAULIC FLUID FILLED CIRCLE WITH NOTATION OF NATO CODE NUMBER FOR HYDRAULIC FLUID  (NATO CODE NO.) | FIRE EXTINGUISHING SYSTEM A FILLED DIAMOND WITH NOTATION SHOWING NATO CODE NUMBER  (NATO CODE NO.) |
| DE-ICING FILLED TRIANGLE WITH NOTATION OF NATO CODE NUMBER FOR DE-ICING FLUID  (NATO CODE NO.) | EXTERNAL ELECTRICAL CONNECTIONS FILLED "E" WITH LOWER LIMB SHORTENED STATING SERVICE AND VOLTAGE DETAILS  SERVING STARTING ETC. 28V OR 112 V DC 115/200V, 400 CYCLES |
| COOLANT TWO FILLED HORIZONTAL S'S WITH NOTATION OF NATO CODE NUMBER FOR COOLANT AND PERCENTAGE COMPOSITION IF NECESSARY  (NATO CODE NO.) WATER _____ % SOLUBLE OIL _____ % | GROUNDING OR EARTHING RECEPTACLE A FILLED INVERTED "T" WITH TWO PARALLEL BARS UNDERNEATH WHICH DIMINISH IN SIZE  GROUND (EARTH) HERE |
| PNEUMATIC SYSTEM FILLED X WITH NOTATION OF MAXIMUM CHARGING PRESSURE IN ENGLISH AND METRIC UNITS  MAXIMUM — psi — Kg/Cm ² | INSPECTION OF BATTERY A FILLED ELECTRIC FLASH SIGN  |

(a) COLOR - BLACK OR WHITE ACCORDING TO BACKGROUND.

FIGURE B-3. NATO codes and markings-filling.

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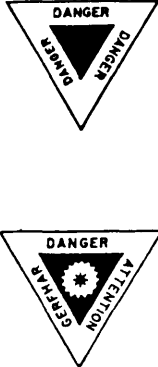

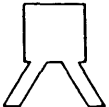
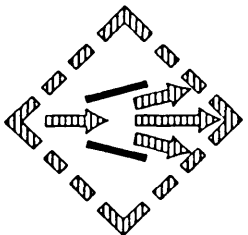

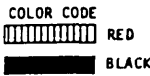

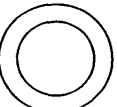

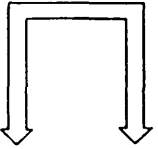

| FILLING COLOR - BLACK OR WHITE ACCORDING TO BACKGROUND | | HAZARD (b) COLOR - RED #11136 | |
|---|--|--|--|
| PNEUMATIC STARTER CONNECTION | A FILLED X CIRCUMSCRIBED BY A FILLED RING  — PSI — kPa | EXPLOSIVE ACTUATED DEVICES | MARK BOTH SIDES OF FUSELAGE RED FILLED EQUILATERAL TRIANGLE, APEX DOWN, OF THE LARGEST PRACTICABLE SIZE UP TO A 9 INCH (23cm) SIZE TO BE APPLIED TO THE EXTERNAL PART OF AIRCRAFT ADJACENT TO THE EXPLOSIVE DEVICE. THE WORD "DANGER" TO BE WITH ITS TOP TO A SURROUNDING PERIPHERAL RED LINE. IT IS PERMISSIBLE FOR THE WORD "DANGER" TO BE APPLIED IN ANY 3 DIFFERENT LANGUAGES, PROVIDED THAT ENGLISH IS ONE OF THEM. THE WORDS "EJECTION SEAT", "CANOPY" ETC OR AN APPROPRIATE SYMBOL MAY BE ADDED IN WHITE ON THE CENTRAL RED TRIANGLE.  |
| REFRIGERANT REPLENISHMENT | TWO FILLED TRIANGLES WITH APEXES JOINED ON HORIZONTAL CENTER LINE WITH NOTATION SHOWING TYPE OF REFRIGERANT  | | |
| GROUND HANDLING (b) COLOR AVIATION - YELLOW #13538 | | | |
| JACKING POINT | AVIATION YELLOW FILLED SQUARE WITH TWO SLANTING LEGS ON BOTTOM SIDE  | AIRBORNE AUXILIARY TURBINE POWER PLANT INLET AND/OR EXHAUST |  |
| SLINGING OR HOISTING POINTS | AVIATION YELLOW FILLED HOOK ON A HORIZONTAL LINE.  | COLOR CODE  | |
| MOORING OR PICKETING | AVIATION YELLOW FILLED ANCHOR  | | |
| TOWING (c) | AVIATION YELLOW FILLED RING  | CANOPY EXPLOSIVE RELEASE | SYMBOL AS SHOWN IN RED ON EXTERNAL PART OF THE AIRCRAFT ADJACENT TO THE EXPLOSIVE RELEASE  |
| LIFTING AREA (EXTERNAL STORES) | FILLED HORIZONTAL BAR WITH DOWNWARD POINTING ARROWS AT EACH END OF THE BAR  | OPTIONAL - WHEN USED SHALL BE ADDITIONAL TO HAZARD: EXPLOSIVE ACTUATED DEVICES.  | |
| (b) OUTLINE SYMBOLS IN BLACK OR WHITE ACCORDING TO THE BACKGROUND. (c) OPTIONAL WHERE TOWING POINT IS OBVIOUS AND SUITABLE LOCATION FOR SYMBOL IS NOT AVAILABLE. | | | |

FIGURE B-4. NATO codes and markings-filling, ground handling and hazards.

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NATO SYMBOL OR CODE NUMBER
FOR MILITARY SPECIFICATIONS

CROSS SERVICING OF AIRCRAFT

| <u>General type of product</u> | <u>NATO no. 1/</u> | <u>Applicable specification 2/</u> |
|---------------------------------------|------------------------|--|
| I. <u>Piston engine fuels</u> | | |
| II. <u>Turbine engine fuels</u> | | |
| Kerosene type, high flashpoint | F-44 | MIL-T-5624 |
| Gasoline type, wide cut (JP-4) | F-40 | MIL-T-5624 |
| Aviation, kerosene type (JP-8) | F-34 | MIL-T-83133 |
| Kerosene type | F-35 | MIL-T-83133 |
| III. <u>Starter fuels</u> | | |
| IV. <u>Thrust augmentation fluids</u> | | |
| Methanol | S-747 | O-M-232 Grade A |
| Soluble oil | C-630 | MIL-C-4339 |
| V. <u>Piston engine oils</u> | | |
| Non-dispersant mineral oil | O-117 | MIL-L-6082 Grade 1100 |
| Non-dispersant mineral oil | O-113 | MIL-L-6082 Grade 1065 |
| Ashless dispersant | O-128 | MIL-L-22851 Type II |
| Ashless dispersant | O-123 | MIL-L-22851 Type III |

FIGURE B-5. NATO code number cross reference.

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| | <u>General type of product</u> | <u>NATO no. 1/</u> | <u>Applicable specification 2/</u> |
|-------|--|------------------------|--|
| VI. | <u>Turbine engine oils</u> | | |
| | Aircraft turbine lubricating oil | O-133 | MIL-O-6081 Grade 1010 |
| | Synthetic type 3cSt | O-148 | MIL-L-7808 |
| | Synthetic type 5cSt | O-156 | MIL-L-23699 |
| VII. | <u>Aviation greases</u> | | |
| | Grease, molybdenum disulfide, high & low temperatures | G-353 | MIL-G-21164 |
| | General purpose 3/ | G-382 | |
| | High temperature 3/ | G-359 | |
| | Ball and roller bearing wide temperature range 3/ | G-359 | |
| | Extreme pressure synthetic | G-354 | MIL-G-23827 |
| | Hydrocarbon resistant | G-363 | MIL-G-6032 |
| | Pneumatic system | G-392 | MIL-G-4343 |
| | Helicopter oscillating bearing | G-366 | MIL-G-25537 |
| | Extreme high temperature | G-372 | MIL-G-25013 |
| | Aircraft, multipurpose | G-395 | MIL-G-81322 Grade A |
| | Aircraft, PTFE | G-396 | MIL-G-83363 |
| VIII. | <u>Hydraulic fluids</u> | | |
| | Petroleum base | H-515 | MIL-H-5606 |
| | Fire resistant, synthetic | H-537 | MIL-H-83282 |

FIGURE B-5. NATO code number cross reference - Continued.

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| | <u>General type of product</u> | <u>NATO no.</u> 1/ | <u>Applicable specification</u> 2/ |
|-----|--|------------------------|--|
| IX. | <u>Miscellaneous oils</u> | | |
| | Gear oil light (mineral type) | O-153 | MIL-L-6086 Grade L |
| | Gear oil medium (mineral type) | O-155 | MIL-L-6086 Grade M |
| | General purpose light oil | O-142 | MIL-L-7870 |
| | Synthetic oil instruments | O-147 | MIL-L-6085 |
| X. | <u>Specialty products</u> | | |
| | Liquid, compass, aircraft | S-712 | MIL-L-5020 |
| | Deicing and defrosting fluid | S-742 | MIL-A-8243 Type II |
| | Isopropanol | S-737 | TT-I-735 Grade B |
| | Ethanol | S-738 | O-E-760 Type III |
| | Petroleum | S-743 | VV-P-236 |
| | Molybdenum disulfide lubricant (dry) | S-740 | MIL-M-7866 |
| | Antiseize graphite-petroleum | S-720 | MIL-T-5544 |
| | Graphite | S-732 | SS-G-659 |
| | Electrical insulating and sealing compound | S-736 | MIL-S-8660 |
| | Lubricant, solid film airdrying | S-749 | MIL-L-23398 |
| | Molybdenum disulfide silicone base high temperature | S-1735 | DOD-L-25681 |
| | Antiseize compound, lead free | S-716 | TT-S-1732 |

FIGURE B-5. NATO code number cross reference - Continued.

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| | <u>General type of product</u> | <u>NATO no.</u> 1/ | <u>Applicable specification</u> 2/ |
|-----|--|------------------------|--|
| X. | <u>Specialty products</u> - Continued | | |
| | Methanol, technical | S-747 | O-M-232 |
| | Fuel system deicing inhibitor | S-748 | MIL-I-27686 |
| | Antiseize tape, aircraft oxygen systems | S-1736 | MIL-T-27730 |
| | Lubricant, solid film, extreme environment | S-1737 | MIL-L-81329 |
| | Fuel system icing inhibitor | S-1745 | MIL-I-85470 |
| XI. | <u>Preservative compounds</u> | | |
| | Aircraft engine corrosion preventive oil concentrate | C-608 | MIL-C-6529 Type I |
| | Aircraft piston engine corrosion preventive oil | C-609 | MIL-C-6529 Type II |
| | Aircraft turbine engine corrosion preventive oil | C-610 | MIL-C-6529 Type III |
| | Heavy oil or wax thickened type | C-612 | MIL-C-5545 |
| | Corrosion preventive oil, gas turbine (synthetic base) | C-638 | MIL-C-8188 |
| | Hydraulic equipment corrosion preventive oil | C-635 | MIL-H-6083 |
| | Hard film cold application | C-632 | MIL-C-16173 Grade 1 |
| | Hard film hot application | C-633 | MIL-C-11796 Grade 1 |
| | Soft film cold application | C-620 | MIL-C-16173 Grade 2 |
| | Soft film hot application | C-627 | MIL-C-11796 Grade 3 |

FIGURE B-5. NATO code number cross reference - Continued.

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| <u>General type of product</u> | <u>NATO no.</u> <u>1/</u> | <u>Applicable specification</u> <u>2/</u> |
|---|-------------------------------|---|
| XI. <u>Preservative compounds</u> - Continued | | |
| Hydraulic fluid, rust inhibited, fire resistant, synthetic | H-544 | MIL-H-46170 |

1/ NATO numbers are in accordance with STANAG 1135, Interchangeability Chart of NATO Standardized Fuels, Lubricants and Associated Products.

2/ Latest issues apply.

3/ There is no U.S. implementing military document for this lubricant.

FIGURE B-5. NATO code number cross reference - Continued.

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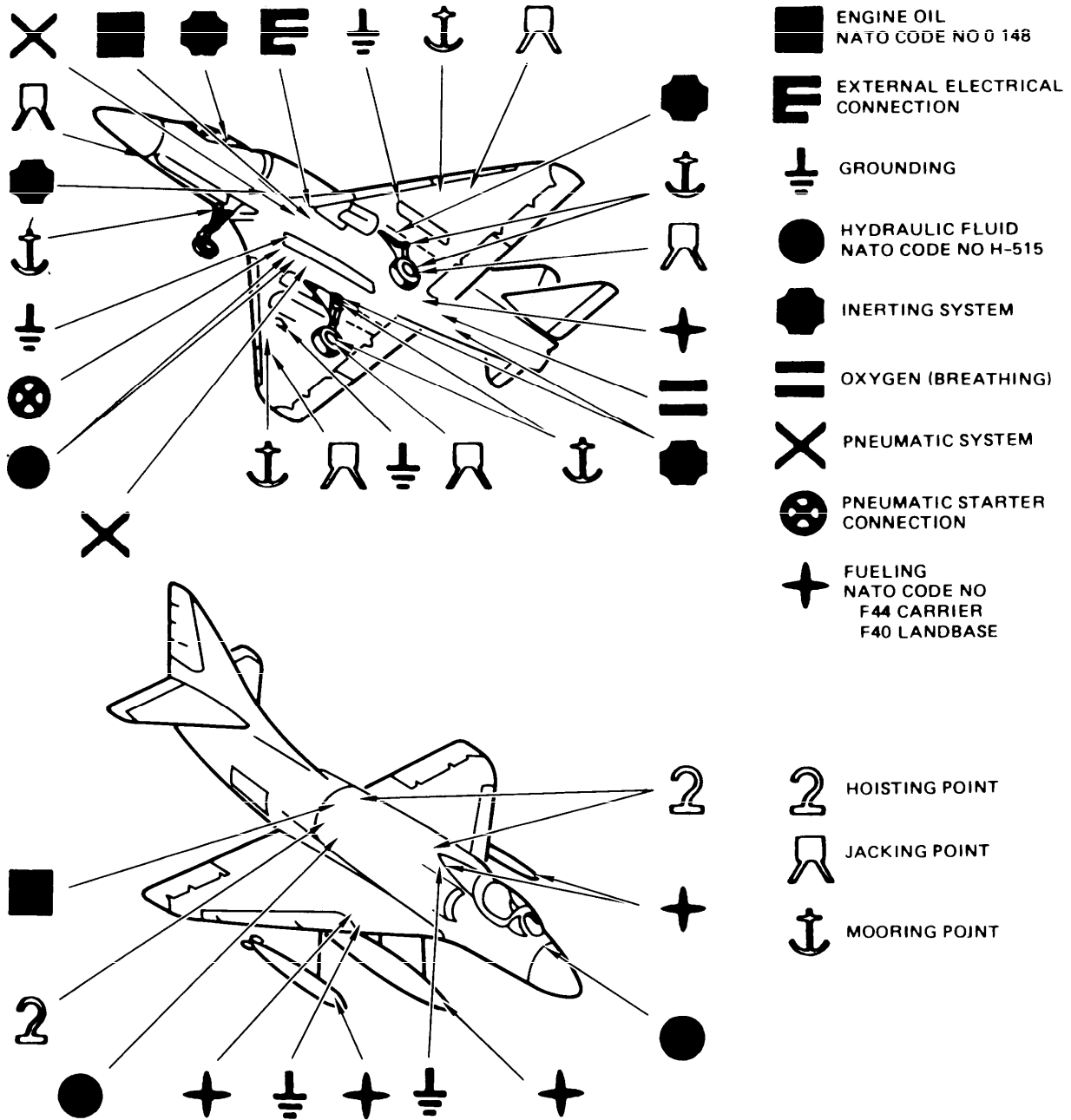


FIGURE B-6. Typical NATO aircraft servicing markings.

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SECTION I

MAINTENANCE

COLOR - AVIATION
YELLOW NO. 13538

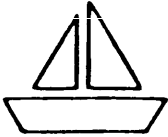
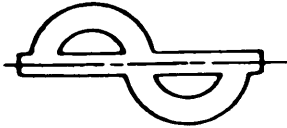
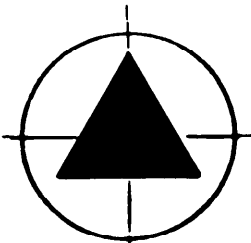
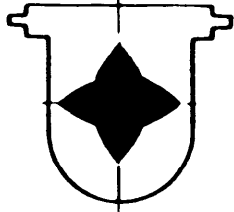
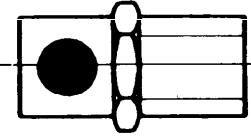
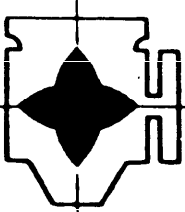
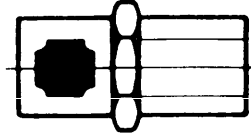
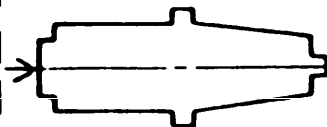
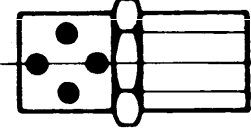
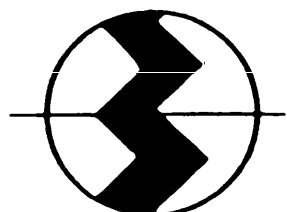
| FUNCTION | SYMBOL | FUNCTION | SYMBOL |
|---------------------------------------|---|---|---|
| DINGHY STORAGE |  | INSPECTION OF ELECTRONIC INSTALLATION |  |
| INSPECTION OF DE-ICING CIRCUIT |  | INSPECTION OF FUEL FILTER |  |
| HYDRAULIC SYSTEM TEST POINT |  | FUEL TANK WATER DRAIN OFF |  |
| INERTING FLUID TANK SYSTEM TEST POINT |  | IGNITION PLUG FOR STARTING JET ENGINE |  |
| CABIN PRESSURE TEST POINT |  | INSPECTION OF STATIC CONNECTION (VENTS) |  |

FIGURE B-7. Required markings and symbols.

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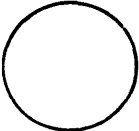

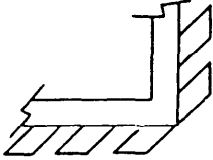




| SECTION II | | | GROUND HANDLING | | |
|----------------------|--|---|--|--|---|
| FUNCTION | DESCRIPTION | SYMBOL | FUNCTION | DESCRIPTION | SYMBOL |
| NO GRIP | FILLED HAND WITH RED FILLED DIAGONAL CROSS SUPERIMPOSED |  | DRINKING WATER REPLENISHMENT | AVIATION YELLOW DISC SURROUNDING THE SYMBOL |  |
| TAIL SUPPORT | AVIATION YELLOW CIRCLE AROUND THE POINT OF SUPPORT |  | TOILET SERVICING | AVIATION YELLOW DISC SURROUNDING THE SYMBOL |  |
| WALKWAYS | SURROUNDED BY AN AVIATION YELLOW BORDER WITH RED FRINGE ON THE OUTSIDE |  | TELEPHONE CONNECTION GROUND TO COCKPIT | FILLED AVIATION YELLOW SYMBOL, AS SHOWN |  |
| NO STEP | A FILLED FOOTPRINT WITH A RED DIAGONAL CROSS SUPERIMPOSED |  | FLIGHT DATA RECORDER | BLACK SYMBOLS ON WHITE BACKGROUND OR WHITE SYMBOLS ON BLACK BACKGROUND |  |
| LOCKING OF DROP TANK | AVIATION YELLOW DISC CONTAINING FUEL SYMBOL IN RED |  | | | |

FIGURE B-7. Required markings and symbols - Continued.

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| SECTION III. HAZARD | | COLOR - RED NO. 11136 |
|--|-------------------------------------|--|
| FUNCTION | PART TO BE MARKED | SYMBOL |
| LOCKING OF CONTROLS AND UNDER CARRIAGE | UPRIGHTS AND CROSS-BARS | PAINTED RED AND WHITE AND FITTED WITH A RED PENNANT INCORPORATING REFLECTIVE STRIPES |
| AIRCRAFT POSITION OF LOCKS | POSITION OF UPRIGHTS AND CROSS-BARS | PAINTED RED |
| PITOT TUBE COVERING | COVER | PAINTED RED AND FITTED WITH A RED PENNANT INCORPORATING REFLECTIVE STRIPES |
| CAMERA GUN COVERING | CAMERA GUN CAP | |
| JET ENGINE COVERING | TAMPIONS | |
| ROCKET CONTROL | ELECTRIC PLUG | RED AND WHITE PENNANT |
| ANTIFIRING CONTROL | SHUNT | RED PENNANT WITH BLACK SKULL AND CROSS-BONES |
| PROHIBITION OF ACCESS | WEAKER PARTS OF AIRCRAFT | BORDER BAND AND CROSS OF ST. ANDREW IN RED |

OPTIONAL MARKINGS


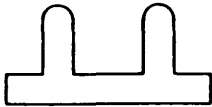

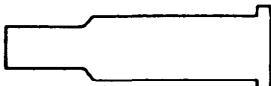
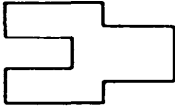
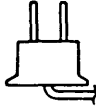

| SECTION IV. ARMAMENT AND AMMUNITION | | COLOR - GREEN NO. 14187 |
|-------------------------------------|---|---|
| FUNCTION | PART TO BE MARKED | SYMBOL |
| GUN | |  |
| FIRING | SHUNT FOR CUTTING OUT FIRING SAFETY CONTROL |  |
| FEEDING OF GUNS | CARTRIDGE |  |
| CARTRIDGE CONTAINER | CARTRIDGE CASE |  |
| LINKS CONTAINER | CONTAINER |  |
| ROCKETS CONTROL | SELECTION PLUG |  |
| BOMB HOIST | ATTACHMENT POINT FOR HOIST |  |

FIGURE B-7. Required markings and symbols - Continued.

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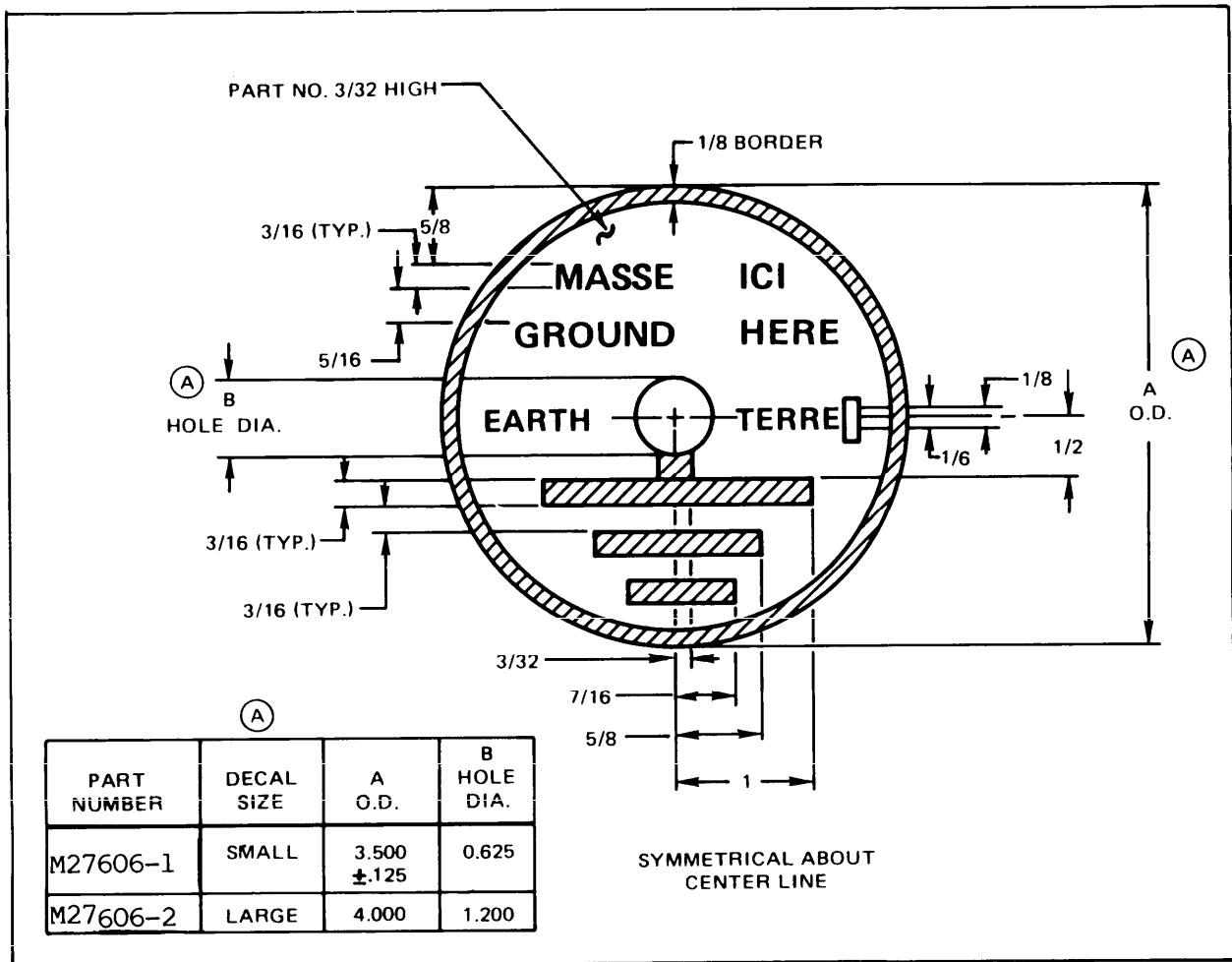


FIGURE B-8. Decalcomania - ground here, international symbol.

MIL-STD-2161A(AS)

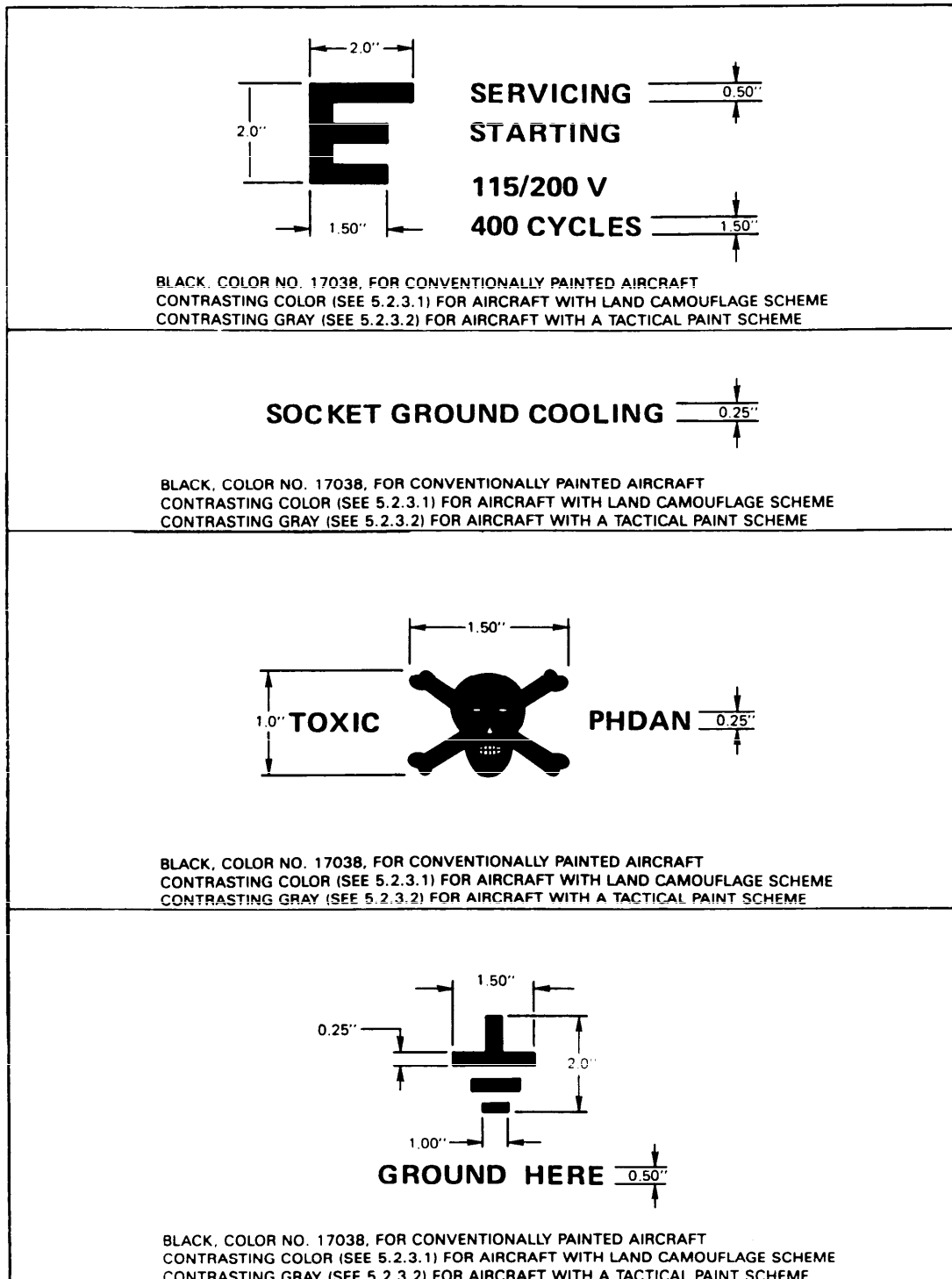


FIGURE B-9. Samples of ground servicing and hazard markings (size and color).

MIL-STD-2161A(AS)

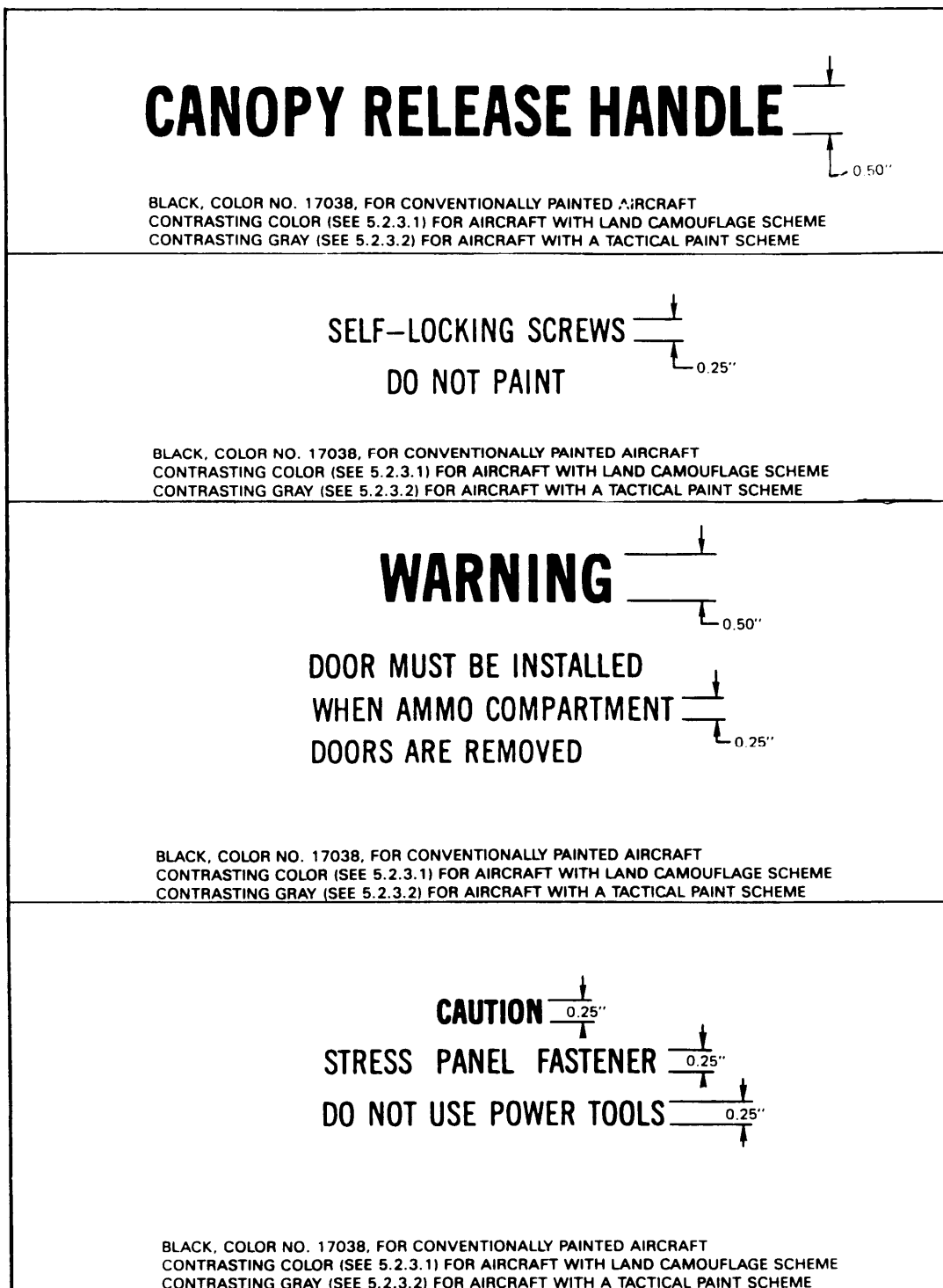


FIGURE B-9. Samples of ground servicing and hazard markings (size and color) - Continued.

MIL-STD-2161A(AS)

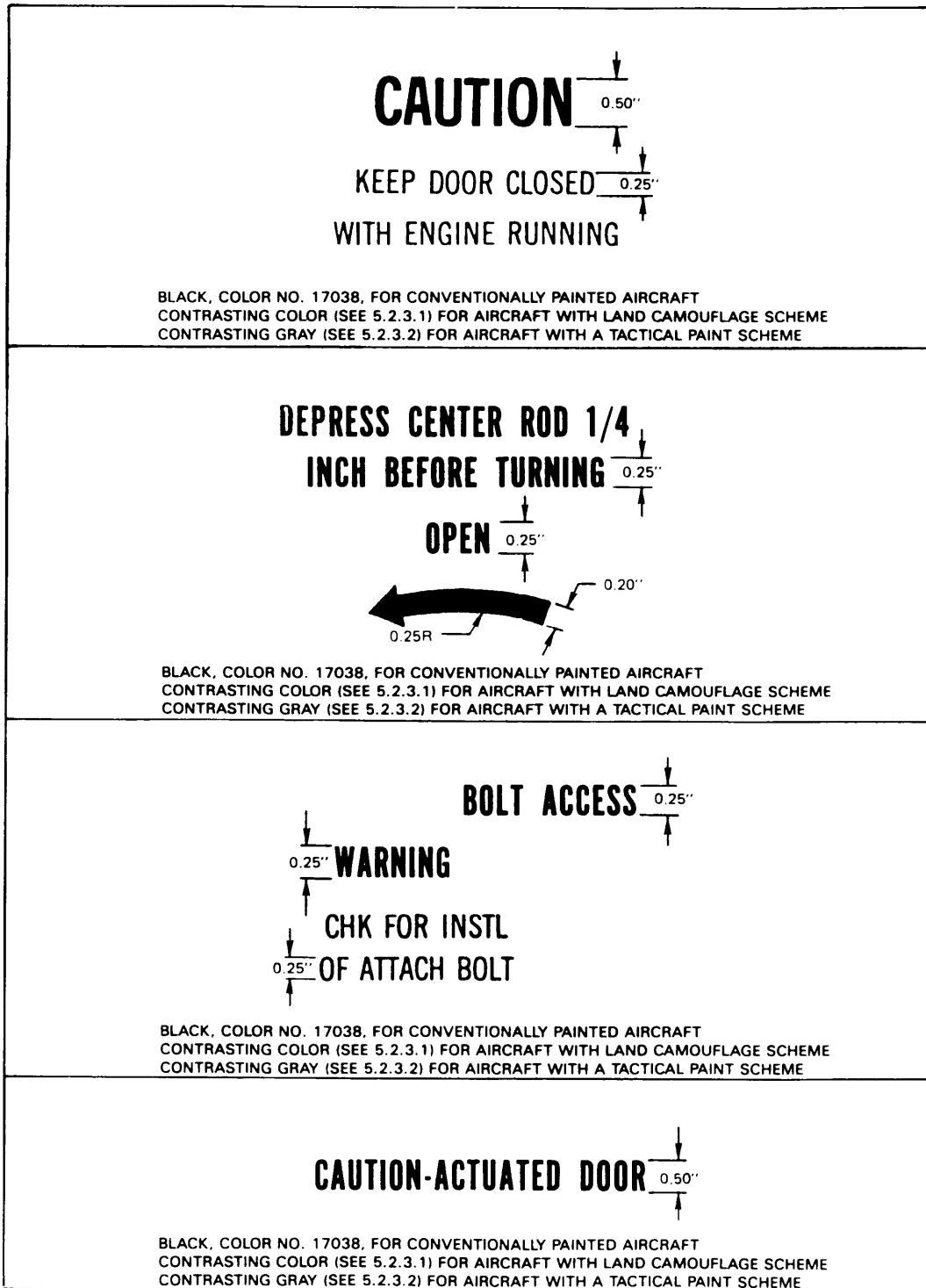


FIGURE B-9. Samples of ground servicing and hazard markings (size and color) - Continued.

MIL-STD-2161A(AS)

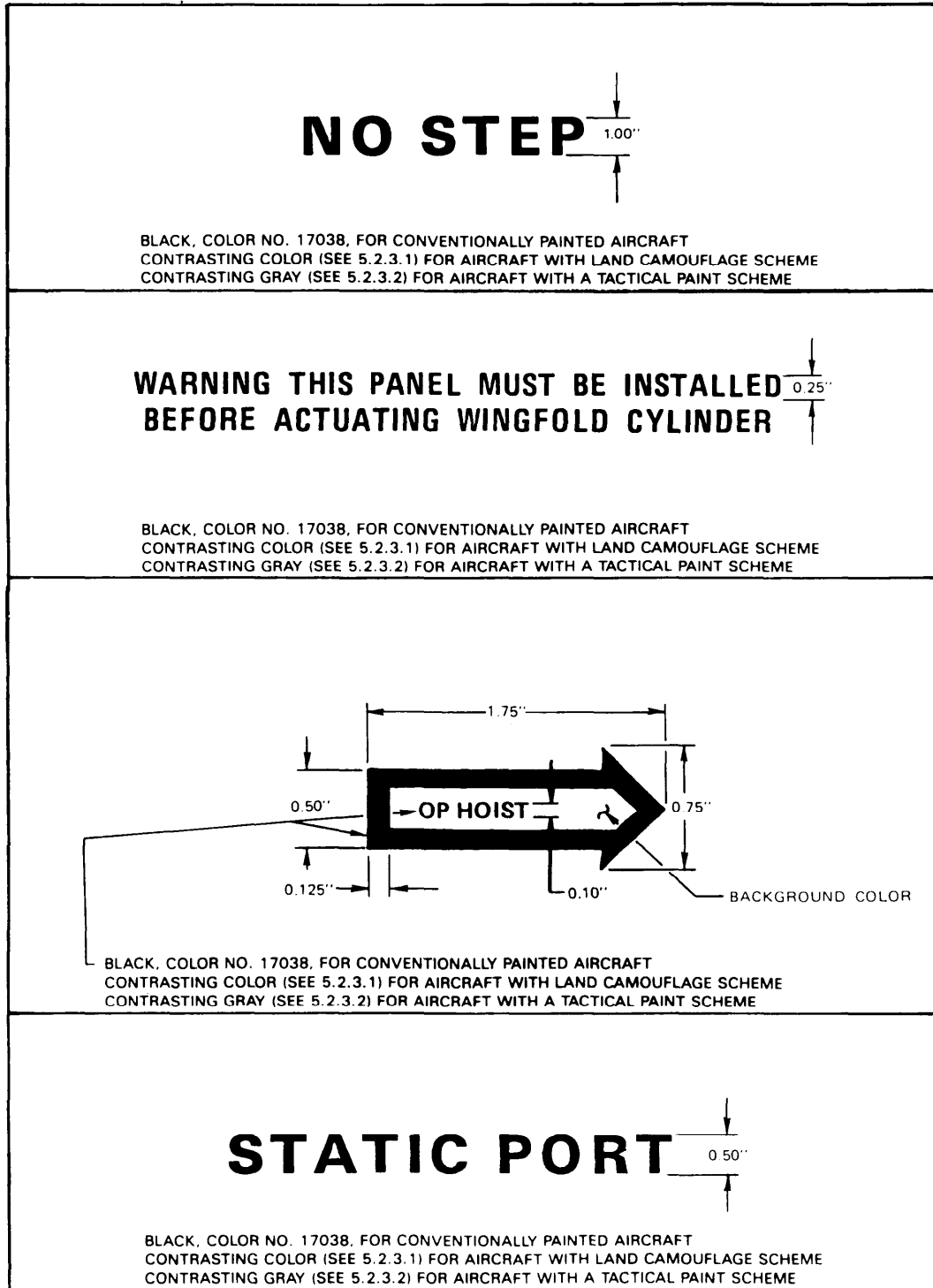


FIGURE B-9. Samples of ground servicing and hazard markings (size and color) - Continued.

MIL-STD-2161A(AS)

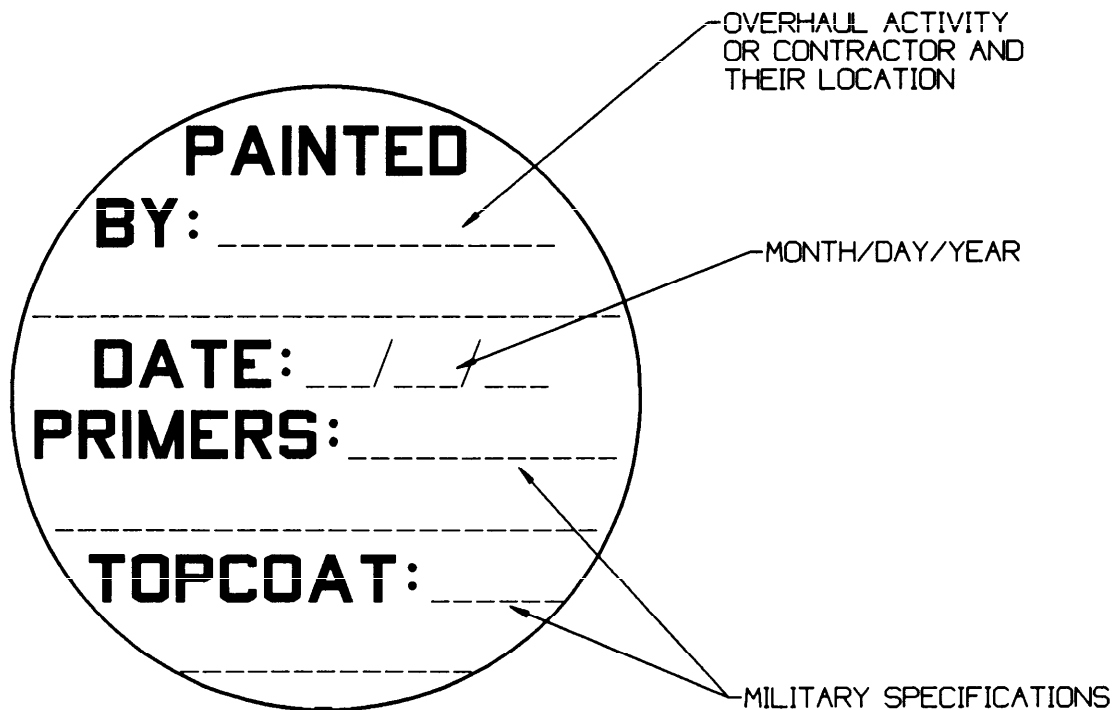


FIGURE B-10. Record of finish marking.

MIL-STD-2161A(AS)

APPENDIX C

FIGHTER, ATTACK, CARGO, UTILITY, TRAINER, AND SEARCH AND RESCUE (SAR) AIRCRAFT MARKING

10. SCOPE

10.1 Scope. This Appendix illustrated the different paint schemes for utility, cargo, SAR, fighter and attack aircraft.

10.2 Use. This Appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS. This section is not applicable to this Appendix.

30. DEFINITIONS

30.1 Definitions. For purposes of this Appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 Aircraft paint schemes. The following figures illustrate aircraft finish and marking specifications for utility, cargo, SAR, fighter and attack aircraft.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|--------------------|-------------------------|
| A. NAVY | Aft Fuselage | 16" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 1½" (2) 3¾" (4) | 17038 |
| C. National Star | Aft Fuselage Upper L. H. Wing Lower R. H. Wing | 40" 40" 40" | 17925 15044 11136 |
| D. Call Numbers | Vertical Stabilizer | 16" | 17038 |
| E. Intake Warning | Fwd. Engine Nacelle | 21.5" | 11136/17925 |
| F. Beware of Blast | Aft Fuselage | 7" | 11136 |
| G. Arresting Hook Marking | Aft Fuselage | 2.12" | 11136/17925 |
| H. Walkway | Aft of Cockpit, Top Center of Fuselage and Wing Root | N/A | 37038 |
| I. Unit Identifier | Upper R. H. Wing Vertical Stabilizer Lower R. H. Wing | 30" 30" 16" | 17038 |
| J. Antiglare | Forward of Cockpit | N/A | 37038 |
| K. Unit Aircraft Numbers | Upper R. H. Wing Forward Fuselage Lower L. H. Wing | 24" 30" 16" | 17038 |
| L. Rescue Arrow | R.H. & L.H. Side of Fuselage, Near Canopy Rail | 24" | 13538/17038 |

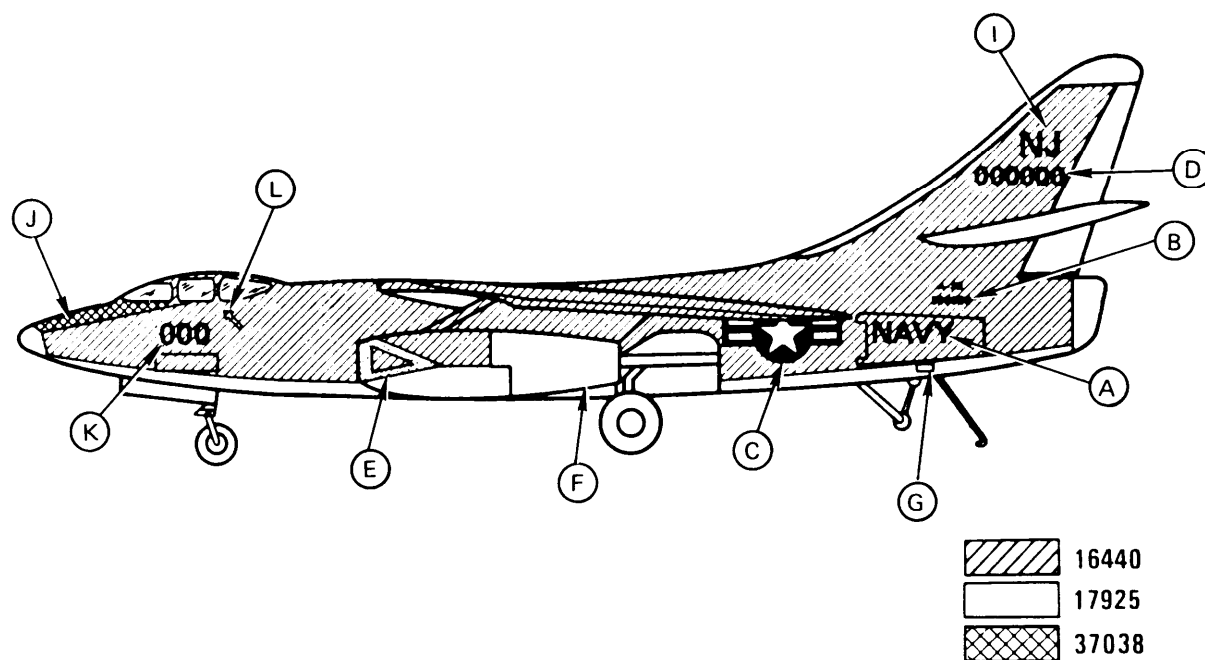


FIGURE C-1. A-3B aircraft marking.

MIL-STD-2161A(AS)

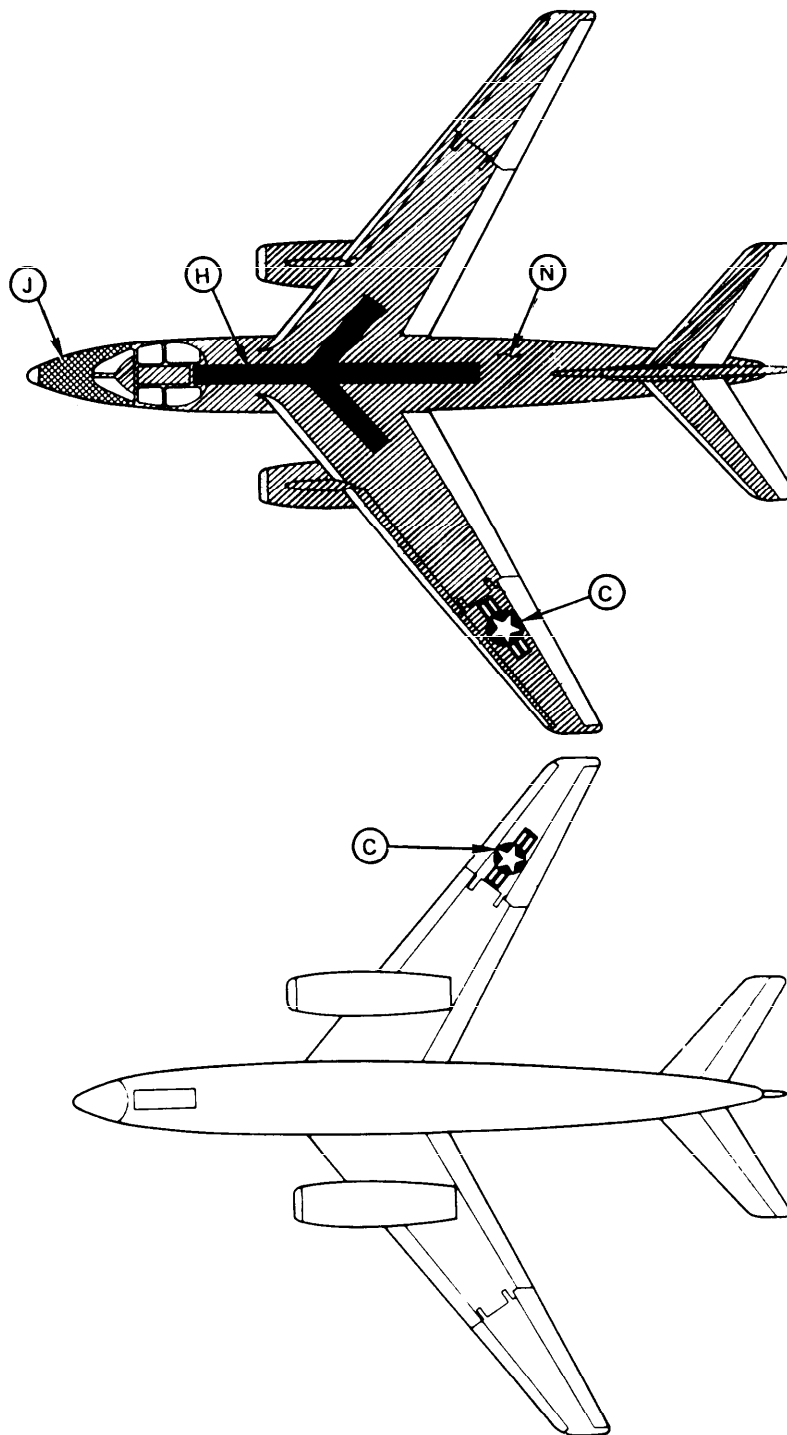
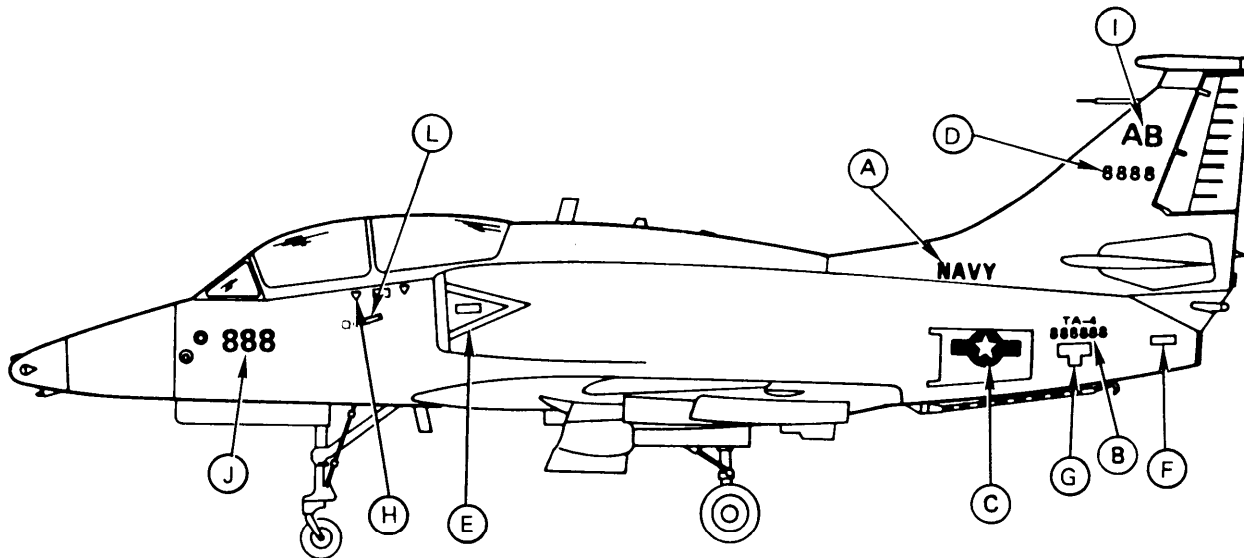


FIGURE C-1. A-3B aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|--|----------------------|-------------------------------|
| A. NAVY/MARINES | Lower Vertical Stabilizer | 12"/10" | IAW Para. 5.2.3 & Figure A-15 |
| B. Model Designation, Acft BUNO | Aft Fuselage - Side | 2" 4" | IAW Para. 5.2.3 & Figure A-15 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 12" 12" 12" | IAW Para. 5.2.3 & Figure A-14 |
| D. Call Numbers | Vertical Stabilizer | 10" | IAW Para. 5.2.3 |
| E. Intake Warning | Jet Engine Nacelles | See Para. 5.2.2.10.1 | IAW Para. 5.2.3 & Figure A-15 |
| F. Beware of Blast | Side of Engine Exhaust | 7" | IAW Para. 5.2.3 |
| G. Arresting Hook Marking | Aft Fuselage | 14" | IAW Para. 5.2.3 & Figure A-14 |
| H. Ejection Seat Warning | See Figure A-11 | 8" | IAW Para. 5.2.3 & Figure A-16 |
| I. Unit Identifier | Vertical Stabilizer | 12" | IAW Para. 5.2.3 |
| J. Unit Aircraft Numbers | Fwd. Fuselage | 12" | IAW Para. 5.2.3 |
| K. Walkway | Wings Next to Fuselage | N/A | IAW Para. 5.1.13 |
| L. Rescue Arrow | R.H. & L.H. Side of Canopy | 24" | IAW Para. 5.2.3 & Figure A-14 |

FIGURE C-2. A/TA-4 aircraft marking (tactical).

MIL-STD-2161A(AS)

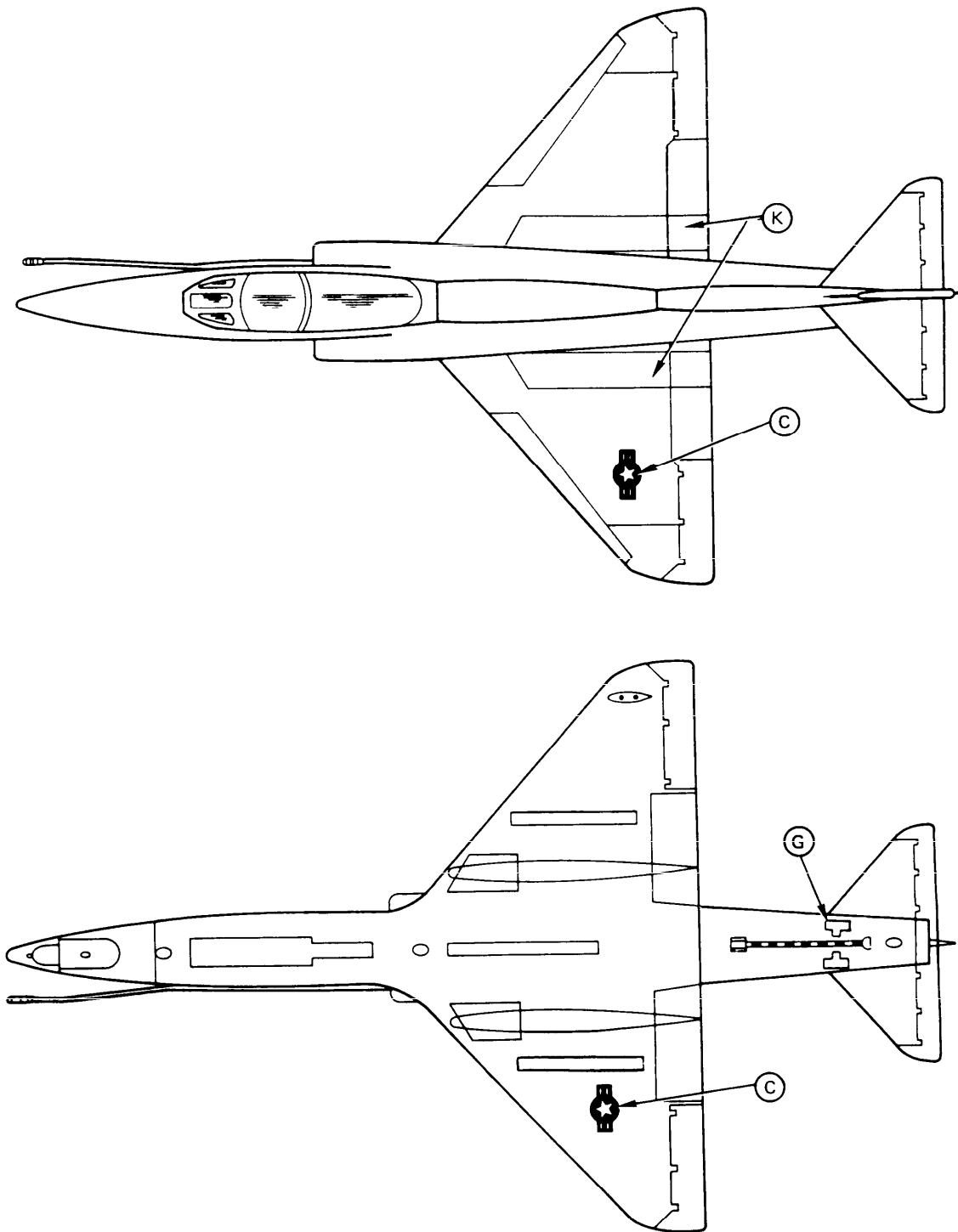
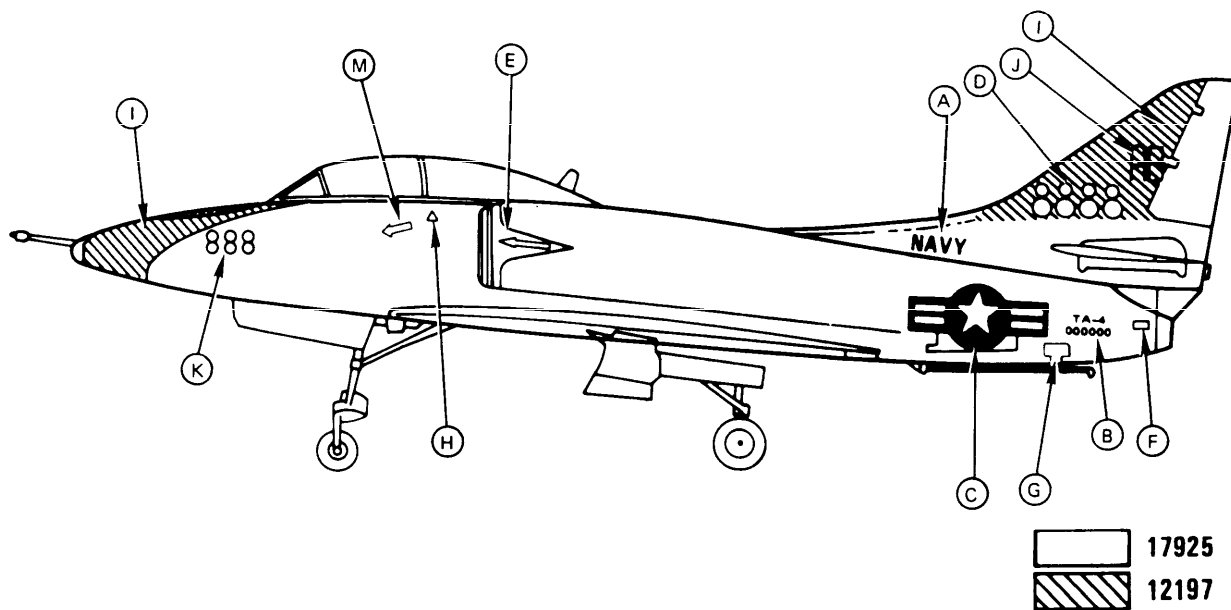


FIGURE C-2. A/TA-4 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-----------------------|-----------------------|
| A. NAVY/MARINES | Lower Vertical Stabilizer | 12" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 30" 30" 30" | 15044/11136/ 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Intake Warning | Jet Engine Nacelles | See Para. 5.2.2.10.11 | 11136/17925 |
| F. Beware of Blast | Side of Engine Exhaust | 7" | IAW Para. 5.2.2.10.2 |
| G. Arresting Hook Marking | See Figure A-14 | 4" | 17925/17038 |
| H. Ejection Seat Warning | Under Canopy Rail See Figure A-11 | 8" | 11136/17038 |
| I. Conspicuity Markings | See Para. 5.1.1.1 | N/A | 12197 |
| J. Unit Identifier | Vertical Stabilizer Lower R.H. Wing Upper R.H. Wing | 16" 20" | 17038 |
| K. Unit Aircraft Numbers | Fwd. Fuselage Upper R.H. Wing Lower L.H. Wing | 12" 16" 16" | 17038 |
| L. Walkway | Wings Next to Fuselage | N/A | 17038 |
| M. Rescue Arrow | R.H. & L.H. Side of Canopy | 24" | 17038/13538 |
| N. Antiglare | Forward of Cockpit | N/A | 37038 |

FIGURE C-3. A/TA-4 aircraft marking (high visibility).

MIL-STD-2161A(AS)

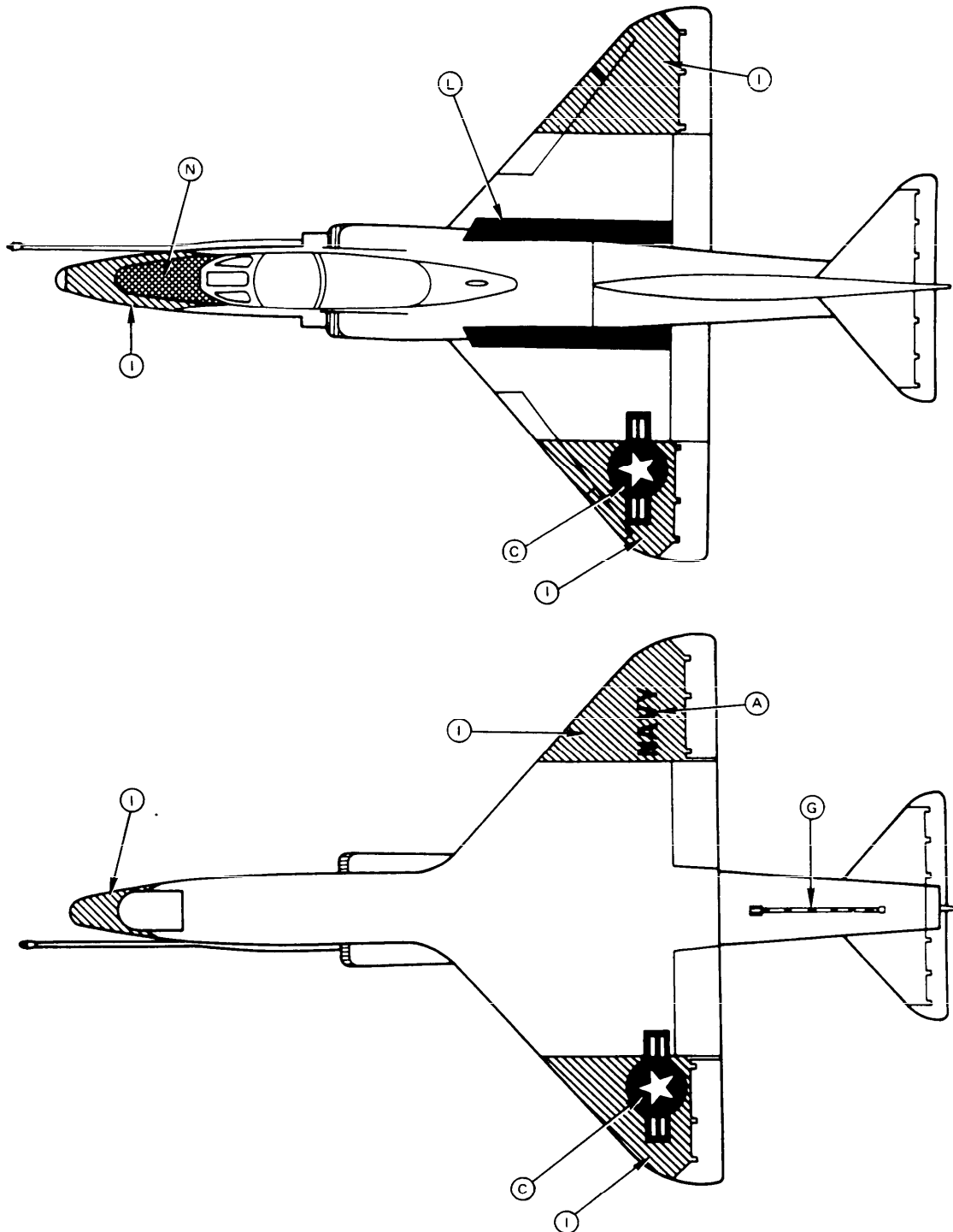
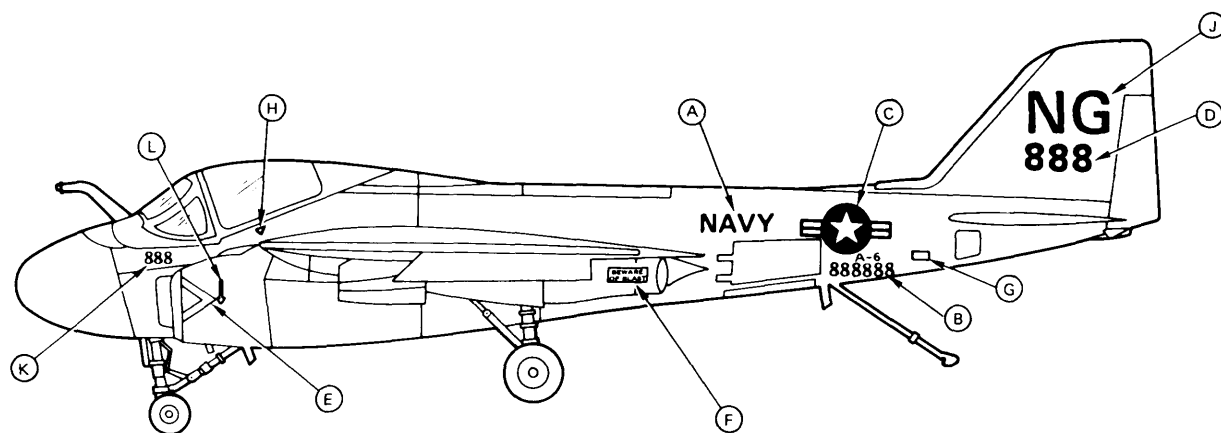


FIGURE C-3. A/TA-4 aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|----------------------|---------------------------|
| A. NAVY/MARINES | Aft Fuselage | 12" | IAW Figure A-15, 35237 |
| B. Model Designation, Acft BUNO | Below National Star Below National Star | 2" 4" | IAW Figure A-15, 35237 |
| C. National Star | Aft Fuselage Upper L. H. Wing Lower R. H. Wing | 12" 12" 12" | IAW Figure A-1, 35237 |
| D. Call Numbers | Lower Vertical Stabilizer | 12" | 35237 |
| E. Intake Warning | Engine Intake Nacelles | See Para. 5.2.2.10.1 | IAW Figure A-15, 35237 |
| F. Beware of Blast | Aft Engine Exhaust Outlet | 15" | IAW 5.2.3 |
| G. Arresting Hook Marking | Aft Fuselage | 13" | IAW Figure A-14, 35237 |
| H. Ejection Seat Warning | Below Canopy Rail | 8" | IAW Figure A-16, 35237 |
| I. Walkway | Upper Fuselage Wings Next to Fuselage | N/A | IAW Para. 5.1.13 |
| J. Unit Identifier | Vertical Stabilizer Upper R. H. Wing | 30" 30" | 35237 |
| K. Unit Aircraft Numbers | Forward Fuselage Upper R. H. Wing | 12" 24" | IAW Para. 5.2.3 |
| L. Rescue Arrow | R.H. & L.H. Sides of Canopy | 24" | IAW Figure A-14, 35237 |

FIGURE C-4. A-6 aircraft marking (tactical).

MIL-STD-2161A(AS)

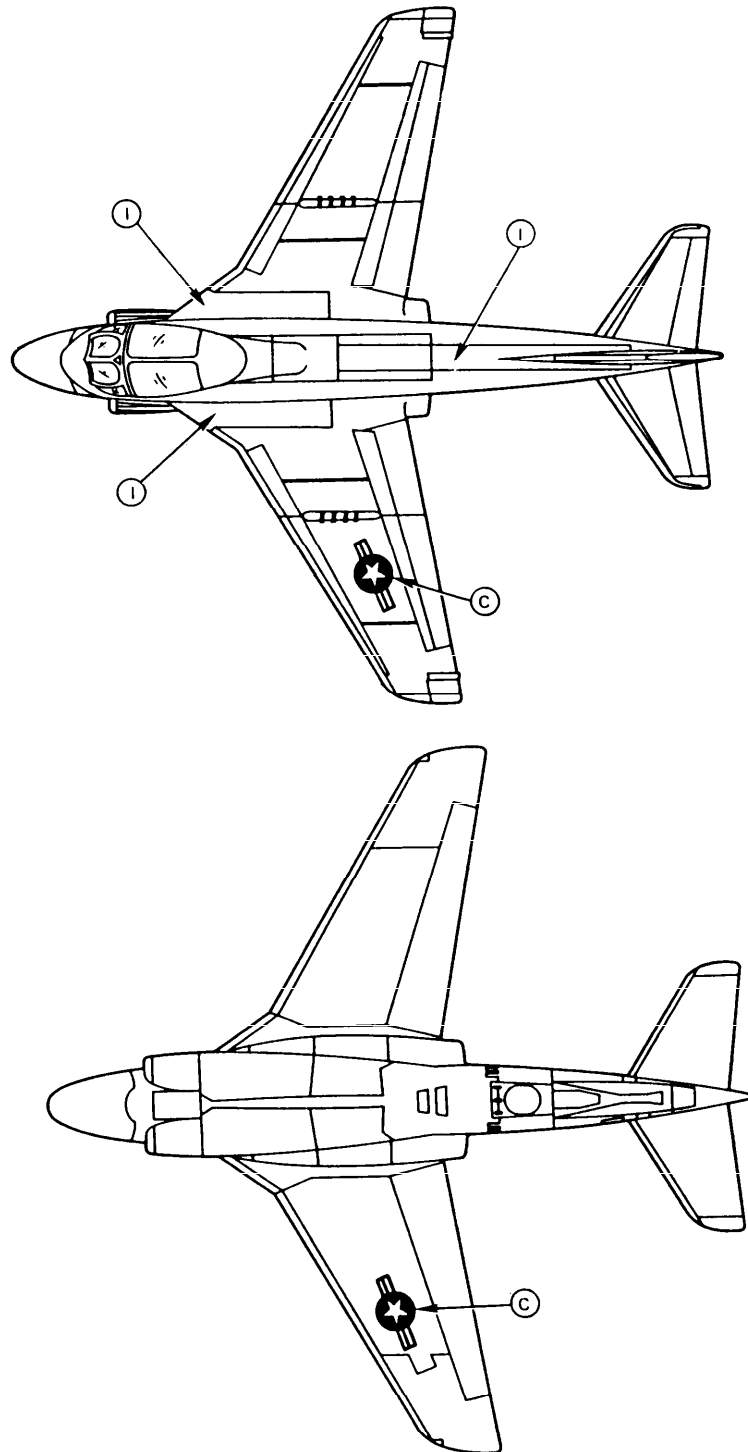
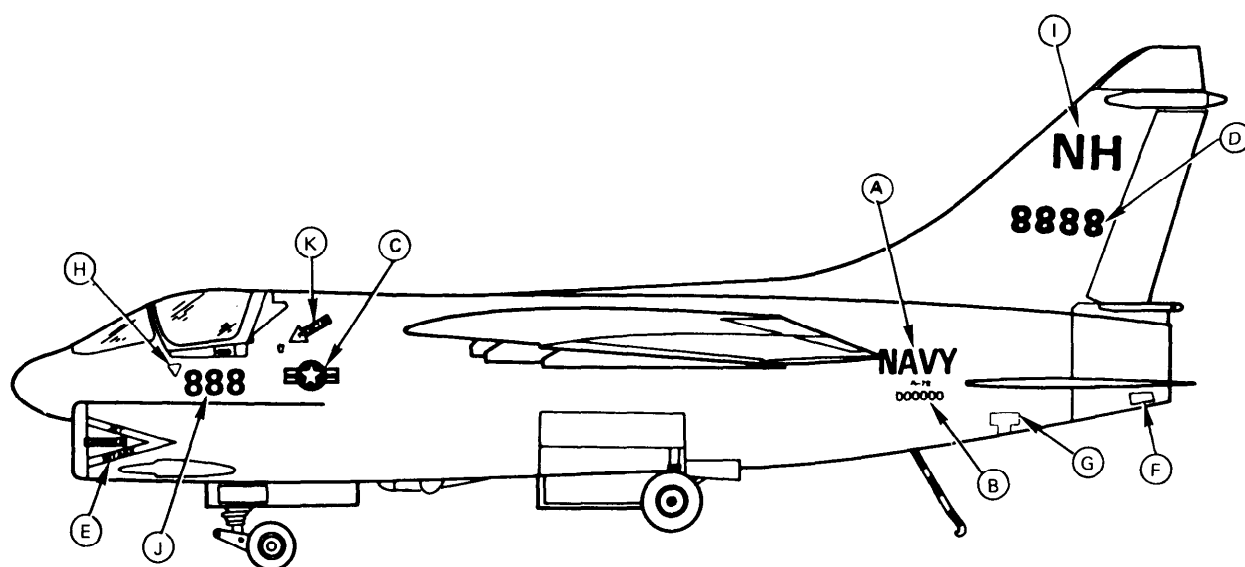


FIGURE C-4. A-6 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------|---------------------------|
| A. NAVY | Aft Fuselage | 12" | IAW Figure A-15, 35237 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | IAW Figure A-15, 35237 |
| C. National Star | Fwd. Fuselage Lower R. H. Wing Upper L. H. Wing | 12" 12" 12" | IAW Figure A-1, 35237 |
| D. Call Numbers | Vertical Stabilizer | 10" | 35237 |
| E. Intake Warning | Fwd. Fuselage | 21.5" | IAW Figure A-15, 35237 |
| F. Beware of Blast | Aft Fuselage | 7" | 35237 |
| G. Arresting Hook Marking | Aft Fuselage | 14" | IAW Figure A-14, 35237 |
| H. Ejection Seat Warning | Below Canopy Rail | 8" | IAW Figure A-16, 35237 |
| I. Unit Identifier | Upper Vertical Stabilizer | | 35237 |
| J. Unit Aircraft Numbers | Fwd. Fuselage | | IAW Para. 5.2.3 |
| K. Rescue Arrow | R.H. & L.H. Sides of Canopy | 24" | IAW Figure A-14, 35237 |
| L. Walkway | Horizontal Stabilizer Next to Fuselage | N/A | IAW Para. 5.1.13 |

FIGURE C-5. A-7 aircraft marking (tactical).

MIL-STD-2161A(AS)

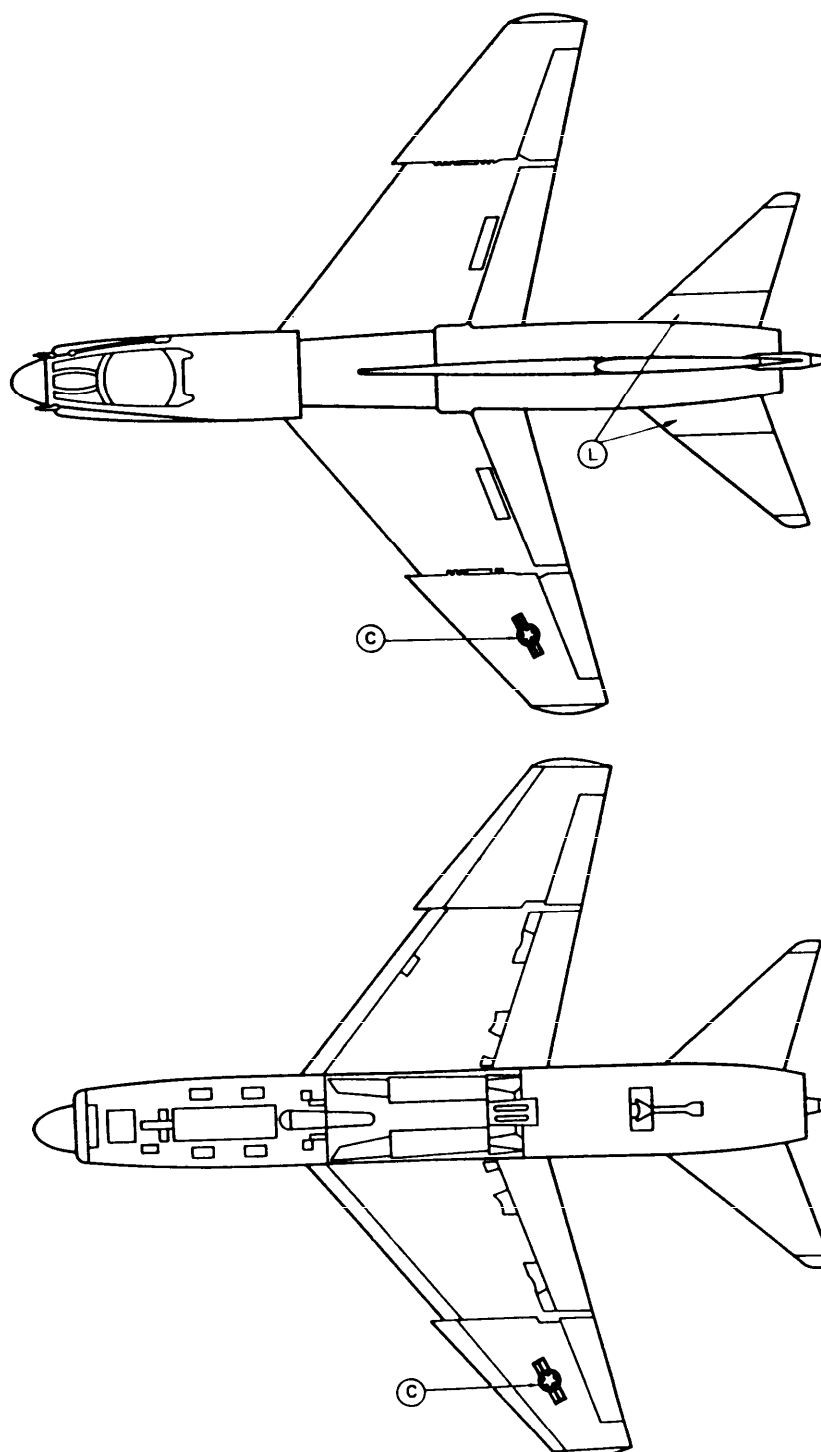


FIGURE C-5. A-7 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|--------------------------------------|---|----------------------|------------------|
| A. MARINES | Lower Vertical Stabilizer Upper R.H. Wing | 7" 12" | 37038 |
| B. Model Designation, Acraft BUNO | Lower Aft Fuselage | 2" 4" | 37038 |
| C. National Star | Fwd. Fuselage Upper L.H. Wing Lower R.H. Wing | 20" 25" 25" | 37038 |
| D. Call Numbers | Vertical Stabilizer | 7" | 37038 |
| E. Intake Warning | Engine Intake Nacelles | See Para. 5.2.2.10.1 | 37038 |
| F. Beware of Blast | Engine Exhaust Nacelles | See Figure A-8 | 37038 |
| G. Ejection Seat Warning | Below Canopy Rail | 8" | 37038/11136 |
| H. Unit Identifier | Upper Aft Fuselage | 4" | 37038 |
| I. Unit Aircraft Numbers | Fwd. Fuselage | 12" | 37038 |
| J. Rescue Arrow | R.H. & L.H. Side of Canopy | 24" | 37038/34095 |

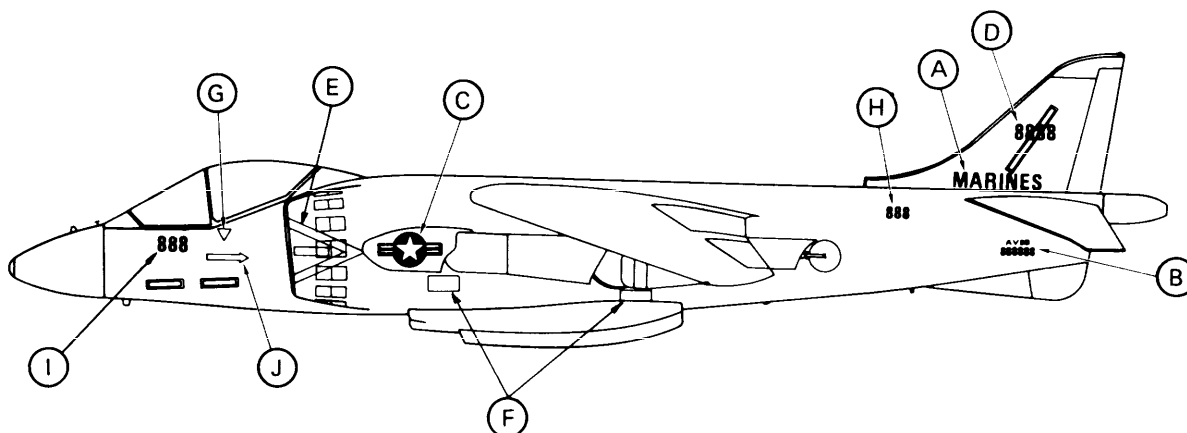


FIGURE C-6. AV-8B aircraft marking (land camouflage).

MIL-STD-2161A(AS)

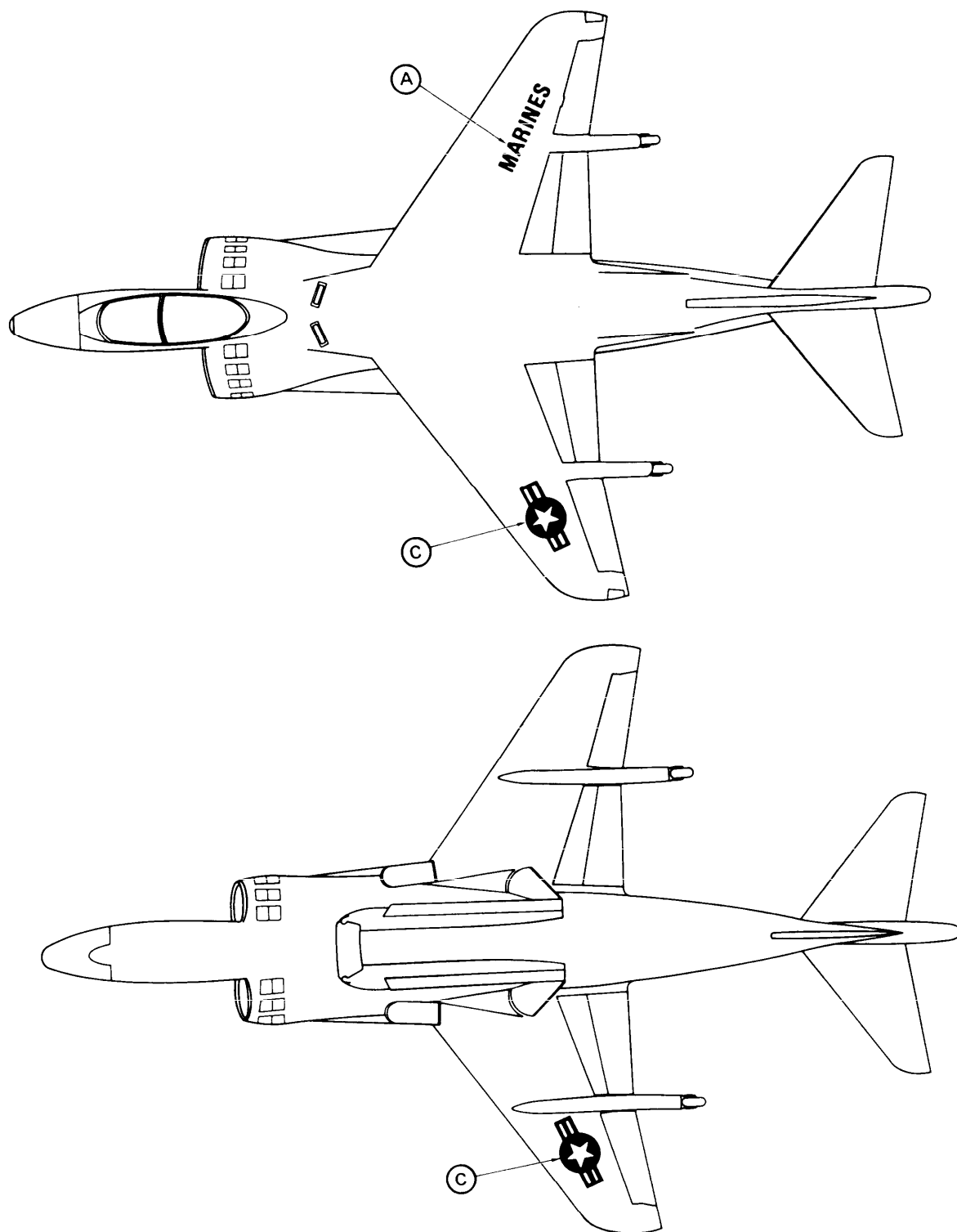


FIGURE C-6. AV-8B aircraft marking (land camouflage) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|-------------------|-------------------------|
| A. NAVY | Aft Fuselage | 16" | 17038 |
| B. Model Designation, Acft BUNO | Lower Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 40" 30" 30" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Antiglare | Upper 1/2 Nose and Inside Upper 1/2 Eng Cowl | N/A | 37038 |
| F. Walkway | Center Top of Fuselage, Wing Root & Engine Cowlings | N/A | 37038 |
| G. Propeller Warning Band | Fwd. Fuselage (See Figure A-9) | 3" | 11136/17925 |
| H. Flag | Vertical Stabilizer | 26 X 46 | 11136/15044/17925 |
| I. Unit Aircraft Numbers | Nose | 16" | 17038 |
| J. Unit Identifier | Vertical Stabilizer | 30" | 37038 |
| K. Propeller Tips | See Figure A-6 | N/A | See Figure A-6 |
| L. Arresting Hook Marking | Aft Fuselage | 7" | 17038 |
| M. Rescue Arrow | Top Fwd. Fuselage, Aft of Cockpit | 18" | 17038 |

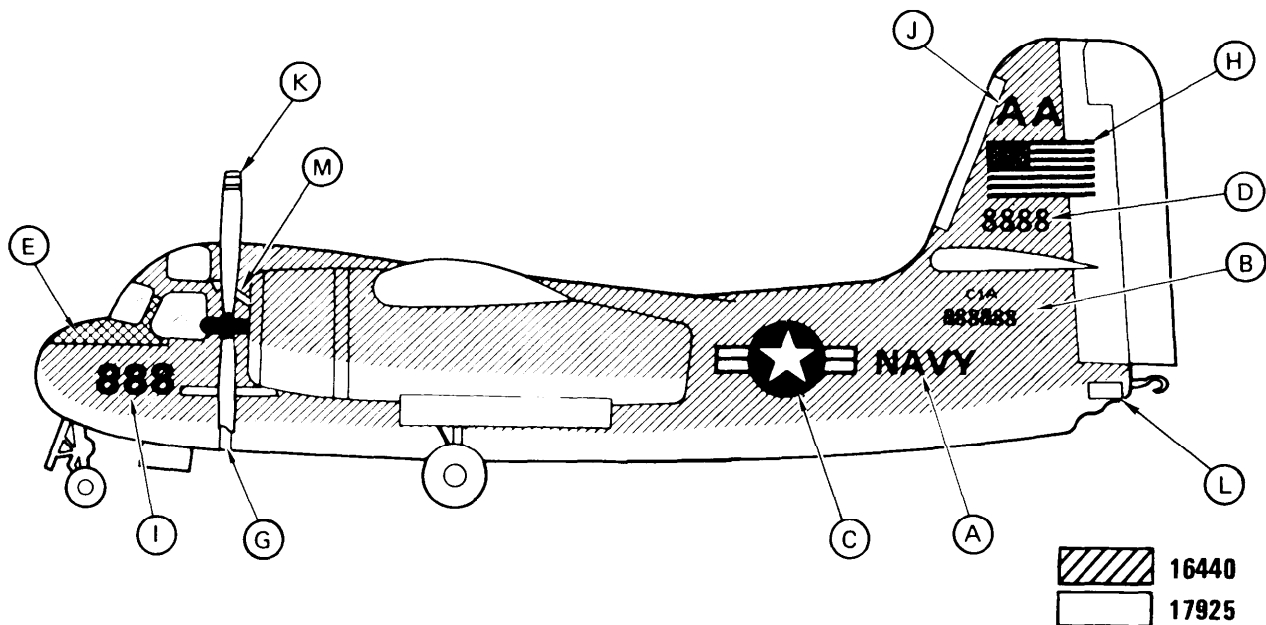


FIGURE C-7. C-1A aircraft marking.

MIL-STD-2161A(AS)

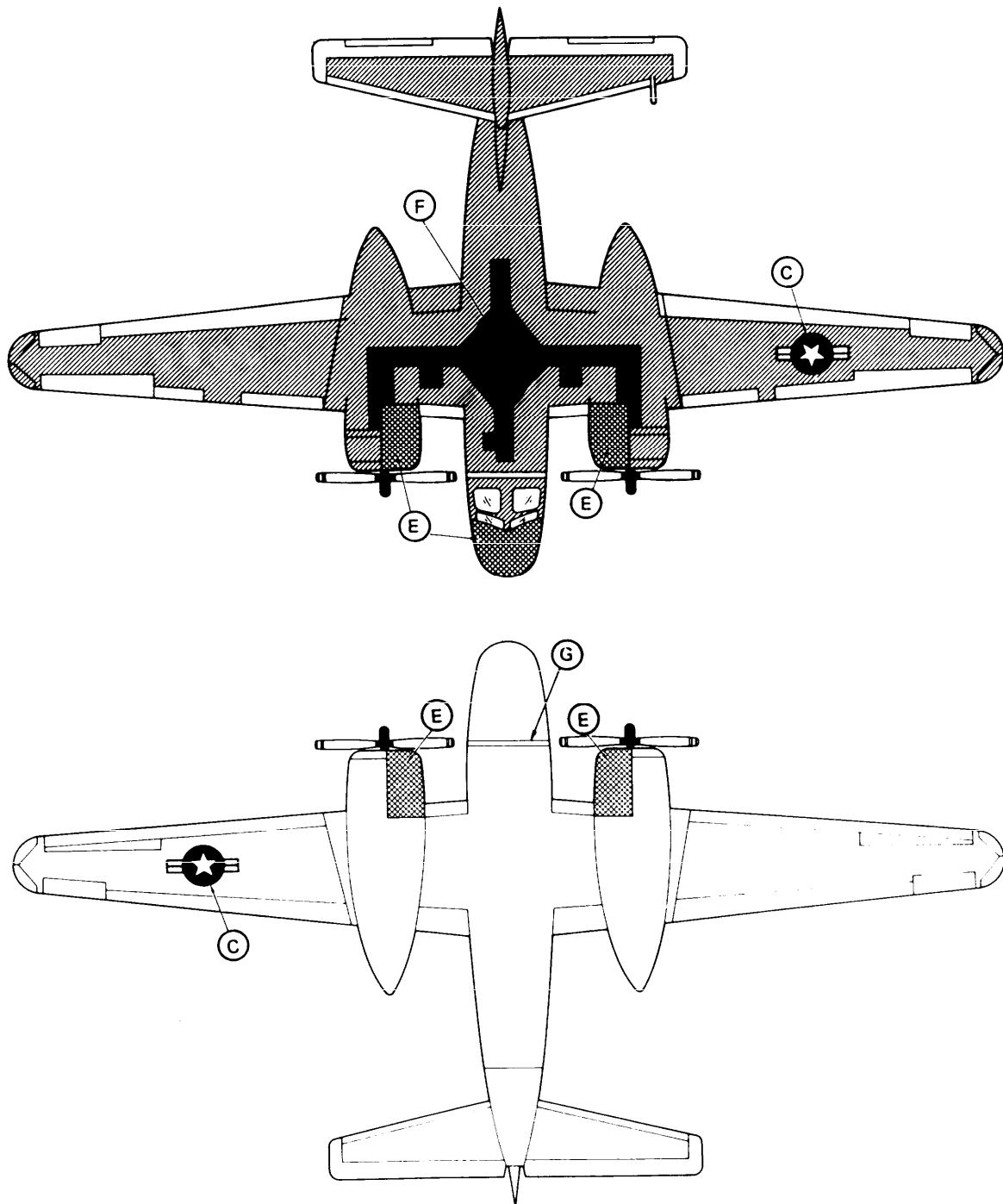
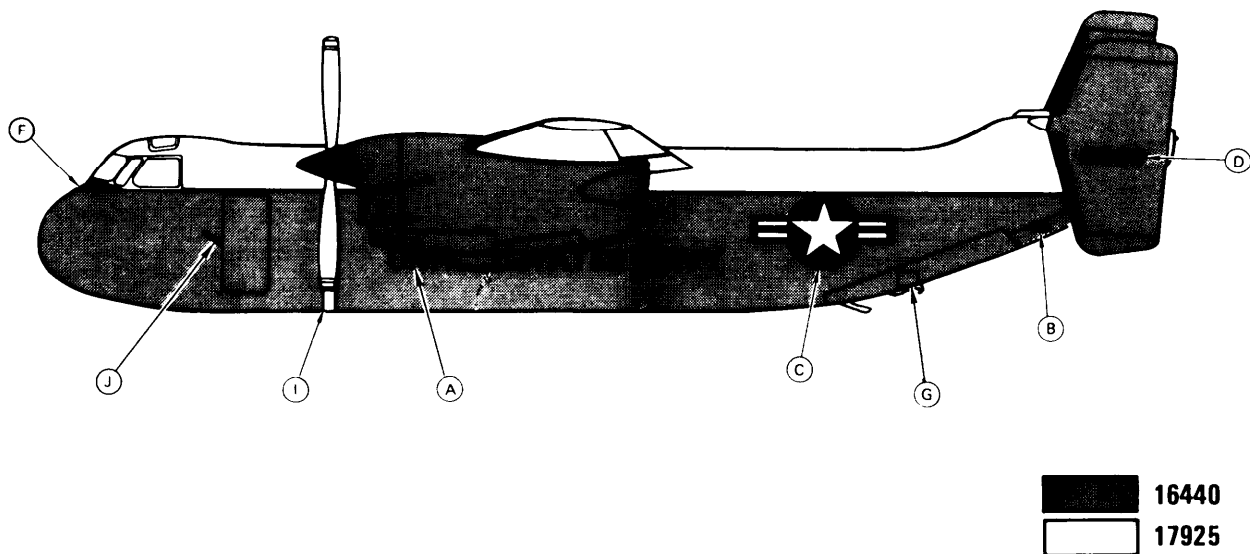


FIGURE C-7. C-1A aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|------------------------|-------------------------------------|
| A. UNITED STATES NAVY | Center Fuselage | 12" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L. H. Wing Lower R. H. Wing | 40" 40" 40" | 11136 15044 17925 |
| D. Call Numbers | Mid Vertical Stabilizer (Outsides Only) | 12" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17925/11136/17925 See Figure A-6 |
| F. Antiglare | Nose & Propeller Hubs | N/A | 37038 |
| G. Arresting Hook Marking | Aft Fuselage Doors | 13" | 17038 |
| H. Walkway | Per Drawing | Per Drawing | 37038 |
| I. Propeller Warning Band | Fwd. Fuselage | 3" (See Figure A-9) | 11136 |
| J. Rescue Arrow | Fwd. Fuselage Toward Pilot Compartment Door | 24" | 17038 |

FIGURE C-8. C-2A aircraft marking.

MIL-STD-2161A(AS)

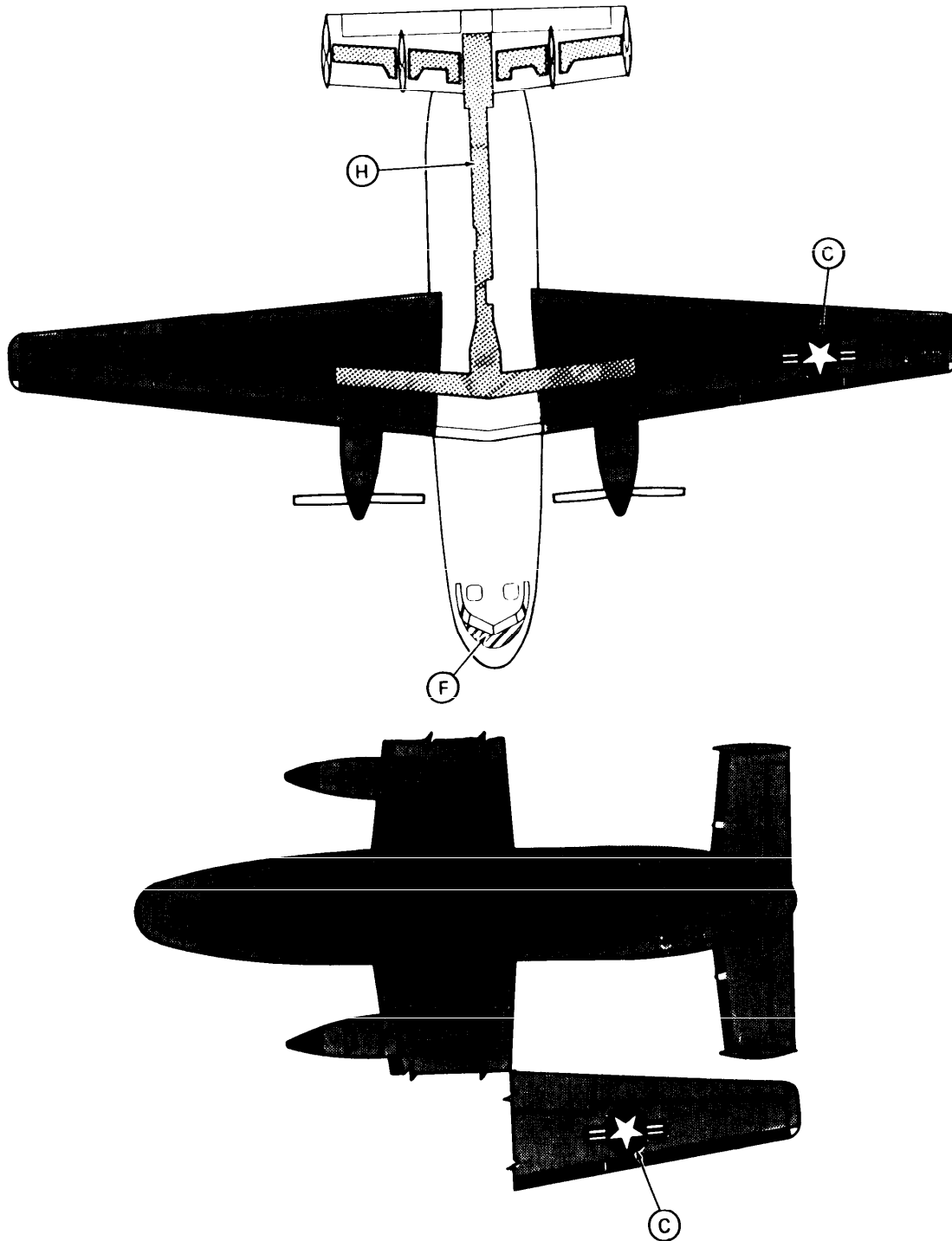


FIGURE C-8. C-2A aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---|--|-------------------|---------------------------------------|
| A. UNITED STATES NAVY | Side of Fuselage | 10" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 45" 60" 60" | 11136/15044/17925 |
| D. Call Numbers | Vertical Stabilizer | 20" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17925/11136/17925 |
| F. Antiglare | Fwd. of Cockpit | | 37038 |
| G. Navy | Lower L.H. Wing | 36" | 18464 |
| H. Flap Wells, Aileron Wells and Aileron (See NOTE) | | | 16440 |
| I. Walkway Border | Wing Center to Outboard Engine | N/A | 17038 |
| J. Flag | Vertical Stabilizer | 39" | 11136/15044/ 17925 (Overseas only) |
| K. Unit Aircraft Numbers | Forward Fuselage | 16" | 17038 |
| L. Unit Identifier | Vertical Stabilizer Upper R.H. Wing | 40" 40" | 17038 17038 |
| M. Propeller Warning Band | Fwd. Fuselage | See Figure A-9 | See Figure A-9 |
| N. Rescue Arrow | Pilot Compartment Door Handle Rear Door Handle | 29" 29" | 17925/12197 |

NOTE: Item H - For tactical and LC aircraft, flap, wheel, and aileron wells shall be painted the appropriate color to blend with camouflage.

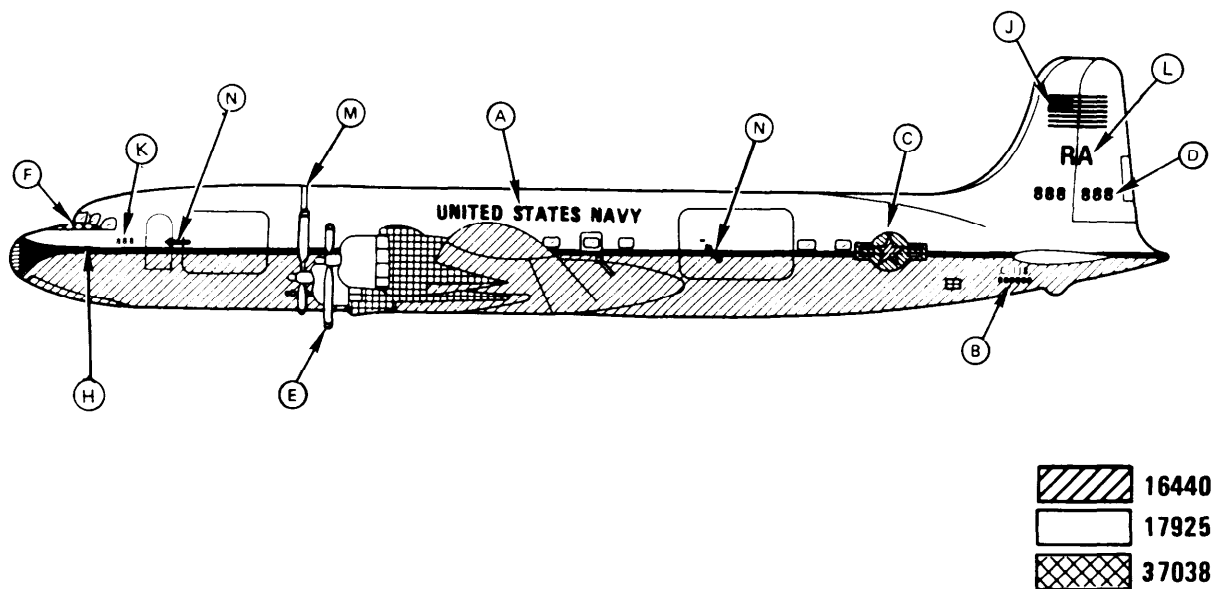


FIGURE C-9. C-118 aircraft marking (cargo).

MIL-STD-2161A(AS)

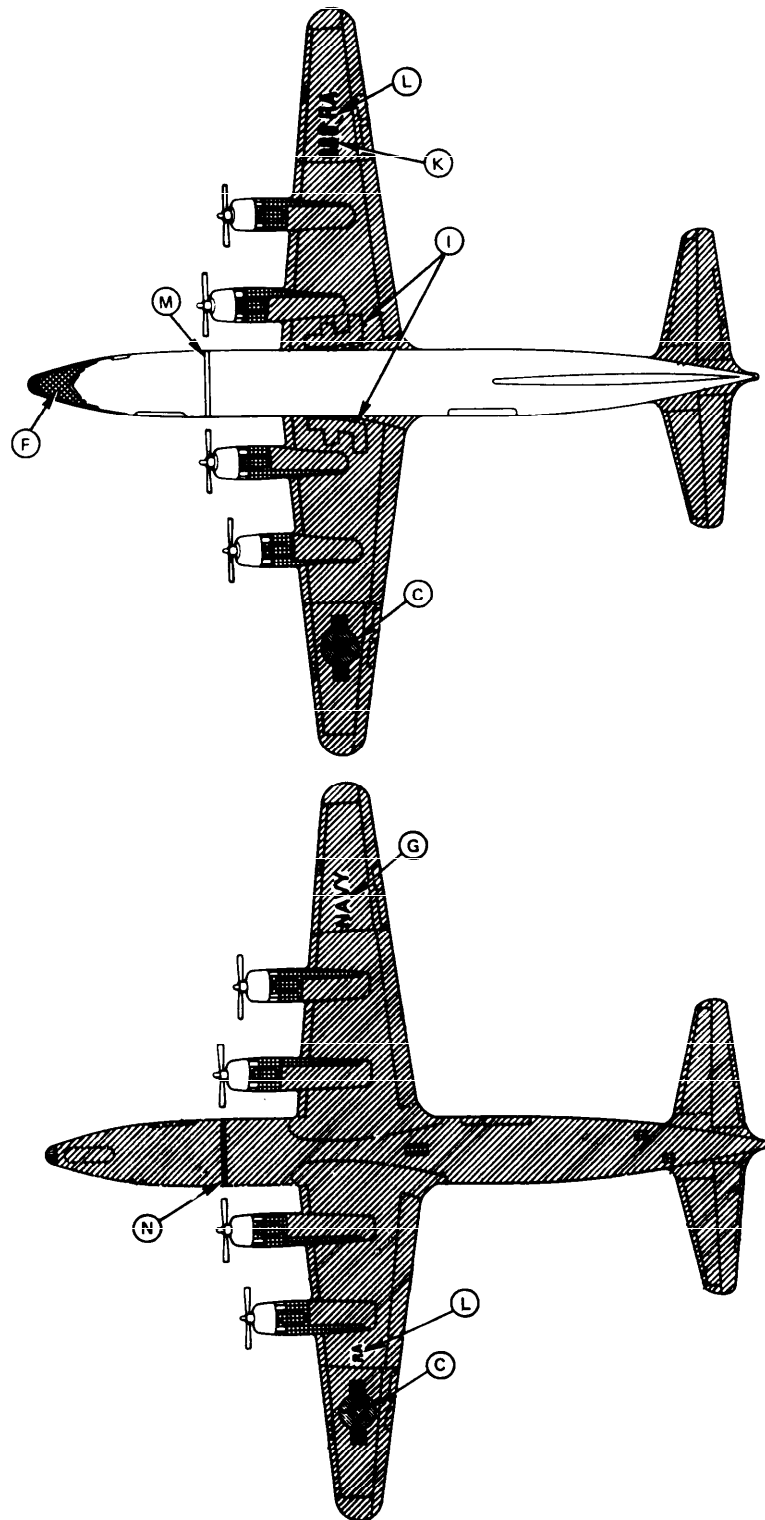


FIGURE C-9. C-118 aircraft marking (cargo) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-----------------------|-------------------------|
| A. UNITED STATES NAVY | Center Fuselage | 12" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Lower R.H. Wing Upper L.H. Wing | 55" 50" WG | 11136 17925 15044 |
| D. Call Numbers | Vertical Stabilizer | 30" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17925/11136/17925 |
| F. NAVY | Lower L.H. Wing | 30" | 17038 |
| G. Walkway | Wing and Fuselage Upper Surface | N/A | 36231 |
| H. Conspicuity Markings | Per Drawing | N/A | 12197 |
| I. Propeller Warning Band | Fwd. Fuselage | 3" | 11136 |
| J. Unit Aircraft Numbers | Fwd. Fuselage Upper R.H. Wing | 24" 30" | 17038 |
| K. Unit Identifier | Lower R.H. Wing Upper R.H. Wing Vertical Stabilizer | 30" 30" 30"/36" | 17038 |
| L. Antiglare | Nose | Per Drawing | 17038 |
| M. Emergency Rescue Notice | Wing/Fuselage Joint, R.H. & L.H. Sides | 24" | 13538 |
| N. Turbine Exhaust Warning | Center Lower Fuselage, L.H. & R.H. | 3" | 11136 |

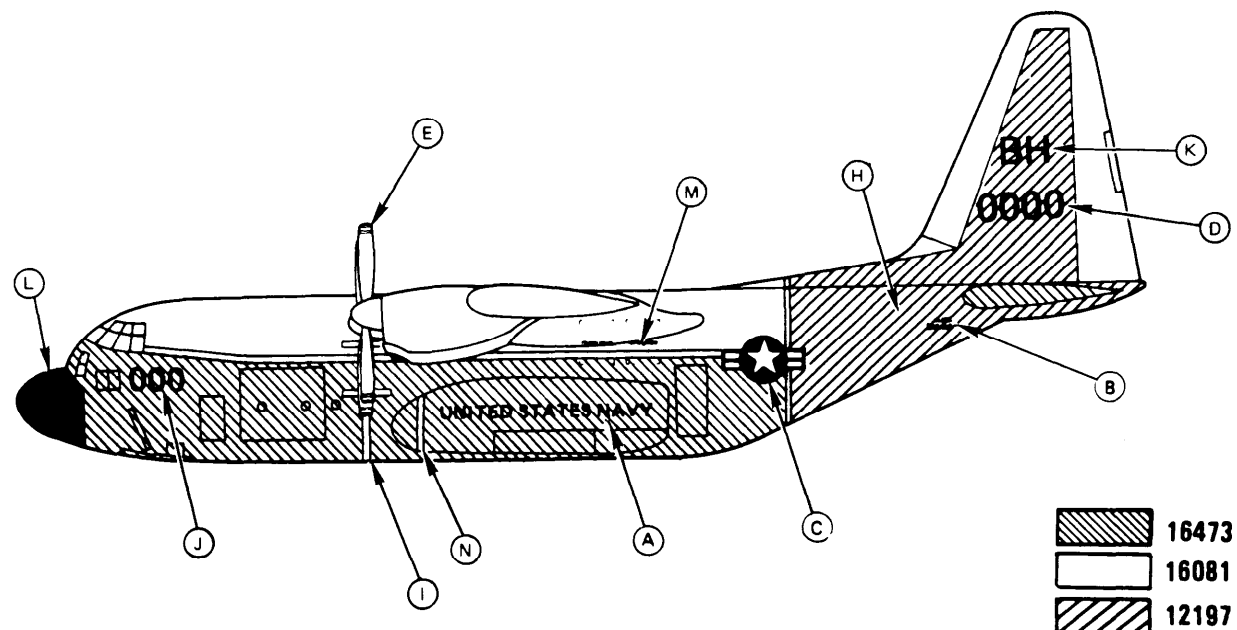


FIGURE C-10. C-130 aircraft marking (arctic).

MIL-STD-2161A(AS)

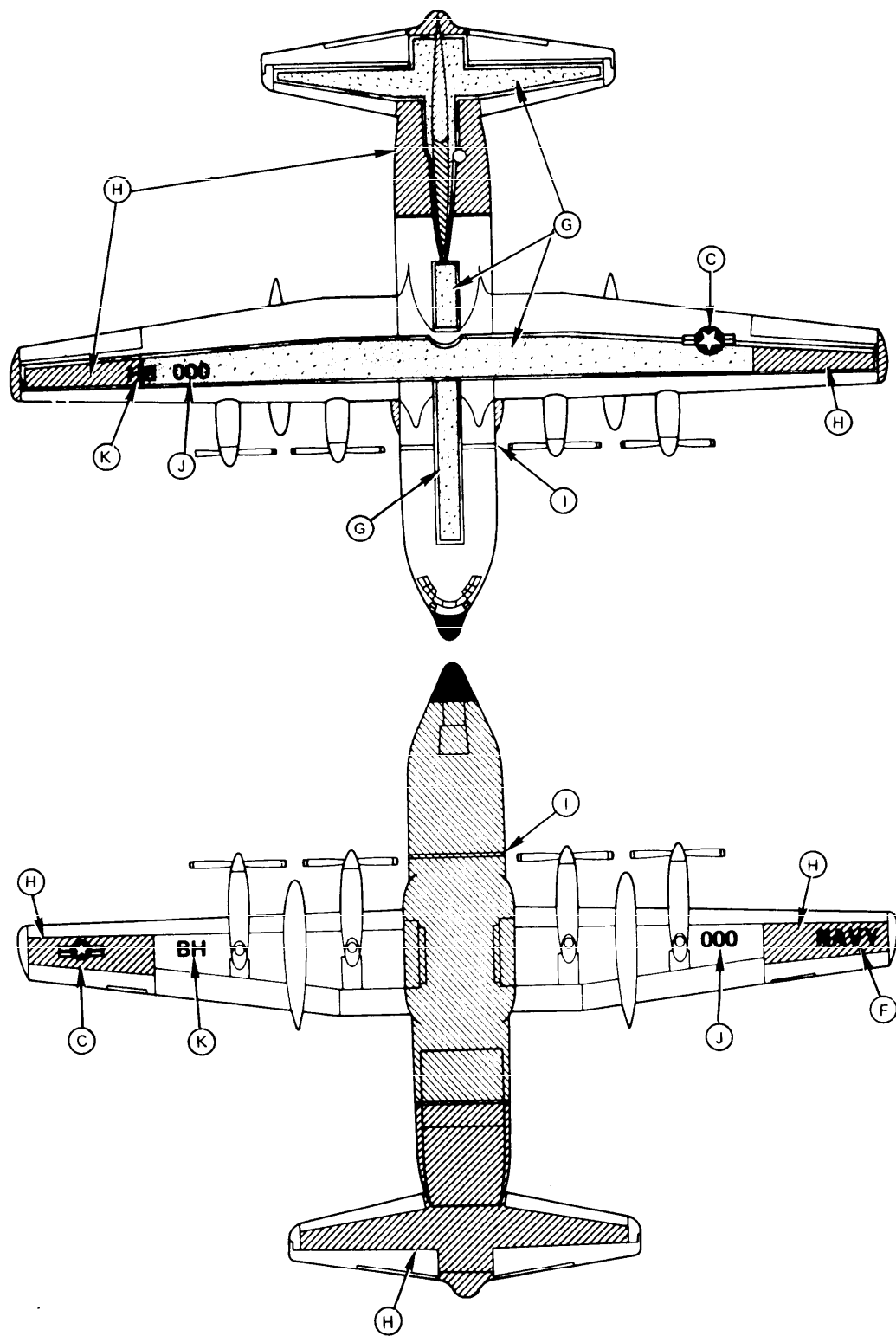
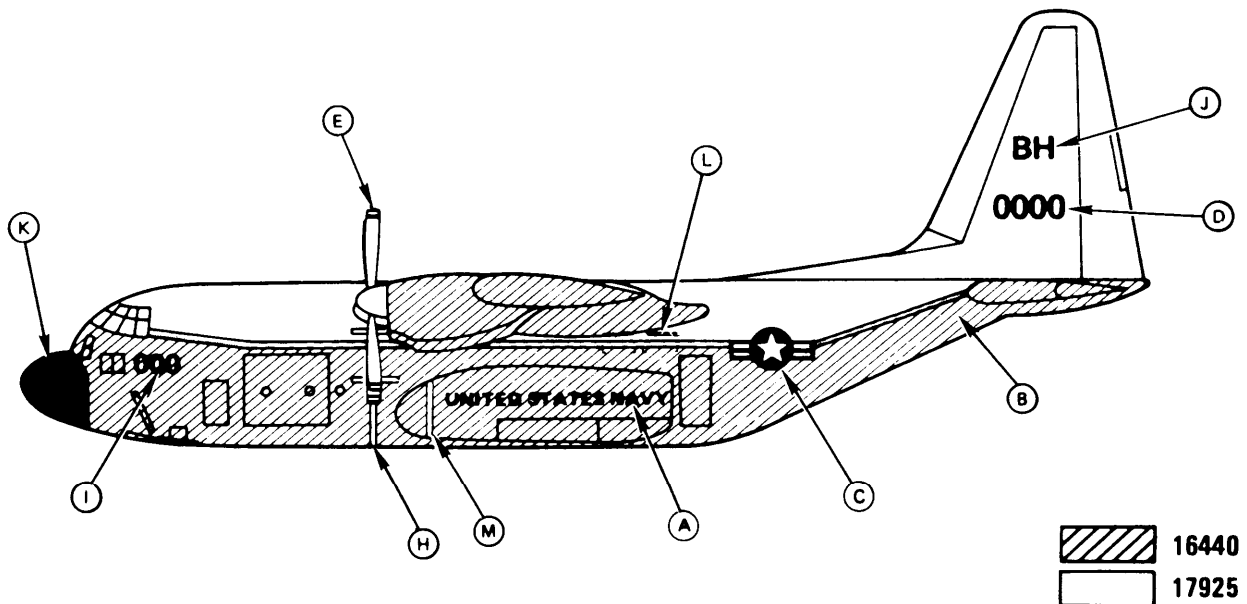


FIGURE C-10. C-130 aircraft marking (arctic) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-----------------------|-------------------------|
| A. UNITED STATES NAVY/ MARINES | Center Fuselage | 12" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Lower R.H. Wing Upper L.H. Wing | 55" 50" WG | 11136 17925 15044 |
| D. Call Numbers | Vertical Stabilizer | 30" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17875/11136/17925 |
| F. NAVY/MARINES | Lower L.H. Wing Wings | 30" | 17038 |
| G. Walkway | Top of Wing & Fuselage | Per Drawing | 36231 |
| H. Propeller Warning Band | Fwd. Fuselage | 3" | 11136 |
| I. Unit Aircraft Numbers | Fwd. Fuselage Upper R. H. Wing | 24" 30" | 17038 |
| J. Unit Identifier | Lower R. H. Wing Upper R. H. Wing Vertical Stabilizer | 30" 30" 30"/36" | 17038 |
| K. Antiglare | Nose | Per Drawing | 17038 |
| L. Emergency Rescue Notice | Wing/Fuselage Joint, R.H. & L.H. Sides | 24" | 13538 |
| M. Turbine Exhaust Warning | Center Lower Fuselage, R.H. & L.H. Sides | 3" | 11136 |

FIGURE C-11. C-130 aircraft marking (cargo/tanker/tacamo).

MIL-STD-2161A(AS)

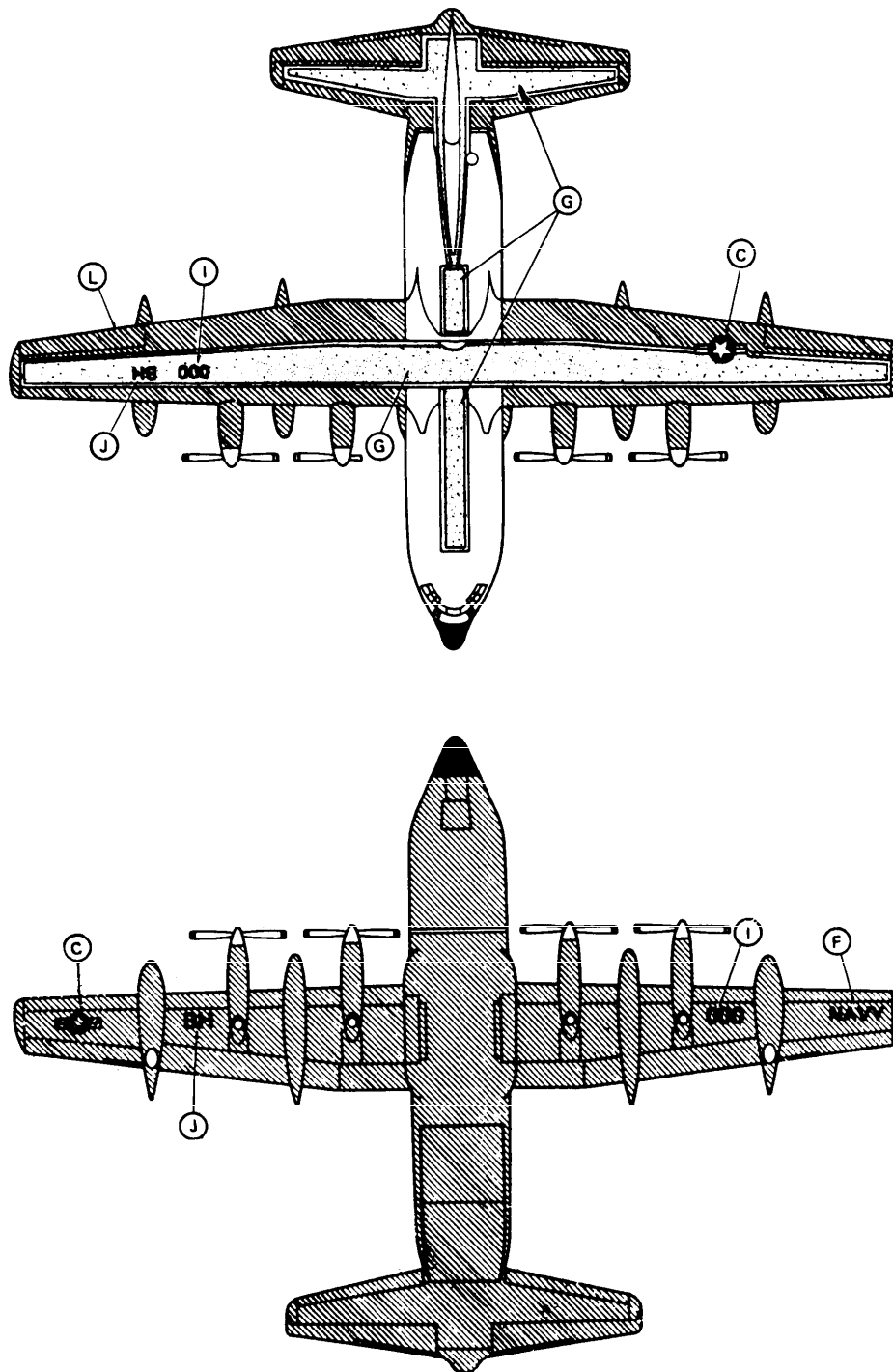


FIGURE C-11. C-130 aircraft marking (cargo/tanker/tacamo) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-----------------------|-------------------------|
| A. UNITED STATES NAVY/ MARINES | Center Fuselage | 12" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Lower R.H. Wing Upper L.H. Wing | 55" 50" WG | 11136 17925 15044 |
| D. Call Numbers | Vertical Stabilizer | 30" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17875/11136/17925 |
| F. NAVY/MARINES | Lower L.H. Wing Wings | 30" | 17038 |
| G. Walkway | Top of Wing & Fuselage | Per Drawing | 36231 |
| H. Propeller Warning Band | Fwd. Fuselage | 3" | 11136 |
| I. Unit Aircraft Numbers | Fwd. Fuselage Upper R. H. Wing | 24" 30" | 17038 |
| J. Unit Identifier | Lower R. H. Wing Upper R. H. Wing Vertical Stabilizer | 30" 30" 30"/36" | 17038 |
| K. Antiglare | Nose | Per Drawing | 17038 |
| L. Emergency Rescue Notice | Wing/Fuselage Joint, R.H. & L.H. Sides | 24" | 13538 |
| M. Turbine Exhaust Warning | Center Lower Fuselage, R.H. & L.H. Sides | 3" | 11136 |

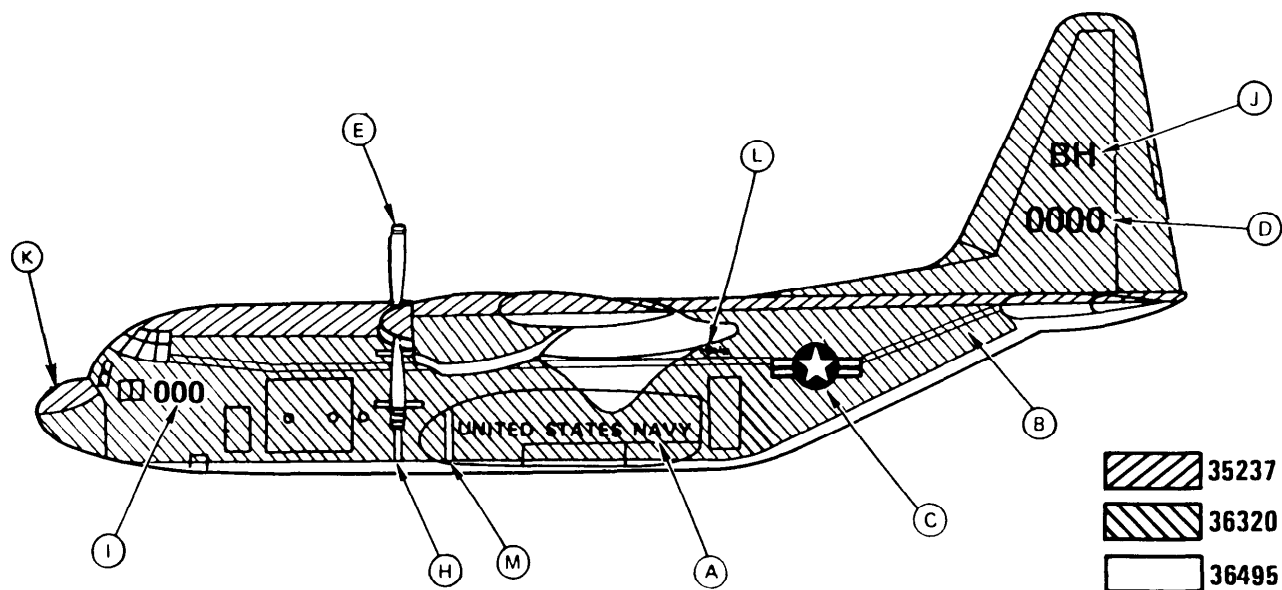


FIGURE C-12. C-130 aircraft marking (tactical).

MIL-STD-2161A(AS)

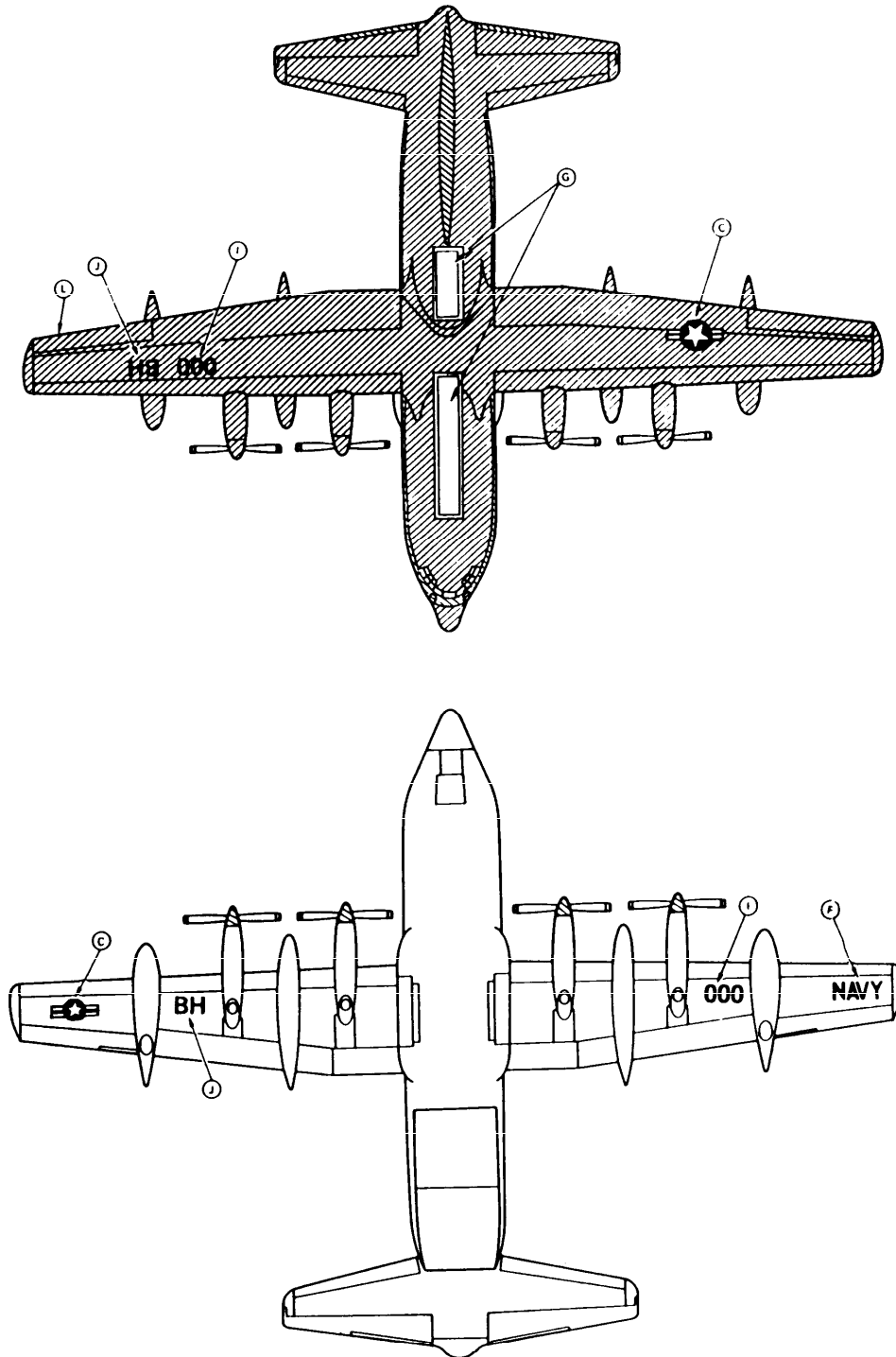


FIGURE C-12. C-130 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|--------------------------------------|---|---------------|-------------------------|
| A. UNITED STATES NAVY | Fuselage | 16" | 17038 |
| B. Model Designation, Acraft BUNO | Aft Fuselage Under Horizontal Tail | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 40" 40" WG | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 16" | 17038 |
| E. Propeller Tips | 3"/6"/3" | 12" | 17875/11136/ 17925 |
| F. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| G. Unit Identifier | R.H. and L.H. Fwd. Fuselage | 9" | 17038 |
| H. Propeller Warning Band | Lower Fuselage Propeller Plane | 3" | 11136/17925 |
| I. Navy | Lower L.H. Wing | 30" | 17038 |
| J. Walkway | Wings Near Fuselage | N/A | 17038 |
| K. Accent Stripe | Center of Fuselage L.H. & R.H. Sides Nose to Horizontal Stabilizer | 2.5" | 17925 |
| L. Rescue Arrow | Fwd. Fuselage | 24" | 17038 |

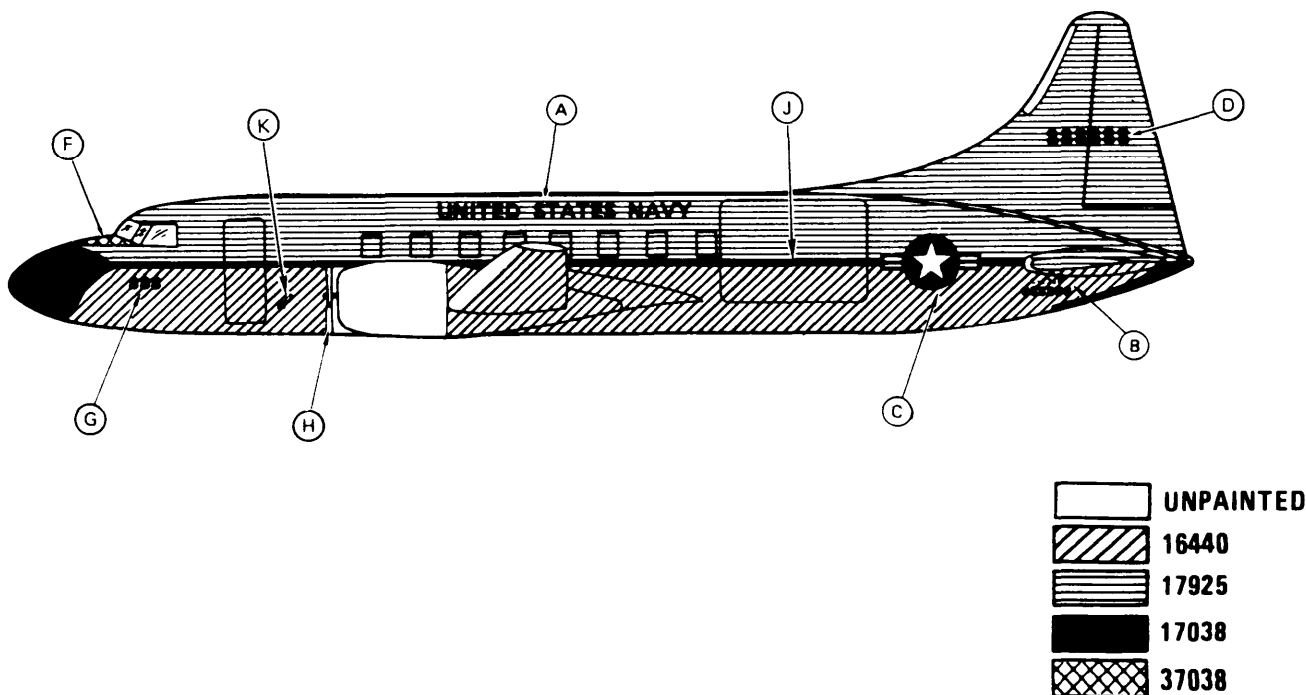


FIGURE C-13. C-131 aircraft marking (cargo).

MIL-STD-2161A(AS)

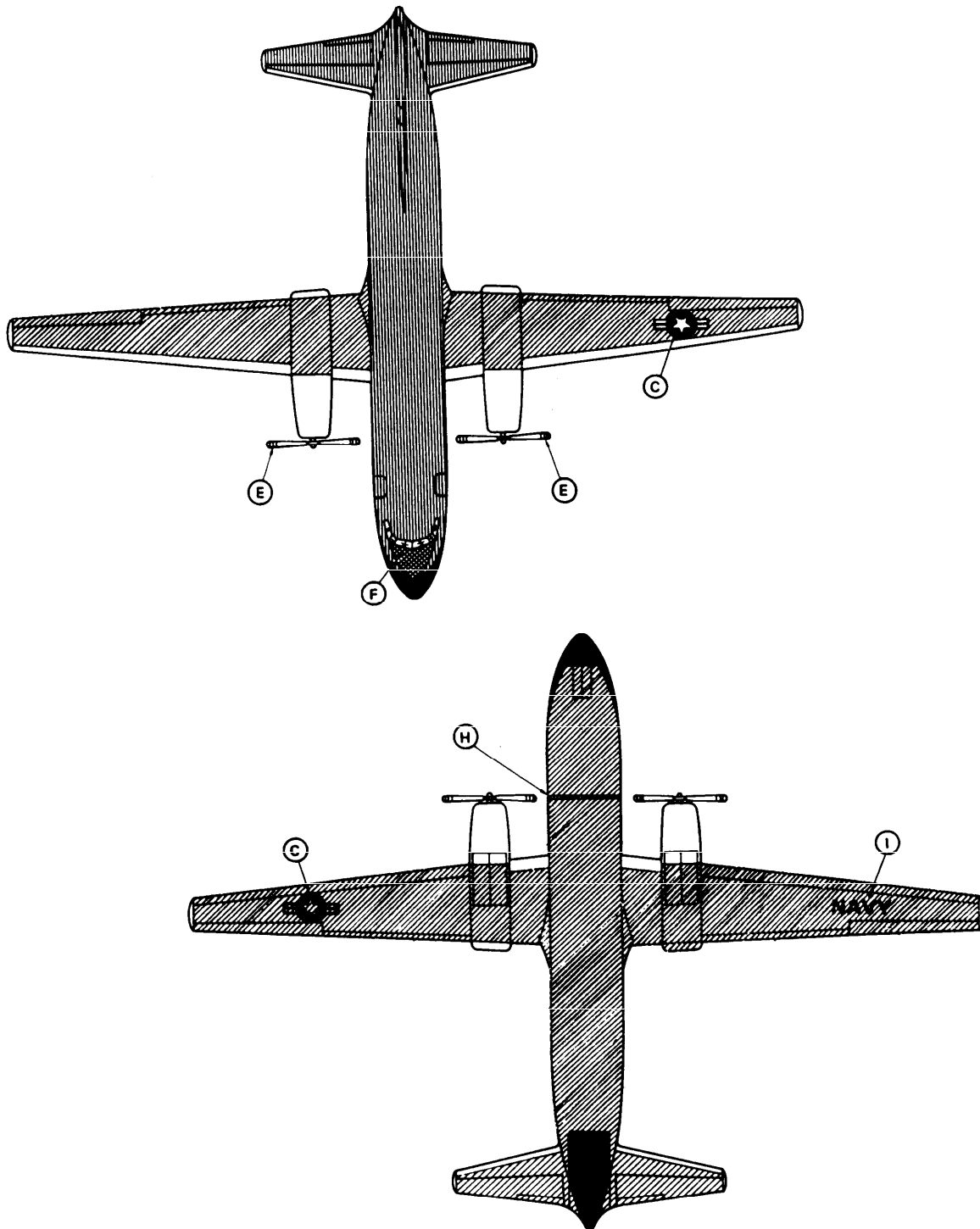
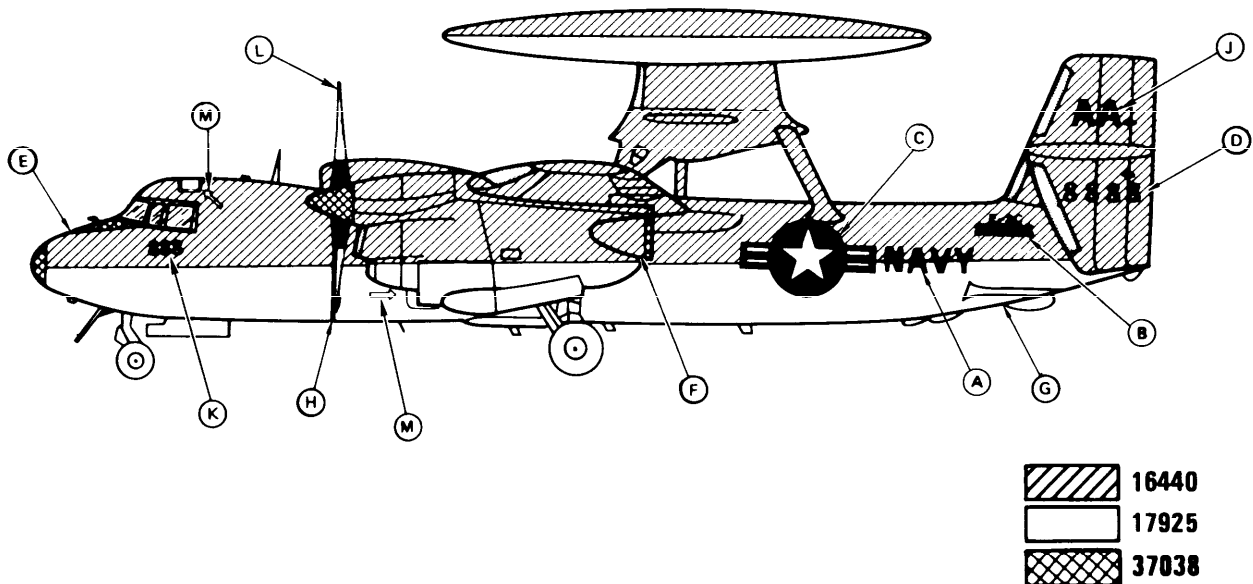


FIGURE C-13. C-131 aircraft marking (cargo) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------------|
| A. NAVY | Aft Fuselage | 20" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R. H. Wing | 40" 40" 40" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stab | 12" | 17038 |
| E. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| F. Beware of Blast | Engine Exhaust Cowling | 12" | 17038 |
| G. Arresting Hook Marking | Aft Fuselage | 7" | 17038 |
| H. Propeller Warning Band | Fwd. Fuselage | 3" | 11136/17925 |
| I. Walkway | Top Horizontal Tail Surface Top Center of Wing | N/A | IAW Para. 5.1.13 |
| J. Unit Identifier | Vertical Stabilizer | 30"/36" | 17038 |
| K. Unit Aircraft Numbers | Fwd. Fuselage | 24" | 17038 |
| L. Propeller Tips | N/A | 3"/6"/3" | 17925/11136/17925 |
| M. Rescue Arrow | L.H. Side Fuselage Near Door Top Fwd. Fuselage Aft of Cockpit | 24" | 13538 17038 |

FIGURE C-14. E-2C aircraft marking.

MIL-STD-2161A(AS)

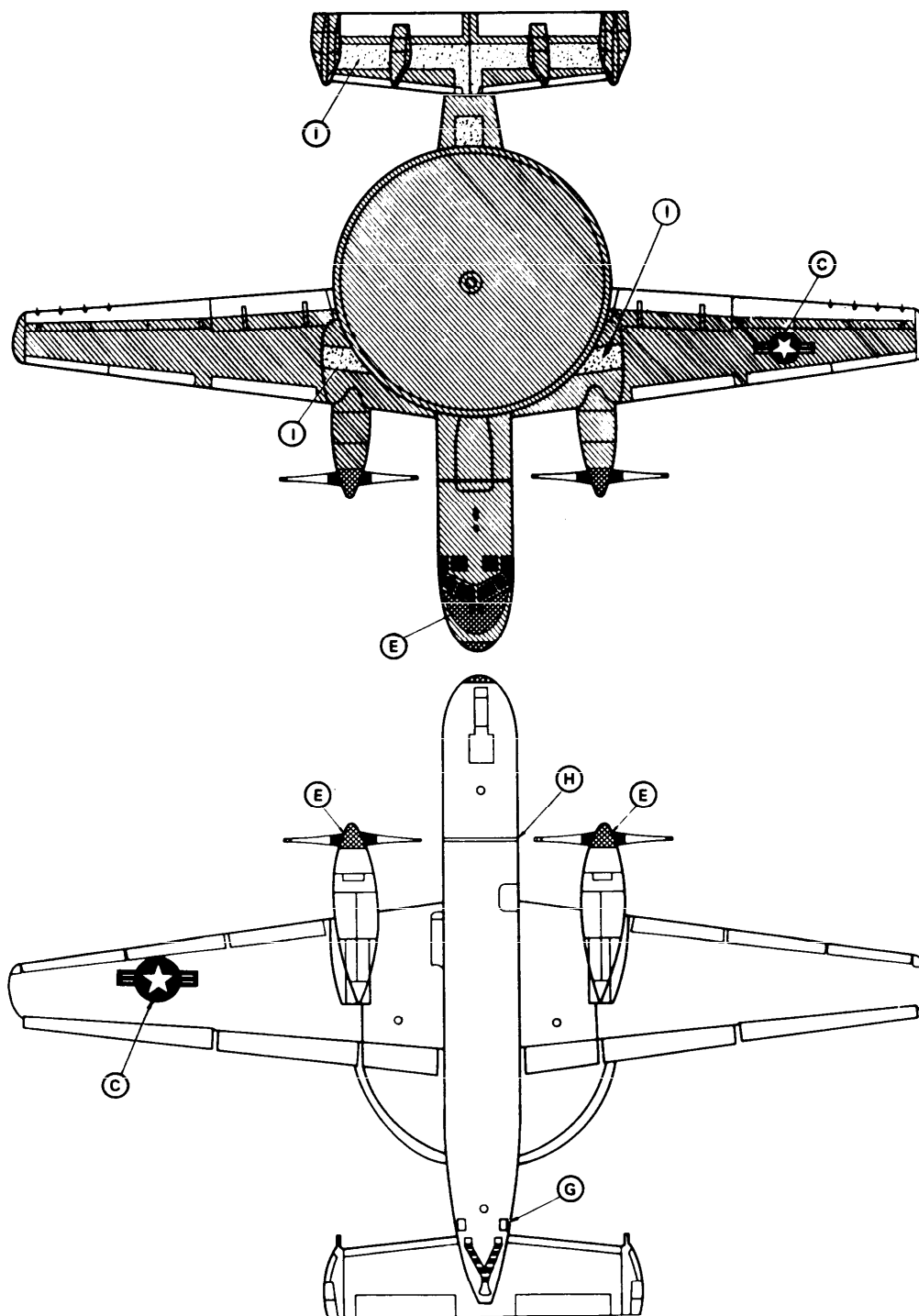


FIGURE C-14. E-2C aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|--|-------------------|-------------------------------|
| A. NAVY | Aft Fuselage | 12" | IAW Para. 5.2.3 & Figure A-15 |
| B. Model Designation, Acft BUNO | Below National Star | 2" 4" | IAW Para. 5.2.3 & Figure A-15 |
| C. National Star | Aft Fuselage Upper L. H. Wing Lower R. H. Wing | 12" 12" 12" | IAW Para. 5.2.3 & Figure A-1 |
| D. Call Numbers | Lower Vertical Stabilizer | 12" | IAW Para. 5.2.3 |
| E. Intake Warning | Engine Intake Nacelles | See 5.2.2.10.1 | IAW Para. 5.2.3 & Figure A-15 |
| F. Beware of Blast | Aft Engine Exhaust Outlet | 15" | IAW Para. 5.2.3 |
| G. Arresting Hook Marking | Aft Fuselage | 13" | IAW Para. 5.2.3 & Figure A-14 |
| H. Ejection Seat Warning | Below Canopy Rail | 8" | IAW Para. 5.2.3 & Figure A-16 |
| I. Walkway | Wings Next to Fuselage | N/A | IAW Para. 5.1.13 |
| J. Unit Identifier | Upper R. H. Wing Vertical Stabilizer | 30" 30" | IAW Para. 5.2.3 |
| K. Unit Aircraft Numbers | Forward Fuselage Upper R. H. Wing | 12" 24" | IAW Para. 5.2.3 |
| L. Rescue Arrow | R.H. & L.H. Sides of Fuselage Aft of Intake Warning | 24" | IAW Para. 5.2.3 & Figure A-14 |

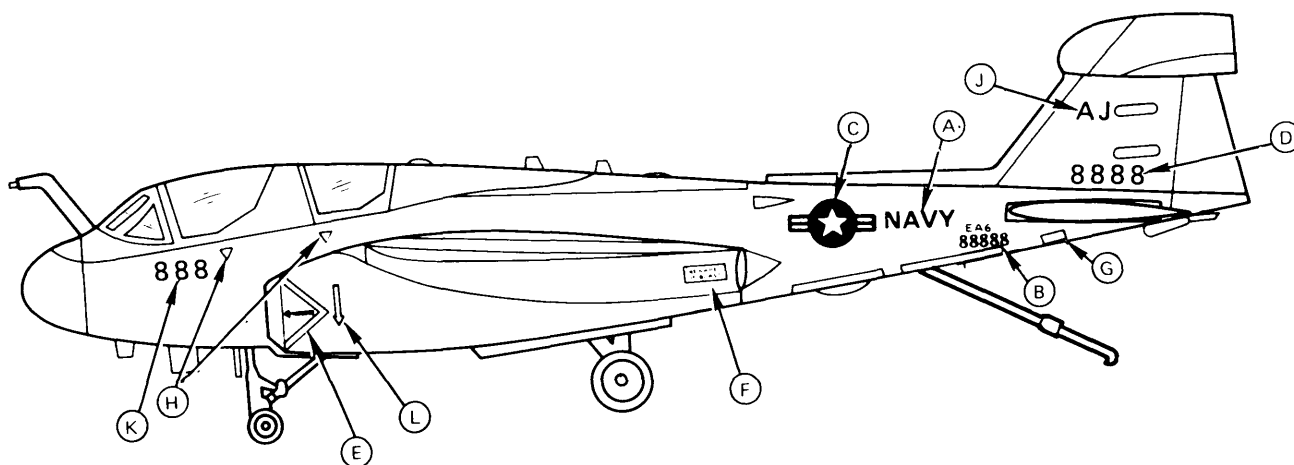


FIGURE C-15. EA-6B aircraft marking (tactical).

MIL-STD-2161A(AS)

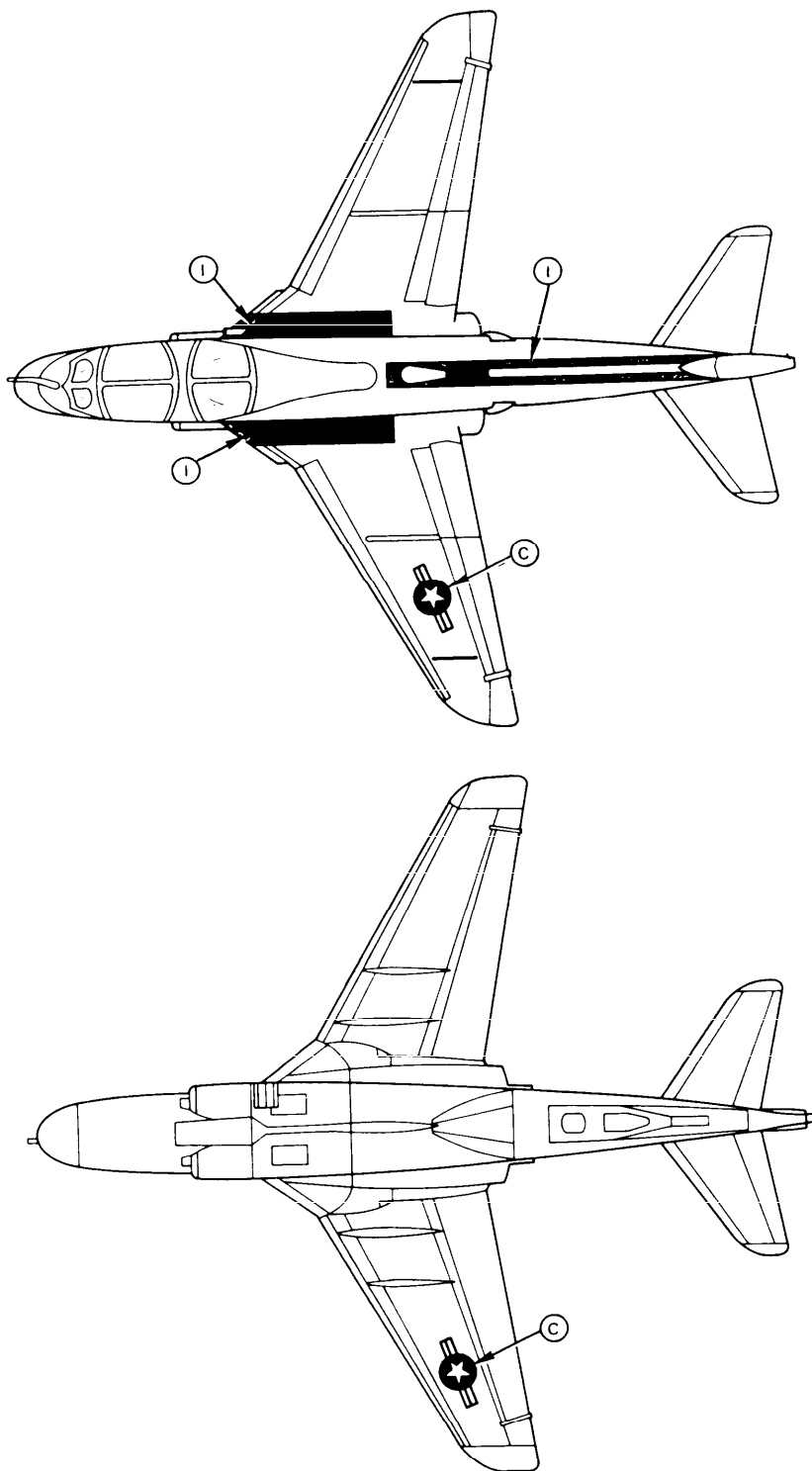
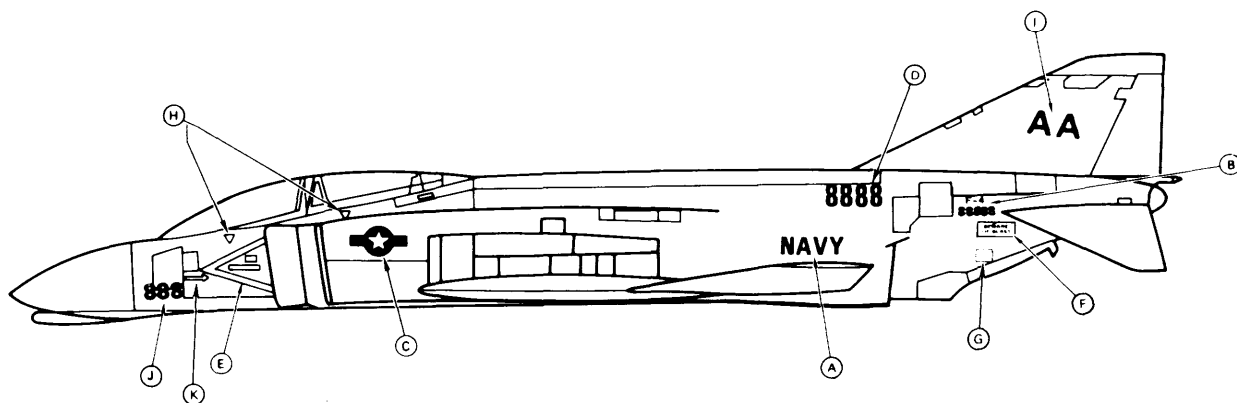


FIGURE C-15. EA-6B aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|-------------------|-------------------------------|
| A. NAVY/MARINES | Aft Fuselage | 12" | IAW Para. 5.2.3 & Figure A-15 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | IAW Para. 5.2.3 & Figure A-15 |
| C. National Star | Fwd. Fuselage Upper L.H. Wing Lower R.H. Wing | 12" 12" 12" | IAW Para. 5.2.3 & Figure A-14 |
| D. Call Numbers | Aft Fuselage | 12" | IAW Para. 5.2.3 |
| E. Intake Warning | Engine Intake Nacelles | 33" | IAW Para. 5.2.3 & Figure A-15 |
| F. Beware of Blast | Aft Fuselage | 9" | IAW Para. 5.2.3 |
| G. Arresting Hook Marking | Aft Fuselage | 13" | IAW Para. 5.2.3 & Figure A-14 |
| H. Ejection Seat Warning | Below Canopy Rail | 8" | IAW Para. 5.2.3 & Figure A-16 |
| I. Unit Identifier | Vertical Stabilizer | 12" | IAW Para. 5.2.3 |
| J. Unit Aircraft Numbers | Fwd. Fuselage | 12" | IAW Para. 5.2.3 |
| K. Rescue Arrow | R.H. & L.H. Sides of | 18" | IAW Para. 5.2.3 |
| L. Walkway | Wings Next to Fuselage | N/A | IAW Para. 5.1.13 |

FIGURE C-16. RF/F-4 aircraft marking (tactical).

MIL-STD-2161A(AS)

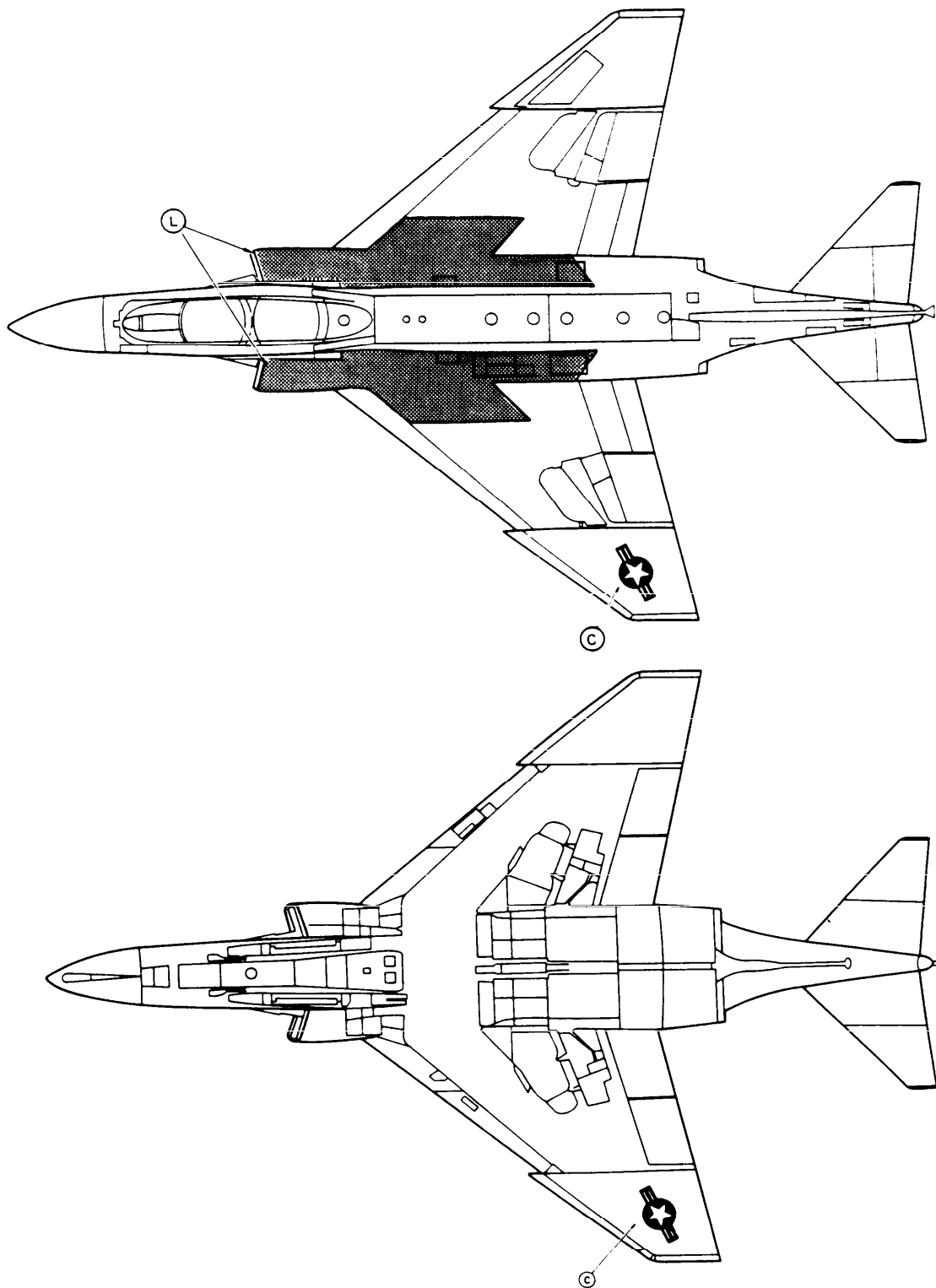


FIGURE C-16. RF/F-4 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|----------|---------------------------|
| A. NAVY | Aft Fuselage | 12" | IAW Figure A-15, 35237 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | IAW Figure A-15, 35237 |
| C. National Star | Forward Fuselage Upper L. H. Wing Lower R. H. Wing | 12" | IAW Figure A-1, 35237 |
| D. Call Numbers | Vertical Stabilizer | 12" | 35237 |
| E. Beware of Blast | Aft Fuselage | 12" | IAW Figure A-8, 35237 |
| F. Arresting Hook Marking | Aft Fuselage | | IAW Figure A-14, 35237 |
| G. Ejection Seat Warning | Below Canopy Rail | 8" | IAW Figure A-16, 35237 |
| H. Walkway | Aft Fuselage Next to Vertical Stabilizer | N/A | IAW Para. 5.2.3 36320 |
| I. Intake Warning | Nose | | IAW Figure A-15, 35237 |
| J. Unit Identifier | Vertical Stabilizer | | IAW 35237 |
| K. Unit Aircraft Numbers | Fwd. Fuselage | | IAW Para. 5.2.3 |
| L. Rescue Arrow | R.H. & L.H. Side of Canopy | 24" | IAW Figure A-14, 35237 |

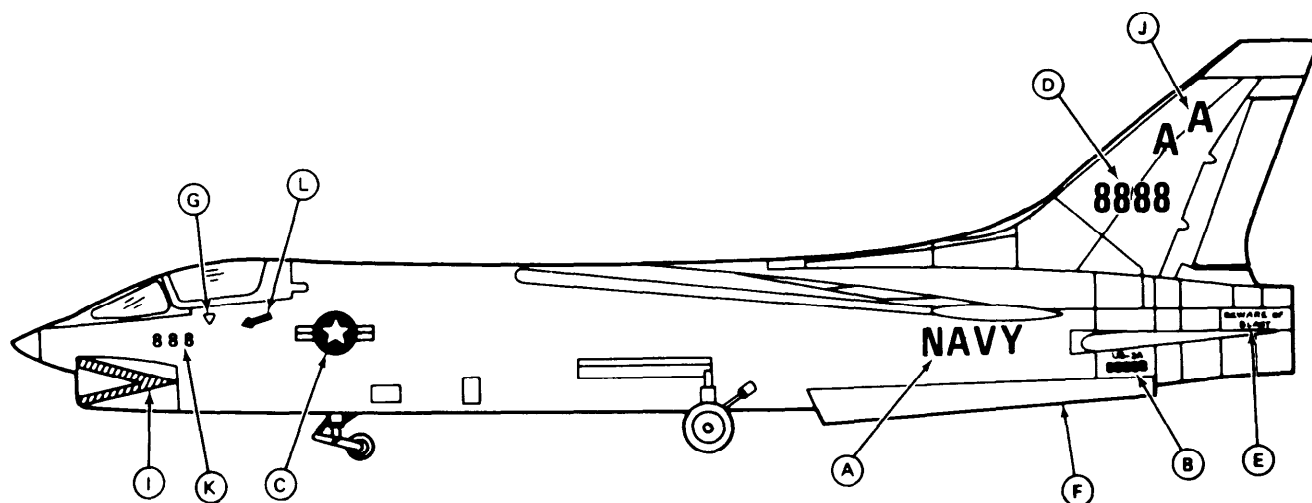


FIGURE C-17. RF-8G aircraft marking (tactical).

MIL-STD-2161A(AS)

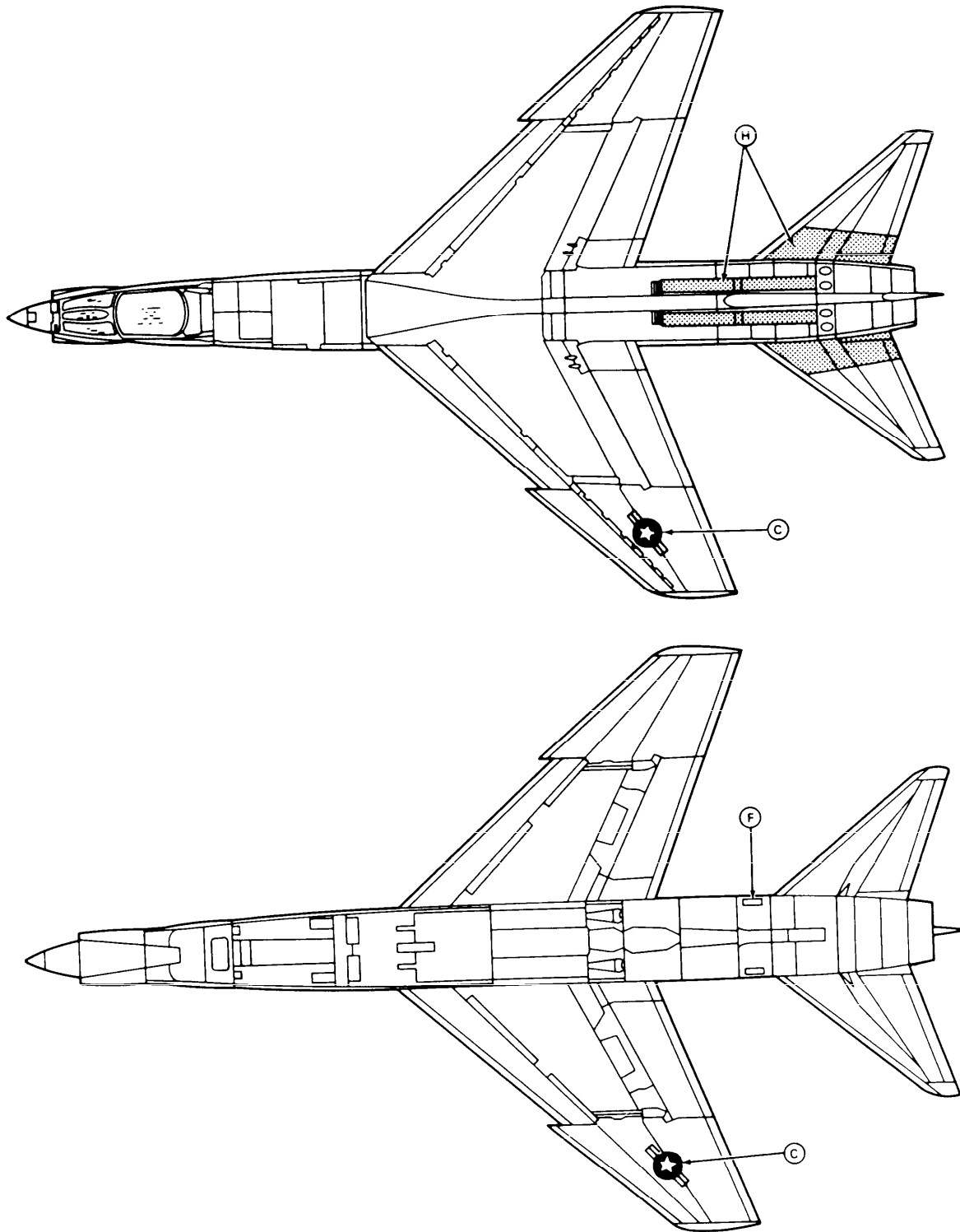
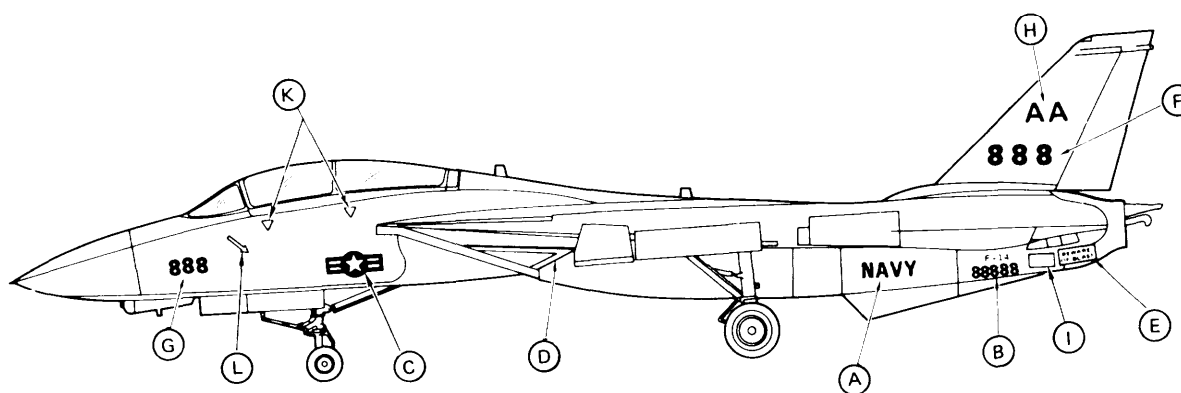


FIGURE C-17. RF-8G aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|------------|-------------------------------|
| A. NAVY | Aft Fuselage | 12" | IAW Para. 5.2.3 & Figure A-15 |
| B. Model Designation, Acft BUNO | Aft Side Fuselage | 2" 6" | IAW Para. 5.2.3 & Figure A-15 |
| C. National Star | Fwd. Side Fuselage L.H. Wing Top R.H. Wing Bottom | 12" | IAW Para. 5.2.3 & Figure A-14 |
| D. Intake Warning | Forward Engine Intake | 75" | IAW Para. 5.2.3 & Figure A-15 |
| E. Beware of Blast | Lower Aft Side Fuselage | 12" | IAW Para. 5.2.3 |
| F. Call Numbers | Outside Vertical Tails | 12" | IAW Para. 5.2.3 |
| G. Unit Aircraft Number | Fwd. Fuselage | 12" 24" | IAW Para. 5.2.3 |
| H. Unit Identifier | Outside Vertical Stabilizer | 30" | IAW Para. 5.2.3 |
| I. Arresting Hook Marking | Aft Fuselage | 8" | IAW Para. 5.2.3 & Figure A-14 |
| J. Walkway | Wing Near Rear Canopy and Rear Wheels | N/A | IAW Para. 5.1.13 |
| K. Ejection Seat Warning | Below Canopy Rail (2 places) | 8" | IAW Para. 5.2.3 & Figure A-16 |
| L. Rescue Arrow | R.H. & L.H. Sides of Fuselage | 24" | IAW Para. 5.2.3 & Figure A-14 |

FIGURE C-18. F-14 aircraft marking (tactical).

MIL-STD-2161A(AS)

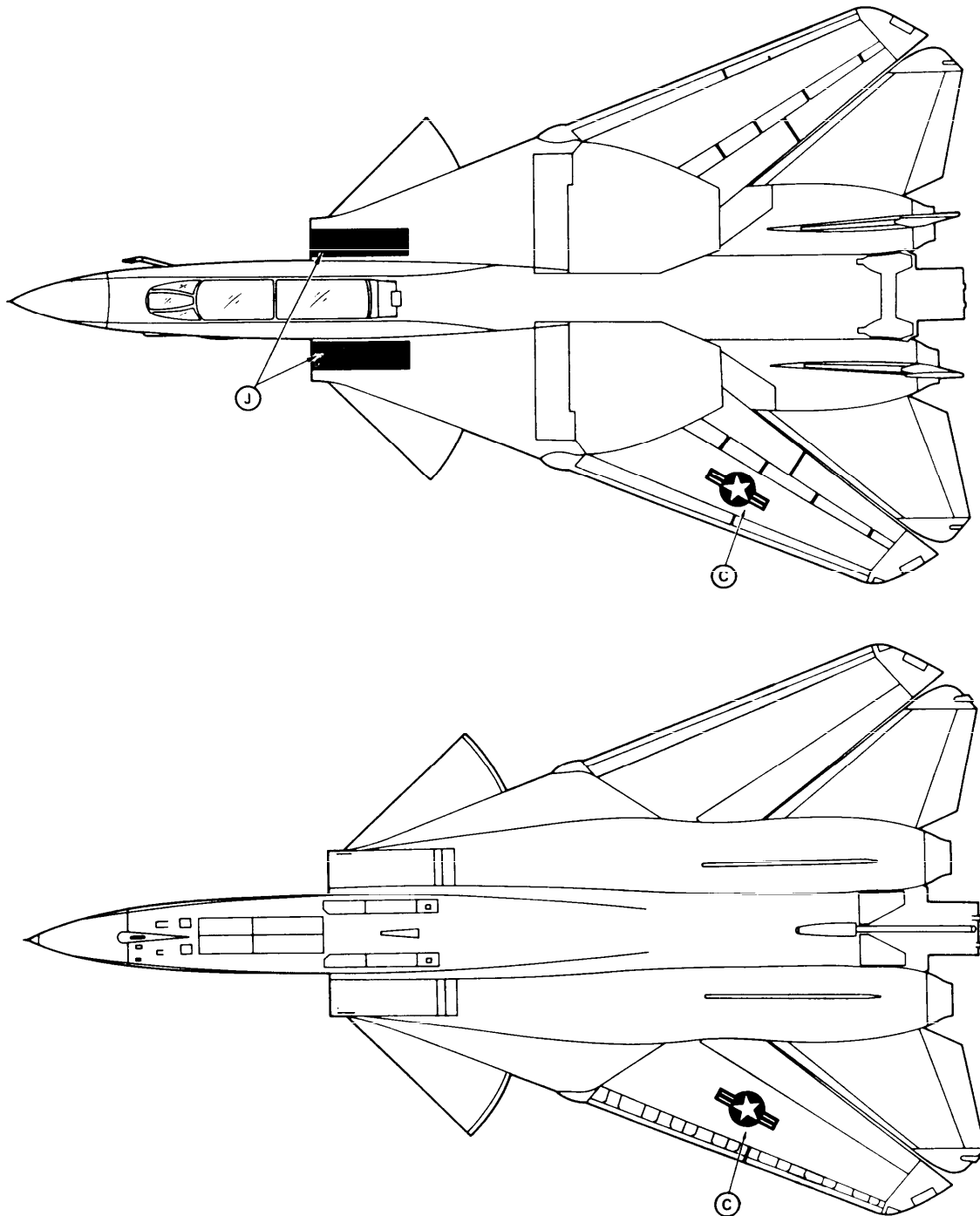
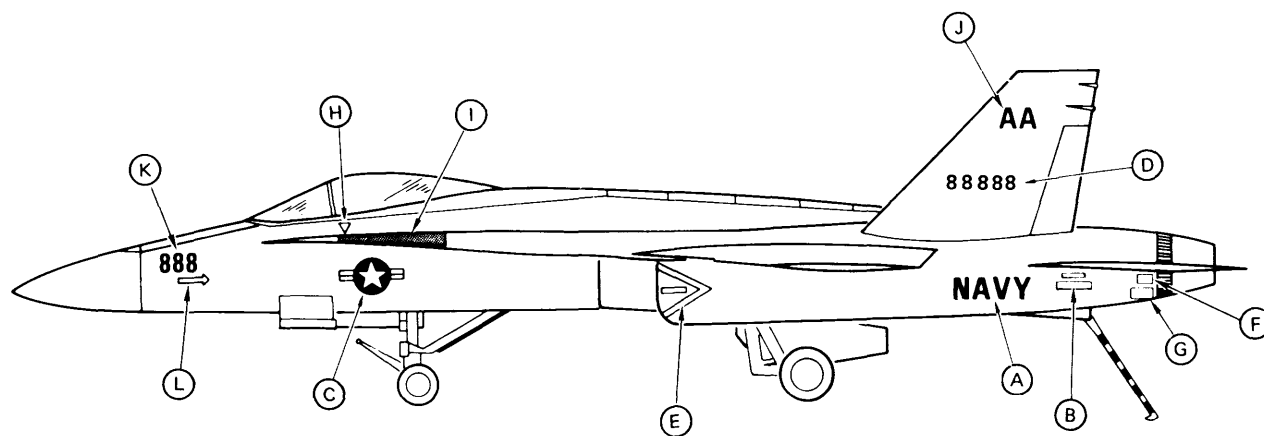


FIGURE C-18. F-14 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------|---------------------------|
| A. NAVY/MARINES | Aft Fuselage | 12"/10" | IAW Figure A-15, 35237 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 4" 2" | IAW Figure A-15, 35237 |
| C. National Star | Fwd. Fuselage Lower L.H. Wing Upper L.H. Wing | 12" 12" 12" | IAW Figure A-1, 35237 |
| D. Call Numbers | Outside Vertical Stabilizers | 10" | 35237 |
| E. Intake Warning | Fwd. Engine Intake | 75" | IAW Figure A-15, 35237 |
| F. Beware of Blast | Aft Fuselage | 12" | 35237 |
| G. Arresting Hook Marking | Aft Fuselage | 14" | IAW Figure A-14, 35237 |
| H. Ejection Seat Warning | Upper Canopy Rail | 8" | IAW Figure A-16, 35237 |
| I. Walkway | L.H. Fuselage | N/A | IAW Para. 5.1.13 |
| J. Unit Identifier | Outside Vertical Stabilizers | 30" | 35237 |
| K. Unit Aircraft Numbers | Fwd. Fuselage | 12" | IAW Para. 5.2.3 |
| L. Rescue Arrow | Fwd. Fuselage | 24" | IAW Figure A-14, 35237 |

FIGURE C-19. F-18 aircraft marking (tactical).

MIL-STD-2161A(AS)

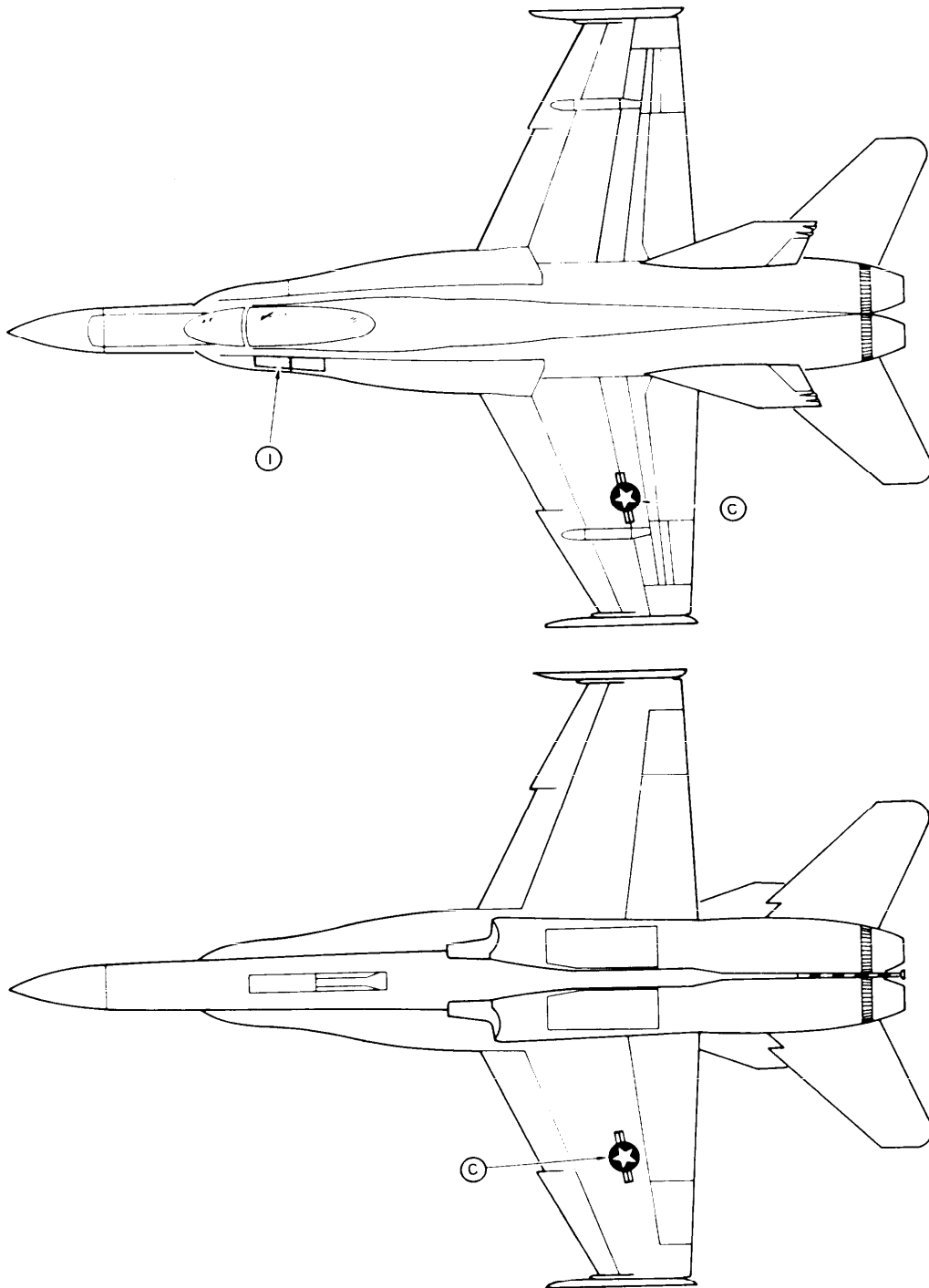


FIGURE C-19. F-18 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|----------------------------------|--|-------------------|--------------------------------------|
| A. MARINES | R.H. and L.H. of Tail Boom | 10" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUONO | Tail Boom R.H. and L.H. | 2" 6" | IAW Para 5.2.3.2 |
| C. National Star | R.H. and L.H. Side | 15" 15" 15" | IAW Para 5.2.3.2 IAW Para 5.2.3.2 |
| D. No Push | R.H. and L.H. Side, Aft Tail Boom Fairing, Fwd. and Aft of Elevators | | IAW Para 5.2.3.2 |
| E. Intake Warning | Fwd. of Intakes | 15" | IAW Para 5.2.3.2 |
| F. Beware of Blast | R.H. and L.H. Side | 5" | IAW Para 5.2.3.2 |
| G. Tail Rotor Warning | Tail Boom | 22" | IAW Para 5.2.3.2 |
| H. Walkway | | 24" x 6" | 35237 |
| I. Rescue Arrow | R.H. and L.H. Side of Nose Section | 2" | IAW Para 5.2.3.2 |
| J. Rescue Arrow | Adjacent to Pilots and Gunners Door Handles | 3/4" | IAW Para 5.2.3.2 |
| K. Unit Aircraft Numbers | R.H. and L.H. of Nose Section | 10" | IAW Para 5.2.3.2 |
| L. Unit Identifier | R.H. and L.H. Side | 10" | IAW Para 5.2.3.2 |

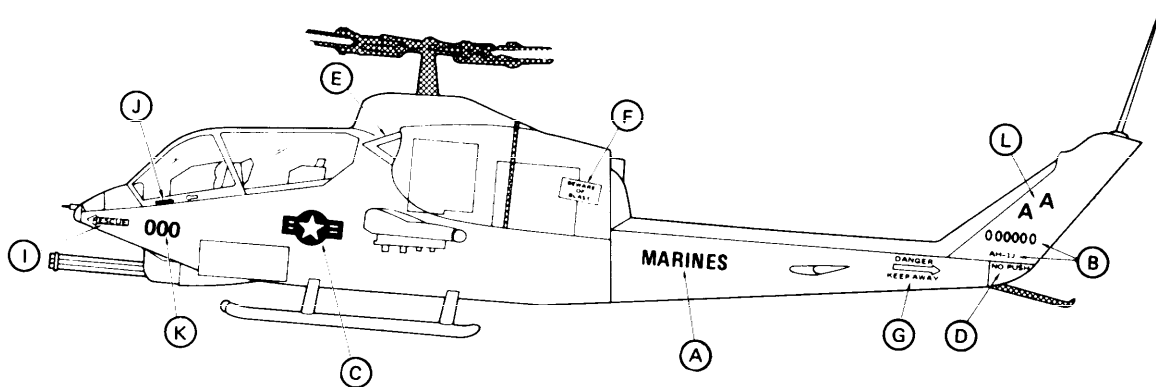


FIGURE C-20. AH-1J/1T/1W aircraft marking (tactical).

MIL-STD-2161A(AS)

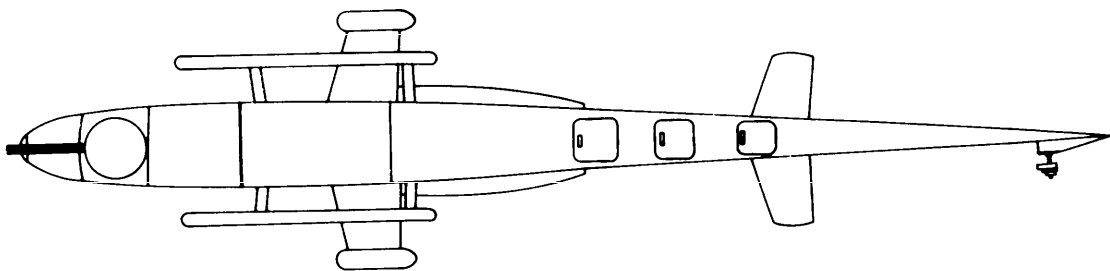
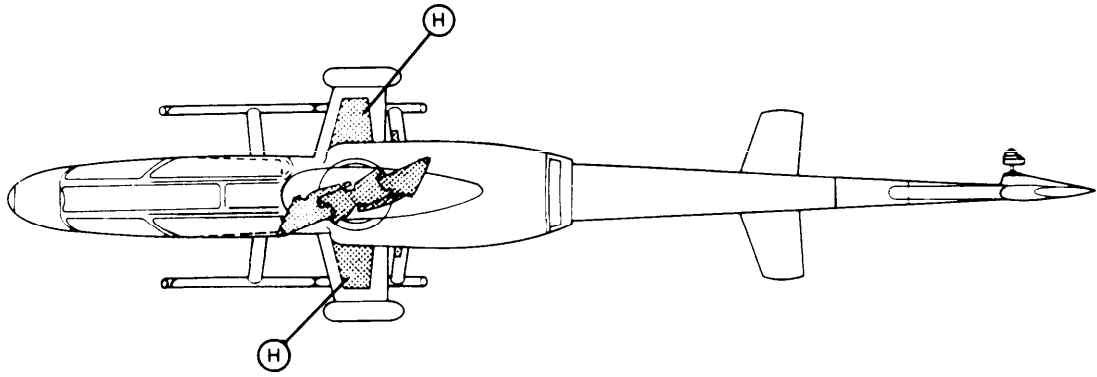


FIGURE C-20. AH-1J/1T/1W aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------------|
| A. NAVY | Bottom & Sides Fuselage | 10" 10" | 17038/17925 |
| B. Model Designation, Acft BUNO | Tail Boom L.H. & R.H. Sides | 2" 6" | 17925 |
| C. National Star | Center Fuselage Bottom Fuselage Top Fuselage | 15" 15" 15" | 17925 11136 15044 |
| D. Rescue Arrow | Cockpit Door | 24" | 13538/17038 |
| E. Call Numbers | Tail Boom | 6" | 17038 |
| F. Intake Warning | Engine Inlet Nacelle | 15" | 11136/17925 |
| G. Beware of Blast | Engine Exhaust Nacelle | 8" | 11136/17925 |
| H. Tail Rotor Warning | Aft Fuselage | 33" | 13538/11136/17038 |
| I. Rescue | Bottom & Top Fuselage | 10" | *17925/17038 |
| J. Abandon Chute | Bottom Fuselage | 10" | 17925 |
| K. Conspicuity Markings | Per Drawing | N/A | 12197 |
| L. Unit Identifier | Bottom Aft Fuselage Tail Boom | 10" | 17925/17038 |
| M. Unit Aircraft Numbers | Both Doors & Nose Bottom Aft Fuselage | 10" | 17925 |
| N. Antiglare | Fwd. of Windscreen | N/A | 37038 |

* 17925 on Orange Background, 17038 on Gray Background

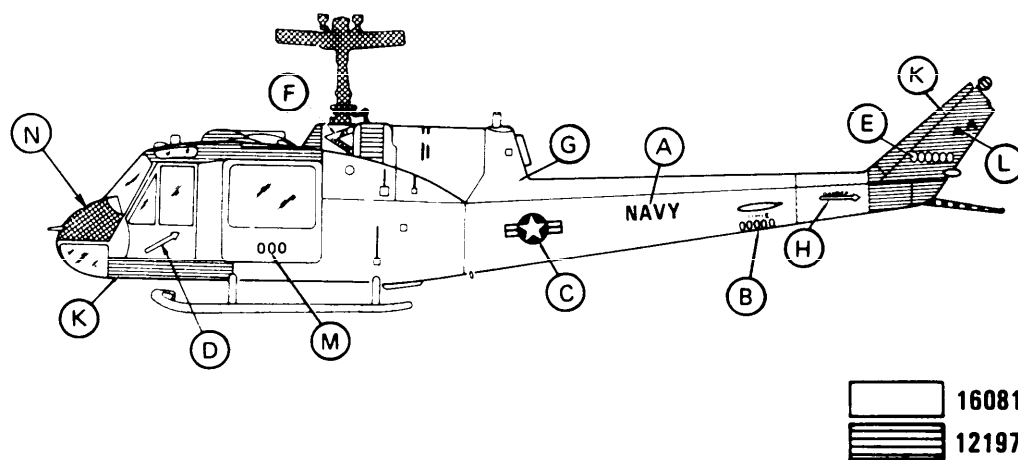


FIGURE C-21. UH-1E aircraft marking (SAR).

MIL-STD-2161A(AS)

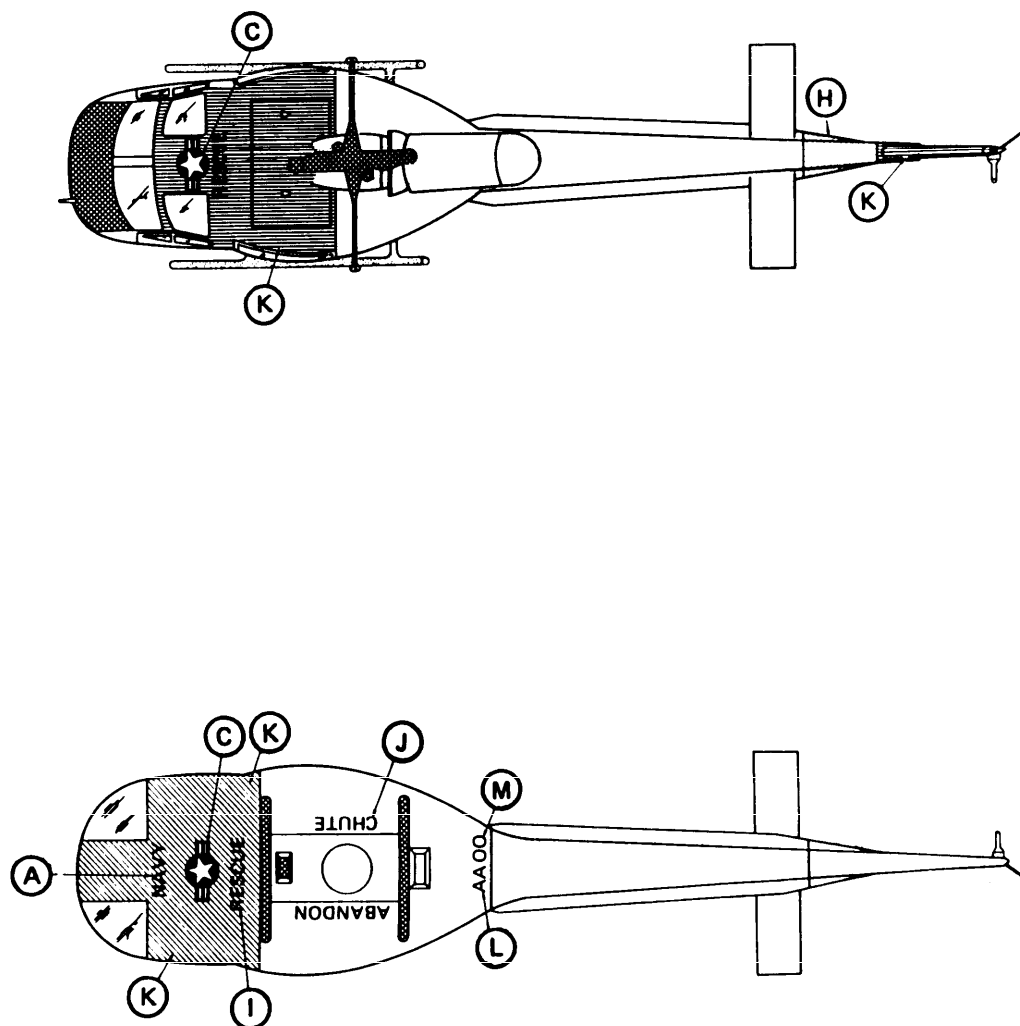
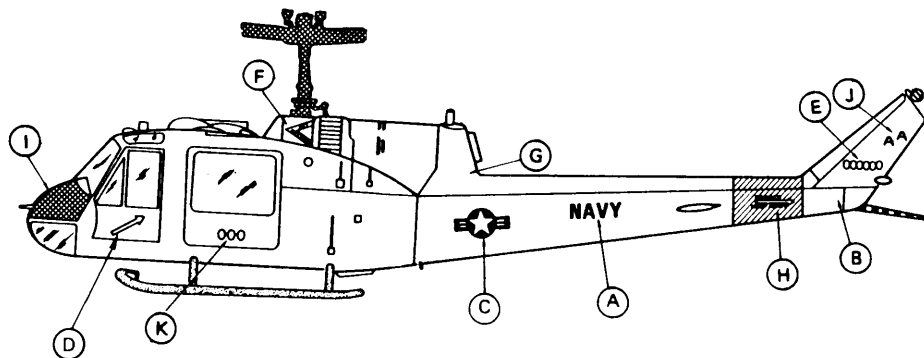


FIGURE C-21. UH-1E aircraft marking (SAR) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------|
| A. NAVY | Bottom & Sides Fuselage | 10" | 17925/17038 |
| B. Model Designation, Acft BUNO | Tail Boom R.H. & L.H. Sides | 2" 6" | 17925 |
| C. National Star | Center Fuselage Bottom Fuselage Top Fuselage | 15" 15" 15" | 17925/11136/15044 |
| D. Rescue Arrow | Cockpit Door | 24" | 13538/17038 |
| E. Call Numbers | Tail Boom | 6" | 17925 |
| F. Intake Warning | Engine Inlet Nacelle | 15" | 17925/11136 |
| G. Beware of Blast | Engine Exhaust Nacelle | 8" | 17925/11136 |
| H. Tail Rotor Warning | Aft Fuselage | 33" | 13538/11136/17038 |
| I. Antiglare | Fwd. Fuselage | N/A | 37038 |
| J. Unit Identifier | Bottom Aft Fuselage Tail Boom | 10" | 17925 |
| K. Unit Aircraft Numbers | Both Doors & Nose Bottom Aft Fuselage | 10" | 17925 |

 16081
FIGURE C-22. UH-1E aircraft marking.

MIL-STD-2161A(AS)

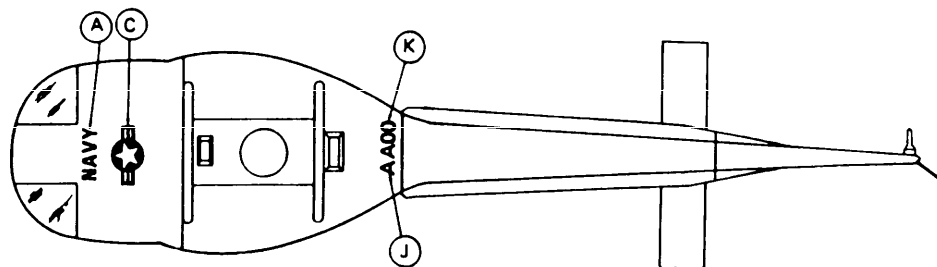
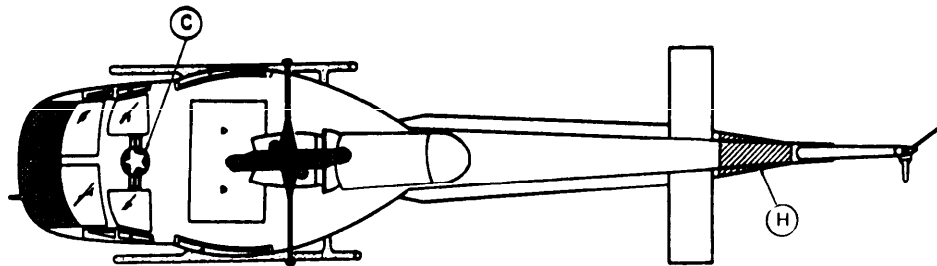
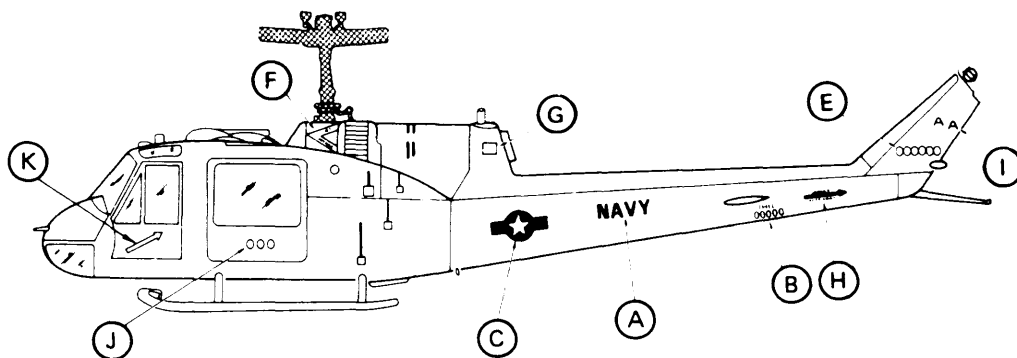


FIGURE C-22. UH-1E aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|----------------------------|----------|------------------|
| A. NAVY | Aft Fuselage | 10"/10 | 37038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 6" | 37038 |
| C. National Star | Aft Fuselage Top/Bottom | 15" | 37038 |
| D. Walkway | Top of Fuselage | N/A | 37038 |
| E. Call Numbers | Tail Boom | 6" | 37038 |
| F. Intake Warning | Fwd. Eng. Nacelle | 15" | 37038 |
| G. Beware of Blast | Aft Eng. Nacelle | 5" | 37038 |
| H. Tail Rotor Warning | Aft Fuselage | 22" | 37038 |
| I. Unit Identifier | Tail Boom | 8" | 37038 |
| J. Unit Aircraft Numbers | Door | 8" | 37038 |
| K. Rescue Arrow | Cockpit Door | 24" | 13538/37038 |



34095

FIGURE C-23. HH-1K aircraft marking (land camouflage).

MIL-STD-2161A(AS)

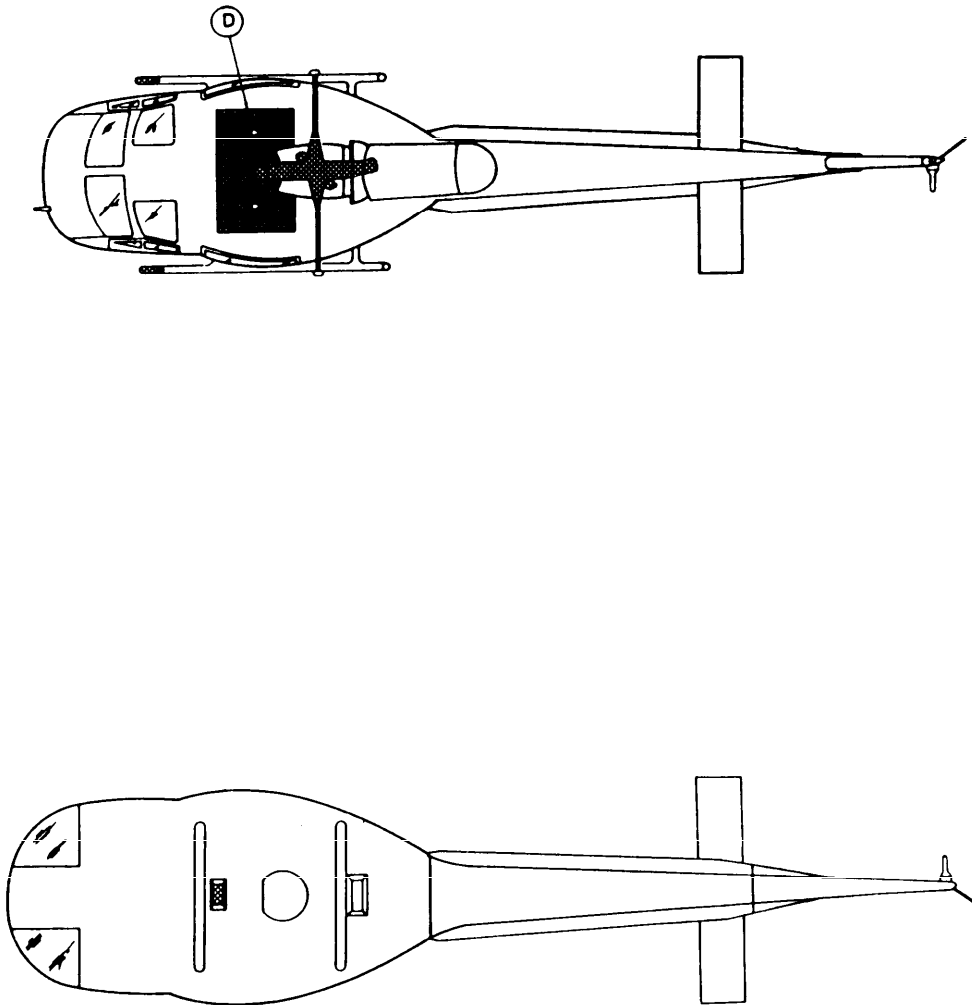
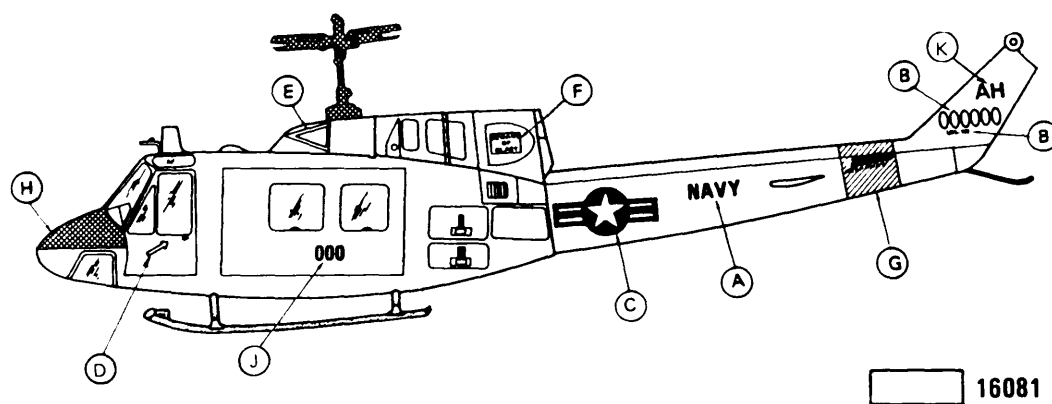


FIGURE C-23. HH-1K aircraft marking (land camouflage) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|---|-------------------|-------------------|
| A. NAVY | Tail Boom/ Bottom Fuselage | 10" | 17925 |
| B. Model Designation, Acft BUONO | Side Tail Boom | 2" 6" | 17925 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 15" 15" 15" | 17925/11136/15044 |
| D. Rescue Arrow | Fwd. Cockpit Door | 24" | 13538/37038 |
| E. Intake Warning | Forward Intake | 15" | 11136/17925 |
| F. Beware of Blast | Engine Exhaust Nacelle | 5" | 11136/17925 |
| G. Tail Rotor Warning | Tail Boom | 33" | 13538/31136/17038 |
| H. Antiglare | Fwd. Fuselage | N/A | 37038 |
| I. Walkway | Top Fwd. Fuselage | N/A | 37038 |
| J. Unit Aircraft Numbers | Mid Fuselage Bottom Fuselage | 10" | 17925 |
| K. Unit Identifier | Tail Boom Bottom Fuselage | 10" | 17925 |

FIGURE C-24. UH-1N aircraft marking.

MIL-STD-2161A(AS)

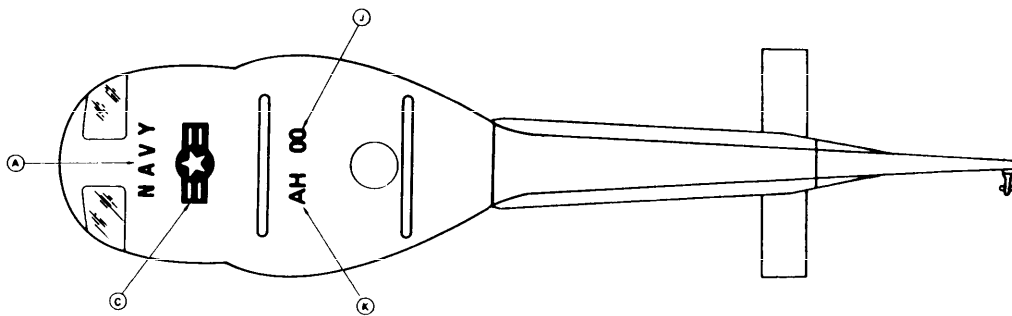
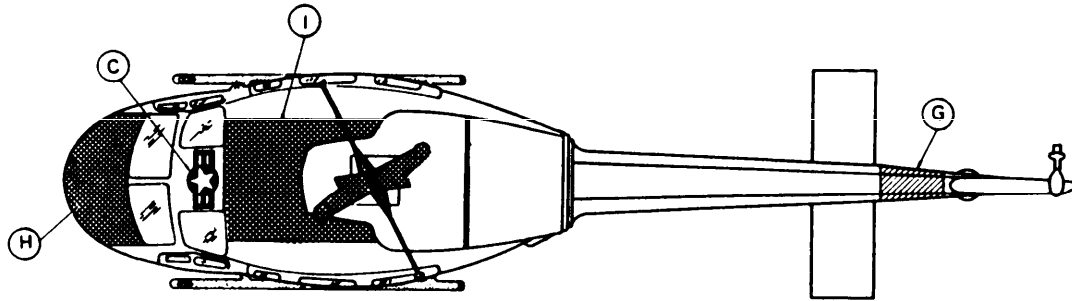
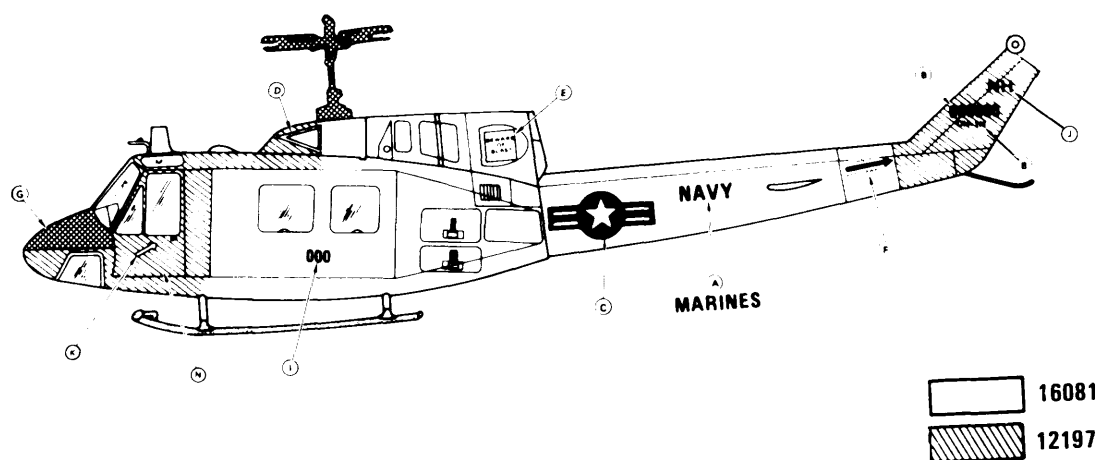


FIGURE C-24. UH-1N aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|---|-------------------|-------------------|
| A. NAVY/MARINES | Tail Boom/ Bottom Fuselage | 10" | 17038 |
| B. Model Designation, Acft BUONO | Side Tail Boom | 2" 6" | 17038 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 15" 15" 15" | 17925/11136/15044 |
| D. Intake Warning | Forward Intake | 15" | 11136/17925 |
| E. Beware of Blast | Engine Exhaust Nacelle | 5" | 11136/17925 |
| F. Tail Rotor Warning | Tail Boom | 33" | 13538/31136/17038 |
| G. Antiglare | Fwd. Fuselage | N/A | 37038 |
| H. Walkway | Top Fuselage | N/A | 37038 |
| I. Unit Aircraft Numbers | Mid Fuselage Bottom Fuselage | 10" | 17038 |
| J. Unit Identifier | Tail Boom Bottom Fuselage | 10" | 17038 |
| K. Rescue Arrow | Fwd. Cockpit Door | 24" | 13538/17925 |
| L. Rescue | Bottom Aft Fuselage Top Fwd. Fuselage | 10" | 17038 |
| M. Abandon Chute | Bottom Fuselage | 10" | 17038 |
| N. Conspicuity Markings | Per Drawing | N/A | 12197 |

FIGURE C-25. UH-1N aircraft marking (non-combat SAR).

MIL-STD-2161A(AS)

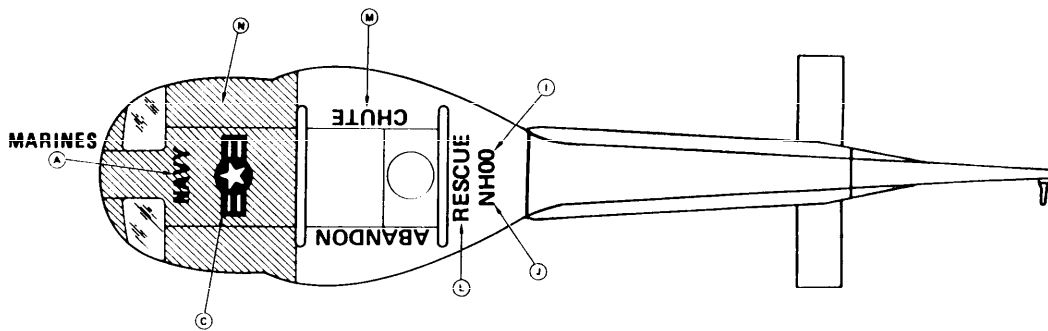
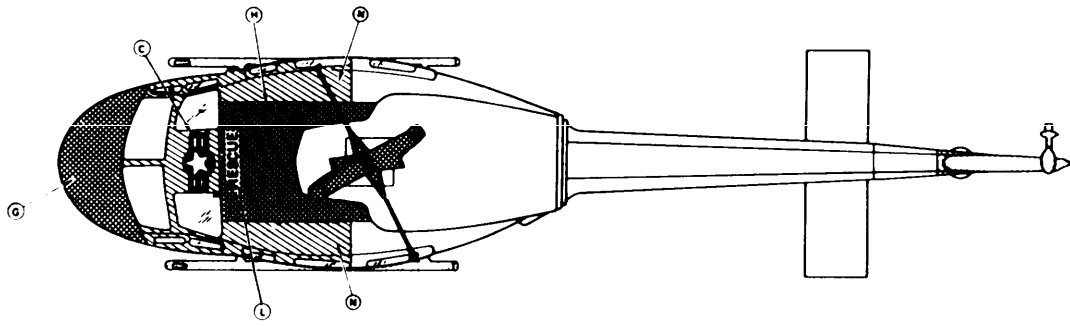
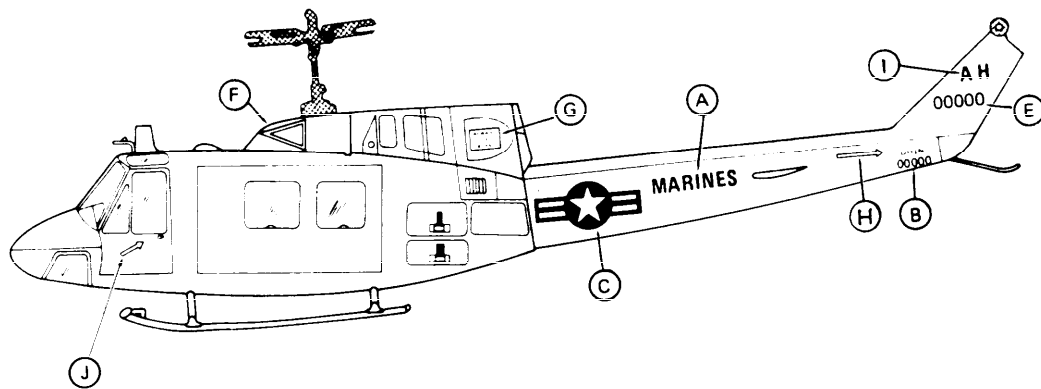


FIGURE C-25. UH-1N aircraft marking (non-combat SAR) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------|------------------|
| A. MARINES | Tail Boom/ Bottom Fuselage | 10" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUNO | Side Tail Boom | 2" 6" | IAW Para 5.2.3.2 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 15" 15" 15" | IAW Para 5.2.3.2 |
| D. Walkway | Top Fwd. Fuselage | N/A | 35237 |
| E. Call Numbers | Aft Tail Boom | 12" | IAW Para 5.2.3.2 |
| F. Intake Warning | Forward Intake | 15" | IAW Para 5.2.3.2 |
| G. Beware of Blast | Engine Exhaust Nacelle | 5" | IAW Para 5.2.3.2 |
| H. Tail Rotor Warning | Tail Boom | 33" | IAW Para 5.2.3.2 |
| I. Unit Identifier | Tail Boom Bottom Fuselage | 10" | IAW Para 5.2.3.2 |
| J. Rescue Arrow | Fwd. Cockpit Door | 24" | IAW Para 5.2.3.2 |

FIGURE C-26. UH-1N aircraft marking (tactical).

MIL-STD-2161A(AS)

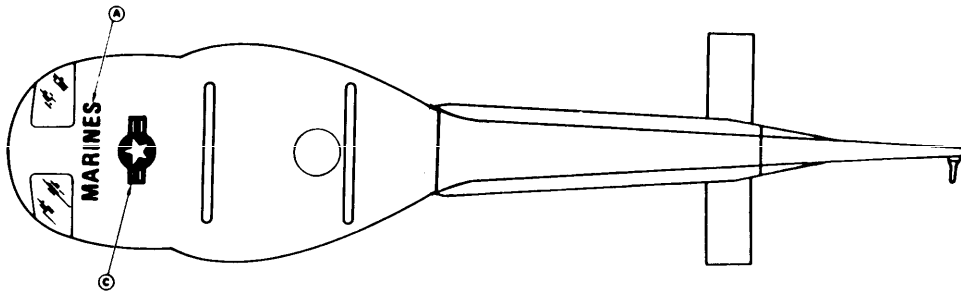
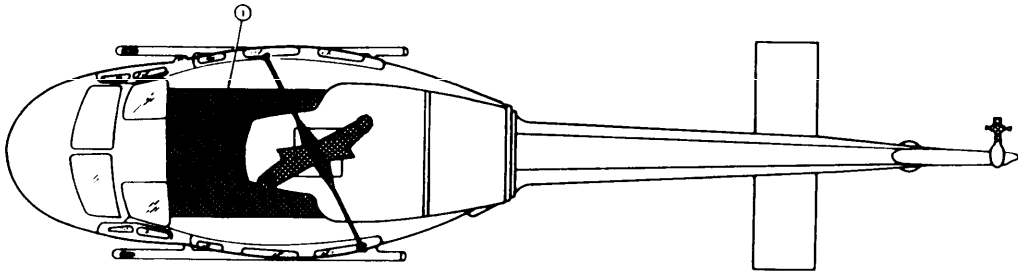


FIGURE C-26. UH-1N aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|--------------------------------------|---|-------------------|-------------------|
| A. NAVY | Bottom Fuselage Aft Fuselage | 10" 10" | 17038 |
| B. Model Designation, Acraft BUNO | Tail Boom Tail Boom | 2" 6" | 17038 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 15" 15" 15" | 17925/11136/15044 |
| D. Intake Warning | Engine Inlet Nacelle | 15" | 11136/17925 |
| E. Beware of Blast | Aft Engine Exhaust Nacelle | 5" | 11136/17925 |
| F. Tail Rotor Warning | Aft Fuselage | 33" | 17038 |
| G. Antiglare | Fwd. Fuselage | N/A | 37038 |
| H. Walkway | Top Fuselage | N/A | 32038 |
| L. Conspicuity Markings | Per Drawing | N/A | 12197 |
| J. Unit Aircraft Numbers | Mid Fuselage Bottom Fuselage | 10" 10" | 17038 17038 |
| K. Unit Identifier | Tail Boom Bottom Fuselage | 10" 10" | 17038 |
| L. Rescue Arrow | Fwd. Cockpit Door | 24" | 13538/17925 |

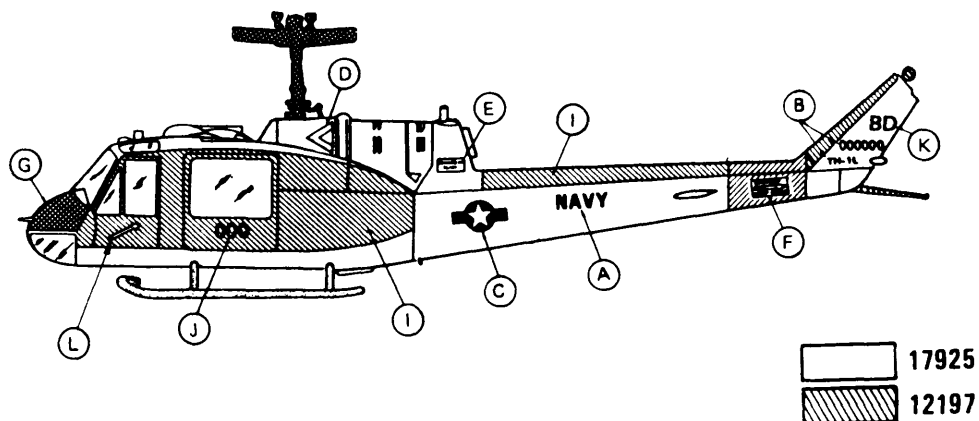


FIGURE C-27. TH-1L aircraft marking.

MIL-STD-2161A(AS)

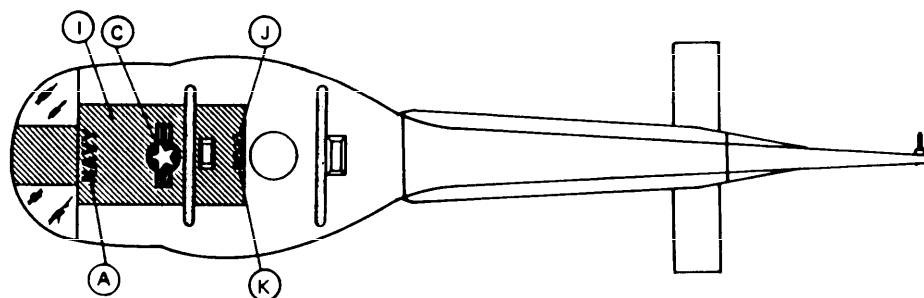
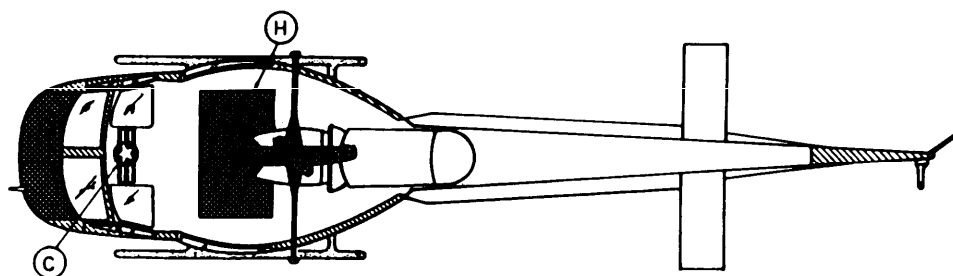


FIGURE C-27. TH-1L aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------|---|
| A. NAVY | Tail Boom | 12" | 35237 |
| B. Model Designation, Acft BUNO | Side Tail Boom | 2" 4" | 35237 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 12" 12" 12" | 35237/36320 36320/35237 36320/36495 |
| D. Intake Warning | Forward Intake | 15" | 36320/35237 |
| E. Beware of Blast | Below Exhaust Exit | 5" | 36320/35237 |
| F. Tail Rotor Warning | Tail Boom | 33" | 35237 |
| G. Antiglare | Nose Fwd. of Canopy | N/A | 35237 |
| H. Walkway | Top Fuselage | N/A | 36320 |
| I. Call Numbers | Aft Fuselage | 12" | 35237 |
| J. Unit Aircraft Numbers | Fwd. Fuselage Tail Boom Mid | 10" | 35237 |
| K. Unit Identifier | Tail Boom | 10" | 35237 |
| L. Rescue Arrow | Pilot Cockpit Door Copilot Cockpit Door | 24" 18" | 36320/35237 |
| M. Sonobuoy Launch Door Marking | Center Left Fuselage | 2" 2" 1" | 35237 |
| N. Main Rotor Blades | | N/A | 35237 |
| O. Tail Rotor Blades | | N/A | 36320 |

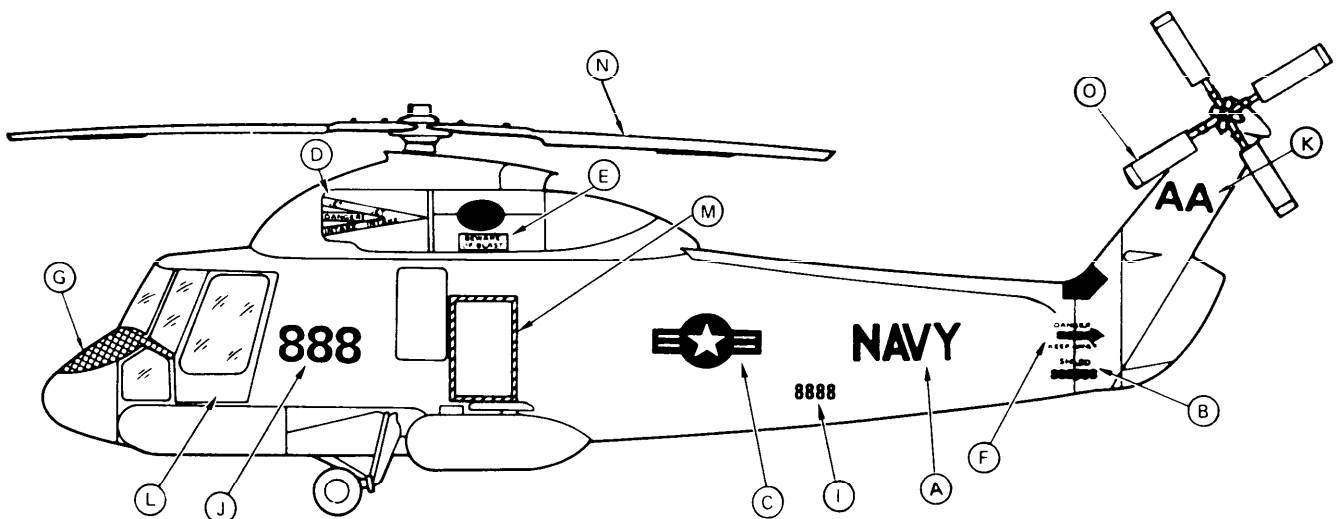


FIGURE C-28. SH-2 aircraft marking (tactical).

MIL-STD-2161A(AS)

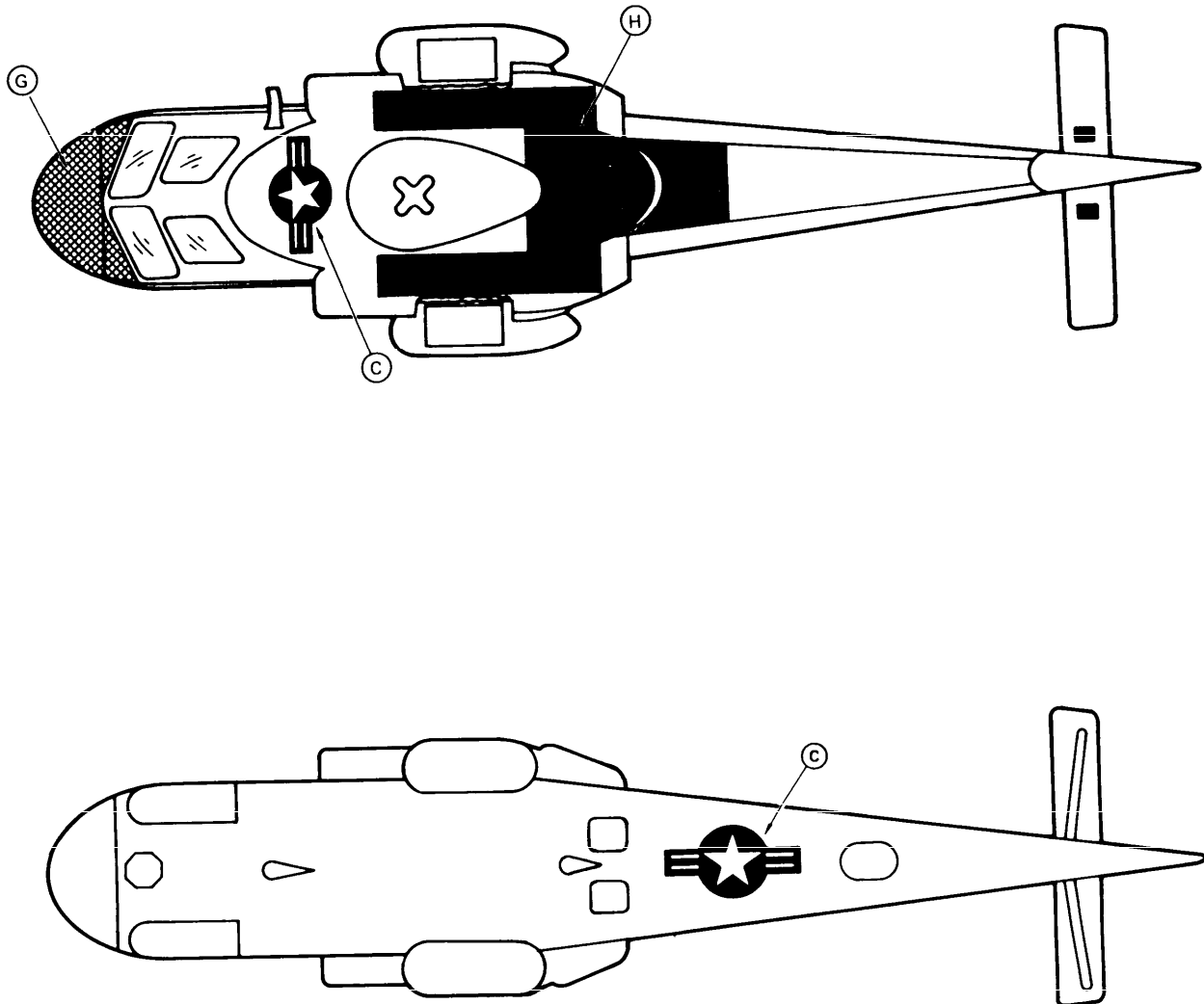


FIGURE C-28. SH-2 aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | | 4. COLOR NO/CODE |
|----------------------------------|---------------------------------|---------|------|------------------|
| A. NAVY | Lower Fuselage | 12" | 12"* | 37038/17925* |
| | Aft Fuselage | 24" | 24"* | |
| B. Model Designation, Acft BUONO | Aft Fuselage | 2" | | 37038/17925* |
| | | 4" | | |
| C. National Star | Upper Tail Boom | | 25"* | |
| | Lower Fuselage | 12" | 30"* | 37038/17925* |
| | Center Fuselage | | 30"* | |
| D. Unit Aircraft Number | Fwd. Fuselage | 12" | | 37038/17925* |
| E. Call Numbers | Lower Aft Fuselage | 12" | | 37038/17038* |
| F. Intake Warning | Fwd. Engine Nacelle | 16" | | 37038 |
| | | | | 11136/17925* |
| G. Beware of Blast | Aft Engine Nacelle | 22" | | 37038 |
| | | | | 11136/17925* |
| H. Tail Rotor Warning | Aft Fuselage | 29" | | 37038 |
| | | | | 11136/17925* |
| I. Antiglare | Nose Fwd. of Cockpit | N/A | | 37038 |
| J. Unit Identifier | Tail Boom | 10" | | 37038/17925* |
| K. Tip Marking | Horizontal Stabilizer | 6" | | 37038/11136* |
| L. Rescue Arrow | Fwd. and Center Fuselage | 24" | | 37038 |
| | | | | 17038/13538* |
| M. Walkway | Top Fuselage | N/A | | 37038/17038* |
| N. Conspicuity Marking | Per Dwg (UH-3A Only) | | | 12197* |
| O. Abandon Chute/Rescue | Bottom of Fuselage (UH-3A Only) | | | 17038* |
| P. Main Rotor Blades | | N/A | | 35237 |
| Q. Tail Rotor Blades | | N/A | | 36320 |

*UH-3A

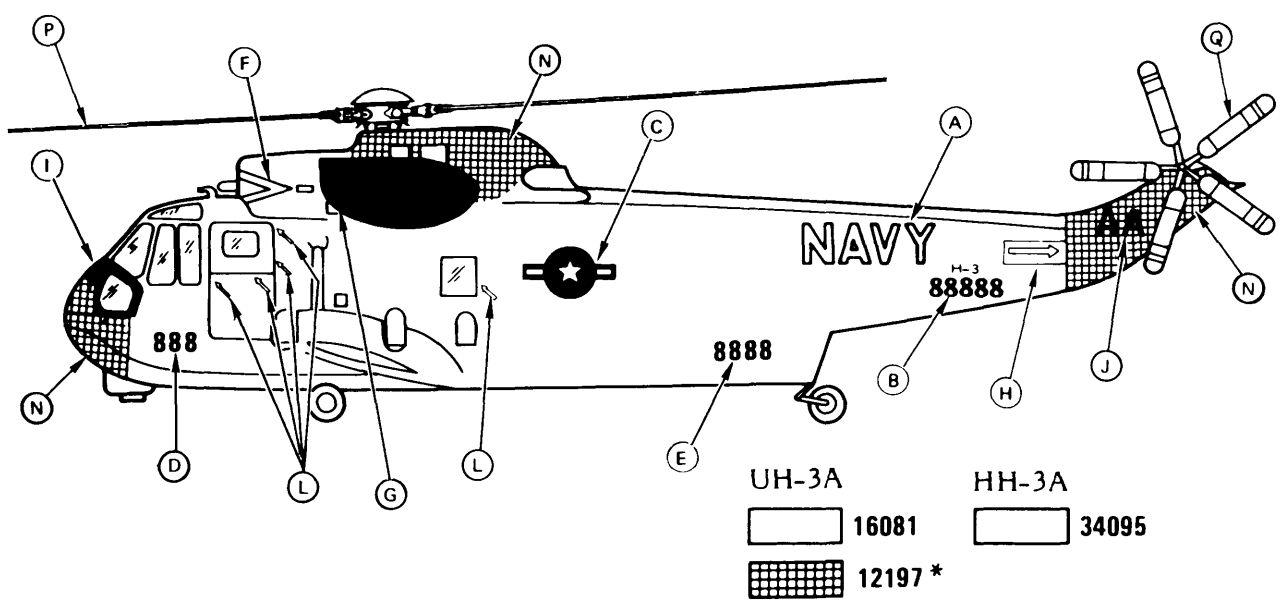


FIGURE C-29. HH-3A/UH-3A aircraft marking.

MIL-STD-2161A(AS)

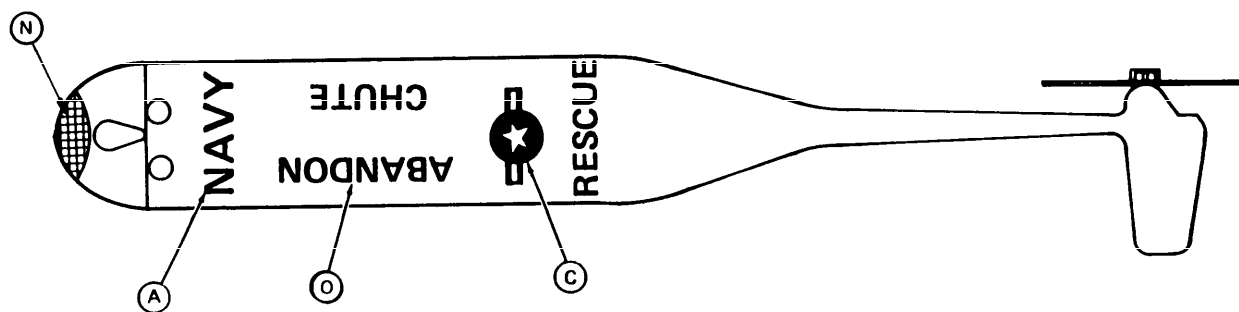
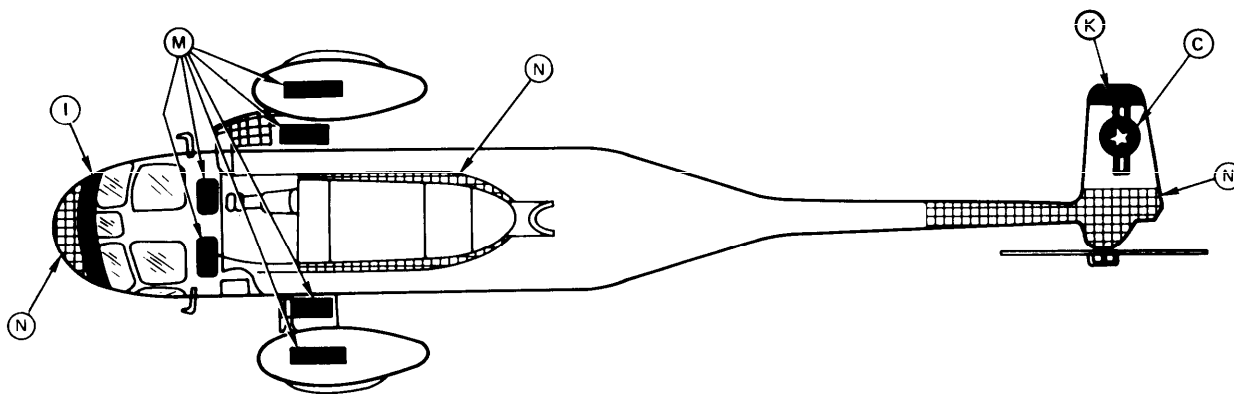


FIGURE C-29. HH-3A/UH-3A aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------|
| A. NAVY | Lower Fuselage Aft Fuselage | 12" 24" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Upper Tail Boom Lower Fuselage Center Fuselage | 25" 30" 30" | 17925/11136/15044 |
| D. Unit Identifier | Tail Boom | 10" | 17038 |
| E. Call Numbers | Lower Aft Fuselage | 12" | 17038 |
| F. Intake Warning | Fwd. Engine Nacelle | 16" | 17925/11136 |
| G. Beware of Blast | Aft Engine Nacelle | 22" | 17925/11136 |
| H. Tail Rotor Warning | Aft Fuselage | 35" | 11136/17038 |
| I. Antiglare | Nose | N/A | 37038 |
| J. Walkway | Top Center Fuselage | N/A | 36231 |
| K. Abandon Chute/Rescue | Bottom of Fuselage | 12" | 17038 |
| L. Conspicuity Marking | Per Drawing | (SAR Only) | 12197 |
| M. Red Tip | Horizontal Stabilizer | 6" | 11136 |
| N. Unit Aircraft Numbers | Fwd. Fuselage | 12" | 17038 |
| O. Rescue Arrows | Fwd. & Center Fuselage L.H. & R.H. Sides | 24" | 17038/13538 |
| P. Main Rotor Blades | | N/A | 35237 |
| Q. Tail Rotor Blades | | N/A | 36320 |

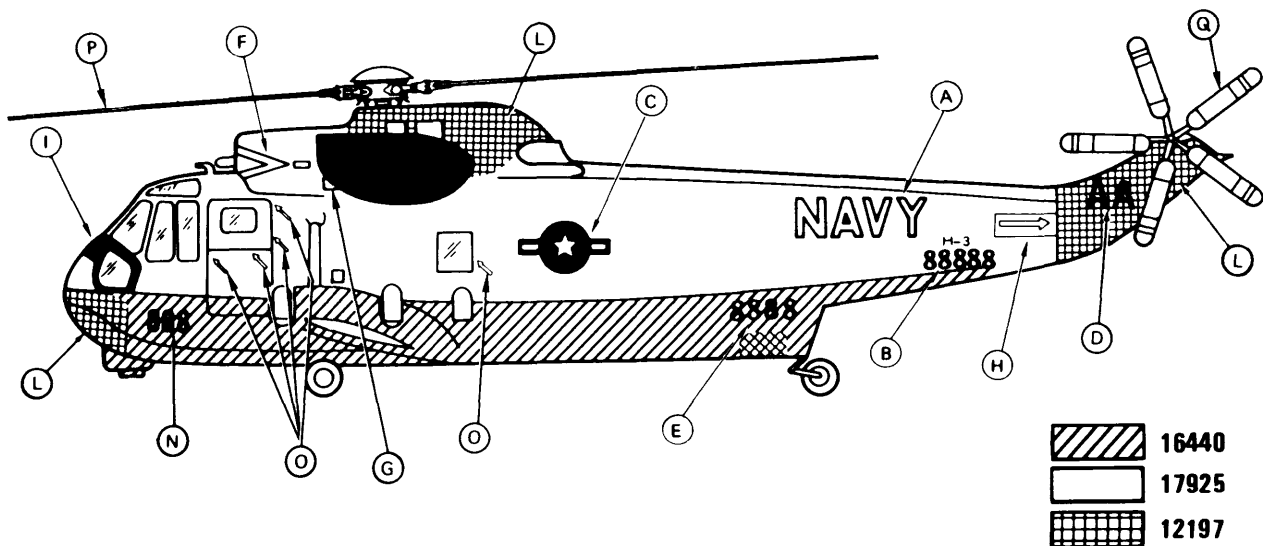


FIGURE C-30. SH-3G aircraft marking (high visibility) (SAR).

MIL-STD-2161A(AS)

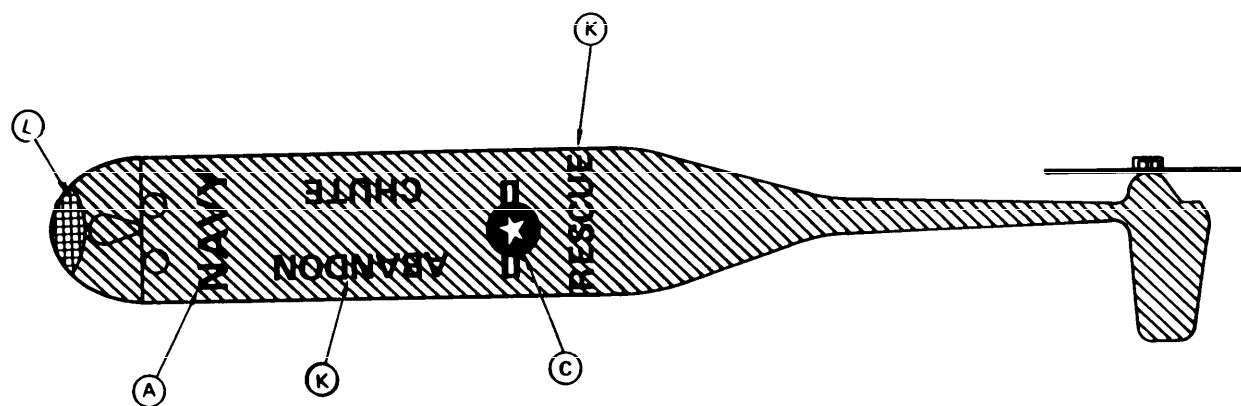
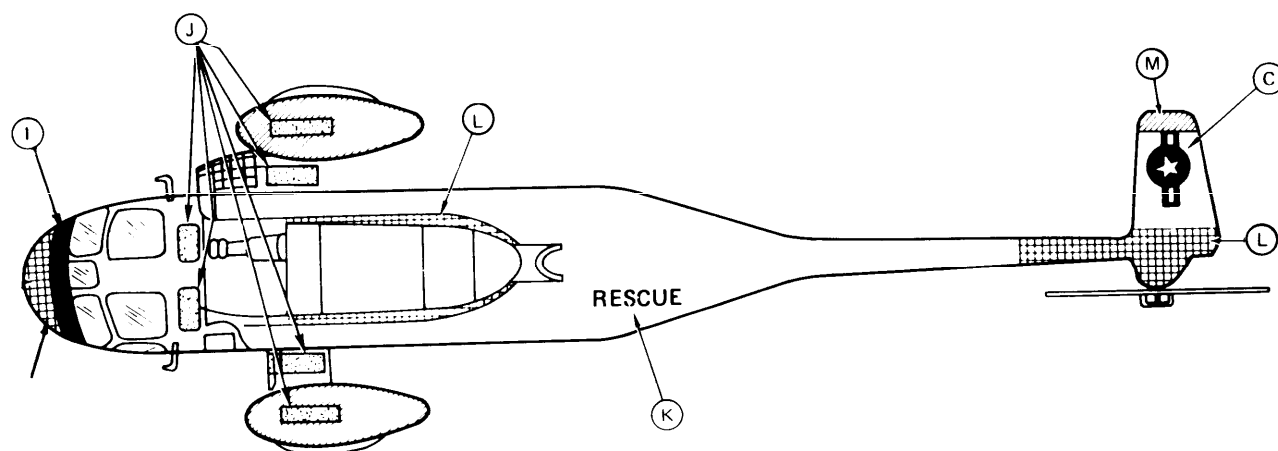


FIGURE C-30. SH-3G aircraft marking (high visibility) (SAR) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|----------------|-------------------|
| A. NAVY | Aft Fuselage & Bottom Fuselage L.H. Side | 12" 12" | 17925 |
| MARINES | Aft Fuselage & Bottom Fuselage L.H. Side L.H. Side | 10" 12" | 17925 |
| B. Model Designation, Acft BUNO | Aft of Branch of Service Markings | 2" 4" | 17925 |
| C. National Star | Center Lower Fuselage Top Center Fuselage Bottom Lower Fwd. Fuselage | 20" | 15044/11136/17925 |
| D. Call Numbers | Aft Pylon | 9" | 17038 |
| E. Rescue | Upper Fuselage Lower Fuselage | 12" 12" | 17038 |
| F. Abandon Chute | Lower Fuselage | 12" | 17925 |
| G. Walkway | Top of Fuselage and Top of Fuselage Gear Housings | N/A | 37038 |
| H. Conspicuity Markings | Per Drawing | N/A | 12197 |
| I. Squadron Designation | | 6" | 17925 |
| J. Unit Aircraft Numbers | Upper Center Fuselage Nose Electronics Compartment Door | 20" | 17925 |
| K. Unit Identifier | Top of Aft Pylon | 24" | 17925 |
| L. Rescue Arrows | Fwd. and Center of Fuselage Rescue Hatch (if installed) | 18" | 13539/17038 |

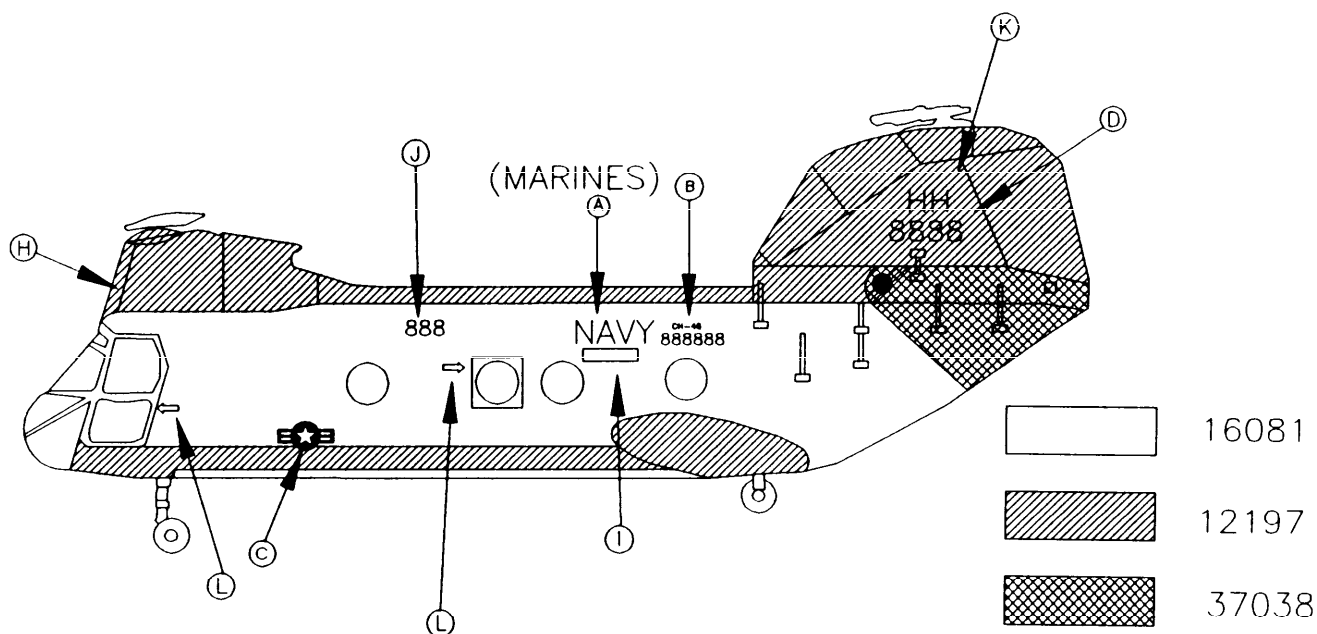


FIGURE C-31. HH-46D aircraft marking (high visibility) (SAR).

MIL-STD-2161A(AS)

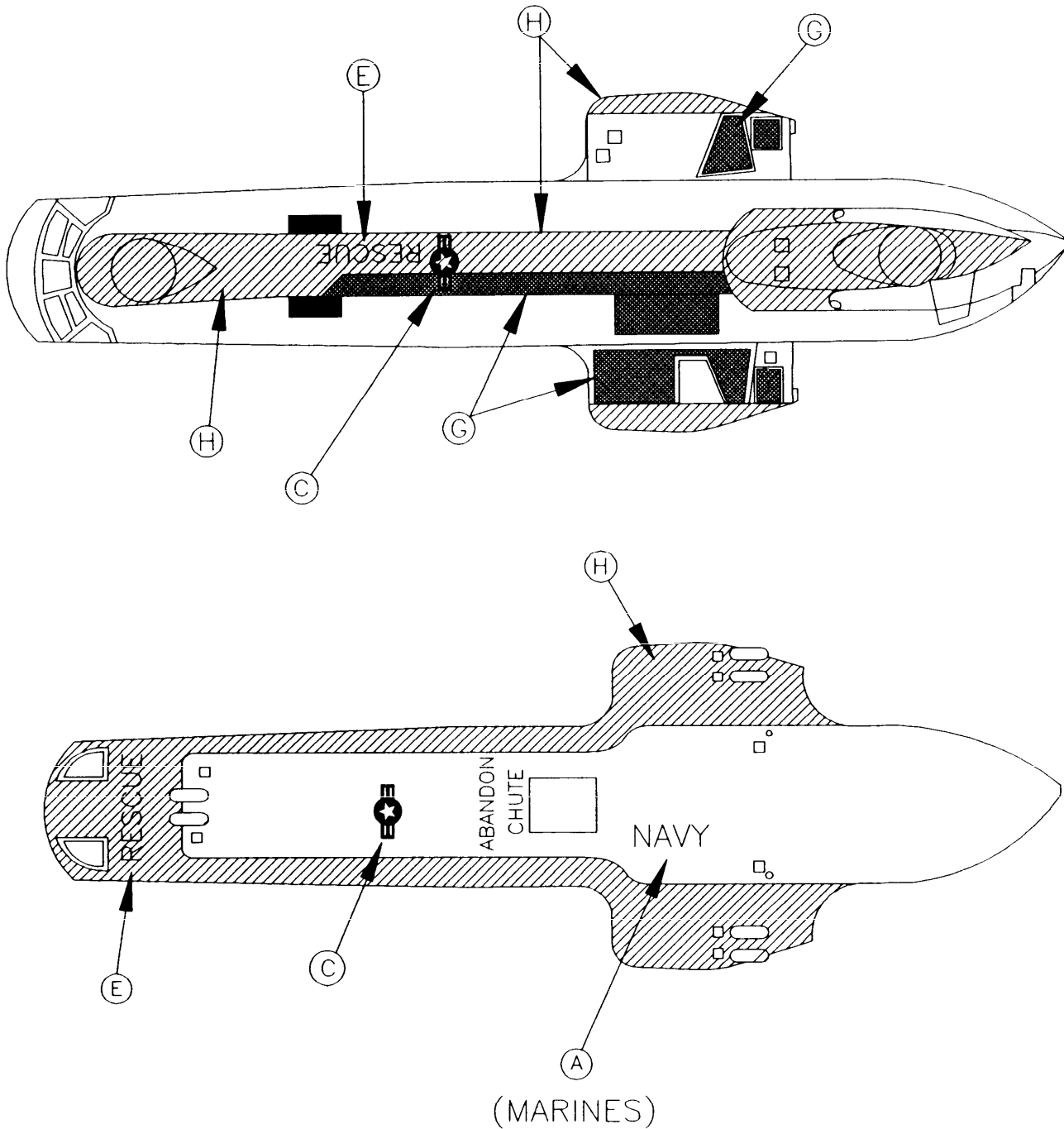


FIGURE C-31. HH-46D aircraft marking (high visibility) (SAR) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|------------|------------------|
| A. MARINES | Aft Fuselage & Bottom Fuselage L.H. Side | 12" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUNO | Aft of MARINE Markings | 2" 4" | IAW Para 5.2.3.2 |
| C. National Star | Center Lower Fuselage Top Center Fuselage Bottom Lower Fwd. Fuselage | 30" | IAW Para 5.2.3.2 |
| D. Walkway | Top of Fuselage Top of Stubwings | N/A | 35237 |
| E. Call Numbers | Aft Pylon | 12" | IAW Para 5.2.3.2 |
| F. Unit Aircraft Numbers | Upper Center Fuselage Nose Electronic Compartment Door | 20" | IAW Para 5.2.3.2 |
| G. Unit Identifier | Top of Aft Pylon | 24" | IAW Para 5.2.3.2 |
| H. Squadron Designation | Aft Fuselage | 6" | IAW Para 5.2.3.2 |
| I. Rescue Arrow | Fwd. & Center Fuselage | 24" 31" | IAW Para 5.2.3.2 |

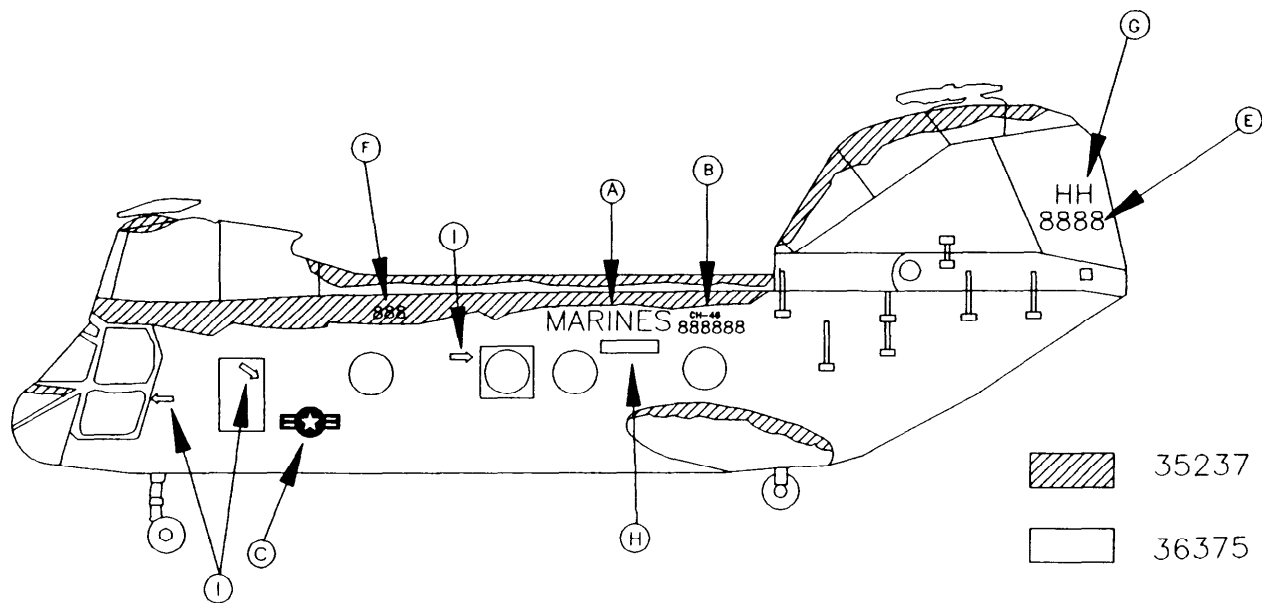


FIGURE C-32. CH-46E aircraft marking (tactical).

MIL-STD-2161A(AS)

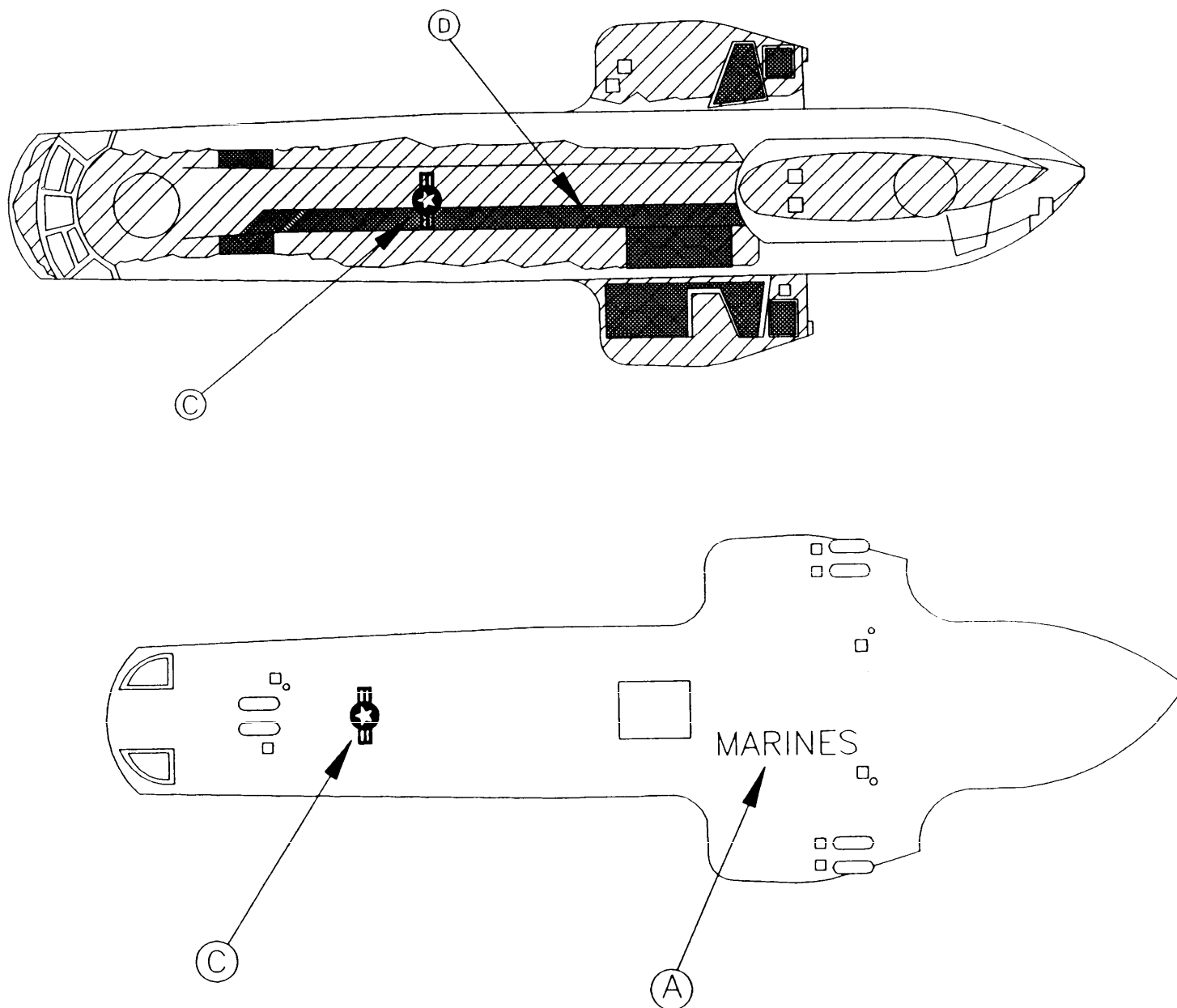


FIGURE C-32. CH-46E aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|------------|-------------------|
| A. NAVY | Aft Fuselage & Bottom Fuselage (L.H. Side) L.H. Side | 12" | 17925 |
| B. Model Designation, Acft BUNO | Aft of NAVY Markings | 2" 4" | 17925 |
| C. National Star | Center Lower Fuselage Top Center Fuselage Bottom Lower Fwd. Fuselage | 30" | 15044/11136/17925 |
| D. Walkway | Top of Fuselage Top of Landing Gear Housings | N/A | 37038 |
| E. Call Numbers | Aft Pylon | 12" | 17038 |
| F. Unit Aircraft Numbers | Upper Center Fuselage Nose Electronic Compartment Door | 20" | 17925 |
| G. Unit Identifier | Top of Aft Pylon | 24" | 17925 |
| H. Squadron Designation | Aft Fuselage | 6" | 17925 |
| I. Rescue Arrow | Fwd. & Center Fuselage | 24" 31" | 37038 |

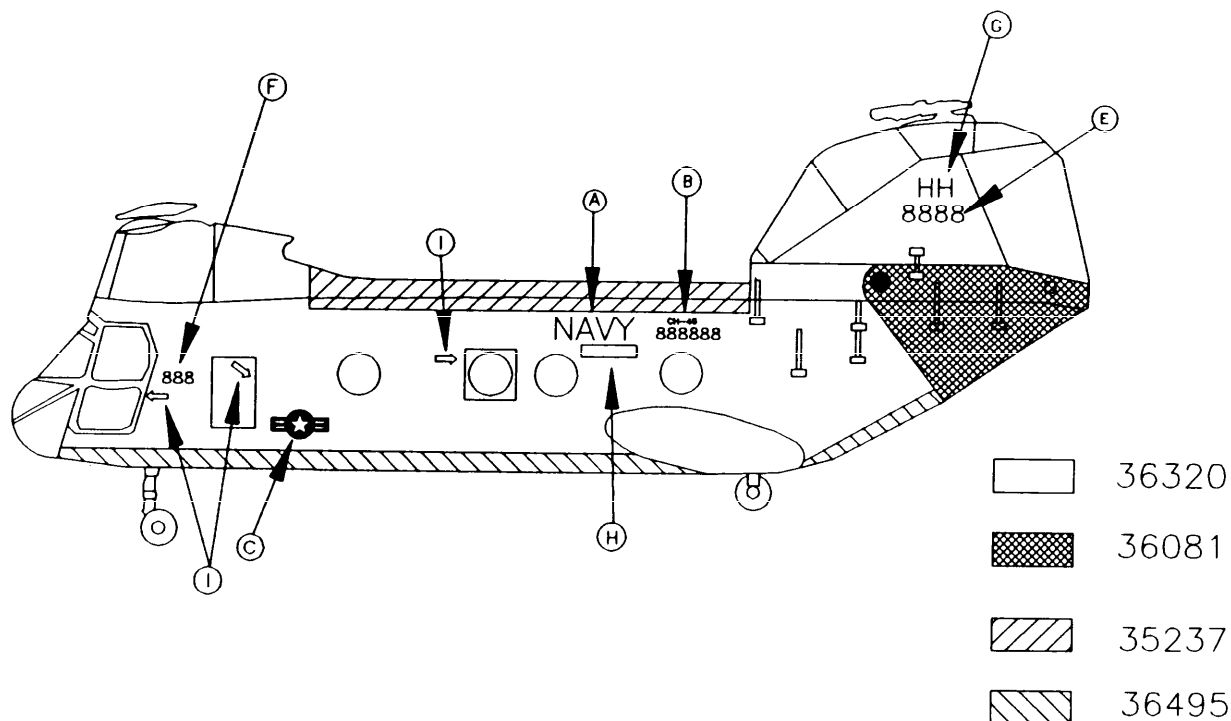


FIGURE C-33. UH-6A/D aircraft marking.

MIL-STD-2161A(AS)

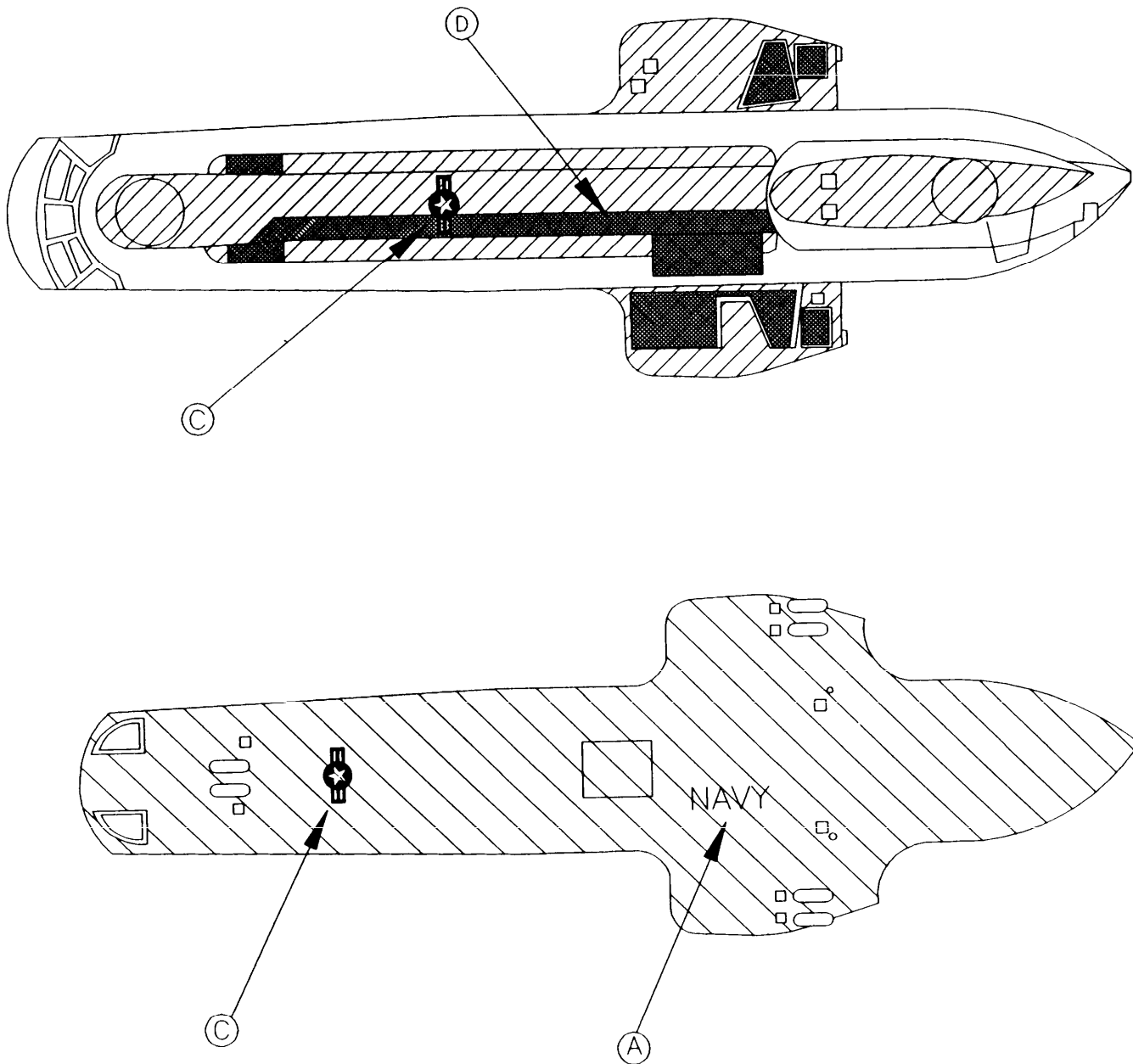
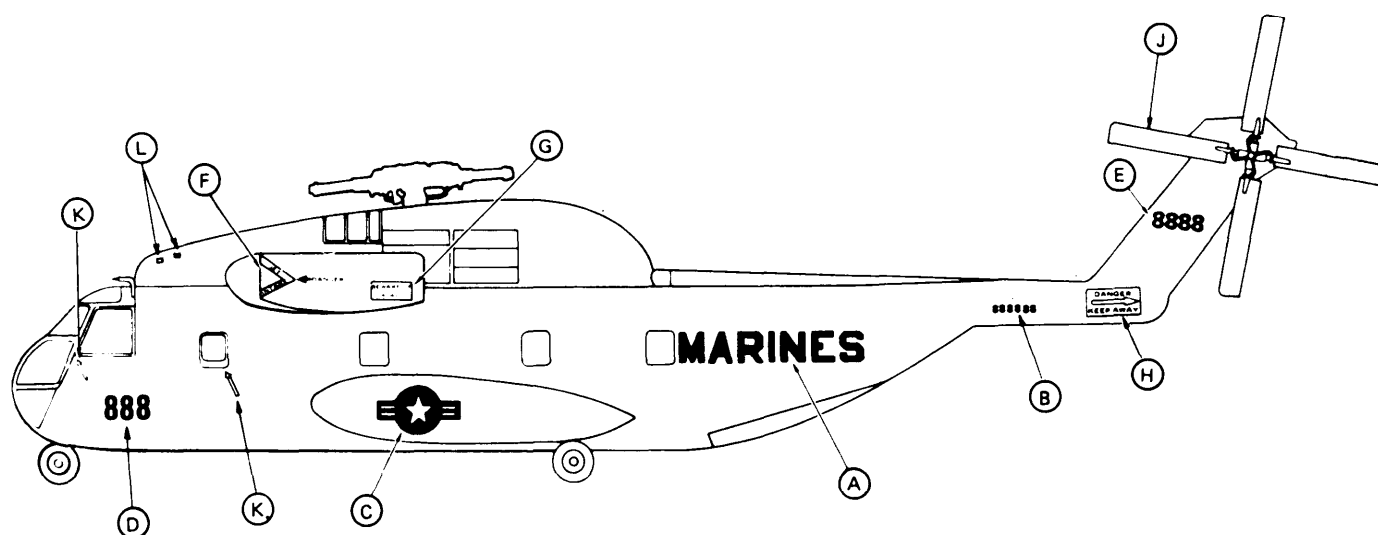


FIGURE C-33. UH-64A/D aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|--|--------------------------|------------------|
| A. MARINES | Aft Fuselage | 20" | IAW Para 5.2.3.1 |
| B. Model Designation, Acft BUONO | Aft Fuselage | 2" 4" | IAW Para 5.2.3.1 |
| C. National Star | Bottom Fuselage Aft Fuselage Horizontal Stabilizer | 20" | IAW Para 5.2.3.1 |
| D. Unit Identification Number | Fwd. Lower Fuselage | 30" | IAW Para 5.2.3.1 |
| E. Call Numbers | Aft Tail Rotor Boom | 8" | IAW Para 5.2.3.1 |
| F. Intake Warning | Fwd. Engine Nacelle | 36" | IAW Para 5.2.3.1 |
| G. Beware of Blast | Aft Engine Nacelle | 10" x 20" | IAW Para 5.2.3.1 |
| H. Tail Rotor Warning | Aft Tail Boom | 24" | IAW Para 5.2.3.1 |
| I. Walkway | Per Drawing | N/A | IAW Para 5.2.3.1 |
| J. Tail Rotor Blades | N/A | N/A | IAW Para 5.2.3.1 |
| K. Rescue Arrow | Fwd. Fuselage | 24" | IAW Para 5.2.3.1 |
| L. Keep Clear +EXHAUST+ | Exhaust Ports Upper Fwd. Fuselage | 1" Letters 1½" Arrows | IAW Para 5.2.3.1 |

FIGURE C-34. CH-53 aircraft marking (land camouflage).

MIL-STD-2161A(AS)

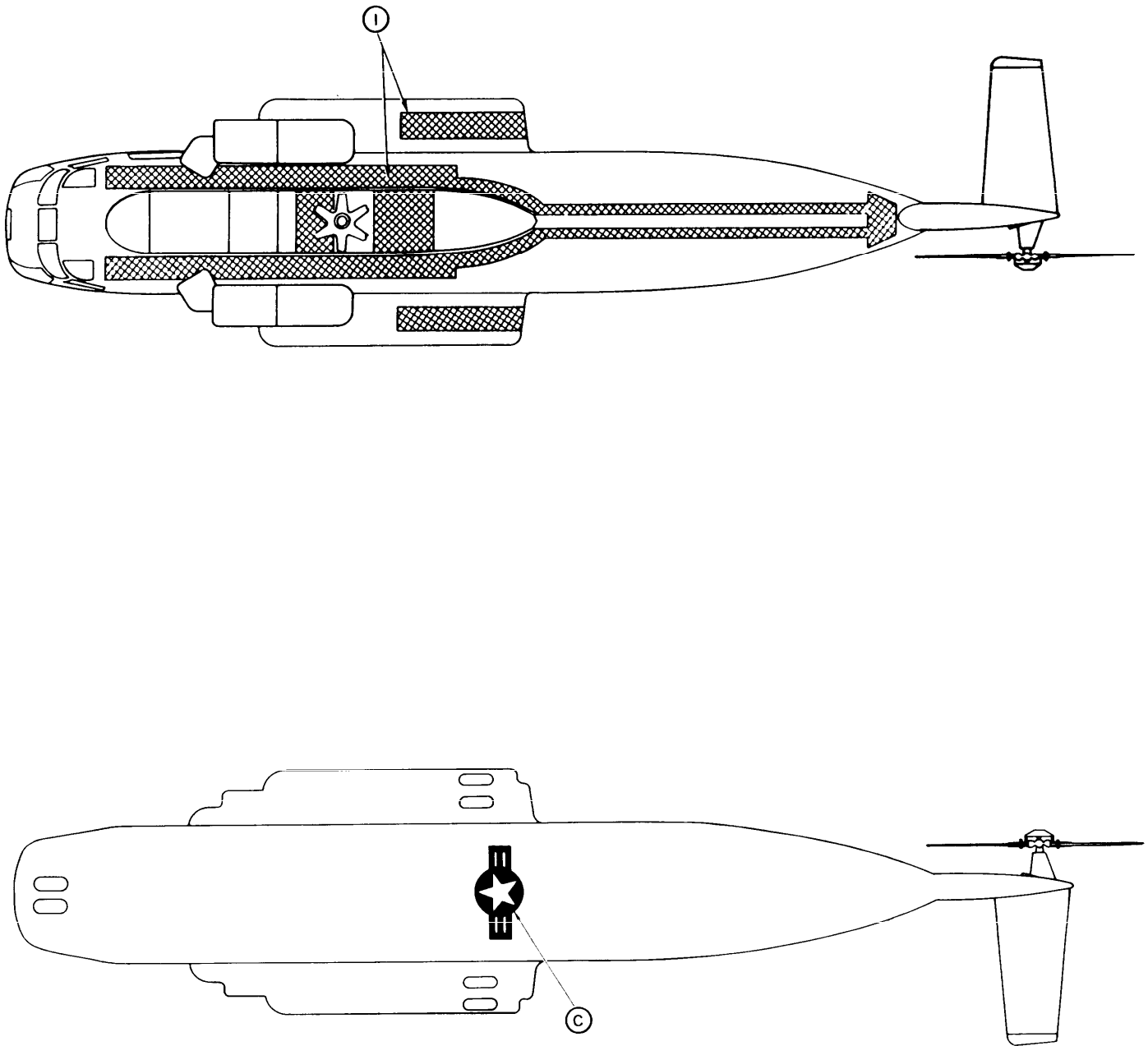


FIGURE C-34. CH-53 aircraft marking (land camouflage) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|---------------------------------|------------------|
| A. NAVY | Aft Fuselage | 24" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | IAW Para 5.2.3.2 |
| C. National Star | Aft Fuselage | 25" | IAW Para 5.2.3.2 |
| | Horizontal Stabilizer | 30" | |
| | Bottom of Fuselage | | |
| D. Unit Identification Number | Fwd. Lower Fuselage | 30" | IAW Para 5.2.3.2 |
| E. Call Numbers | Tail Rotor Support | 8" | IAW Para 5.2.3.2 |
| F. Intake Warning | Fwd. Engine Nacelles | 2" Letters 36" 3" Chevron | IAW Para 5.2.3.2 |
| G. Beware of Blast | | 10" | IAW Para 5.2.3.2 |
| H. Tail Rotor Warning | Aft Tail Boom | 24" | IAW Para 5.2.3.2 |
| I. Walkway | Per Drawing | N/A | 35237 |
| J. Keep Clear Exhaust | Upper Fwd. Fuselage Between Exhaust Ducts L.H. Side | 5" | IAW Para 5.2.3.2 |
| K. Rescue Arrow | Fwd. Fuselage | 24" | IAW Para 5.2.3.2 |

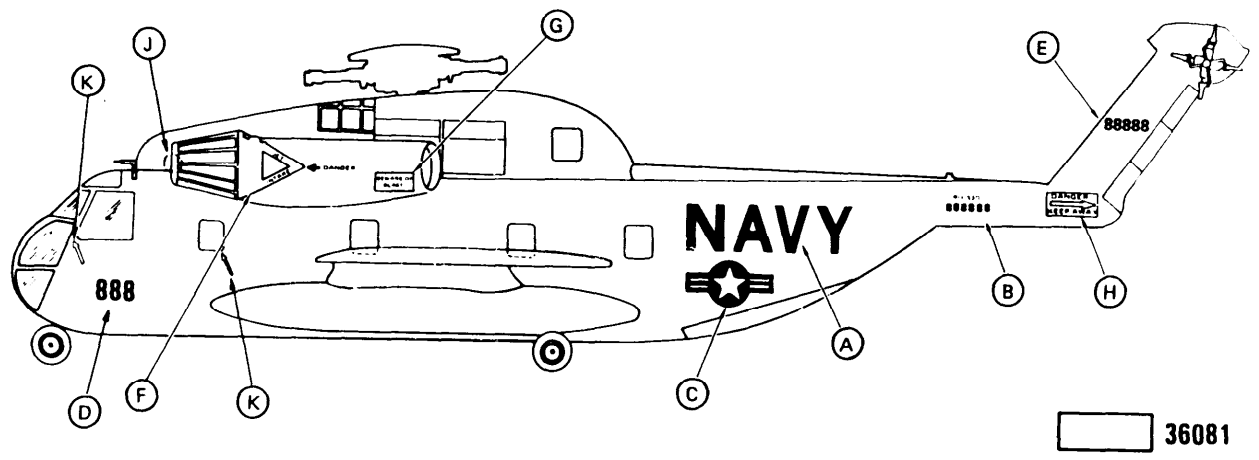


FIGURE C-35. CH-53D/RH-53D aircraft marking (tactical).

MIL-STD-2161A(AS)

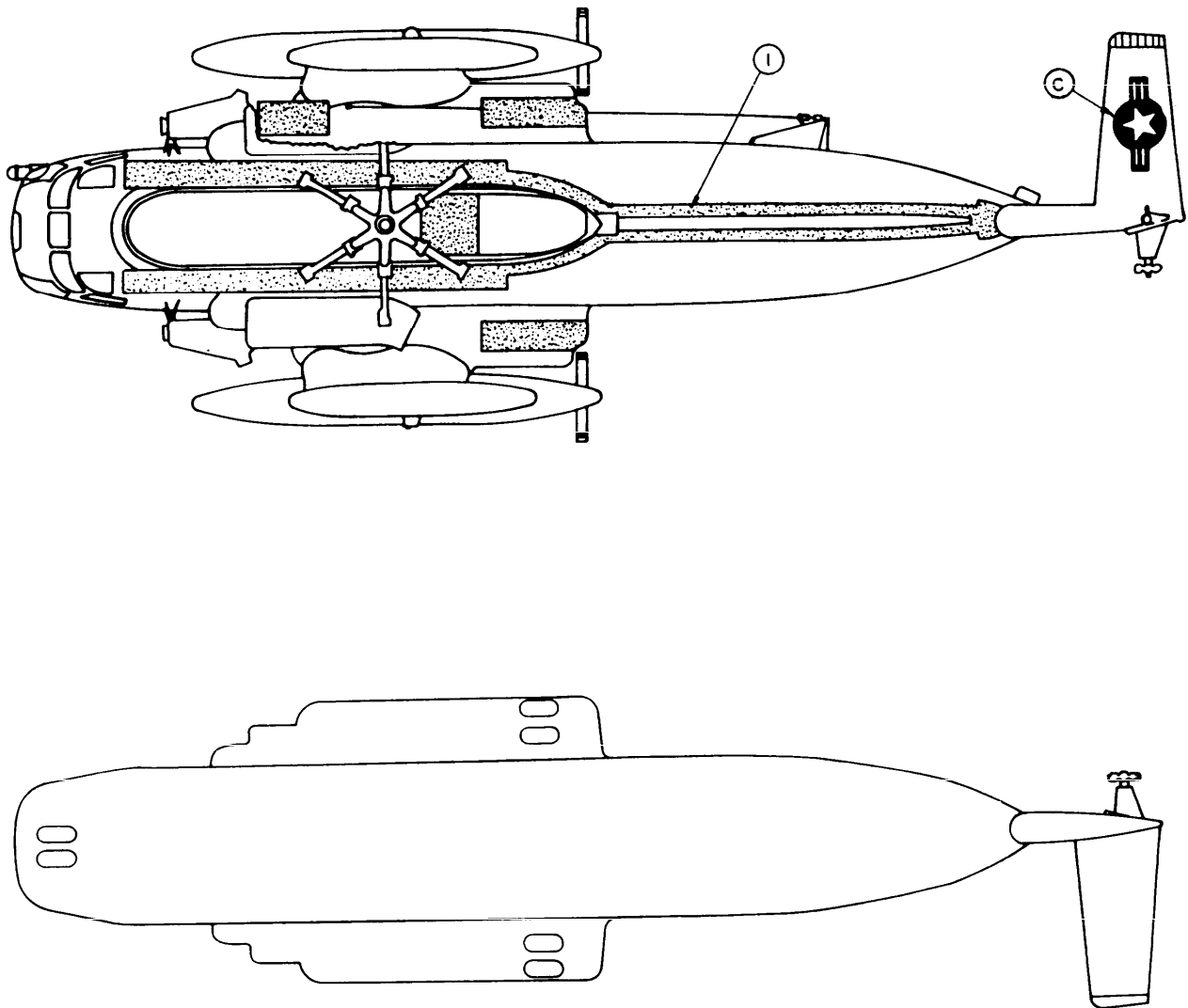
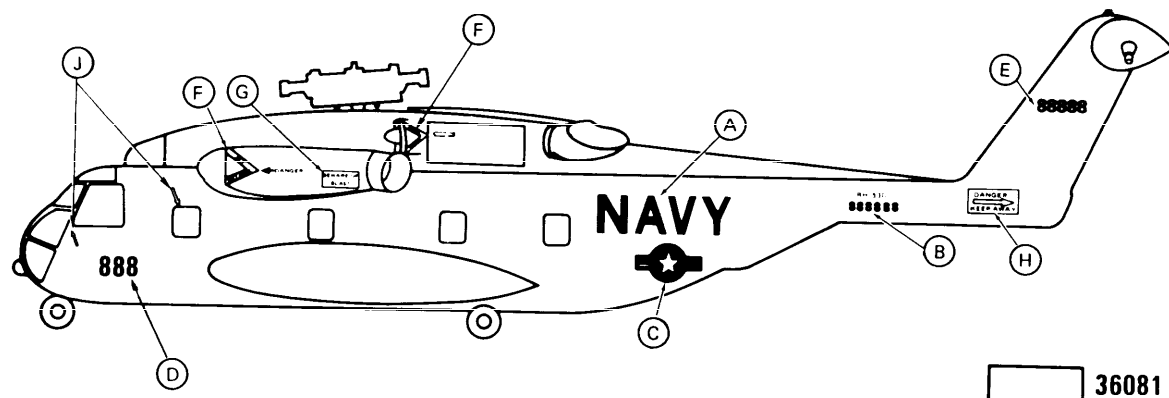


FIGURE C-35. CH-53D/RH-53D aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-----------------------------------|--|------------|------------------|
| A. NAVY | Aft Fuselage | 24" | 35237 |
| B. Model Designation, Aft BUNO | Aft Fuselage | 2" 4" | 35237 |
| C. National Star | Aft Fuselage Horizontal Stabilizer | 25" 30" | 35237 |
| D. Unit Identification Numbers | Fwd. Lower Fuselage | 30" | 35237 |
| E. Call Numbers | Upper Tail Boom | 6" | 35237 |
| F. Intake Warning | Engine Intake Nacelles | 16" | 35237 |
| G. Beware of Blast | Lower Aft Section L.H. & R.H. Engine Nacelles | 2" Letters | 35237 |
| H. Tail Rotor Warning | Aft Tail Boom | 24" | 35237 |
| I. Walkway | Per Drawing | N/A | IAW Para. 5.1.13 |
| J. Rescue Arrow | Fwd. Fuselage | 24" | 35237 |

FIGURE C-36. CH-53E aircraft marking (Navy) (tactical).

MIL-STD-2161A(AS)

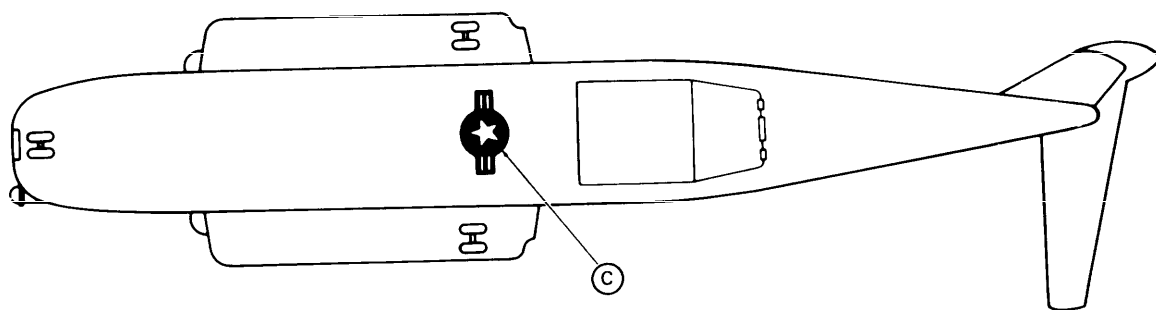
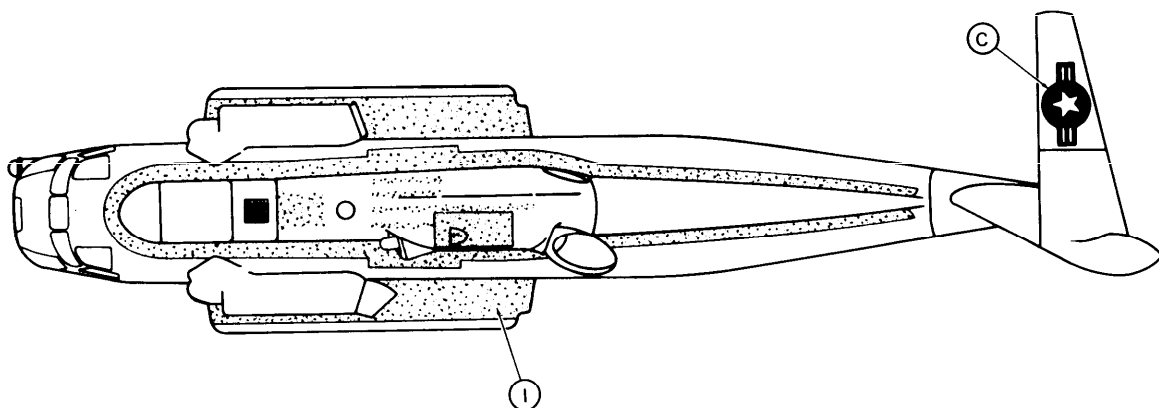


FIGURE C-36. CH-53E aircraft marking (Navy) (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|----------------------------------|--|------------|------------------|
| A. MARINES | Aft Fuselage | 24" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUONO | Aft Fuselage | 2" 4" | IAW Para 5.2.3.2 |
| C. National Star | Aft Fuselage, Bottom Center Fuselage | 25" | IAW Para 5.2.3.2 |
| D. Unit Identification Numbers | Fwd. Lower Fuselage | 30" | IAW Para 5.2.3.2 |
| E. Call Numbers | Upper Tail Boom | 6" | IAW Para 5.2.3.2 |
| F. Intake Warning | Engine Intake Nacelles | 16" | IAW Para 5.2.3.2 |
| G. Beware of Blast | Lower Aft Section L.H. & R.H. Engine Nacelles | 2" Letters | IAW Para 5.2.3.2 |
| H. Tail Rotor Warning | Aft Tail Boom | 24" | IAW Para 5.2.3.2 |
| I. Walkway | Per Drawing | N/A | 35237 |
| J. Rescue Arrow | Fwd. Fuselage | 24" | IAW Para 5.2.3.2 |

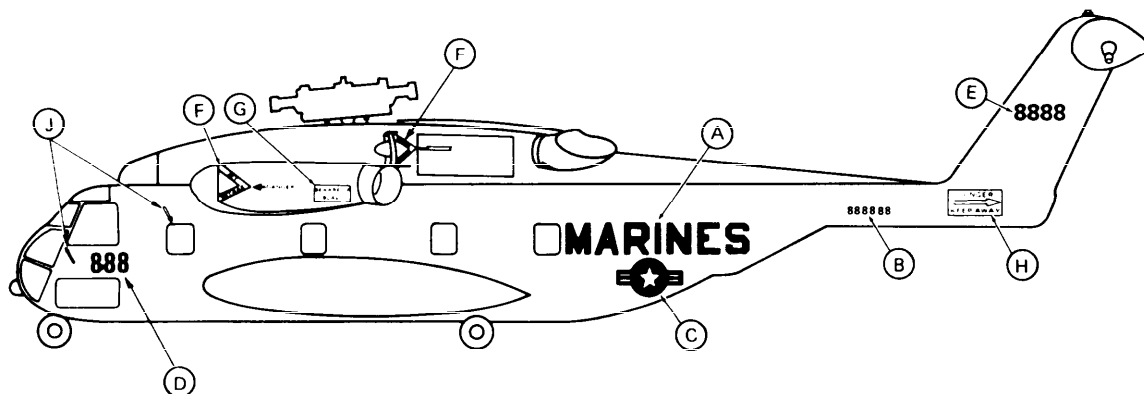


FIGURE C-37. CH-53E aircraft marking (Marine) (tactical).

MIL-STD-2161A(AS)

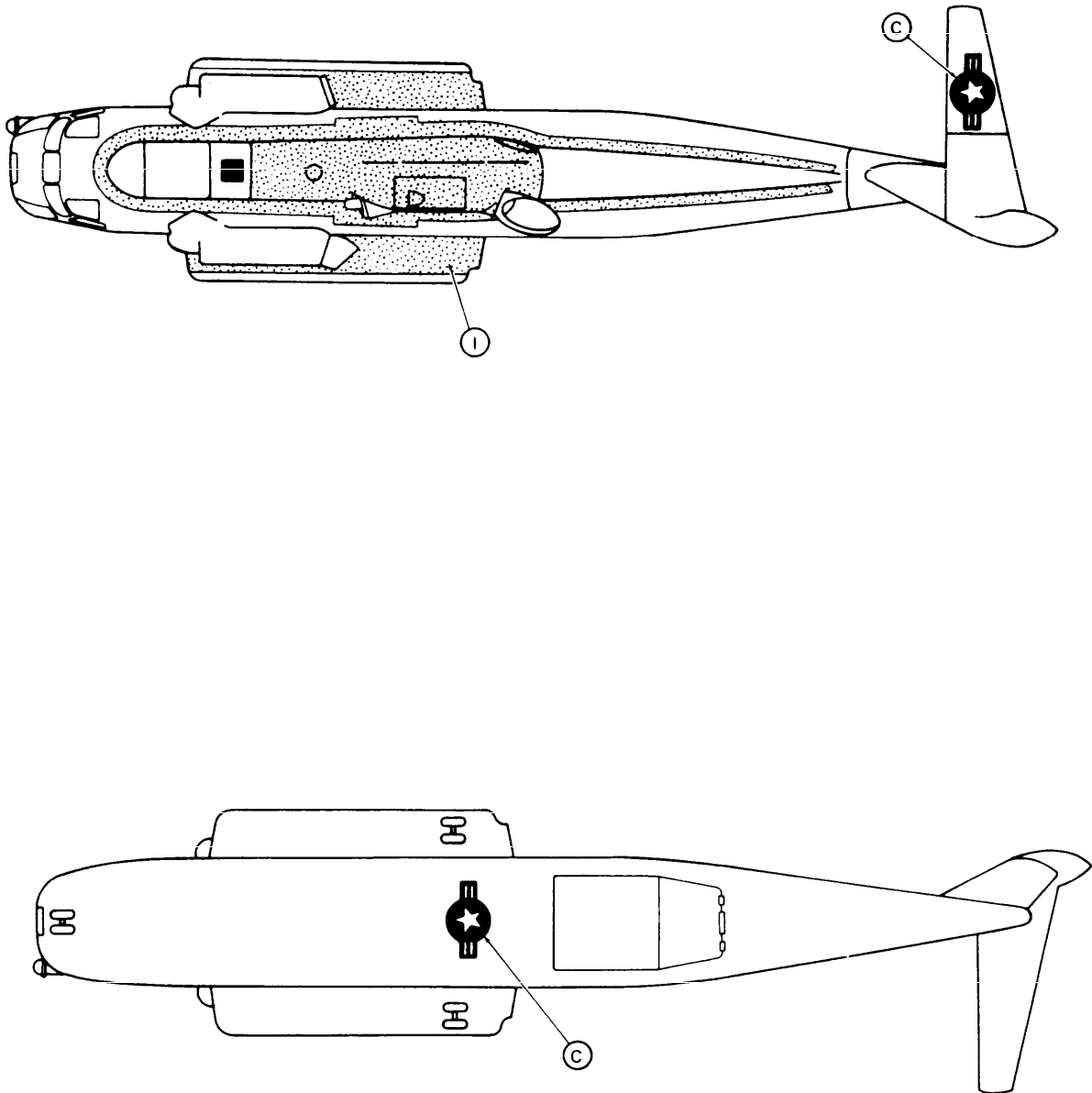


FIGURE C-37. CH-53E aircraft marking (Marine) (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|--|--------------------------------------|------------------|
| A. NAVY | Aft Fuselage | 10" | 35237 |
| B. Model Designation, Acft BUNO | Side Tail Boom Aft | 2" 6" | 35237 |
| C. National Star | Mid Fuselage | 12" Stars & Bars Rest of Insignia | 36320 35237 |
| | Fwd. Top Fuselage | 12" Stars & Bars Rest of Insignia | 35237 36320 |
| | Aft Bottom Fuselage | 12" Stars & Bars Rest of Insignia | 36495 36320 |
| D. Intake Warning | Forward Intake Nacelle | 15" Background Letters | 35237 36320 |
| E. Beware of Blast | Engine Exhaust Nacelle | 5" Background Letters | 35237 36320 |
| F. Tail Rotor Warning | Tail Boom | 33" | 35237 |
| G. Antiglare | Fwd. of Cockpit | N/A | |
| H. Walkway | Per Drawing | N/A | IAW Para. 5.2.3 |
| I. Unit Identifier | Upper Tail Boom | 24" | IAW Para. 5.2.3 |
| J. Rescue Arrow | Cockpit Door and Center of Fuselage | 24" Background Letters | 35237 36320 |

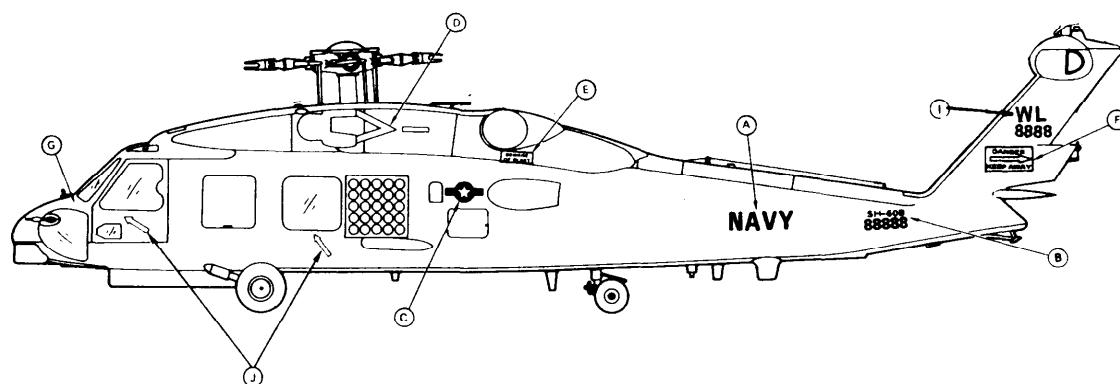


FIGURE C-38. SH-60B aircraft marking (tactical).

MIL-STD-2161A(AS)

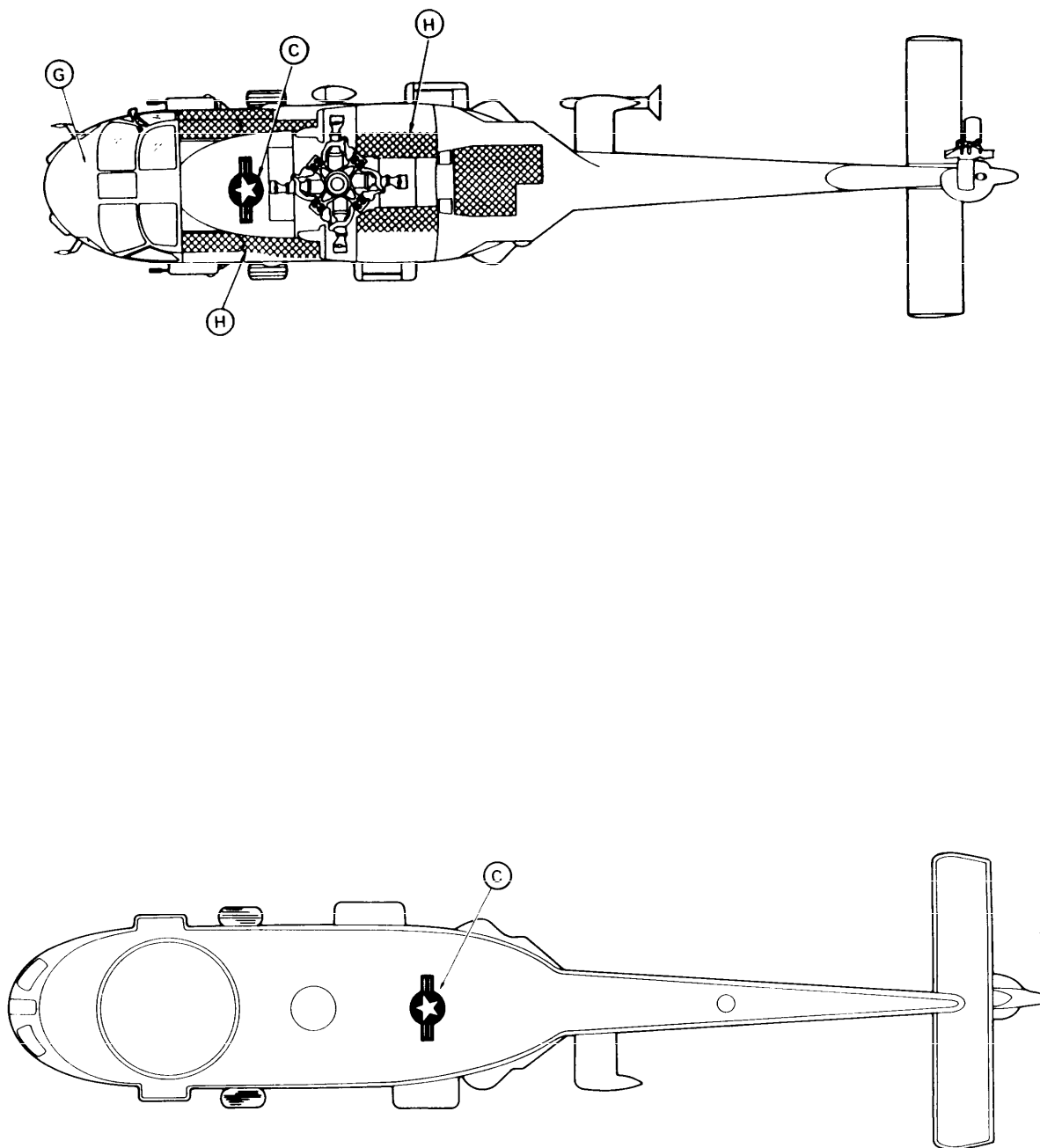
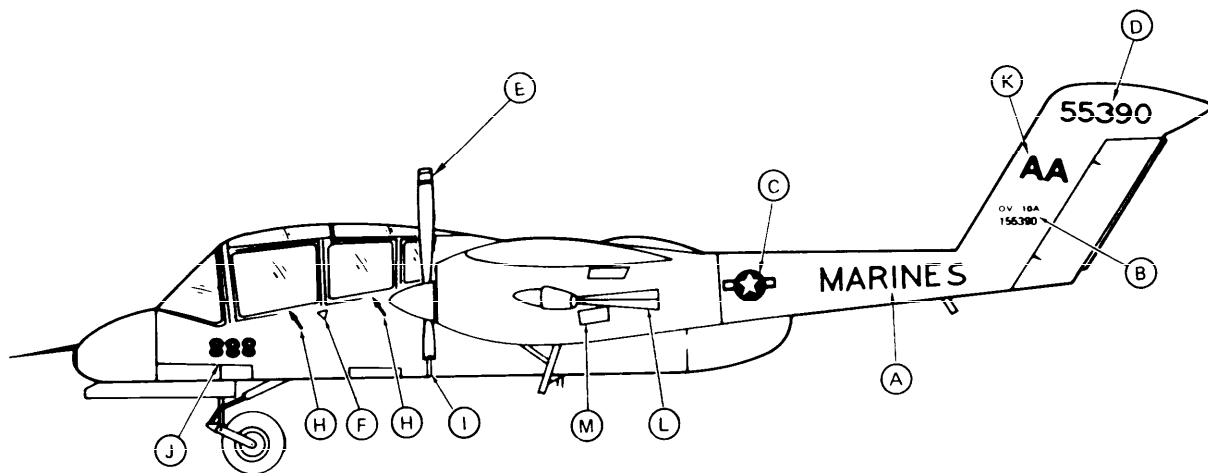


FIGURE C-38. SH-60B aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|-----------------------|------------|-------------------|
| A. MARINES | Boom Outboard Side | 10" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUNO | Vertical Stabilizer | 2" | IAW Para 5.2.3.2 |
| | | 4" | IAW Para 5.2.3.2 |
| C. National Star | Boom | 10" | IAW Para 5.2.3.2 |
| | Outboard Side | | |
| | Upper L.H. Wing | | |
| | Lower R.H. Wing | 10" | |
| D. Call Numbers | Vertical Stabilizer | 9" | IAW Para 5.2.3.2 |
| E. Propeller Tips | N/A | 3", 6", 3" | 37925/31136/37925 |
| F. Ejection Seat | Below Canopy Rail | 9" | IAW Para 5.2.3.2 |
| G. Walkway | Top of Wing | N/A | 35237 |
| H. Rescue Arrows | Points to Canopy | 24" | IAW Para 5.2.3.2 |
| | Release Handle | | |
| I. Propeller Warning Band | Fwd. Fuselage | 3" | IAW Para 5.2.3.2 |
| J. Unit Aircraft Numbers | Fwd. Fuselage | 12" | IAW Para 5.2.3.2 |
| K. Unit Identifier | Vertical Stabilizer | 24" | IAW Para 5.2.3.2 |
| L. Exhaust Trail | Boom | | |
| | Outboard Side | 38" | IAW Para 5.2.3.2 |
| M. Danger Exhaust | Boom | 3" | |
| | Outboard Side | 3" | IAW Para 5.2.3.2 |

FIGURE C-39. OV-10A aircraft marking (tactical).

MIL-STD-2161A(AS)

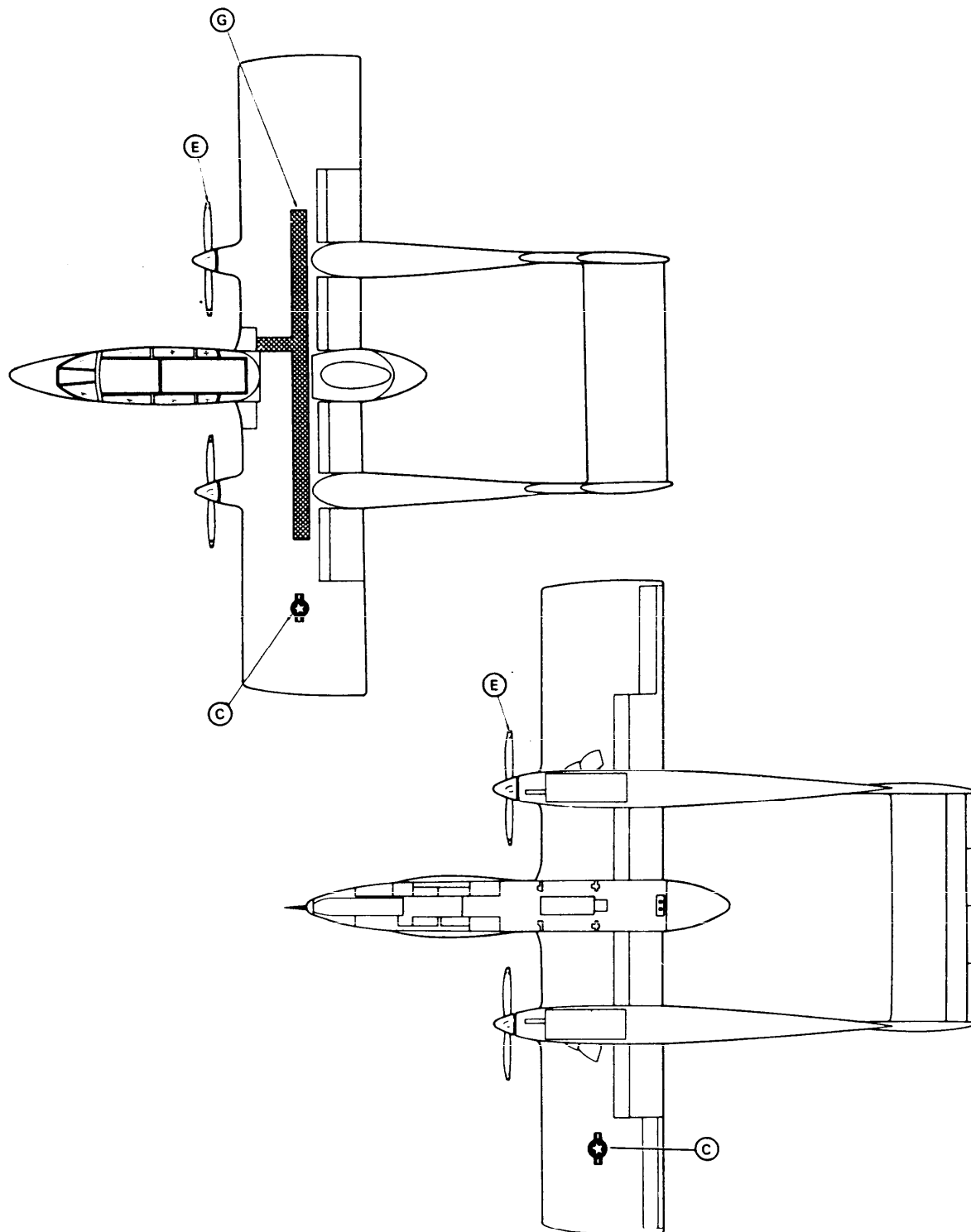
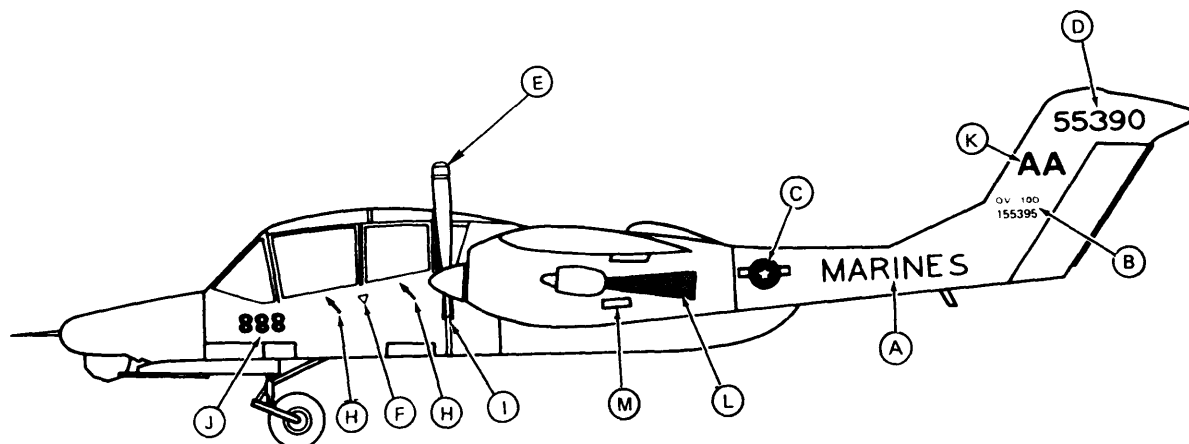


FIGURE C-39. OV-10A aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|------------|--------------------------------------|
| A. MARINES | Boom Outboard Side | 10" | IAW Para 5.2.3.2 |
| B. Model Designation, Acft BUNO | Vertical Stabilizer | 2" 4" | IAW Para 5.2.3.2 IAW Para 5.2.3.2 |
| C. National Star | Boom Outboard Side Upper L.H. Wing Lower R.H. Wing | 10" | IAW Para 5.2.3.2 |
| D. Call Numbers | Vertical Stabilizer | 9" | IAW Para 5.2.3.2 |
| E. Propeller Tips | N/A | 3", 6", 3" | 37925/31136/37925 |
| F. Ejection Seat | Below Canopy Rail | 9" | IAW Para 5.2.3.2 |
| G. Walkway | Top of Wing | N/A | 35237 |
| H. Rescue Arrows | Points to Canopy Release Handle | 24" | IAW Para 5.2.3.2 |
| I. Propeller Warning Band | Fwd. Fuselage | 3" | IAW Para 5.2.3.2 |
| J. Unit Aircraft Numbers | Fwd. Fuselage | 12" | IAW Para 5.2.3.2 |
| K. Unit Identifier | Vertical Stabilizer | 24" | IAW Para 5.2.3.2 |
| L. Exhaust Trail | Boom Outboard Side | 38" | IAW Para 5.2.3.2 |
| M. Danger Exhaust | Boom Outboard Side | 3" 3" | IAW Para 5.2.3.2 |

FIGURE C-40. OV-10D aircraft marking (tactical).

MIL-STD-2161A(AS)

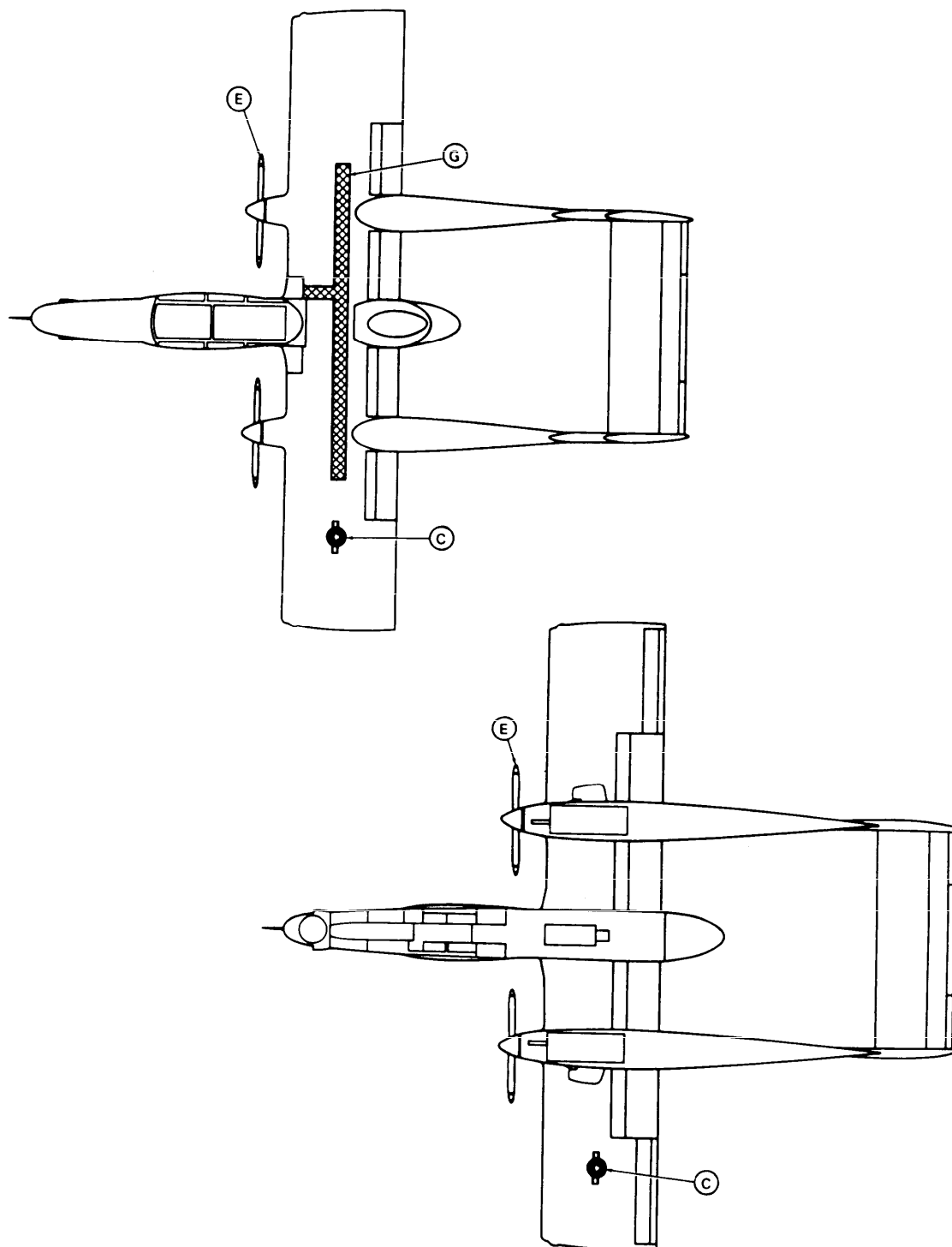
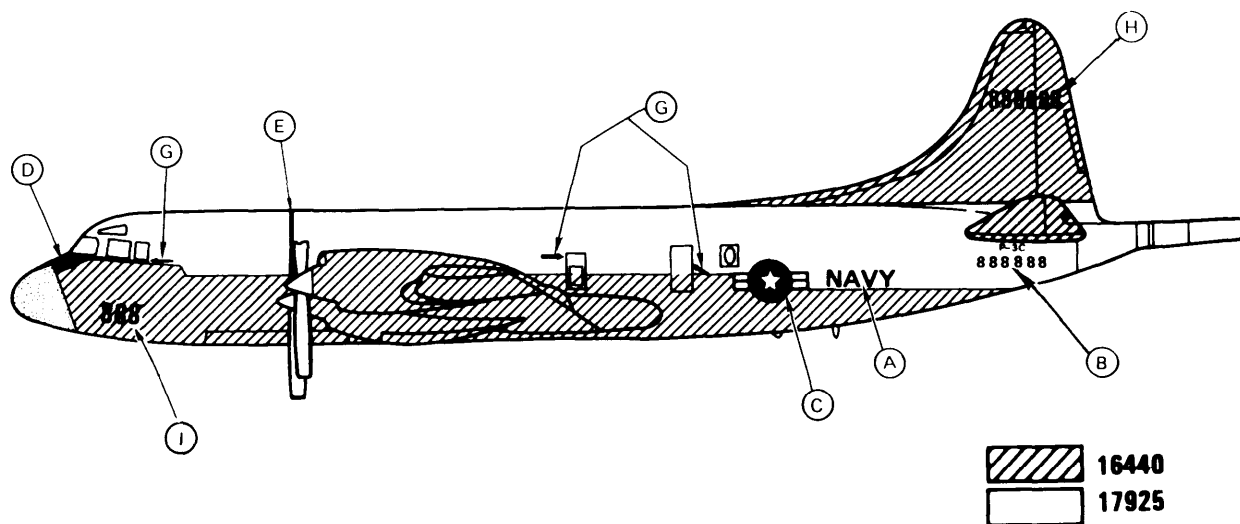


FIGURE C-40. OV-10D aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|---------|------------------|
| A. NAVY | Aft Fuselage | 30" | 17038 |
| | Lower L.H. Wing | 30" | |
| B. Model Designation, Acft BUNO | Aft Fuselage Under Horizontal Stabilizer | 2" | 17038 |
| C. National Star | Aft Fuselage | 50" | 11136 |
| | Upper L.H. Wing | 50" | 15044 |
| | Lower R.H. Wing | 50" | 17925 |
| D. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| E. Propeller Warning Band | Forward Fuselage | 3" | 11136/17925 |
| F. Walkway | Top Surface of Wings | N/A | 17038 |
| G. Rescue Arrows | Fwd. Fuselage Aft of Cockpit Windows Mid Fuselage at Doors Top of Fuselage Aft of Hatch | 24" | 17038/11136 |
| H. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| I. Unit Aircraft Numbers | Fwd. Fuselage | 12" | 17038 |

FIGURE C-41. P-3 aircraft marking.

MIL-STD-2161A(AS)

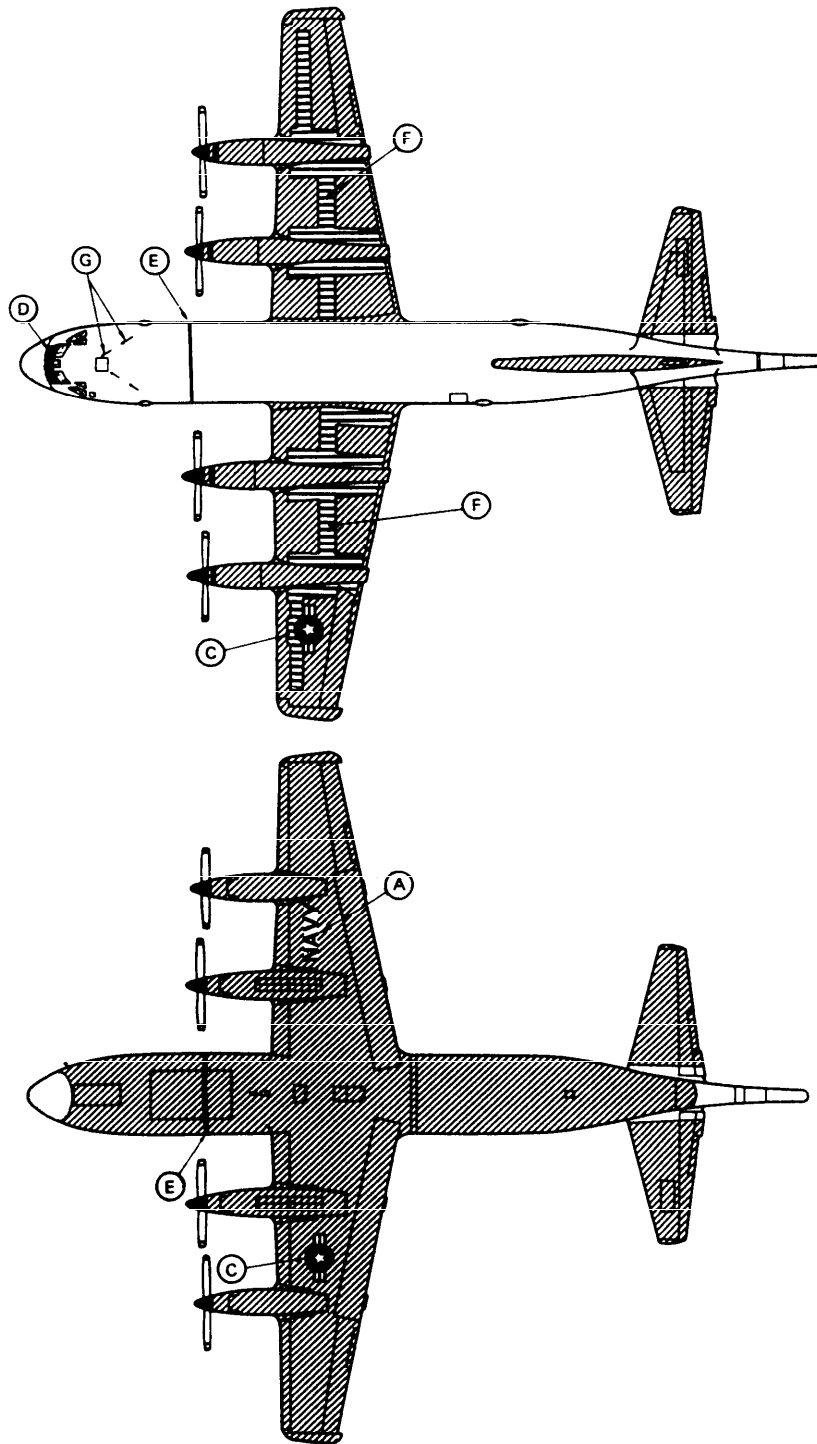


FIGURE C-41. P-3 aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|----------|------------------|
| A. NAVY | Aft Fuselage | 12" | 35237 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 4" 2" | 35237 |
| C. National Star | Fwd. Fuselage Upper L. H. Wing Lower R. H. Wing | 20" | 35237 |
| D. Call Numbers | Vertical Stabilizer | 9" | 35237 |
| E. Arresting Hook Warning | Aft Fuselage Sides | 12" | 35237 |
| F. Antiglare | Fwd. of Cockpit | N/A | 35237 |
| G. Rescue Arrow | Fwd. Fuselage | 24" | 35237 |
| H. Intake Warning | Fwd. Engine Nacelle | 21" | 35237 |
| L. Beware of Blast | Aft Engine Pod | 12" | 35237 |
| J. Walkway | Center Top Fuselage | N/A | 36375 |
| K. Ejection Seat Notice | Fwd. Fuselage Beneath Canopy Rail | 8" | 35237 |

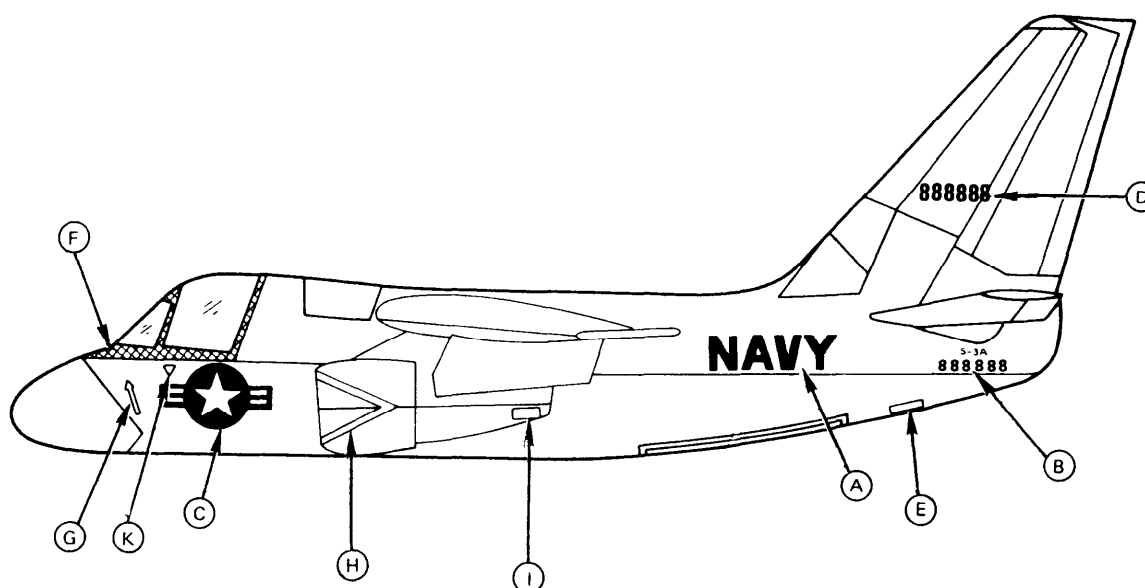


FIGURE C-42. S-3A/B aircraft marking (tactical).

MIL-STD-2161A(AS)

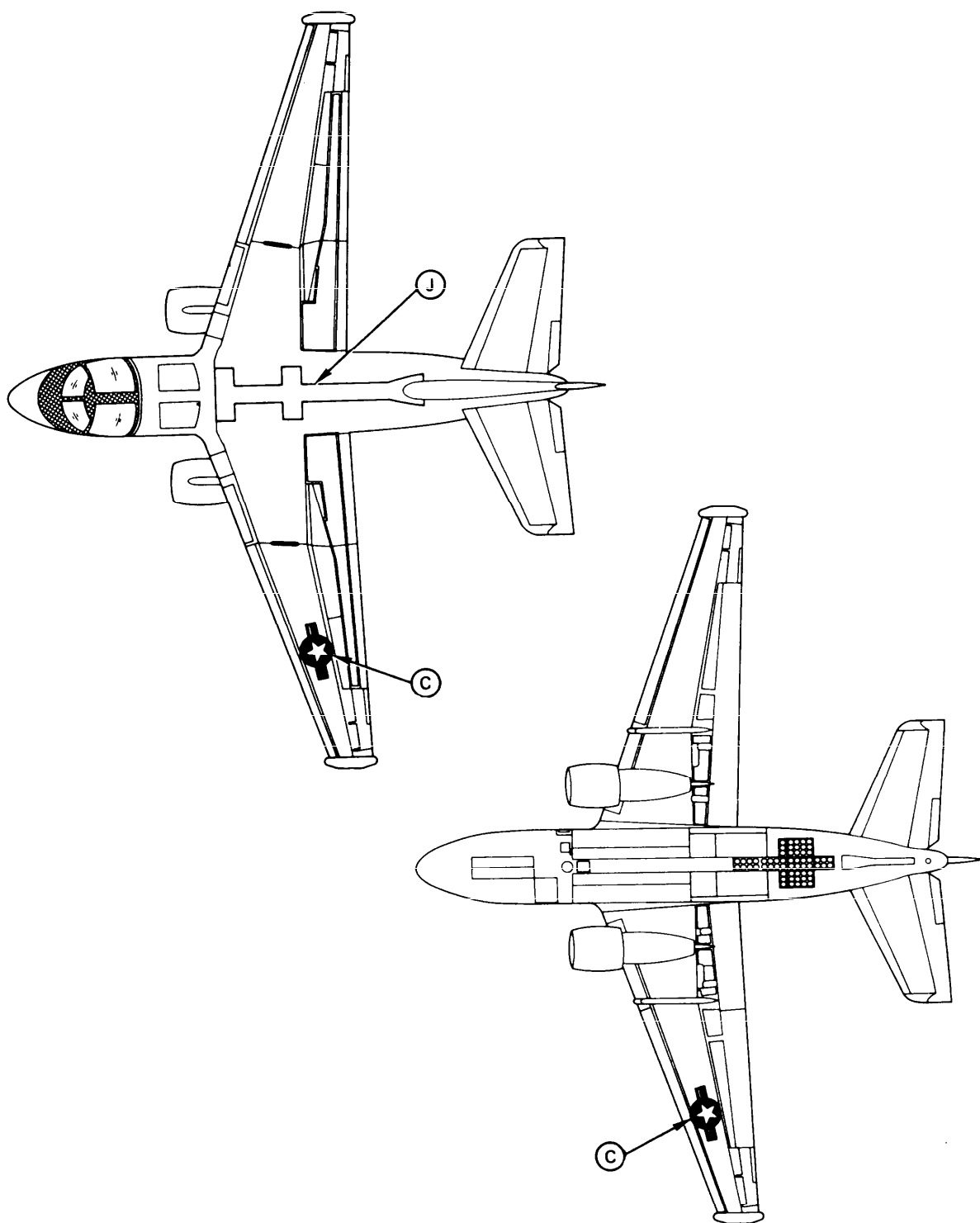


FIGURE C-42. S-3A/B aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------------|-------------------|
| A. NAVY/MARINES | Aft Fuselage Lower L.H. Wing | 12"/10" 24"/16" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 6" | 17038 |
| C. National Star | Fwd. Fuselage Lower R.H. Wing Upper L.H. Wing | 20" 30" 30" | 17925/11136/15044 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Intake Warning | See Para. 5.2.2.10.1 | See Para. 5.2.2.10.1 | 11136 |
| F. Beware of Blast | Aft Fuselage | See Para. 5.2.2.10.2 | 17925/11136 |
| G. Arresting Hook Warning | N/A | 4" Alternating Stripes | 17038/17925 |
| H. Ejection Seat | Below Canopy Rail | See Para. 5.2.2.10.6.12 | IAW Para. 5.2.3 |
| I. Walkway | Wing Adjacent to Fuselage | N/A | 37038 |
| J. Conspicuity Markings | Per Drawing | See Para. 5.1.1.1 | 12197 |
| K. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| L. Unit Aircraft Numbers | Fwd. Fuselage Lower L.H. Wing Upper R.H. Wing | 12" 16" 16" | 17038 |
| M. Unit Identifier | Vertical Stabilizer Lower L.H. Wing Upper L.H. Wing | 20" 16" | 17038 |
| N. Rescue Arrow | Fwd. Fuselage | 24" | 17038/13538 |

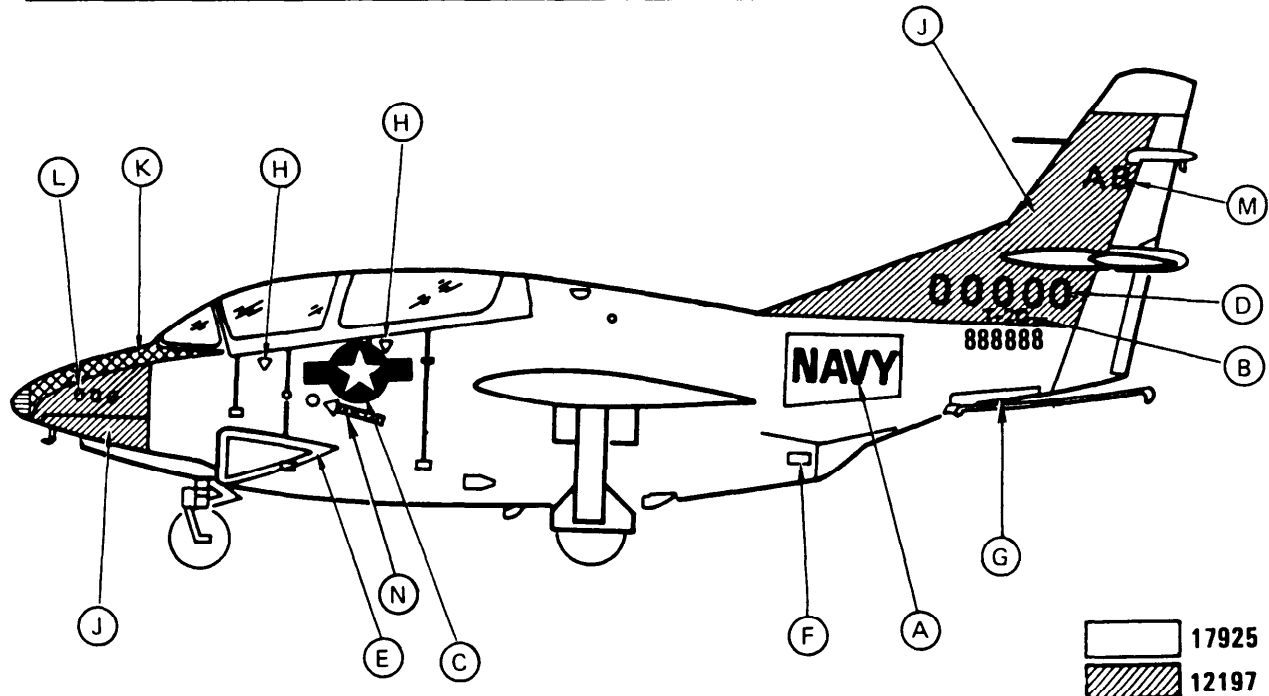


FIGURE C-43. T-2B/C aircraft marking (high visibility).

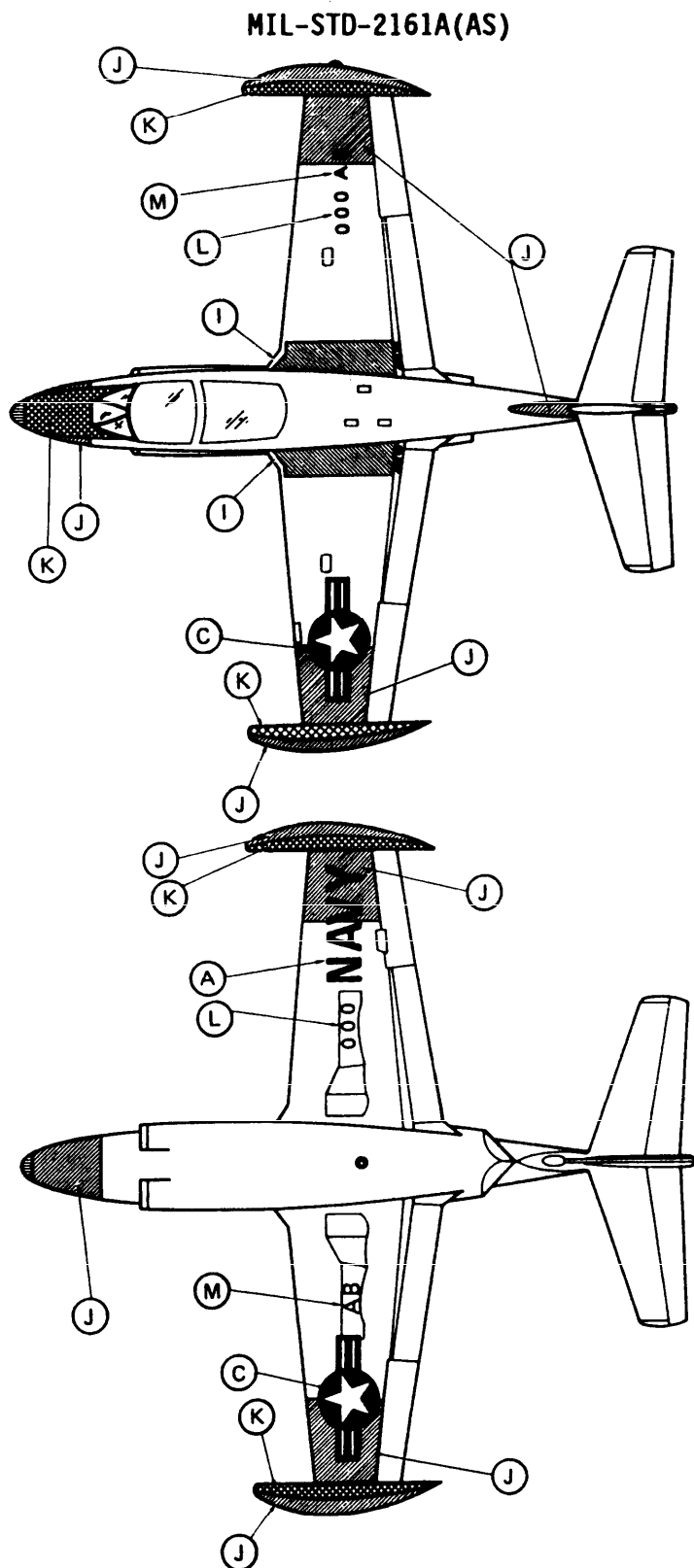


FIGURE C-43. T-2B/C aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------|
| A. NAVY | Aft Fuselage Lower R.H. Wing | 12" 24" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Lower L.H. Wing Upper R.H. Wing | 20" 20" 20" | 17875/11136/15044 |
| D. Call Numbers | Lower Vertical Stabilizer | 12" | 17038 |
| E. Propeller Tips | N/A | 3"/6"/3" | 17925/11136/17925 |
| F. Antiglare | Propeller Spinner & Fwd. & Aft of Cockpit Canopy | N/A | 37038 |
| G. Walkway | Per Drawing | N/A | 37038 |
| H. Conspicuity Markings | Engine Cowling, Wing Tips, & Vertical Stabilizer | Per Drawing | 12197 |
| I. "Rescue Other Side" | L.H. Side Beneath Canopy Rail | ½" Letters | 17038 |
| J. Rescue Arrow | R.H. Side Beneath Canopy Rail | 24" | 17038/11136 |

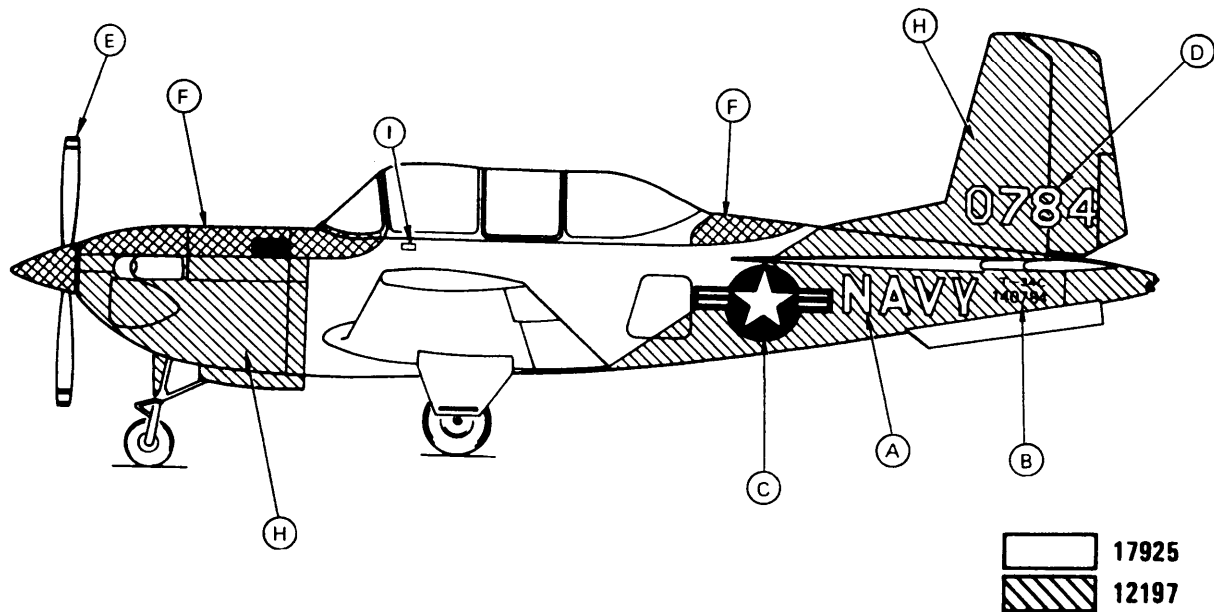


FIGURE C-44. T-34C aircraft marking (high visibility).

MIL-STD-2161A(AS)

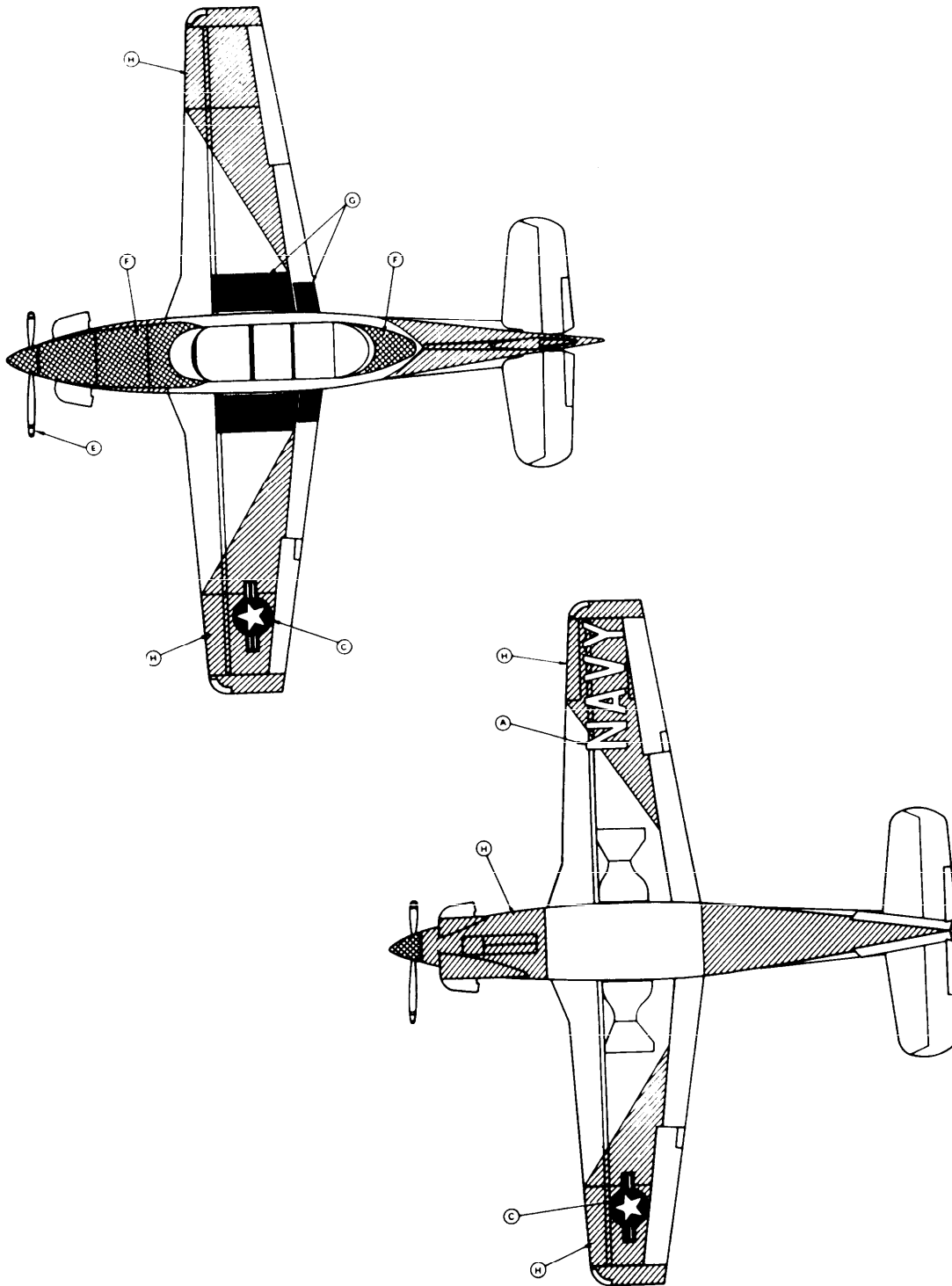
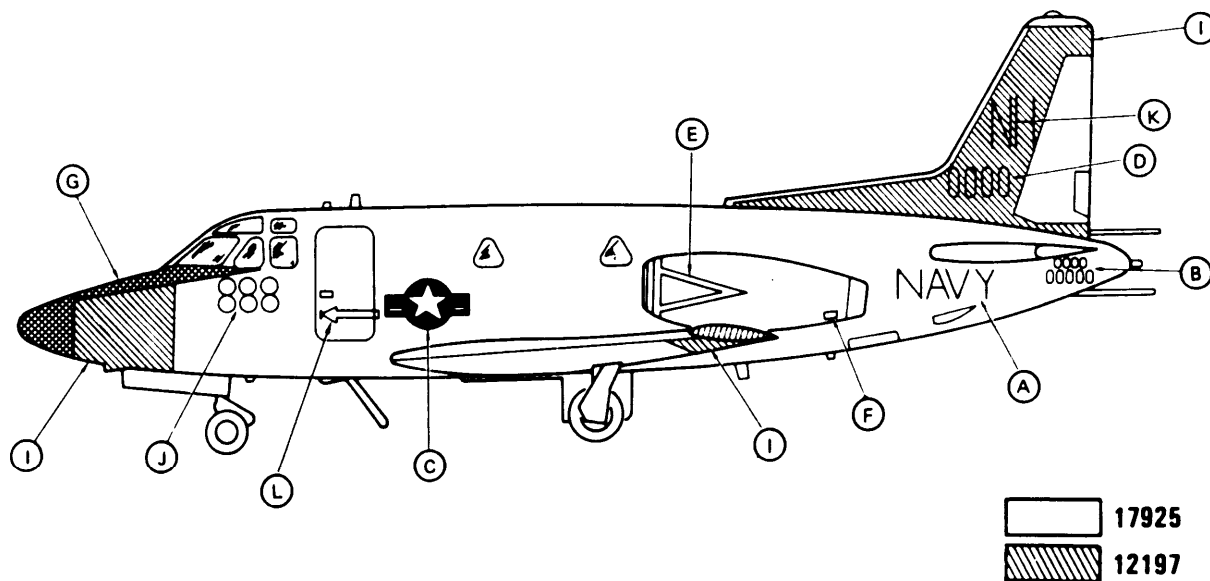


FIGURE C-44. T-34C aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|----------------------|-------------------------|
| A. NAVY | Aft Fuselage Lower L.H. Wing | 16" 20" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Forward Fuselage Upper L.H. Wing Lower R.H. Wing | 20" 30" 30" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Intake Warning | Fwd. Engine Nacelle | See Para. 5.2.2.10.1 | 11136 |
| F. Beware of Blast | Aft Engine Nacelle | See Para. 5.2.2.10.2 | 11136 |
| G. Antiglare | Radome, Fwd. of Cockpit | N/A | 37038 |
| H. Walkway | Wings & Engine Mounts Next to Fuselage | N/A | 37038 |
| I. Conspicuity Markings | Per Drawing | See Para. 5.1.1.1 | 12197 |
| J. Unit Aircraft Numbers | Fwd. Fuselage Lower L.H. Wing Upper R. H. Wing | 16" 16" 20" | 17038 |
| K. Unit Identifier | Vertical Stabilizer Lower R.H. Wing Upper R.H. Wing | 20" 16" 24" | 17038 |
| L. Rescue Arrow | Fwd. Fuselage Door | 24" | 17038 13538 |
| M. Bare Metal & Polish | Engine Intake Lip Engine Exhaust Shroud | N/A | N/A |

**FIGURE C-45. T-39 aircraft marking (high visibility).**

MIL-STD-2161A(AS)

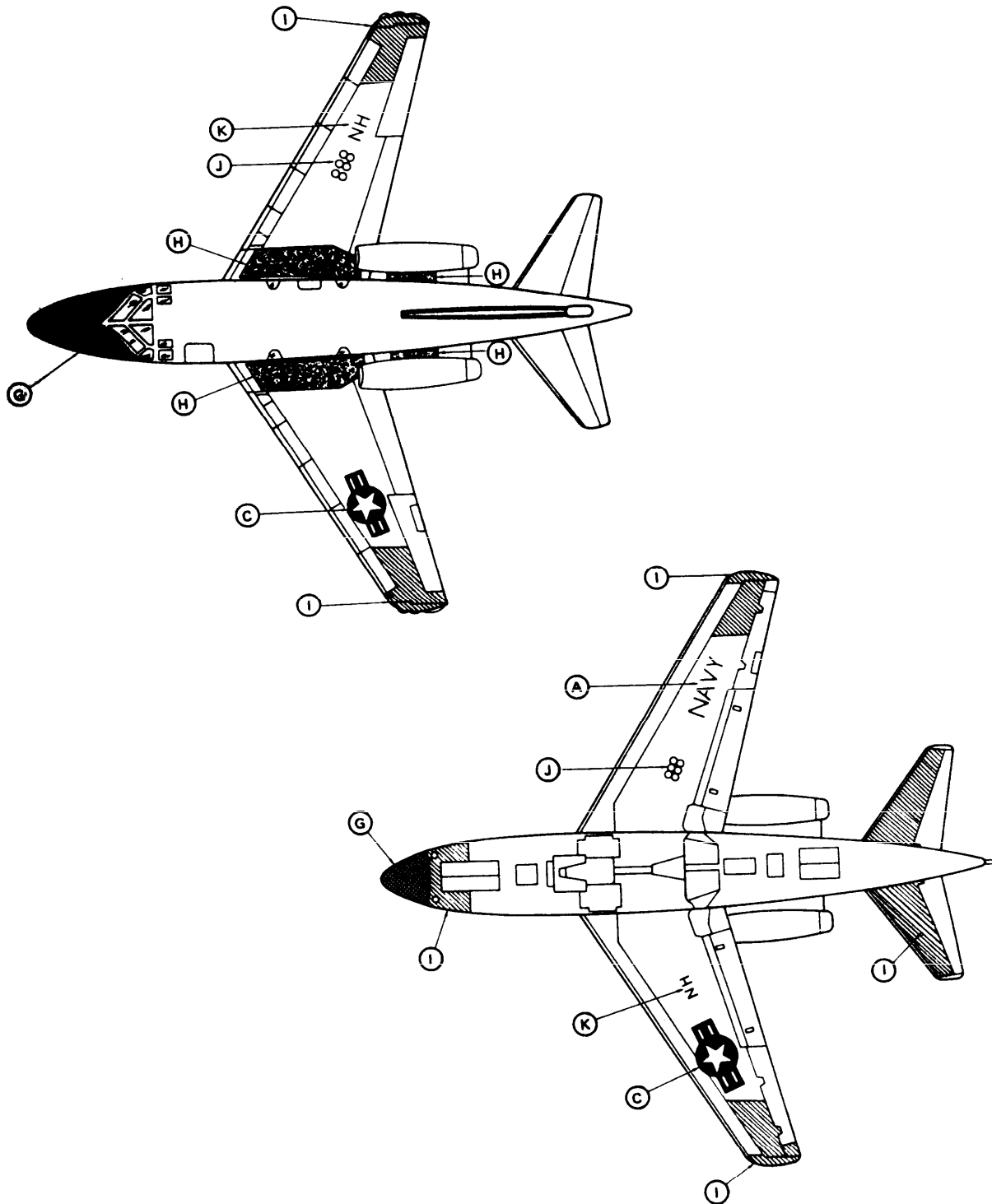


FIGURE C-45. T-39 aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|---|----------------------|-------------------------|
| A. NAVY | Lower L.H. Wing Aft Fuselage | 20" 16" | 17038 |
| B. Model Designation, Acft BUONO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Fwd. Fuselage Upper L.H. Wing Lower R.H. Wing | 20" 30" 30" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Intake Warning | Engine Intake Nacelle | See Para. 5.2.2.10.1 | 11136 |
| F. Beware of Blast | Engine Exhaust Nacelle | See Para. 5.2.2.10.2 | 11136 |
| G. Walkway | Wings & Engine Mounts Next to Fuselage | N/A | 37038 |
| H. Antiglare | Radome & Fwd. of Cockpit | N/A | 37038 |
| I. Unit Identifier | Fwd. Fuselage Upper R.H. Wing Lower L.H. Wing | 16" 20" 16" | 17038 |
| J. Unit Aircraft Numbers | Vertical Stabilizer Upper R.H. Wing Lower R.H. Wing | 20" 24" 16" | 17038 |
| K. Bare Metal and Polish | Engine Intake Lip Engine Exhaust Shroud | N/A | N/A |
| L. Rescue Arrow | Fwd. Fuselage Door | 24" | 17038 13538 |

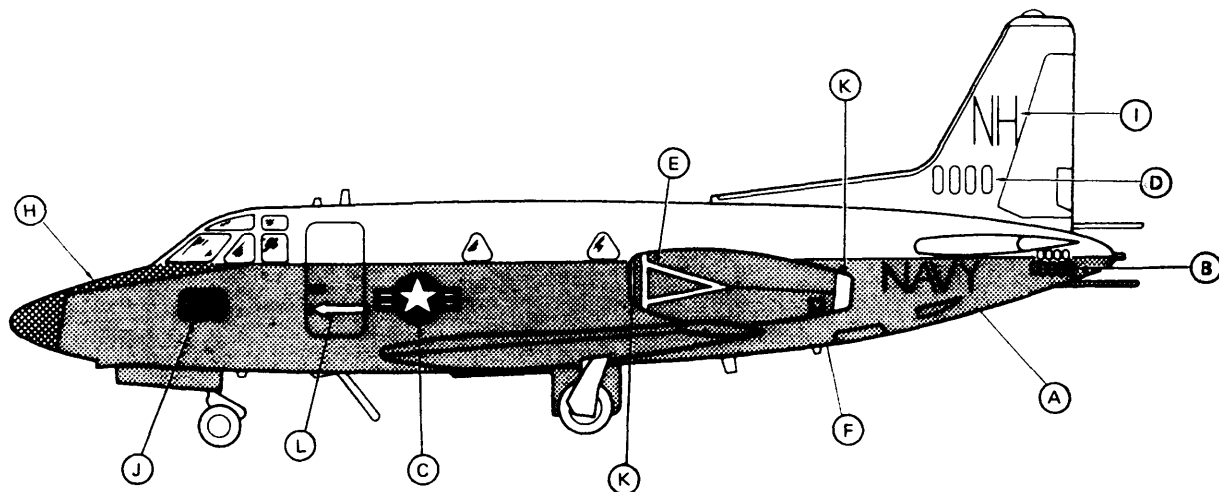


FIGURE C-46. T-39 aircraft marking (cargo).

MIL-STD-2161A(AS)

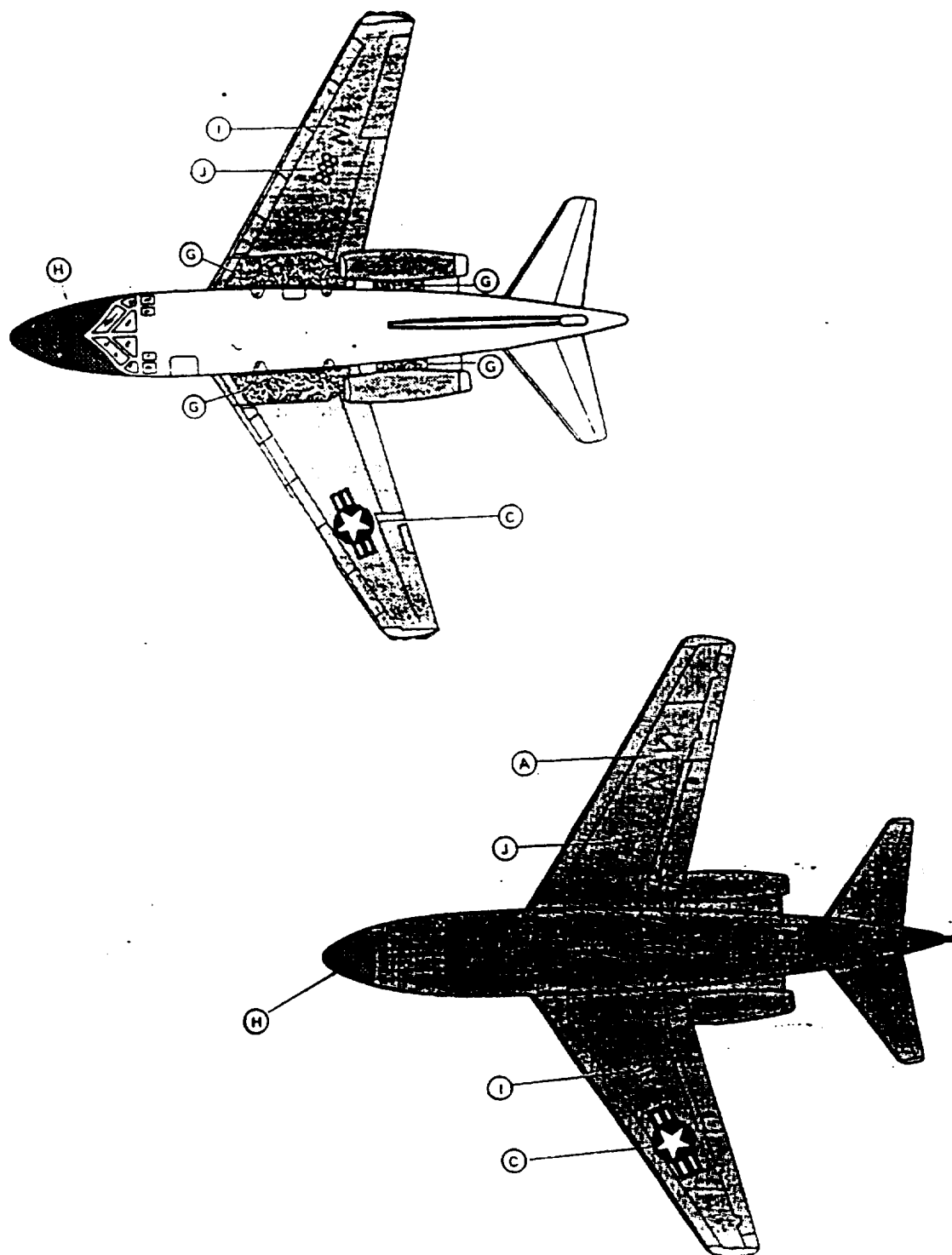
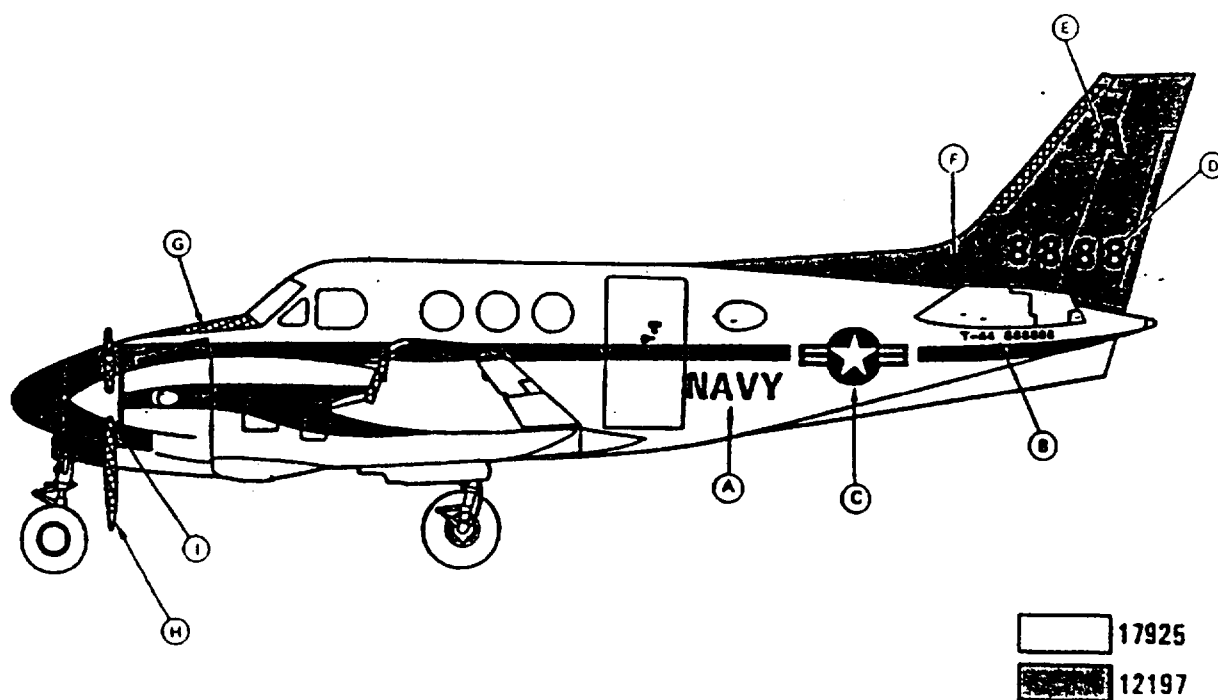


FIGURE C-46. T-39 aircraft marking (cargo) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|--|-------------------|-------------------------|
| A. NAVY | Aft Fuselage Lower L. H. Wing | 16" | 17038 |
| B. Model Designation, Acft BUONO | Side Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L. H. Wing Lower R. H. Wing | 20" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 16" | 17038 |
| E. Unit Identifier | Top Vertical Stabilizer | 24" | 17038 |
| F. Conspicuity Markings | Per Drawing | See Para. 5.1.1.1 | 12197 |
| G. Antiglare | Nose Fwd. of Windscreen inside of L&R Nacelles | N/A | 37038 |
| H. Propeller Tips | N/A | 6" | 17925 11136 |
| I. Propeller Warning Band | Fwd. Fuselage | 3" Wide | 17925/11136 |

FIGURE C-47. T-44A aircraft marking (high visibility).

MIL-STD-2161A(AS)

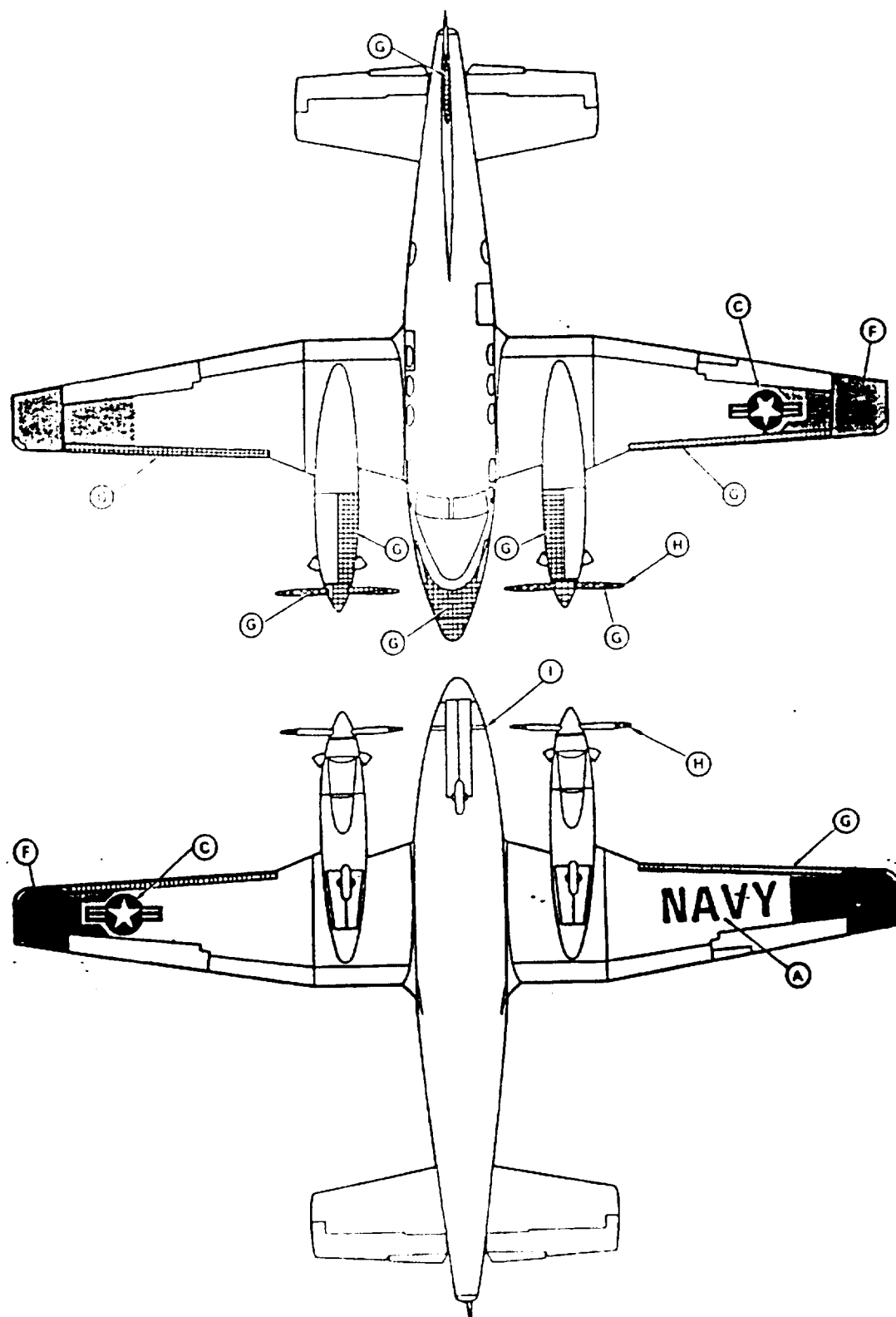


FIGURE C-47. T-44A aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|--|---|--------------------|--|
| A. UNITED STATES NAVY UNITED STATES MARINES | Center Fuselage | 8" | 17038 |
| B. Model Designation, Aeft BUNO | Side Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 20" 20" 20" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Unit Identifier | Upper Vertical Stabilizer | 18" | 17038 |
| F. Accent Stripes MARINE NAVY | Center Fuselage Center Fuselage | 6" each 6" each | Upper 11136/Lower 17043 Upper 15066/Lower 17043 |
| G. Flag - United States | Upper Vertical Stabilizer | Sec Para. 5.2.7 | 11136/15044/17925 |
| H. Antiglare | Nose Fwd. of Wind Screen Inside L. & R. Nacelles | N/A | 37038 |
| I. Propeller Tips | N/A | 6" | 17925/11136 |
| J. Propeller Warning Band | Fwd. Fuselage | 3" Wide | 11136/17925 |

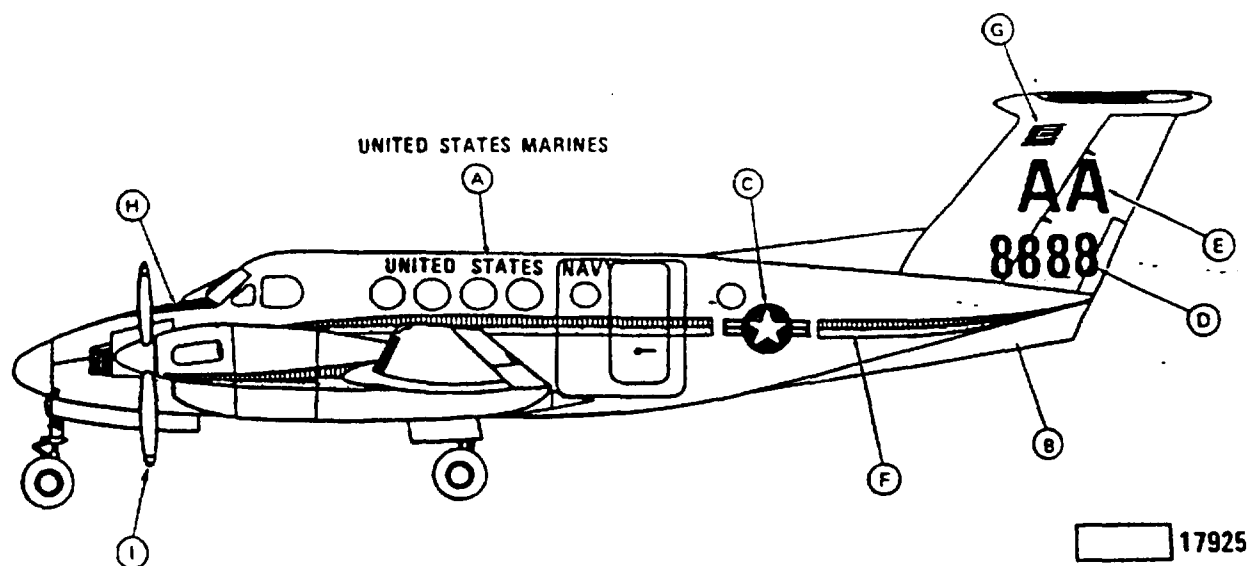


FIGURE C-48. UC-12B aircraft marking.

MIL-STD-2161A(AS)

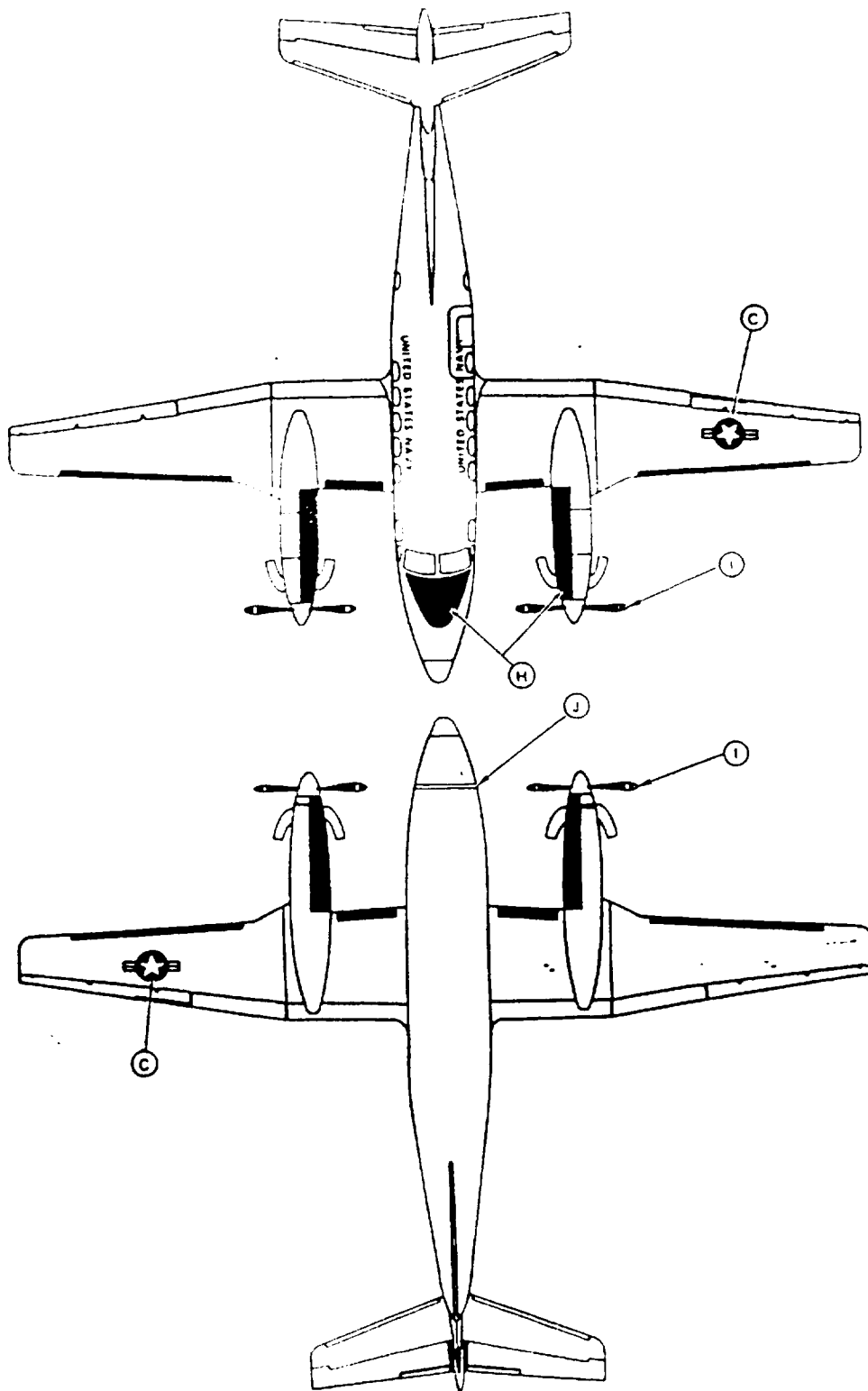
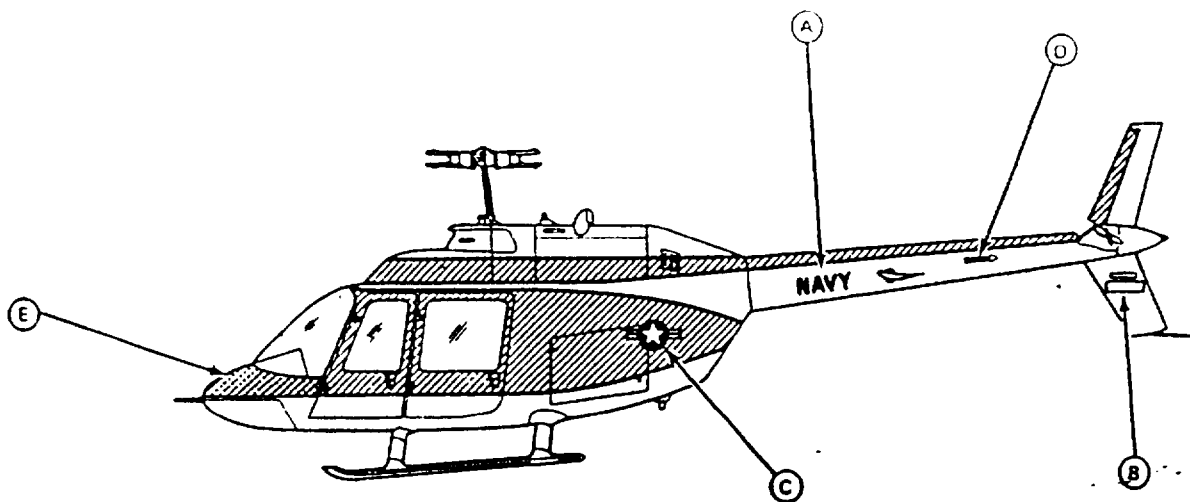


FIGURE C-48. UC-12B aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|---------------------------------|------------|-------------------|
| A. NAVY | Tail Boom | 6" | 17038 |
| B. Model Designation, Actt BU/NO | Both Sides of Tailboom | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Bottom Fuselage | 10" 10" | 17923/11136/15044 |
| D. Tail boom Warning | Tail Boom | 22" | 31136/37038 |
| E. Anti Glare | | | 37038 |
| F. Arctic Markings/ Conspicuity | As Per Drawing | | 12197 |
| G. Unit Identifying Letters | Tail Boom (IAW Para. 5.2.3) | | 17038 |







| | |
|---|-------|
|  | 17038 |
|  | 37038 |
|  | 12197 |
|  | 17875 |

FIGURE C-49. TH-57 aircraft marking (high visibility).

MIL-STD-2161A(AS)

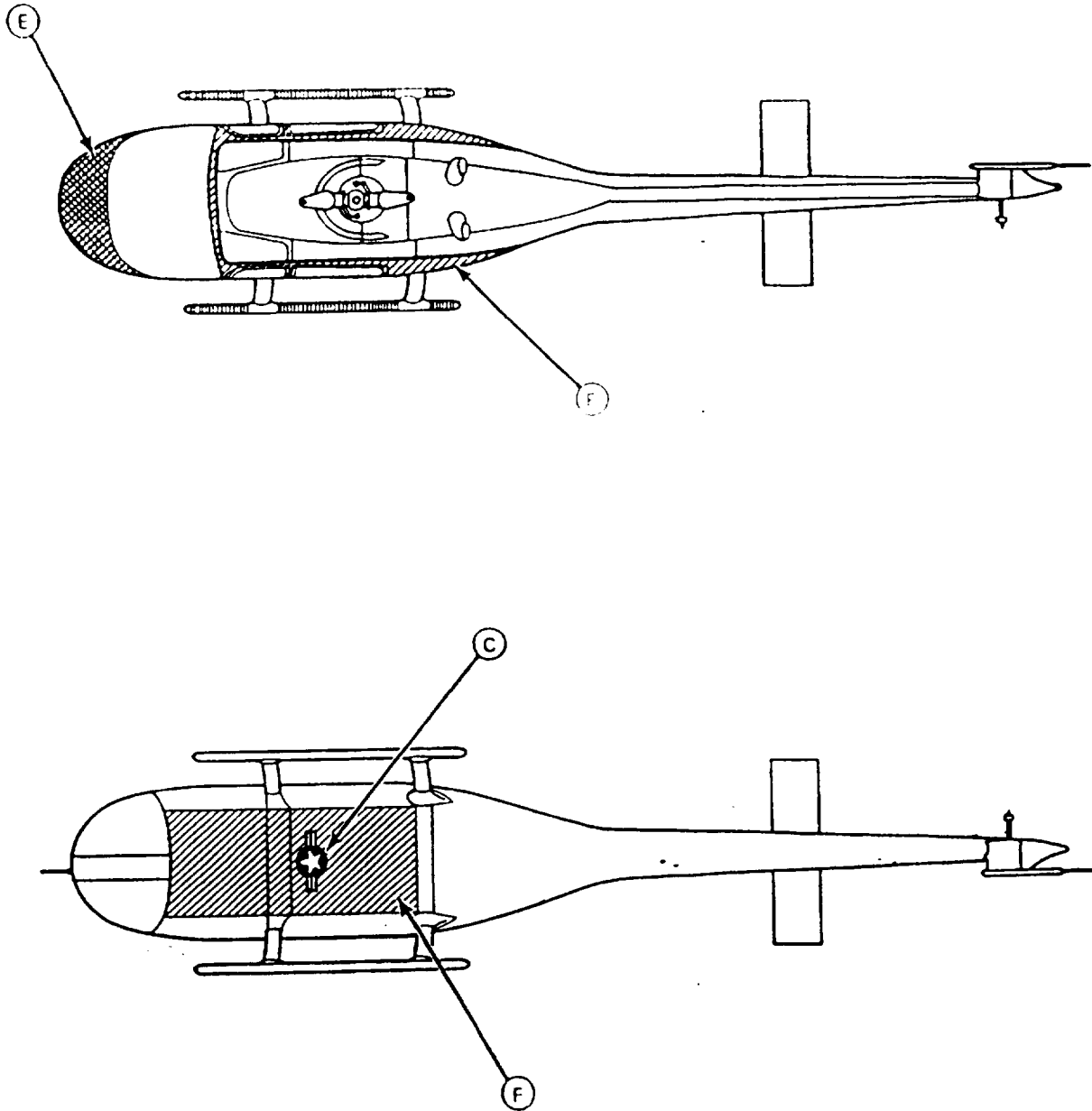
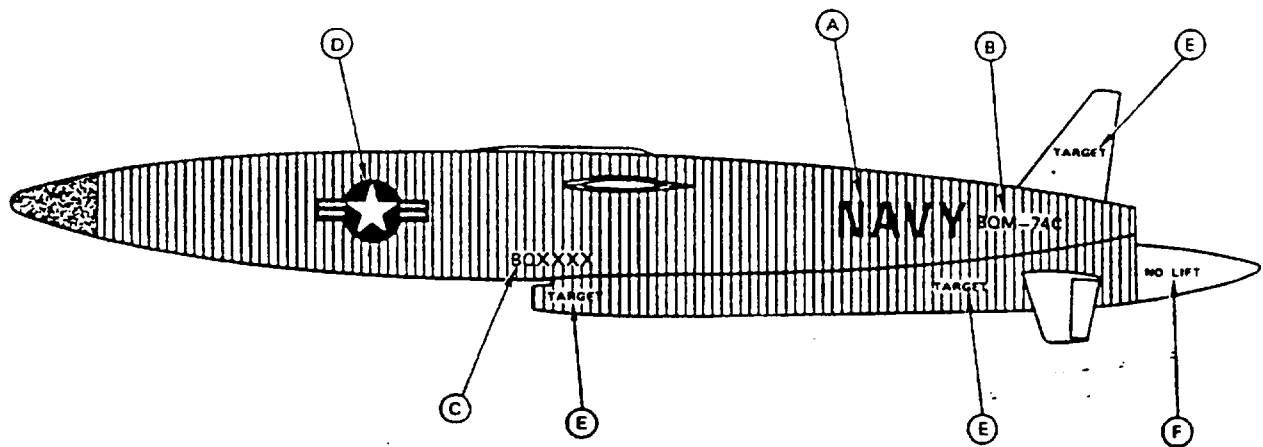


FIGURE C-49. TH-57 aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|----------------------|---|----------------------------|------------------|
| A. NAVY | Aft Fuselage & L.H. Lower Wing Surface | 5" | 17038/37038 |
| B. Model Designation | Aft Fuselage | 2 1/2" (Decal 94743-17) | 17038/37038 |
| C. Drone Serial No. | Center Fuselage Above Air Scoop | 2" (Decal 94743-18) | 17038/37038 |
| D. National Star | Fwd. Fuselage and R.H. Lower Wing Surface | NV-STD-158-8 | |
| E. Target | Air Scoop, Aft Fuselage, R.H. & L.H. Upper Wing Tips, & Vertical Stabilizer | (Decal 32962-1) | |
| F. No Lift | Center of Tail Cone | (Decal 32962-2) | |



| | |
|--|-----------------------------------|
| | WHITE RAIN EROSION COATING |
| | 12197 |
| | 37925 |
| | 11136 |

FIGURE C-50. BQM-74C drone marking.

MIL-STD-2161A(AS)

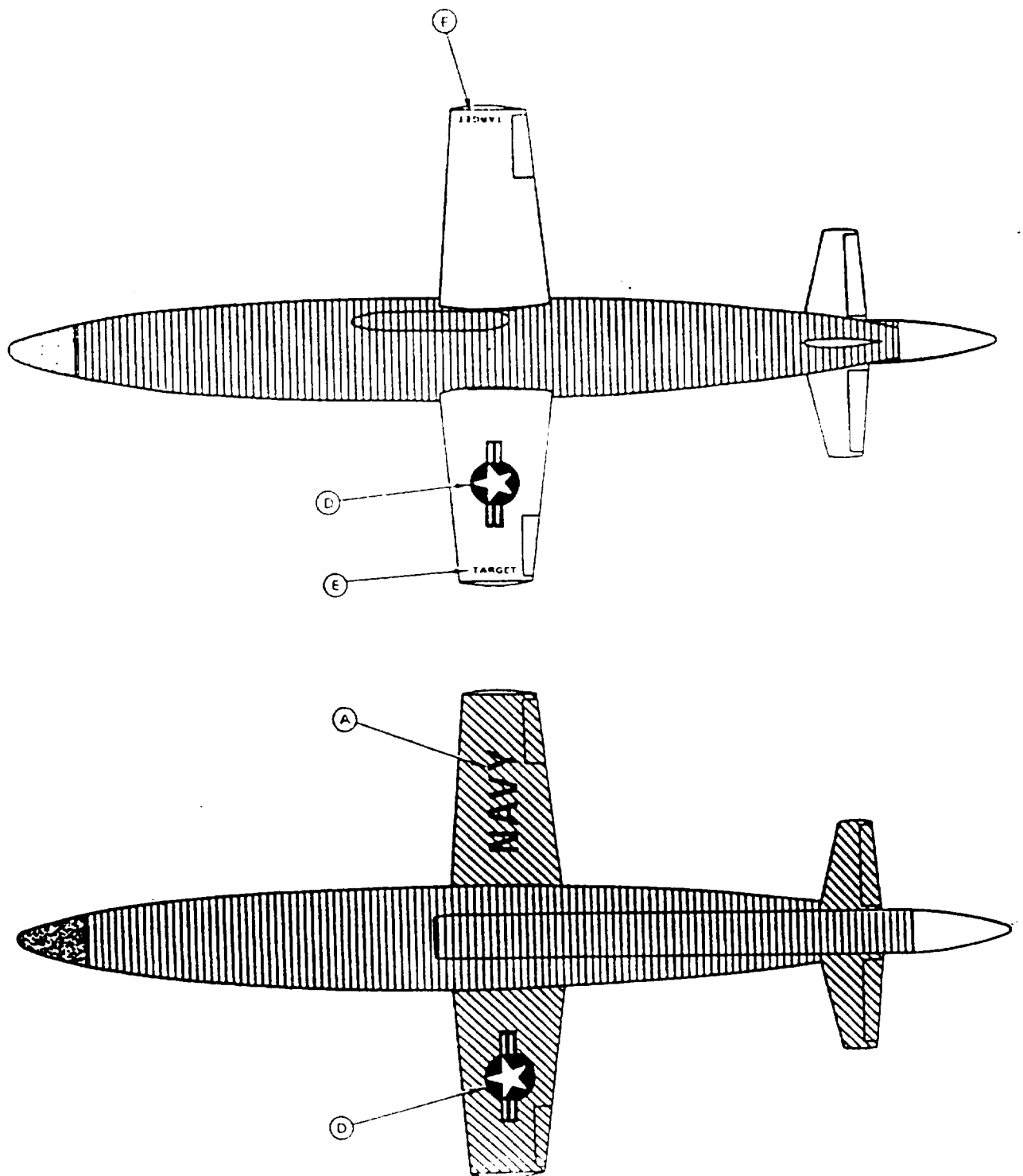


FIGURE C-50. BQM-74C drone marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|---|-------------------|-------------------|
| A. NAVY/MARINES | Tail Boom/ Bottom Fuselage | 10" | 17038 |
| B. Model Designation, A/cft BUNO | Side Tail Boom | 2" 6" | 17038 |
| C. National Star | Aft Fuselage Top Fuselage Bottom Fuselage | 15" 15" 15" | 17925/11136/15044 |
| D. Intake Warning | Forward Intake | 15" | 11136/17925 |
| E. Beware of Blast | Engine Exhaust Nacelle | 5" | 11136/17925 |
| F. Tail Rotor Warning | Tail Boom | 33" | 13538/31136/17038 |
| G. Antiglare | Fwd. Fuselage | N/A | 37038 |
| H. Walkway | Top Fuselage | N/A | 37038 |
| I. Unit Aircraft Numbers | Mid Fuselage Bottom Fuselage | 10" | 17038 |
| J. Unit Identifier | Tail Boom Bottom Fuselage | 15" | 17038 |
| K. Rescue Arrow | Fwd. Cockpit Door | 24" | 13538/17925 |
| L. Rescue | Bottom Aft Fuselage Top Fwd. Fuselage | 10" | 17038 |
| M. Abandon Chute | Bottom Fuselage | 10" | 17038 |
| N. Conspicuity Markings | Per Drawing | N/A | 12197 |

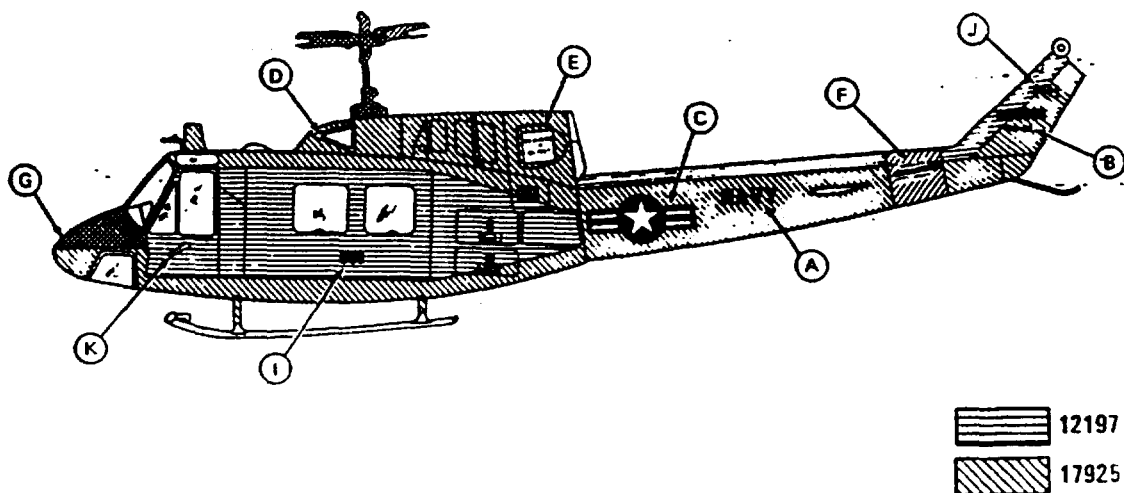


FIGURE C-51. UH-1N aircraft marking (non-combat SAR).

MIL-STD-2161A(AS)

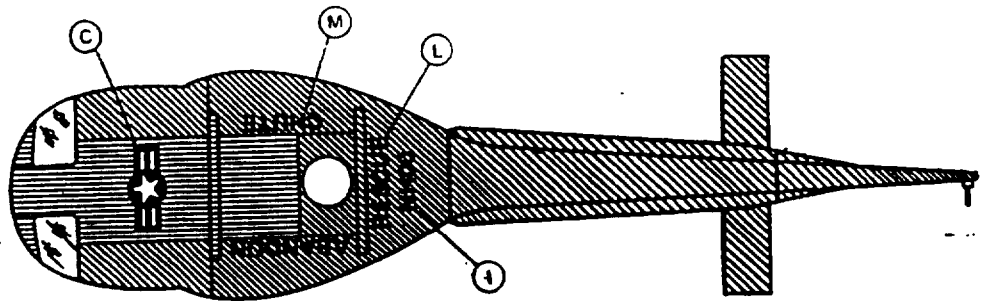
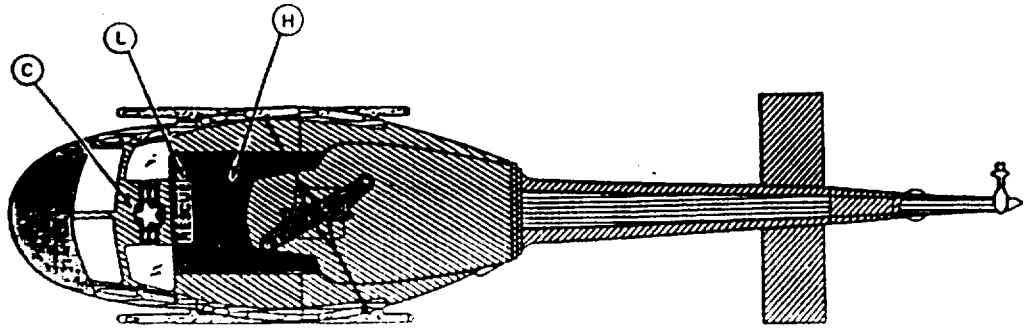


FIGURE C-51. UH-1N aircraft marking (non-combat SAR) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE | |
|-------------------------------------|---|------------------|------------------|-------|
| A. NAVY | Lower Fuselage | 12" | 35237 | |
| | Aft Fuselage | | | |
| B. Model Designation, Acft BUONO | Aft Fuselage | 2" | 35237 | |
| | | 4" | | |
| C. National Star | Upper Tail Boom | 12" | 35237 | 36320 |
| | Lower Fuselage | 12" | 36320 | 36495 |
| | Center Fuselage | 12" | 36495 | 35237 |
| D. Unit Aircraft Number | Forward Fuselage | 12" | IAW Para 5.2.3 | |
| E. Call Numbers | Lower Aft Fuselage | 12" | 35237 | |
| F. Intake Warning | Fwd. Engine Nacelle | 16" | Background | 35237 |
| | | | Letters | 36320 |
| G. Beware of Blast | Aft Engine Nacelle | 22" | Background | 35237 |
| | | | Letters | 36320 |
| H. Tail Rotor Warning | Aft Fuselage | 29" | 35237 | |
| I. Antiglare | Nose Fwd. of Cockpit | N/A | 35237 | |
| J. Unit Identifier | Tail Boom | 10" | IAW Para 5.2.3 | |
| K. Tip Marking | Horizontal Stabilizer | 6" | 36320 | |
| L. Rescue Arrow | Fwd. and Center Fuselage L.H. & R.H Sides | 24" | Background | 35237 |
| | | | Letters | 36320 |
| M. Walkway | Top Fuselage | N/A | IAW Para 5.2.3 | |
| N. Conspicuity Marking | Per Dwg | SH-3D (SAR Only) | 12197 | |
| O. Abandon Chute/Rescue | Bottom of Fuselage | SH-3D (SAR Only) | 35237 | |
| P. Main Rotor Blades | | N/A | 35237 | |
| Q. Tail Rotor Blades | | N/A | 36320 | |
| R. Engine Exhaust Area | Aft Engine Nacelle | N/A | 36081 | |

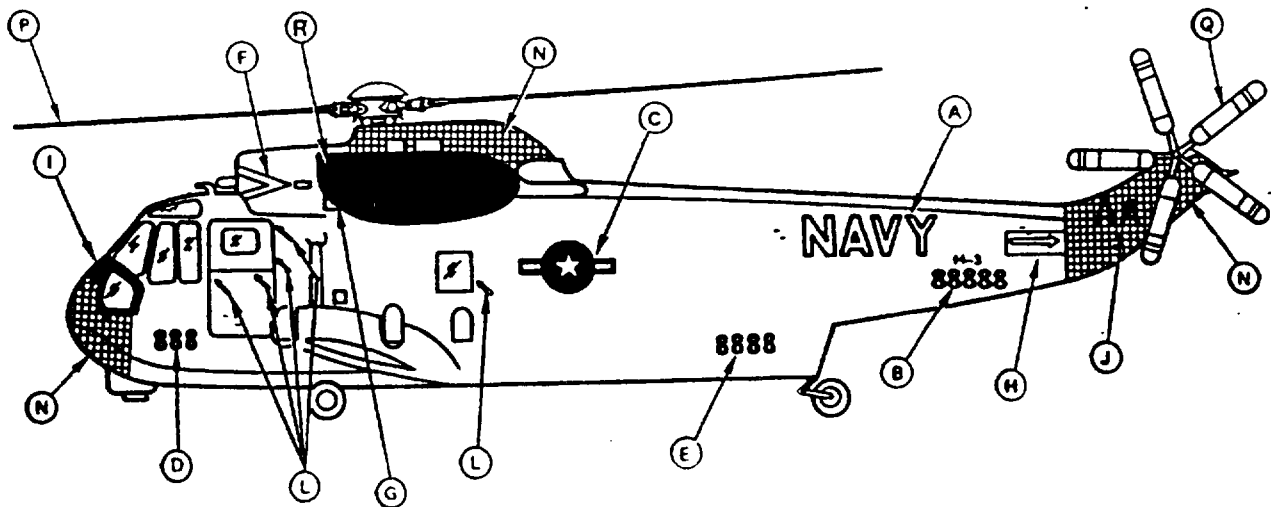


FIGURE C-52. SH-3D/H aircraft marking (tactical).

MIL-STD-2161A(AS)

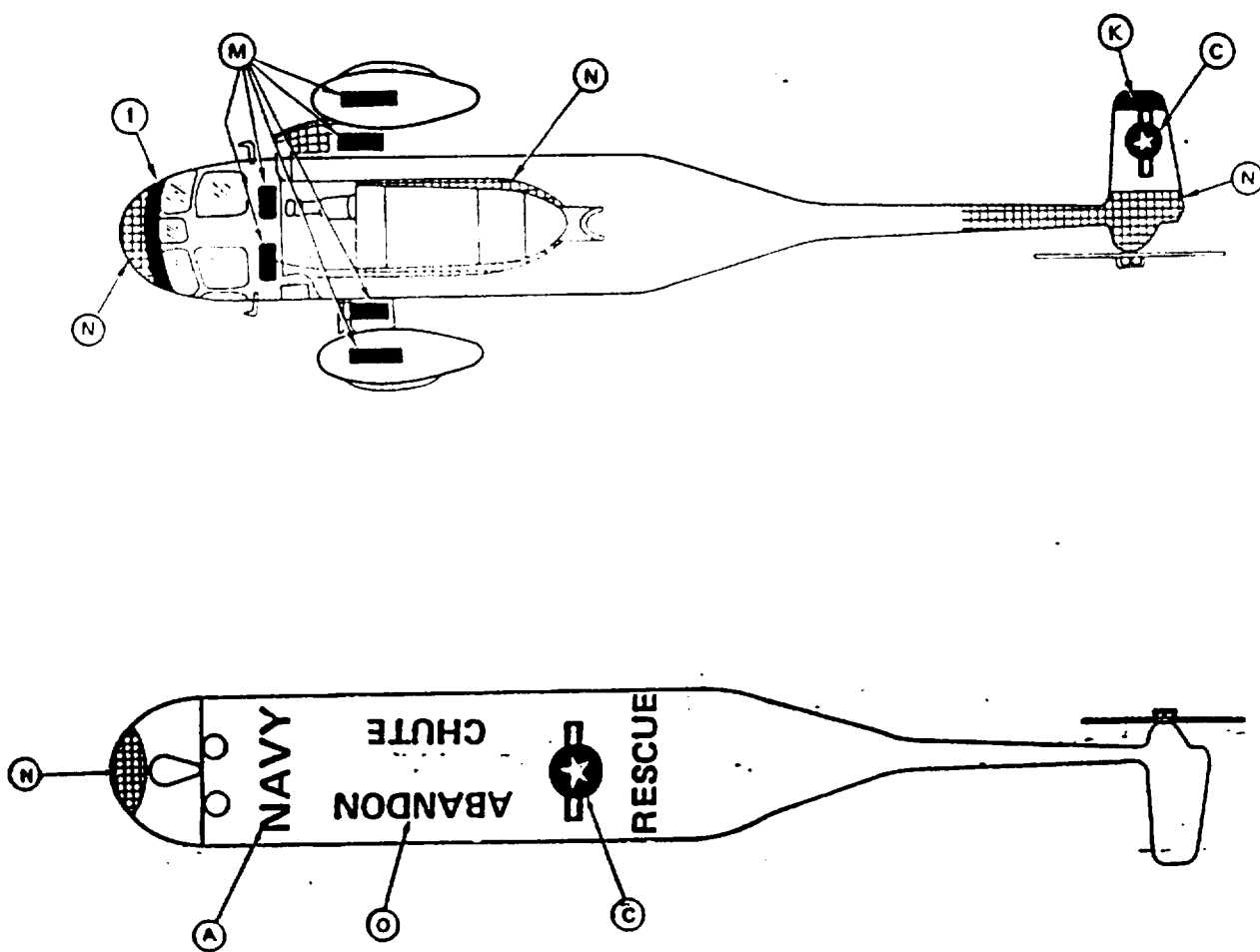


FIGURE C-52. SH-3D/H aircraft marking (tactical) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|---|-------------------------|-------------------|
| A. NAVY | Aft Fuselage Lower L.H. Wing | 12"/10" 24"/16" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Fwd. Fuselage Lower R.H. Wing Upper L.H. Wing | 20" 30" 30" | 17925/11136/15044 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Intake Warning | See Para. 5.2.2.10.1 | See Para. 5.2.2.10.1 | 11136 |
| F. Beware of Blast | Aft Fuselage | See Para. 5.2.2.10.2 | 17925/11136 |
| G. Arresting Hook Warning | N/A | 4" Alternating Stripes | 17038/17925 |
| H. Ejection Seat | Below Canopy Rail | See Para. 5.2.2.10.6.12 | IAW Para. 5.2.3 |
| I. Walkway | Wing Adjacent to Fuselage | N/A | 37038 |
| J. Conspicuity Markings | Per Drawing | See Para. 5.1.1.1 | 12197 |
| K. Antiglare | Fwd. of Cockpit | N/A | 17038 |
| L. Unit Aircraft Numbers | Fwd. Fuselage Lower L.H. Wing Upper R.H. Wing | 12" 16" 16" | 17038 |
| M. Unit Identifier | Vertical Stabilizer Lower L.H. Wing Upper L.H. Wing | 20" 16" | 17038 |

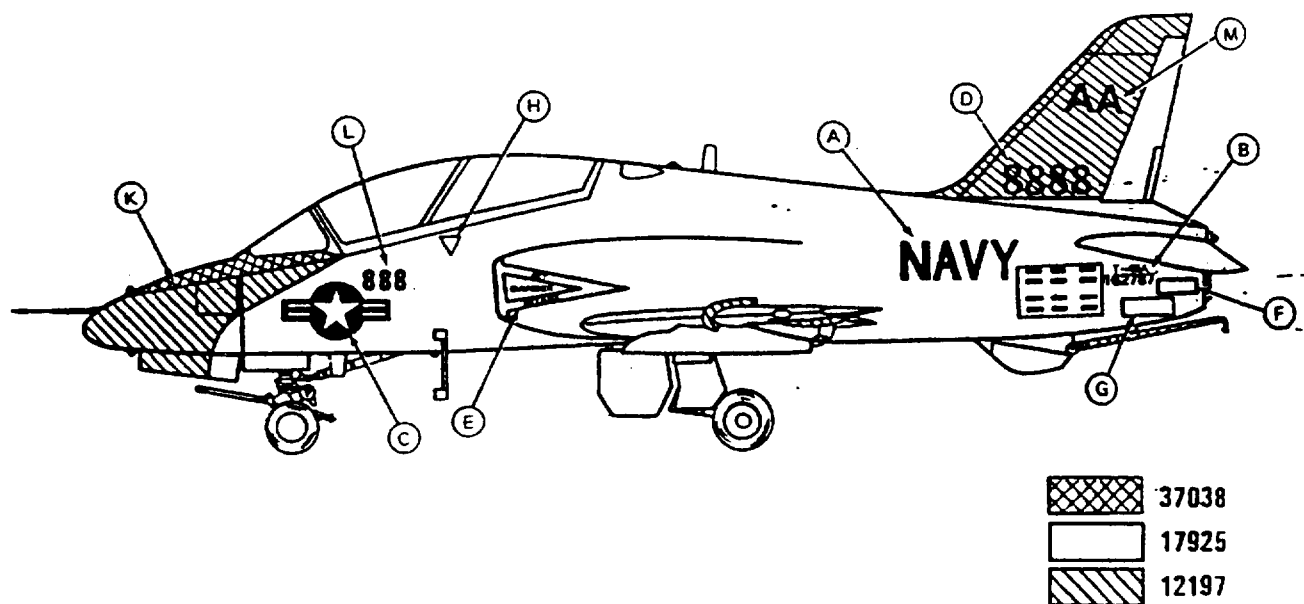


FIGURE C-53. T-45A aircraft marking (high visibility).

MIL-STD-2161A(AS)

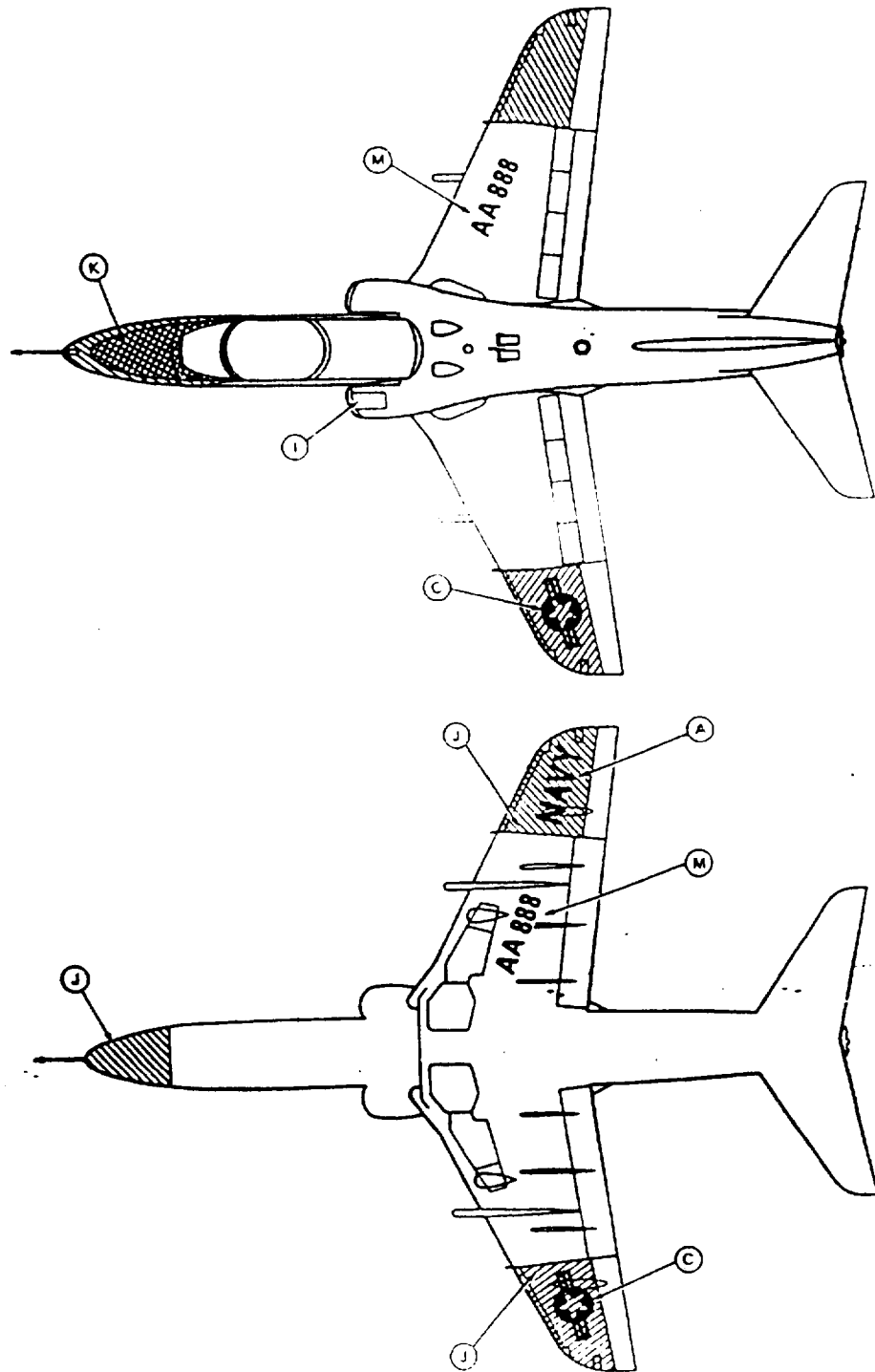


FIGURE C-53. T-45A aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-------------------------------------|--|----------------|-------------------------|
| A. NAVY | Tail Boom | 24" | 17925 |
| B. Model Designation, Acft BUONO | Side Tail Boom | 2" 4" | 17925 |
| C. National Star | Aft Fuselage Top Fuselage | 20" 20" | 17925/11136/15044 |
| D. Intake Warning | Forward Intake | 15" | 11136/17925 |
| E. Beware of Blast | Below Exhaust Exit | 5" | 11136/17925 |
| F. Tail Rotor Warning | Tail Boom | 33" | 13538/17038/11136 |
| G. Antislare | Nose Fwd. of Canopy | N/A | 37038 |
| H. Walkway | Top Fuselage | N/A | 36231 |
| I. Call Numbers | Aft Fuselage | 12" | 17925 |
| J. Unit Aircraft Numbers | Fwd. Fuselage Tail Boom Mid | 10" 10" | 17925 |
| K. Unit Identifier | Tail Boom | 10" | 17925 |
| L. Rescue Arrow | Pilot Cockpit Door Copilot Cockpit Door | 24" 18" | 13538/17925 |
| M. Sonobuoy Launch Door Marking | Center Left Fuselage | 2" 2" 1" | 11136 17925 17038 |
| N. Main Rotor Blades | | N/A | 35237 |
| O. Tail Rotor Blades | | N/A | 36320 |

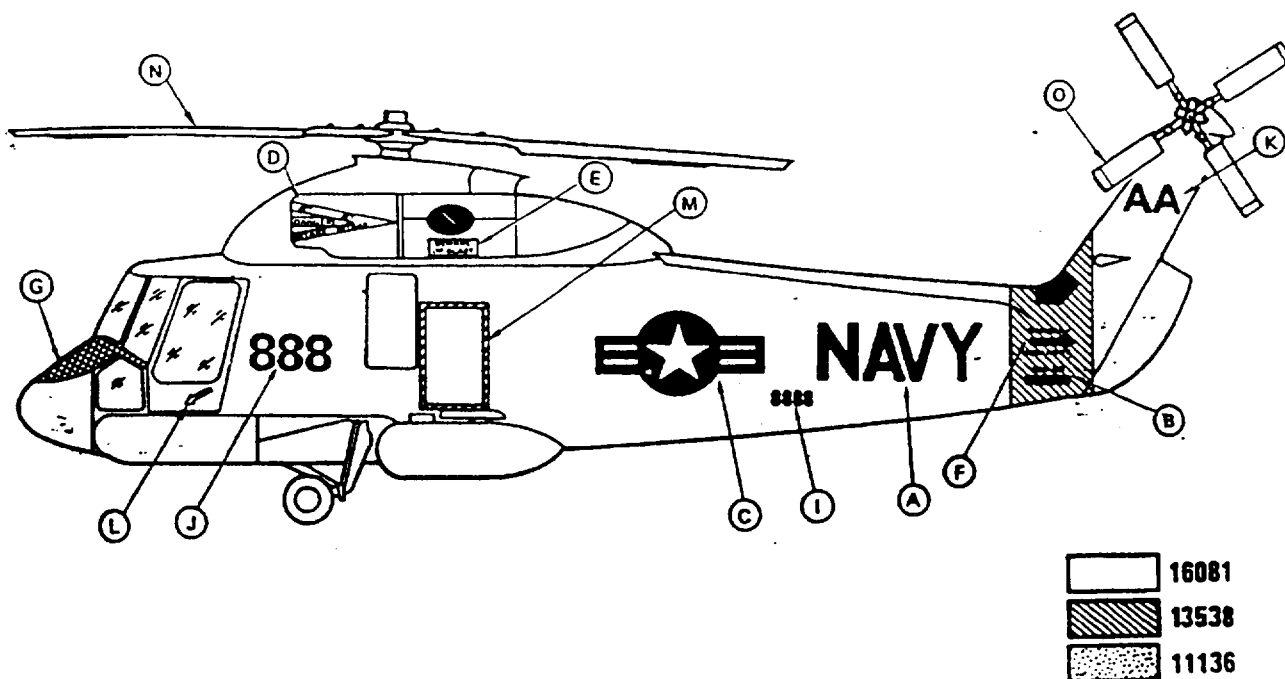


FIGURE C-54. UH-20 aircraft marking.

MIL-STD-2161A(AS)

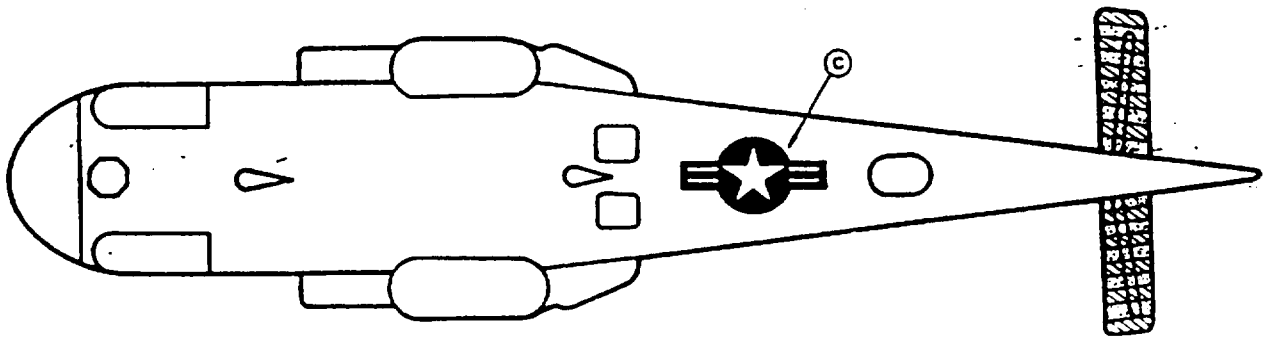
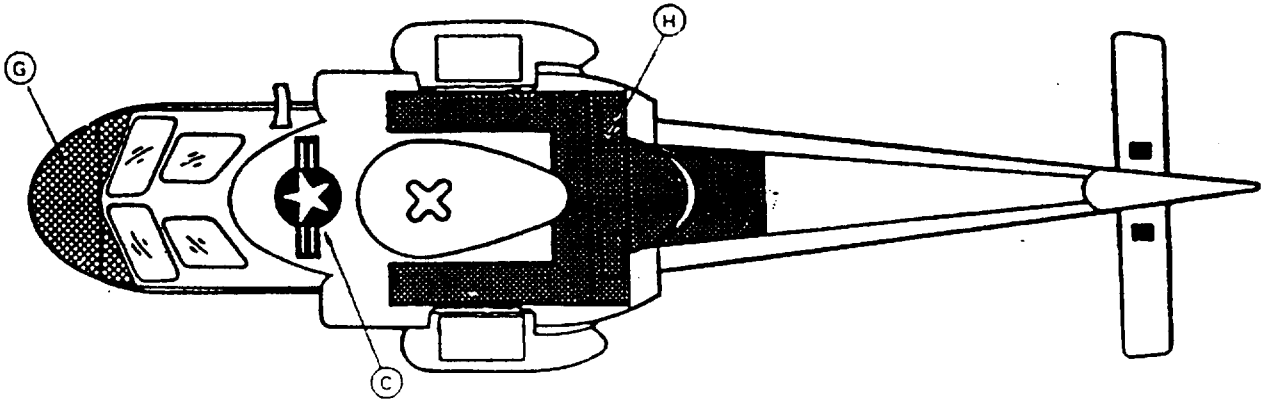


FIGURE C-54. UH-2D aircraft marking - Continued.

MIL-STD-2161A(AS)

APPENDIX D

SPECIAL PURPOSE AIRCRAFT MARKING

10. SCOPE

10.1 Scope. This Appendix illustrates the different paint schemes for special purpose aircraft including the presidential helicopter.

10.2 Use. This Appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS. This section is not applicable to this Appendix.

30. DEFINITIONS

30.1 Definitions. For purposes of this Appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 Aircraft paint schemes. The following figures illustrate aircraft marking for special purpose aircraft.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|----------------------------------|--|-------------------|-------------------------|
| A. NAVY | Aft Fuse | 16" | 17038 |
| B. Model Designation, A/cft BUNO | Aft Fuselage Under Horizontal Stabilizer | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 40" 30" 30" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 12" | 17038 |
| E. Propeller Tips | N/A | 4"/4"/4" | 17925/11136/17925 |
| F. Antiglare | Upper 1/2 Nose and Inside Upper 1/2 Eng Cowl | N/A | 37038 |
| G. Walkway | Per Drawing | | 37038 |
| H. Propeller Warning Band | Fwd. Fuselage | 3" | 11136 |
| I. Flag | Vertical Stabilizer | 26 X 46 | 11136/15044/17925 |
| J. Unit Aircraft Numbers | Nose | 16" | 17038 |
| K. Unit Identifier | Vertical Stabilizer | 30" | 17038 |

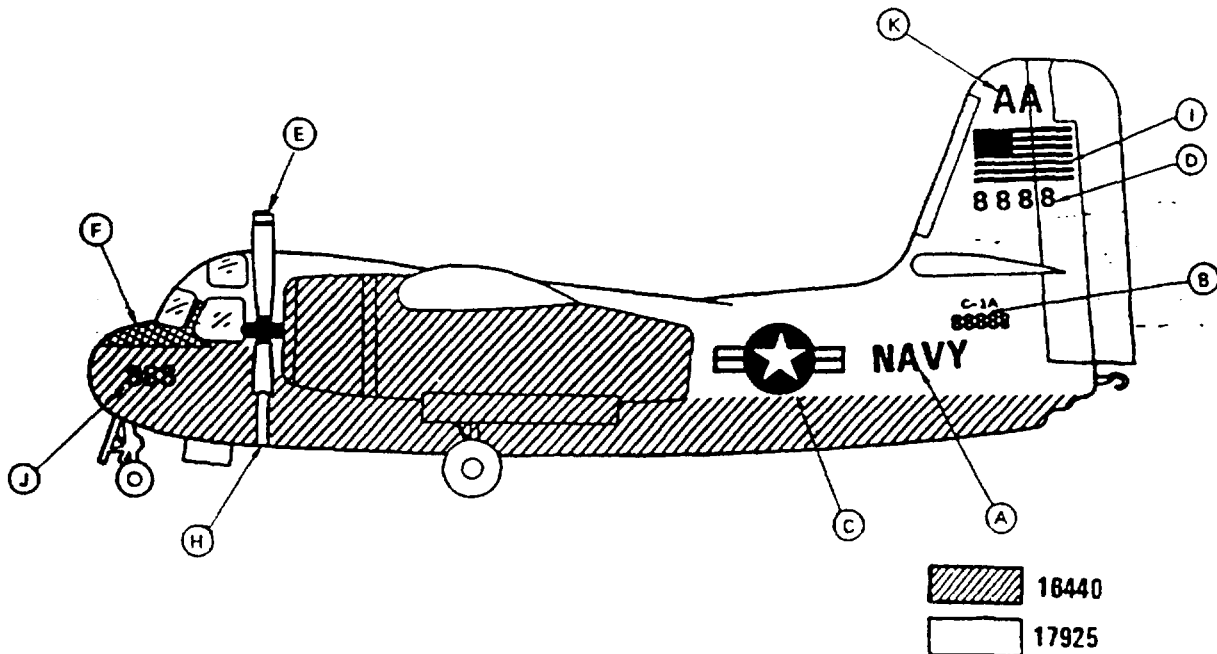


FIGURE D-1. C-1A aircraft marking.

MIL-STD-2161A(AS)

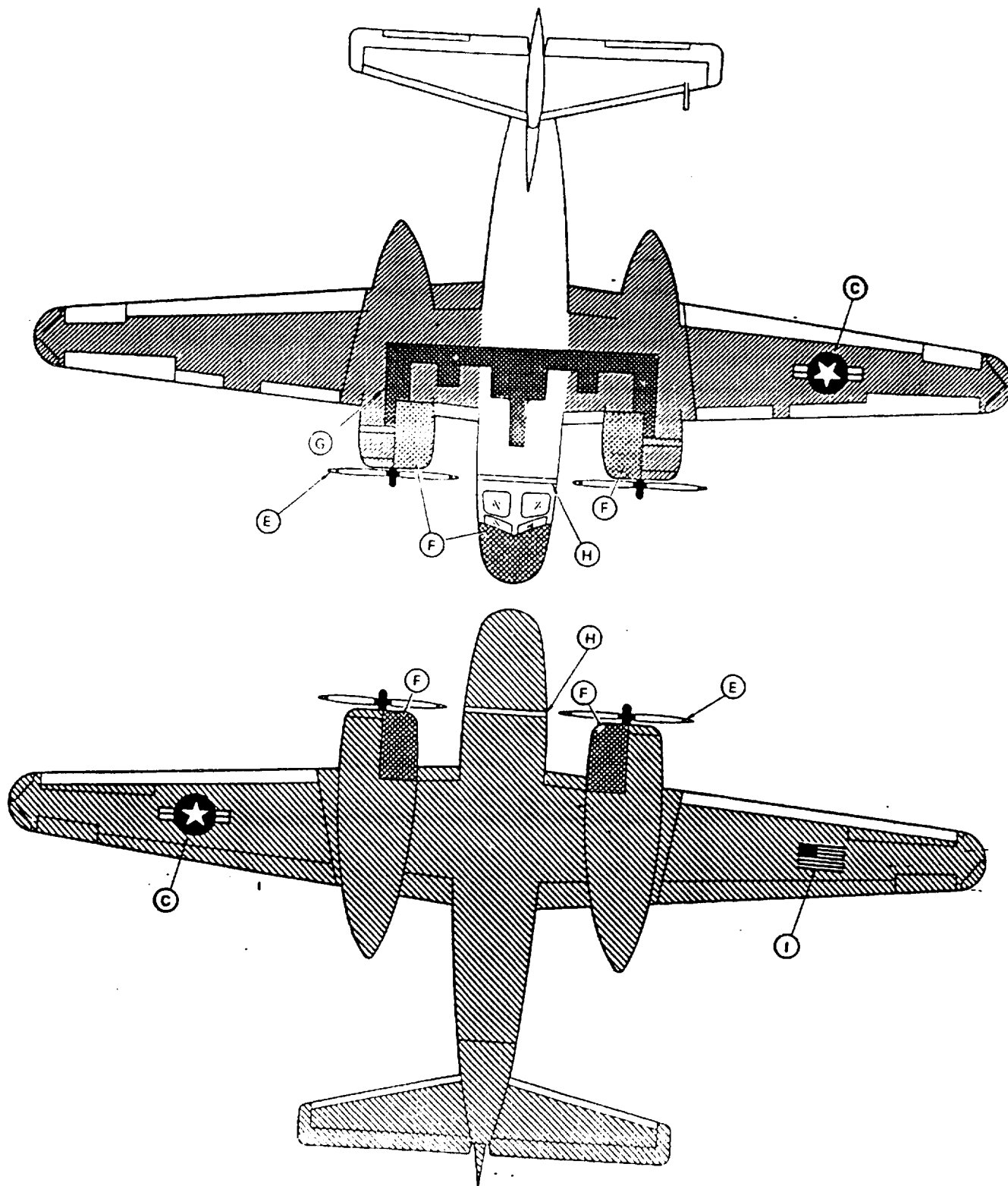


FIGURE D-1. C-1A aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|--|---------------|-------------------------|
| A. UNITED STATES NAVY | Fuselage | 16" | 17038 |
| B. Model Designation, Actt BUNO | Aft Fuselage Under Horizontal Stabilizer | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 40" 40" WG | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 16" | 17038 |
| E. Propeller Tips | N/A | 4"/4"/4" | 11136/17925/ 15102 |
| F. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| G. Unit Identifier | R.H. and L.H. Fwd. Fuselage | 9" | 17038 |
| H. Propeller Warning Band | Lower Fuselage Propeller Plane | 3" | 11136 |
| I. Navy | Lower L.H. Wing | 30" | 17038 |

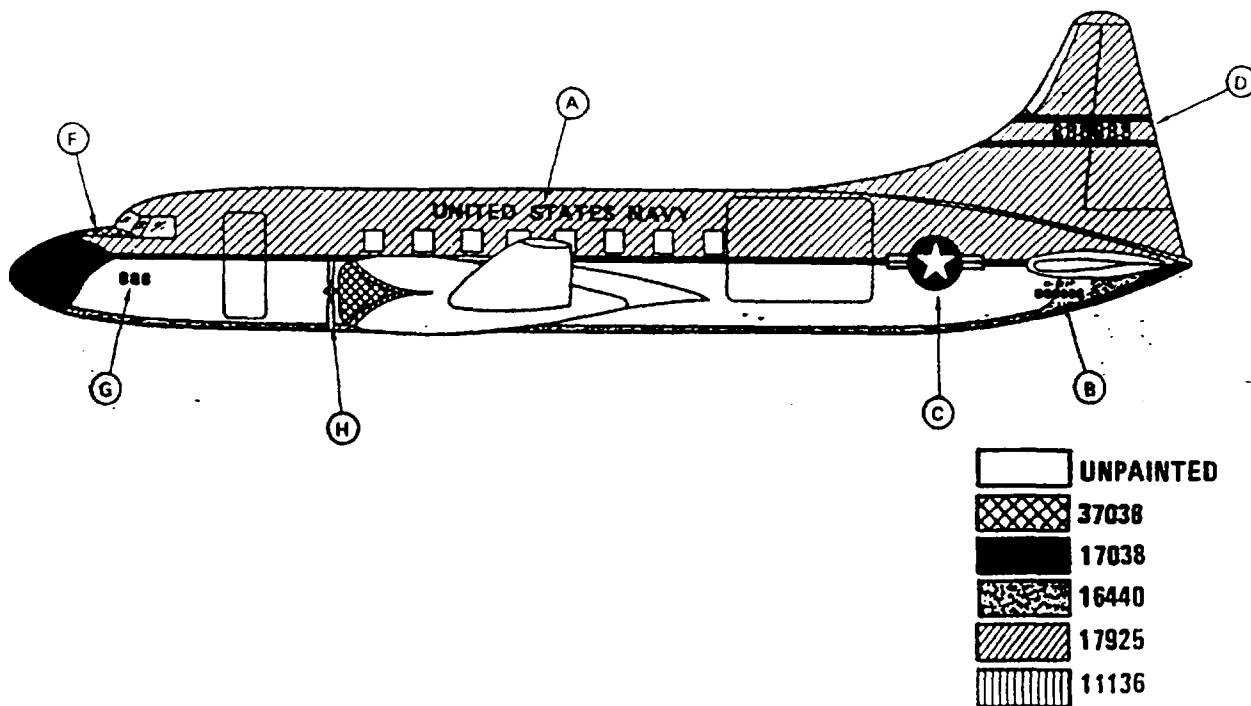


FIGURE D-2. C-131 aircraft marking (executive transport).

MIL-STD-2161A(AS)

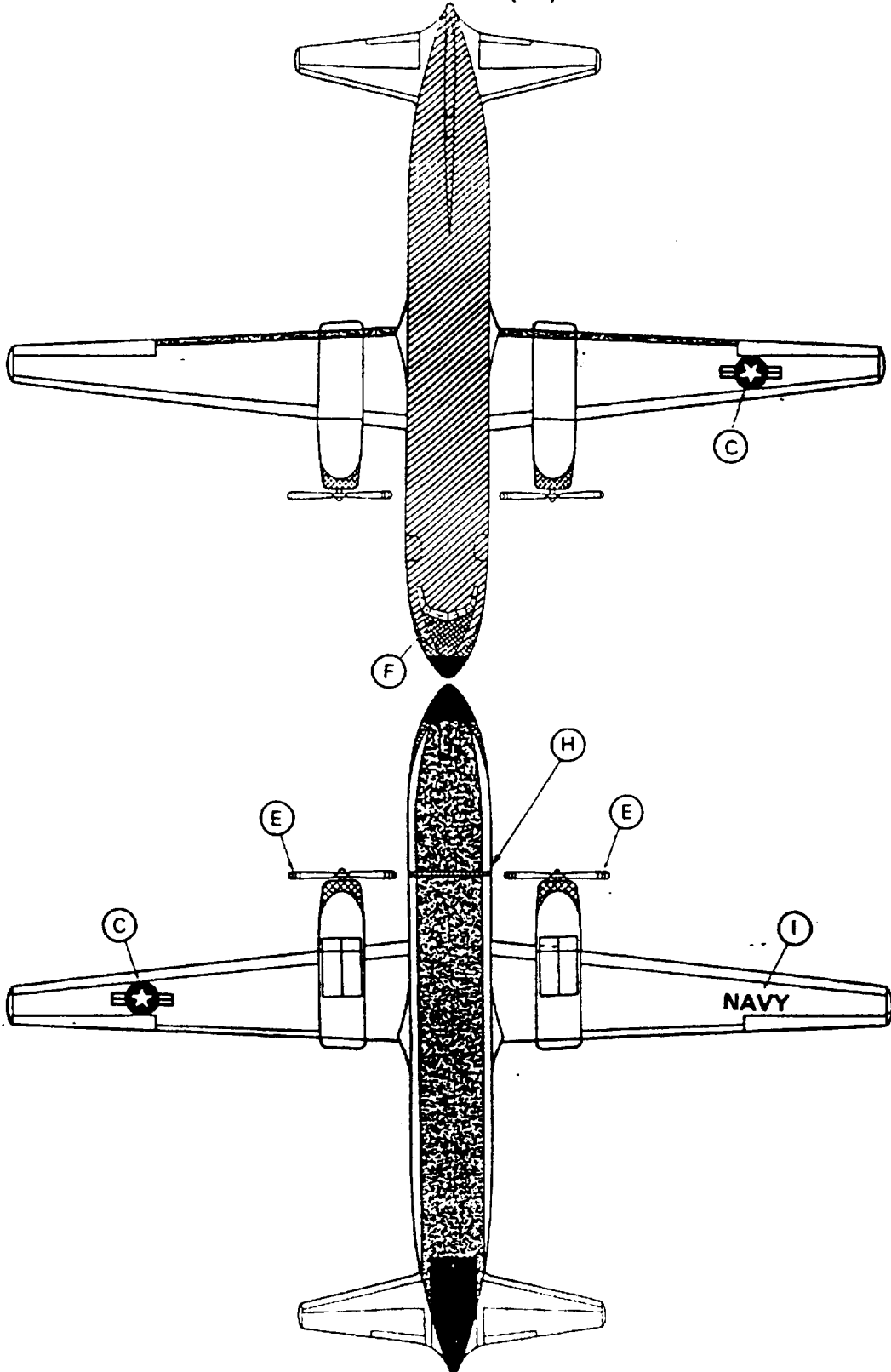


FIGURE D-2. C-131 aircraft marking (executive transport) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|---------------------|----------------------|
| A. UNITED STATES NAVY NAVY | Center Fuselage Lower L.H. Wing Upper R.H. Wing | 12" 20" | 17038 |
| B. Model Designation, Actt BUNO | | 2" 4" | 17038 |
| C. National Star | Engine Nacelle, Both Sides, Upper L.H. & Lower R.H. Wing | 13" | 11136/15044/17925 |
| D. U.S. Flag | Vertical Tail | 4 1/2" | 11136/15044/17925 |
| E. Call Numbers | Lower Vertical Stabilizer Fwd. Fuselage | 12" | 17038 |
| F. Intake Chevrons | Fwd. Engine Nacelle | | 11136 |
| G. Beware of Blast | Aft Engine Nacelle | | 11136 |
| H. Accent Stripe Below | Below Lower Window Line | 1/4 Border 1 3/4 | Gold Bronze 15044 |
| I. Anti Glare | | | 37038 |
| J. Walkway | | | 37038 |
| K. Unit Identifier | Fwd. Fuselage | 6" | 17038 |

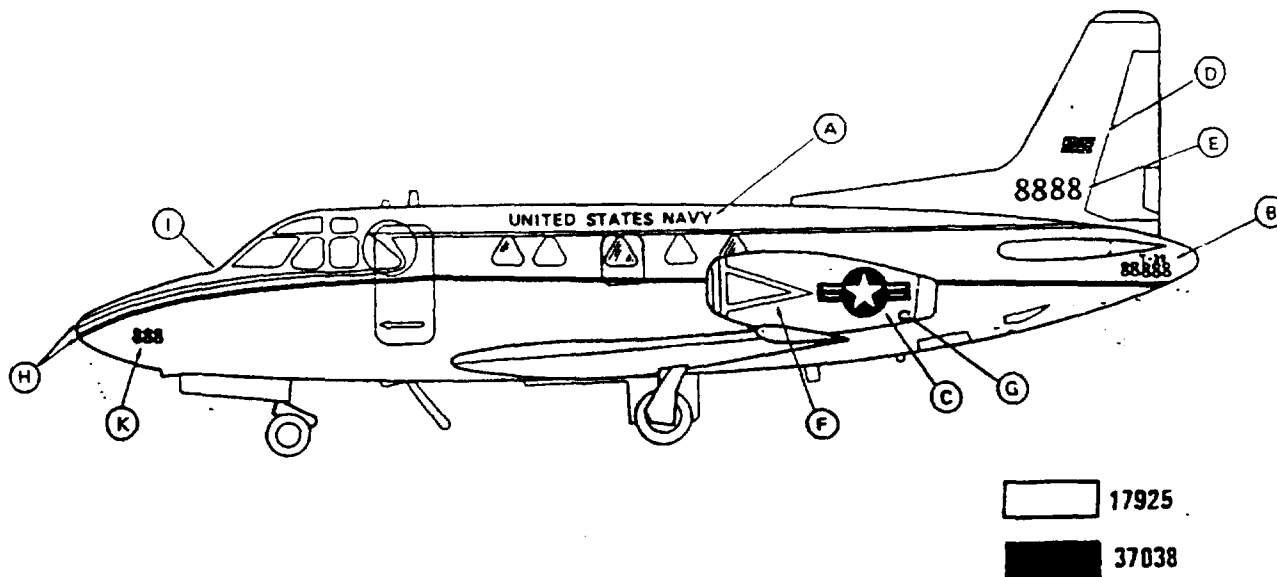


FIGURE D-3. CT-39E/G aircraft marking (Navy).

MIL-STD-2161A(AS)

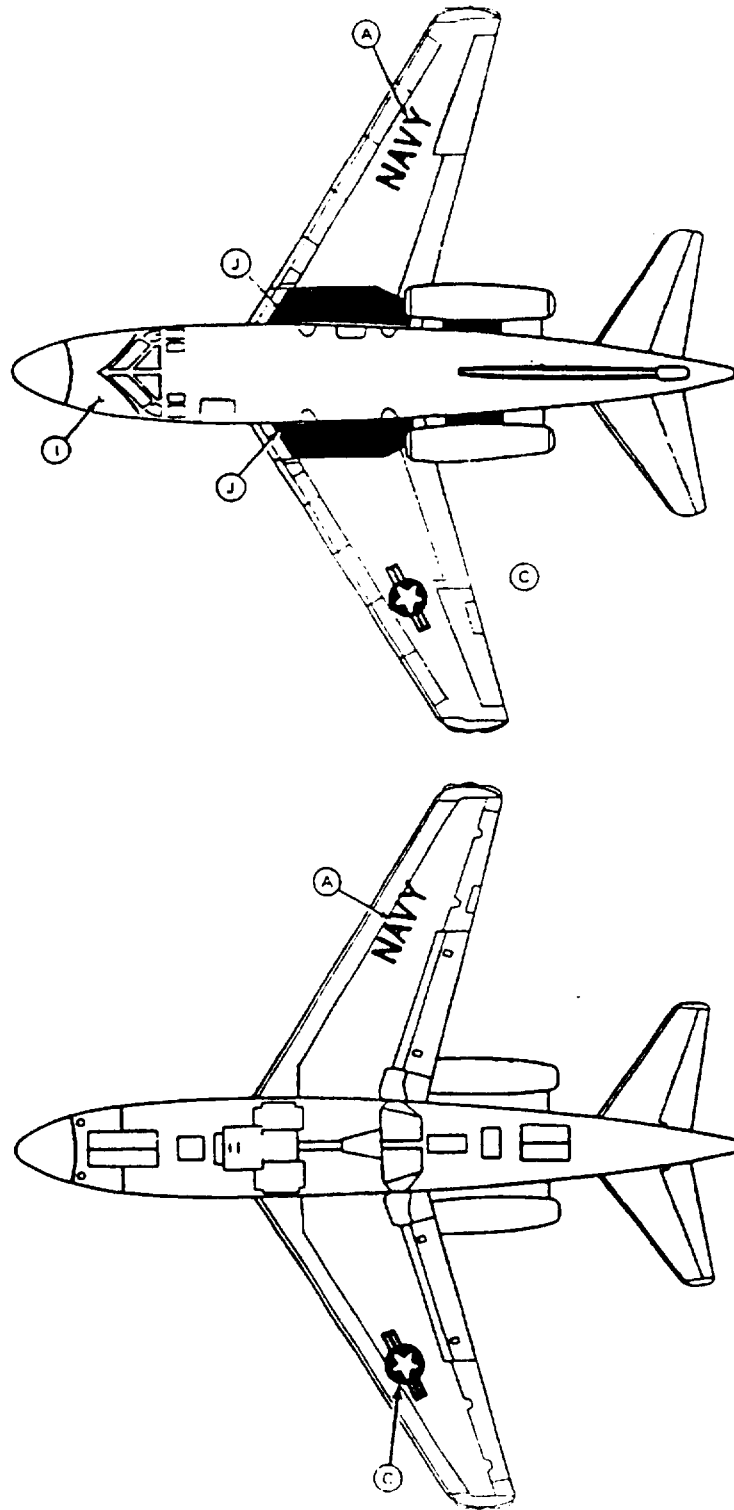


FIGURE D-3. CT-39E/G aircraft marking (Navy) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|---------------------|----------------------|
| A. UNITED STATES MARINES | Center Fuselage Lower L.H. Wing Upper R.H. Wing | 12" 20" | 17038 |
| B. Model Designation, Actt BUNO | | 2" 4" | 17038 |
| C. National Star | Engine Nacelle, Both Sides, Upper L.H. & Lower R.H. Wing | 13" | 11136/15044/17925 |
| D. U.S. Flag | Vertical Tail | 4 1/2" | 11136/15044/17925 |
| E. Call Numbers | Lower Vertical Stabilizer | 12" | 17038 |
| F. Intake Chevrons | Fwd. Engine Nacelle | | 11136 |
| G. Beware of Blast | Aft Engine Nacelle | | 11136 |
| H. Accent Stripe Below | Below Lower Window Line | 1/4 Border 1 3/4 | Gold Bronze 11136 |
| I. Anti Glare | Fwd. of Windscreen | N/A | 37038 |
| J. Walkway | | | 37038 |
| K. Unit Identifier | Fwd. Fuselage | 6" | 17038 |

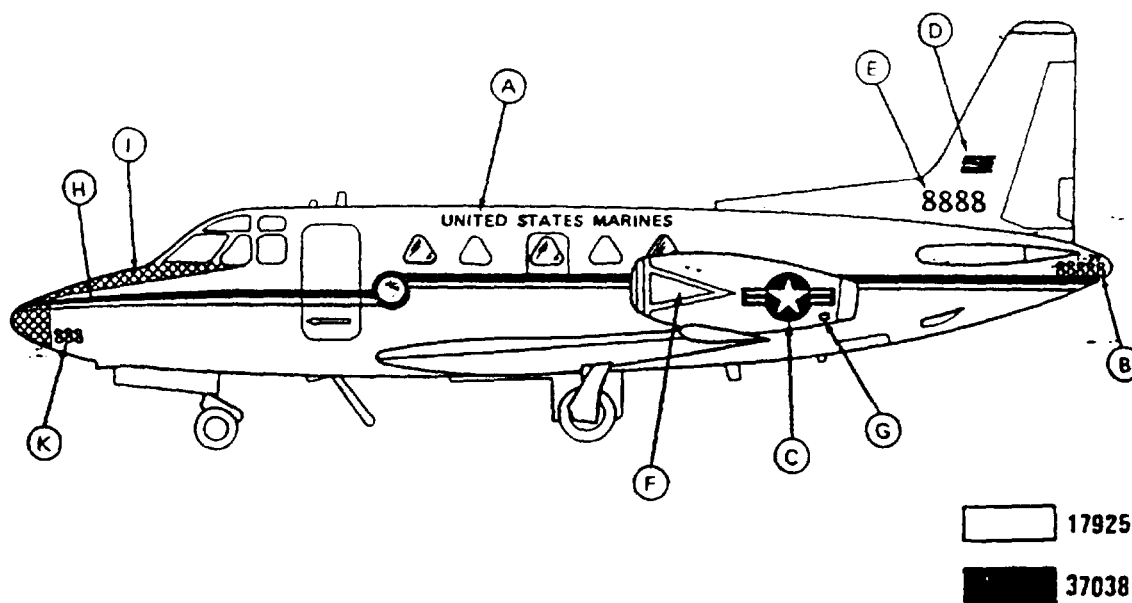


FIGURE D-4. CT-39G aircraft marking (Marine).

MIL-STD-2161A(AS)

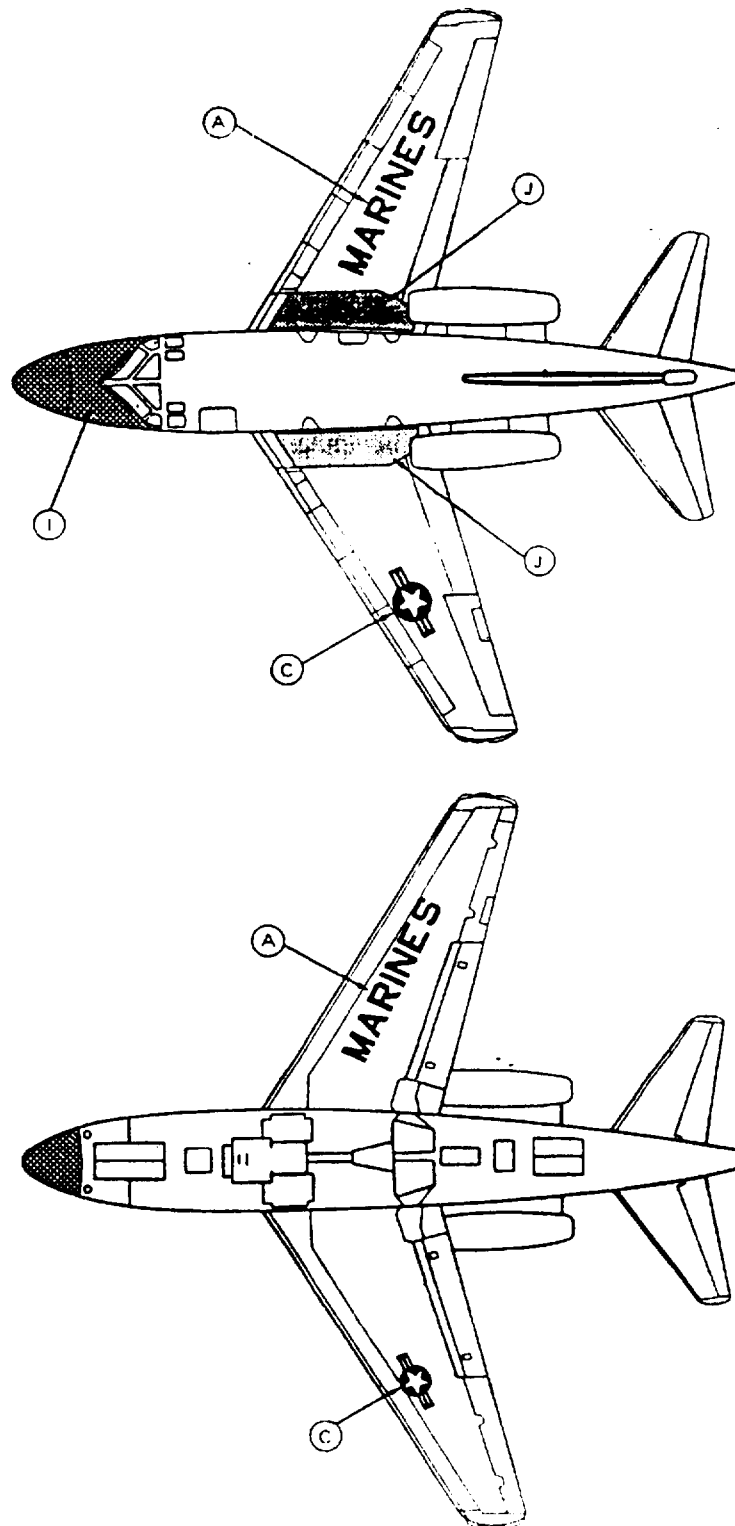


FIGURE D-4. CT-39G aircraft marking (Marine) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|--|---|---------------------|-------------------------|
| A. UNITED STATES NAVY | Center Fuselage Lower L.H. Wing | 12" 20" | 15044 |
| B. Model Designation, A/cft BUONO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Fuselage Side Upper L.H. Wing Lower R.H. Wing | 20" 30" 30" | 11136 15044 17925 |
| D. UNITED STATES NAVAL ATTACHÉ NAVAL ATTACHÉ DES ETATS LORS EN FRANCE | Fwd. Fuselage | 2" | 17038 |
| E. Call Numbers | Lower Vertical Stabilizer | 12" | 17038 |
| F. Intake Warning | Fwd. Engine Nacelle | | 11136 |
| G. Beware of Blast | Aft Engine Nacelle | | 11136 |
| H. Accent Stripe | Below Lower Window Line | 1/4 Border 1 3/4 | Gold Bronze 11136 |
| J. Walkway | Wings and Engine Mounts Adjacent to Fuselage | | 37038 |
| J. Bare Metal Finish | Engine Inlet and Exhaust Nacelles | N/A | N/A |
| K. Antiglare | Fwd. Nose Section | N/A | 37038 |
| L. Flag | Vertical Tail Lower L. H. Wing | See Para. 5.2.7 | IAW Para. 5.2.3 |
| M. Rescue Arrow | Fwd. Fuselage | 24" | 17038/13538 |

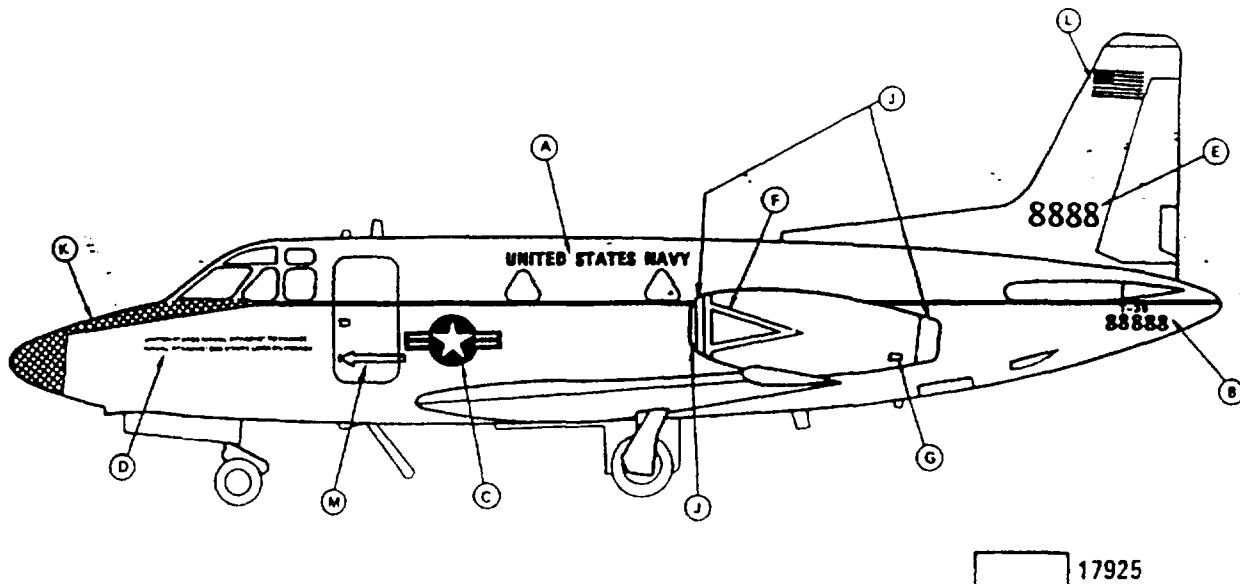


FIGURE D-5. T-39 aircraft marking (naval attache).

MIL-STD-2161A(AS)

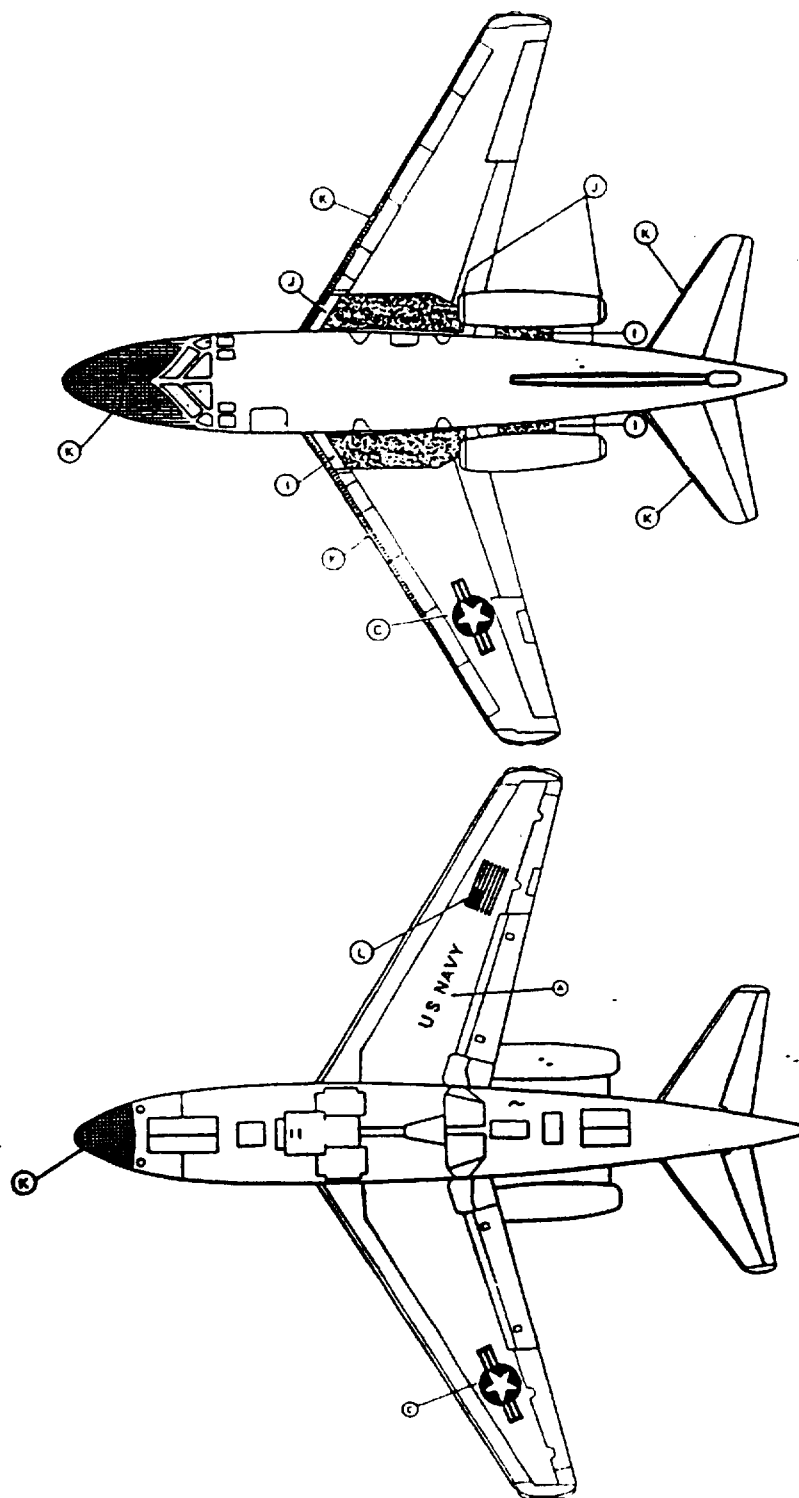
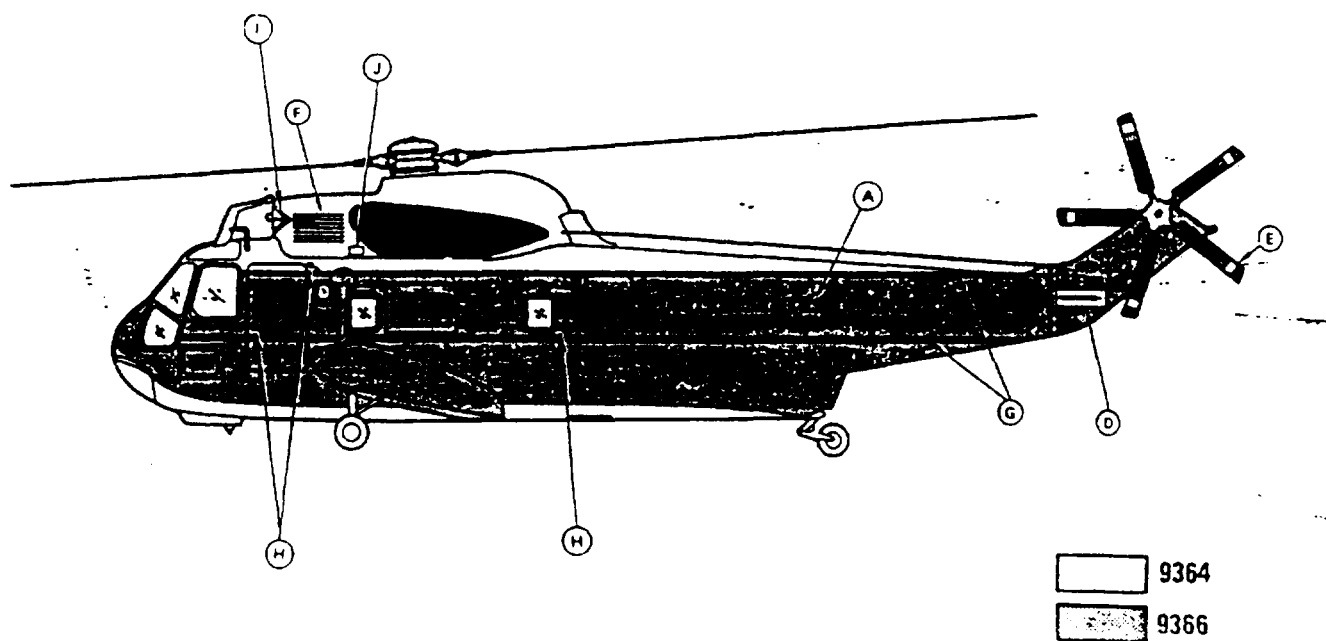


FIGURE D-5. T-39 aircraft marking (naval attache) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|-----------------------------|--|------------|----------------------------|
| A. UNITED STATES OF AMERICA | Fuselage Tail Boom | 8" | 17038 |
| B. National Star | Center Lower Fuselage Upper Tail Horizontal | 30" 25" | 11136 15044 17925 |
| C. Wheel Wells | N/A | N/A | Alaska White |
| D. Tail Rotor Warning | Aft Fuselage | 35" | 11136/13538 |
| E. Tail Rotor | N/A | 4"/4"/4" | 11136/17925 11136/17038 |
| F. Flag | Forward Engine Nacelle | 18 X 34" | 11136 15044 17925 |
| G. Accent Strips | Per Drawing | 4" | 9366/9364 |
| H. Rescue Arrow | Fwd. Fuselage | 24" | 17038/13538 |
| I. Intake Warning | Fwd. Engine Nacelle | 16" | 17925/11136 |
| J. Beware of Blast | Engine Exhaust Nacelle | 22" | 17925/11136 |
| K. Walkway | Top Fwd. Fuselage and Landing Gear Housing | N/A | 17038 |

FIGURE D-6. VH-3D presidential helicopter marking.

MIL-STD-2161A(AS)

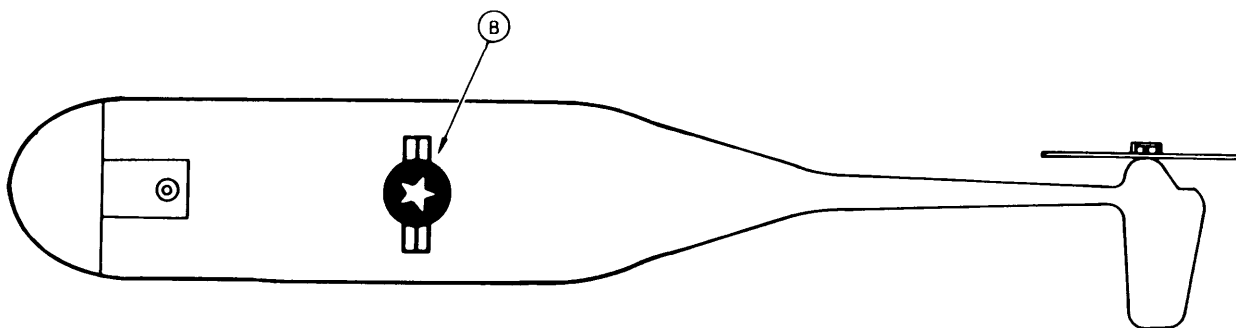
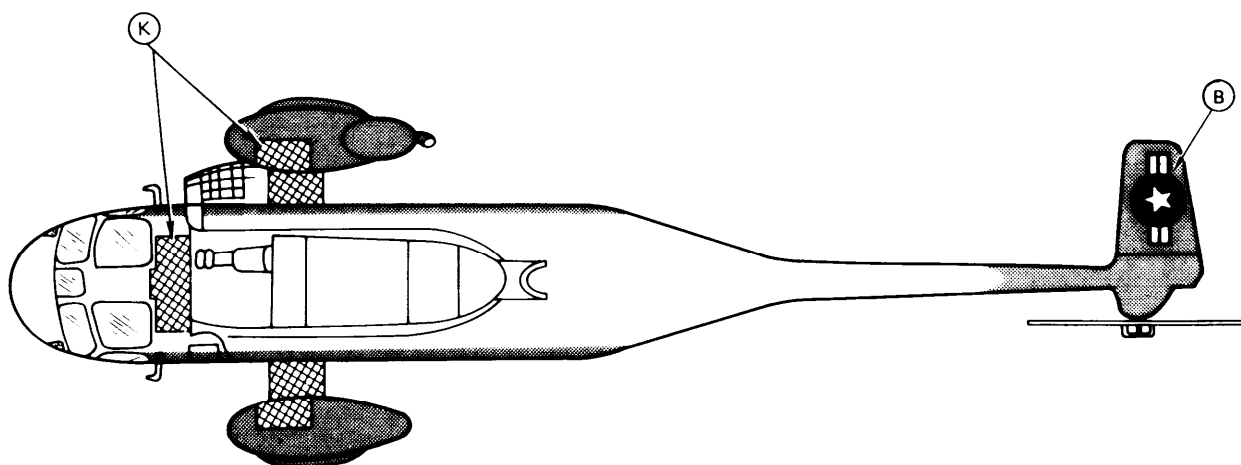


FIGURE D-6. VH-3D presidential helicopter marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|-------------------------|
| A. UNITED STATES NAVY | Fwd. Fuselage | 16" | 17038 |
| B. Model Designation, Acft BUNO | Aft Fuselage | 2" 4" | 17038 |
| C. National Star | Engine Pod Upper L.H. Wing Lower R.H. Wing | 28" 34" 34" | 11136 15044 17925 |
| D. Call Numbers | Vertical Stabilizer | 16" | 17038 |
| E. Navy | Upper R.H. Wing Lower L. H. Wing | 36" | 17038 |
| F. Bare Metal | Wing Leading Edge Cap (Slats); Engine Tail Pipe; Forward Portion Flap Hinge Fairings; Leading Edge, Engine Pylons; Engine Fwd. Nacelles; & Rub Area, Horizontal Stabilizer | Per Drawing | N/A |
| G. Gold Stripe | Center Fuselage | 6" | Gold |
| H. Blue Stripe | Center Fuselage | 12" | 15044 |
| I. Unit Aircraft Numbers | Wings Fwd. Fuselage | 16" 16" | 17038 |
| J. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| K. Unit Identifier | Vertical Fin Upper Right Wing Lower Left Wing | 36" 16" 16" | 17038 17038 17038 |
| L. Logo (Optional) | See Para. 5.2.1 | See Para. 5.2.1 | |
| M. Flag | Upper Vertical Fin | 26" x 46" | 11136 15044 17925 |
| N. Erosion Boot | Nose | Per Drawing | 17038 |
| O. Activity Name | Nose | 3" | 17038 |

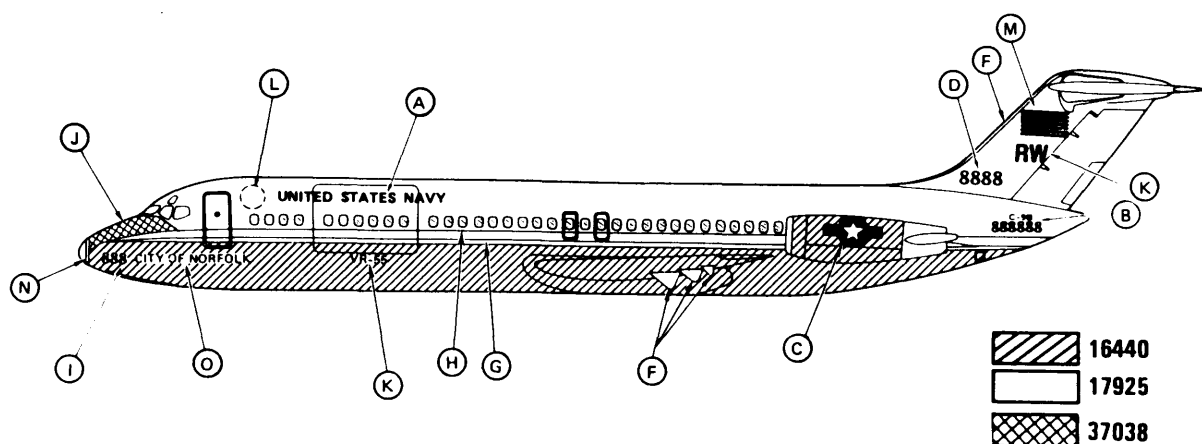


FIGURE D-7. C-9B aircraft marking (Navy).

MIL-STD-2161A(AS)

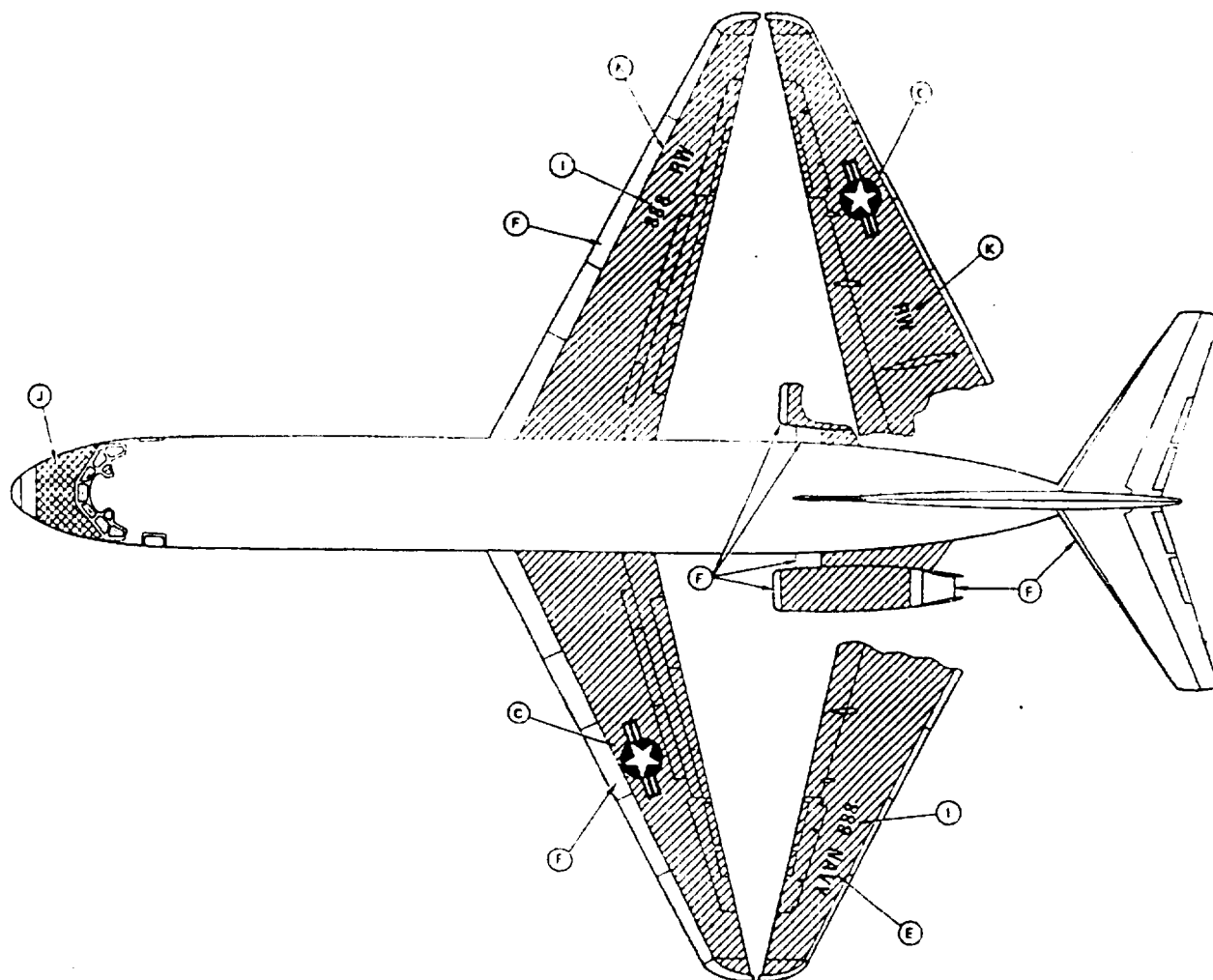


FIGURE D-7. C-9B aircraft marking (Navy) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|-------------------|-------------------------|
| A. UNITED STATES MARINES | Fwd. Fuselage | 12" | 17038 |
| B. Model Designation, Actt BUNO | Aft Fuselage | 4" 2" | 17038 |
| C. National Star | Engine Pod Upper L.H. Wing Lower R.H. Wing | 25" 30" 30" | 11136 17925 15044 |
| D. Call Numbers | Vertical Stabilizer | 10" | 17038 |
| E. Marines | Upper R.H. Wing Lower L. H. Wing | 30" | 17038 |
| F. Bare Metal | Engine Inlet Nacelle Engine Exhaust Cowling Thrust Reversers Passenger Windows Borders | N/A | N/A |
| G. Red Stripe | Center Fuselage | 6" | 11136 |
| H. Yellow Stripe | Center Fuselage | 12" | 13538 |
| I. Unit Aircraft Numbers | Wing Fwd. Fuselage | 12" | 17038 |
| J. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| K. Unit Identifier | Fwd. Fuselage | 6" | 17038 |
| L. Logo (Optional) | Center Fuselage | 34" | IAW Squadron Policy |
| M. Flag | Upper Vertical Stabilizer | 25" x 48" | 11136 17925 15044 |
| N. Erosion Boot | Nose | Per Drawing | 17038 |

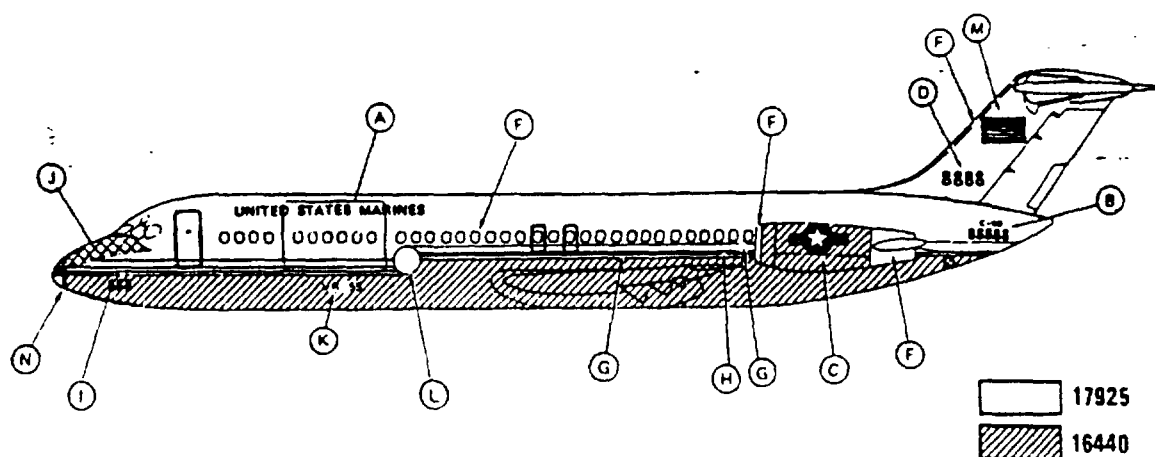


FIGURE D-8. C-9B aircraft marking (Marine).

MIL-STD-2161A(AS)

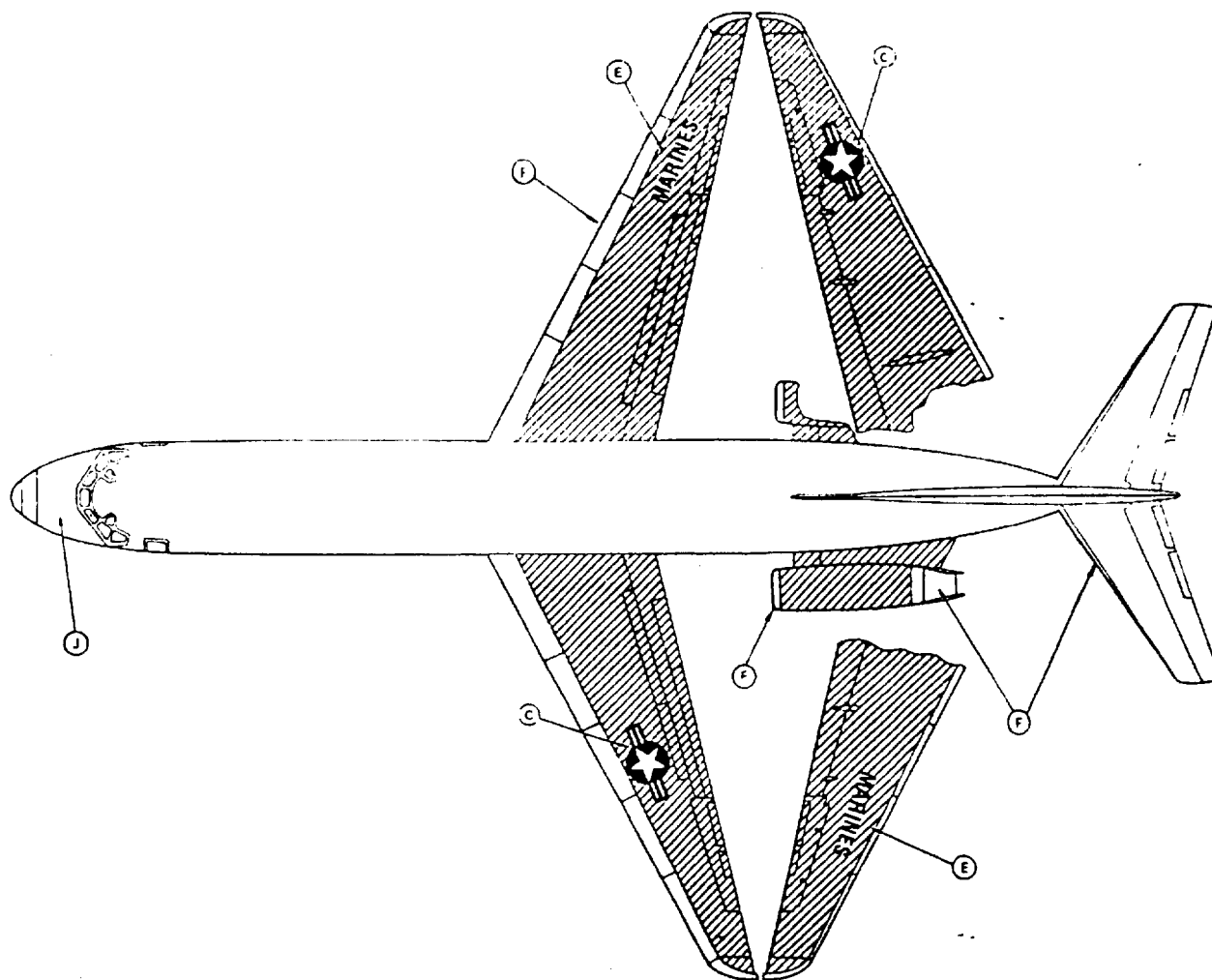
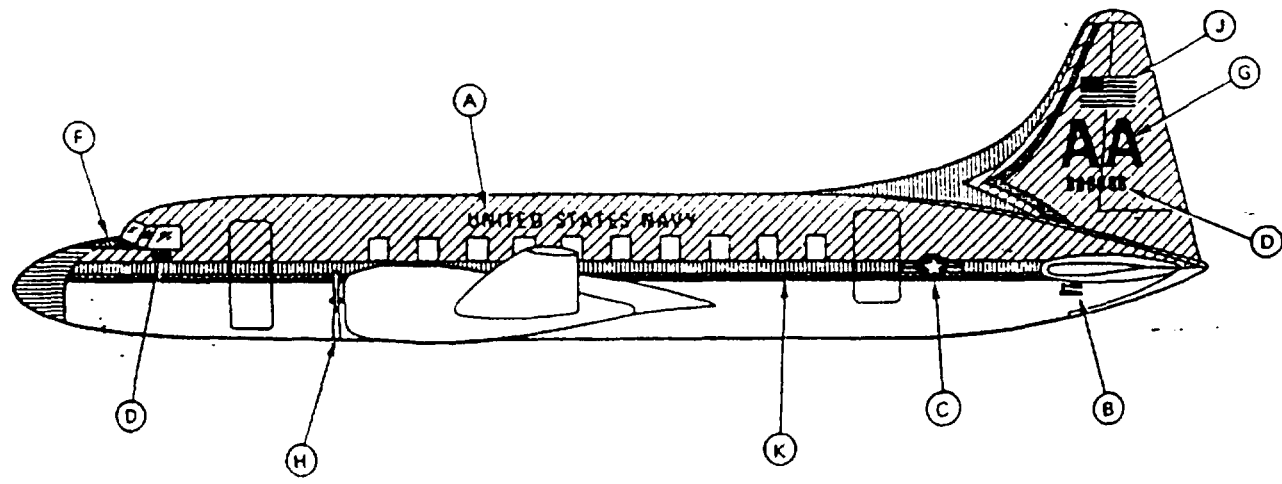


FIGURE D-8. C-9B aircraft marking (Marine) - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|---------------------------------|---|-----------------------------------|---------------------------------|
| A. UNITED STATES NAVY | Fuselage | 16" | 17038 |
| B. Model Designation, Aft BUINO | Aft Fuselage Under Horizontal Stabilizer | 2" 4" | 17038 |
| C. National Star | Aft Fuselage Upper L.H. Wing Lower R.H. Wing | 30" 40" | 11136 15044 17925 |
| D. Call Numbers | Fwd. Fuselage Vertical Stabilizer Upper R.H. & Lower L.H. Wing | 8" 12" 30" | 17038 |
| E. Propeller Tips | N/A | 4"x4"/4" | 11136/17925/15102 |
| F. Antiglare | Fwd. of Cockpit | N/A | 37038 |
| G. Unit Identifier | Vertical Stabilizer Upper & Lower R.H. Wing | 30" Upper 30" Lower 16" | 17038 |
| H. Propeller Warning Band | Lower Fuselage Propeller Plane | | 11136 |
| I. Navy | Lower L.H. Wing | 30" | 17038 |
| J. U.S. Flag | Upper Vertical Stabilizer | 21" x 40" | |
| K. Stripes | Fuselage | Upper 7" Middle 4" Lower 1" | 15044 Imron 44469UH 17038 |









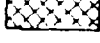
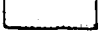
| | | | |
|---|-----------|---|---------------|
|  | UNPAINTED |  | 17038 |
|  | 16440 |  | 15044 |
|  | 17925 |  | 11136 |
|  | 37038 |  | IMRON 44469UH |

FIGURE D-9. C-131H aircraft marking.

MIL-STD-2161A(AS)

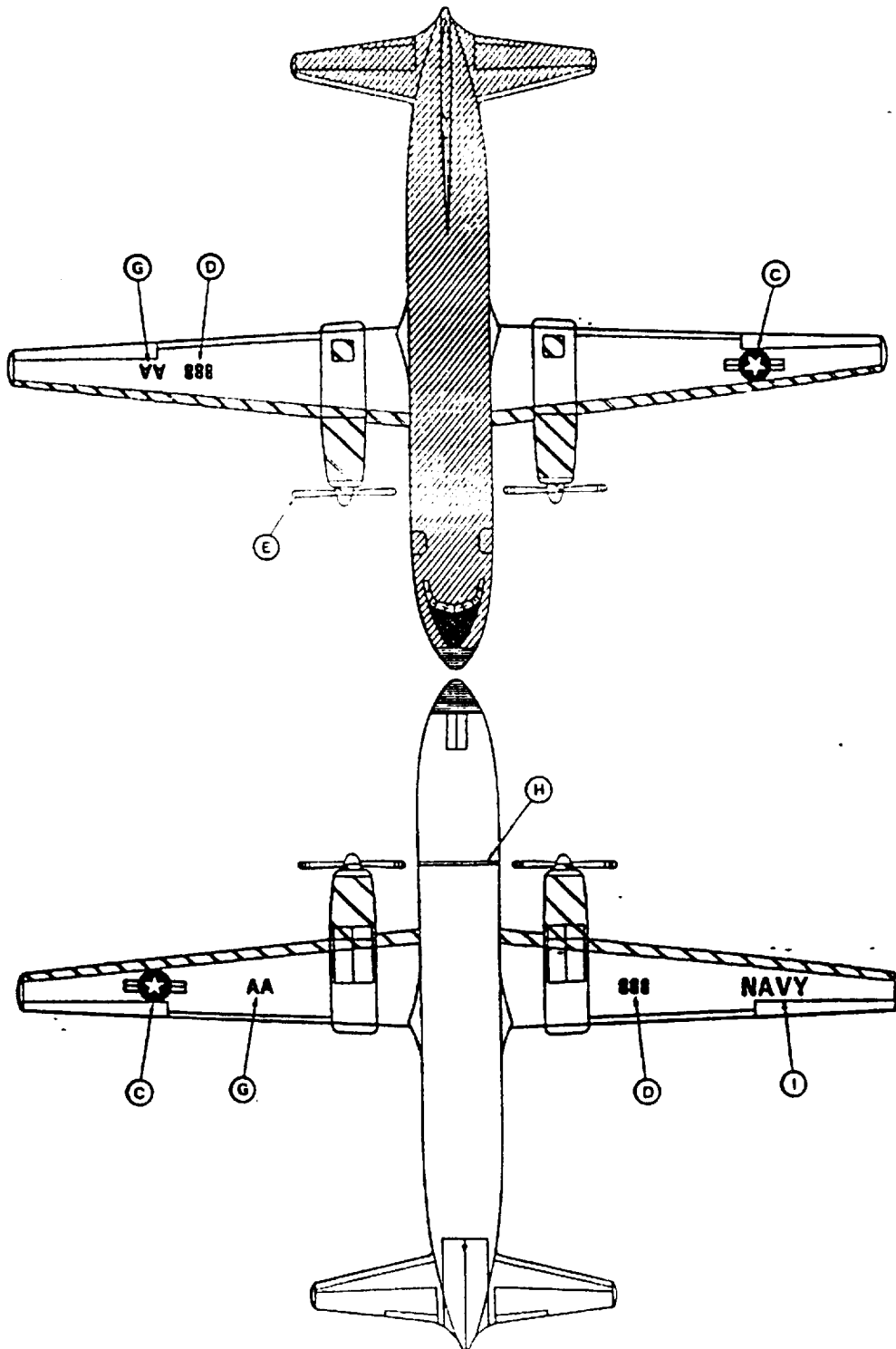


FIGURE D-9. C-131H aircraft marking - Continued.

MIL-STD-2161A(AS)

| 1. MARKING | 2. LOCATION | 3. SIZE | 4. COLOR NO/CODE |
|------------------------------------|--|-------------------|----------------------------|
| A. U.S. NAVY | Lower R.H. Wing Lower L.H. Wing | 24" | 11136 |
| B. Model Designation, Acdt BUNO | Aft Fuselage | 2" 4" | 11136 |
| C. National Star | Aft Fuselage Lower L.H. Wing Upper R.H. Wing | 25" 25" 25" | 17925/11136/15044 |
| D. Propeller Tips | Front Rear | 3"/6"/3" 4" | 17925/11136/17925 13538 |
| E. Antiglare | Aft Sides of Propeller | N/A | 37038 |
| F. Walkway | Per Drawing | N/A | 36440 |
| G. Fly Navy | Vertical Stabilizer (Both Sides) | 8" | 11136 |
| H. Accent Stripe | Fuselage Sides, Top of Wings & Top & Bottom of Horizontal Stabilizer | 2" | 11136 |
| I. "Navy Wings" | Fwd. Fuselage | 36" | 17038/Gold |

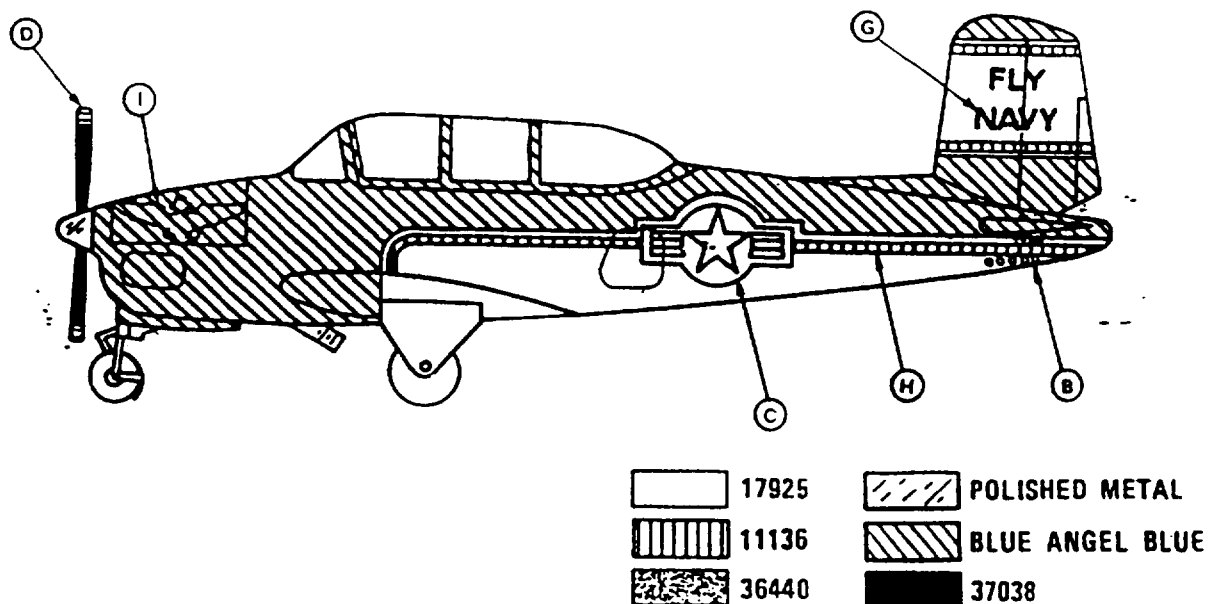


FIGURE D-10. T-34B aircraft marking (high visibility).

MIL-STD-2161A(AS)

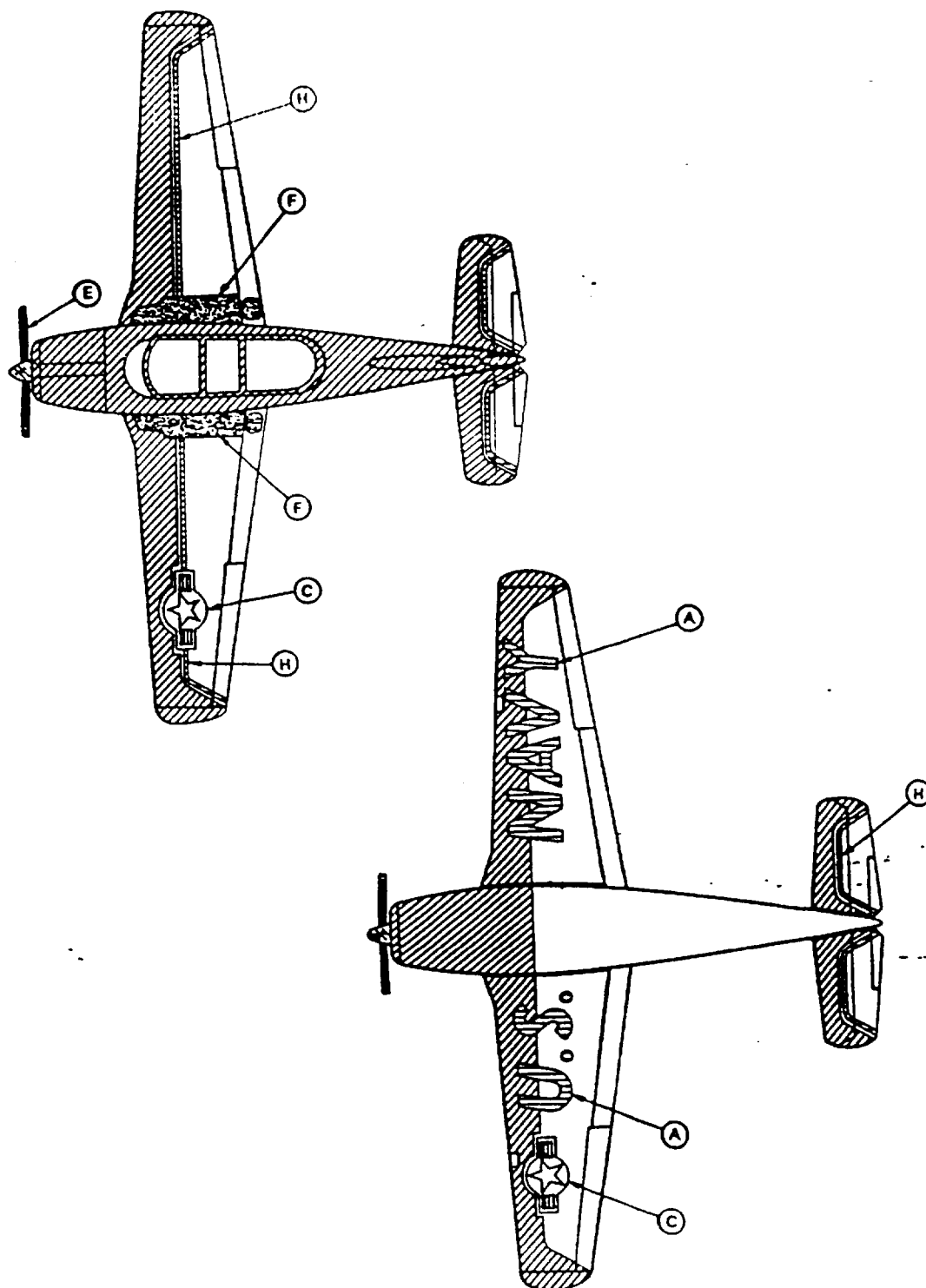


FIGURE D-10. T-34B aircraft marking (high visibility) - Continued.

MIL-STD-2161A(AS)

APPENDIX E

TACTICAL PAINT SCHEME PATTERNS

10. SCOPE

10.1 Scope. This Appendix illustrates paint schemes for tactical aircraft.

10.2 Use. This Appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS. This section is not applicable to this section.

30. DEFINITIONS

30.1 Definitions. For purposes of this Appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 Aircraft paint schemes. The following figures illustrate paint schemes for tactical aircraft.

MIL-STD-2161A(AS)

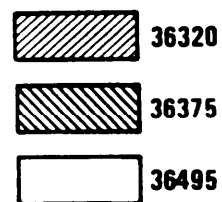
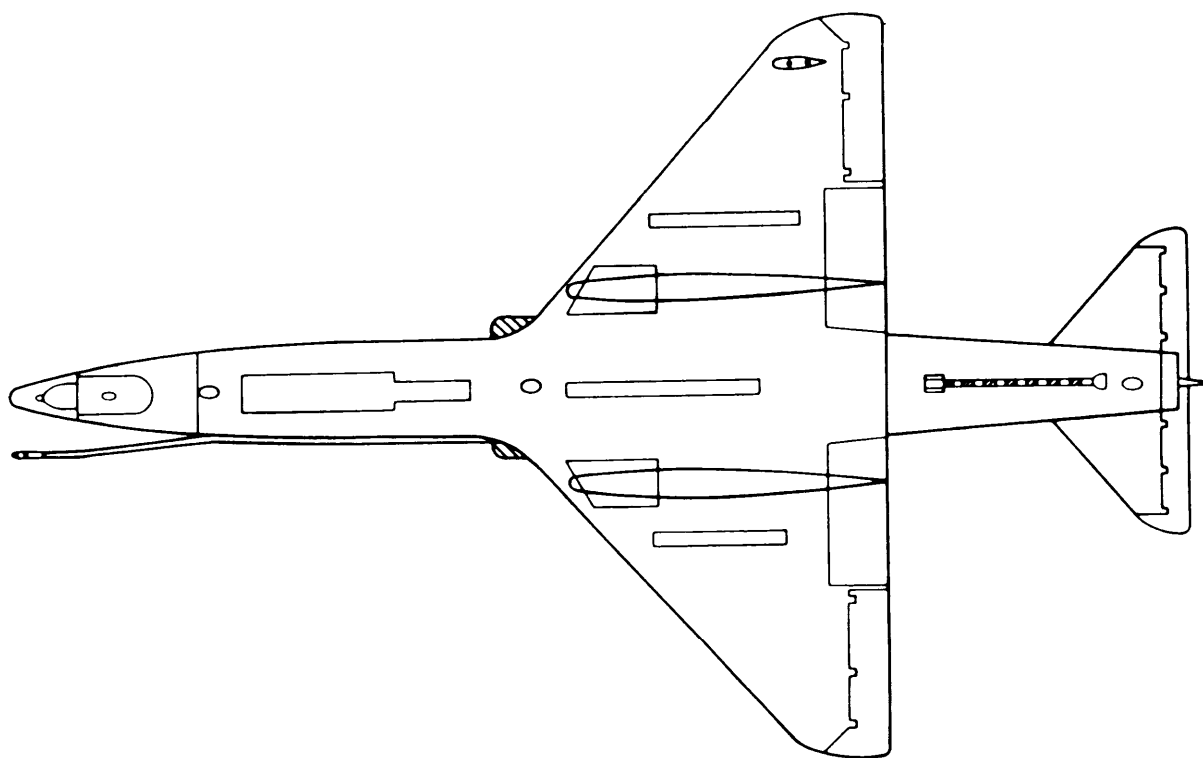


FIGURE E-1. A/TA-4 tactical paint scheme.

MIL-STD-2161A(AS)

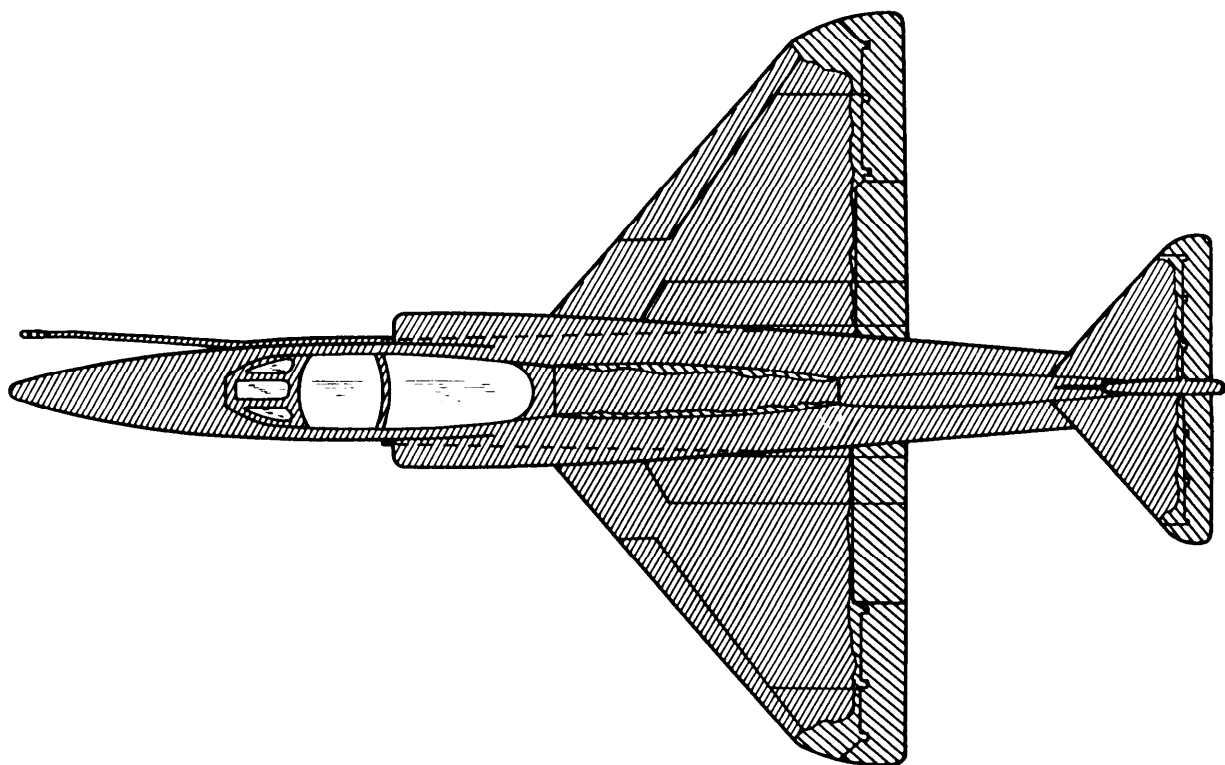
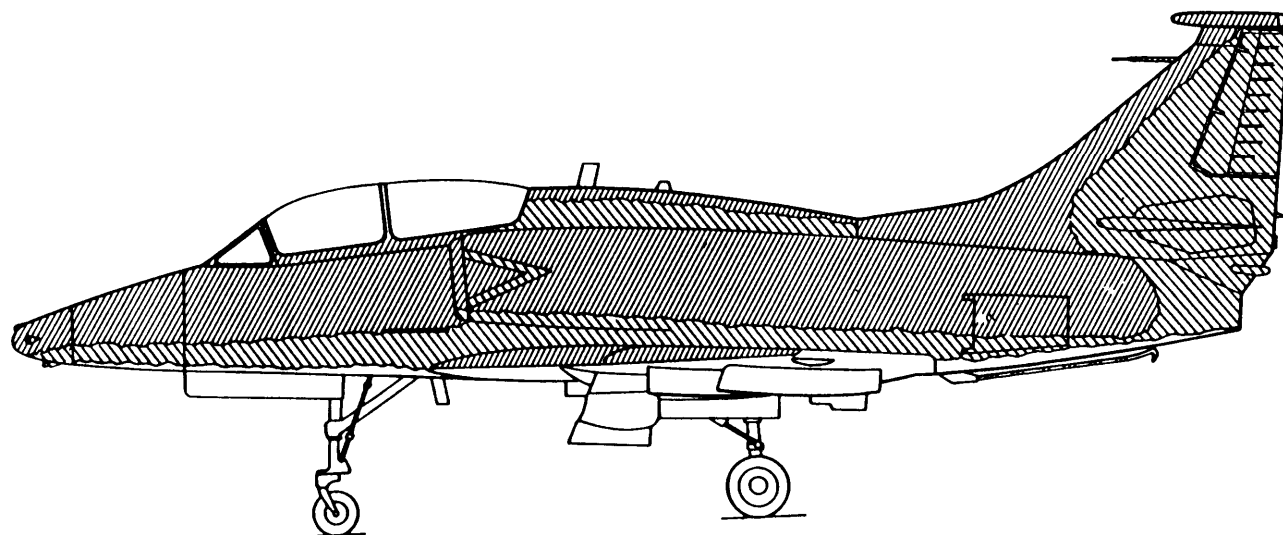


FIGURE E-1. A/TA-4 tactical paint scheme - Continued.

MIL-STD-2161A(AS)

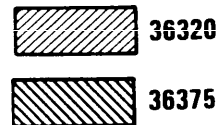
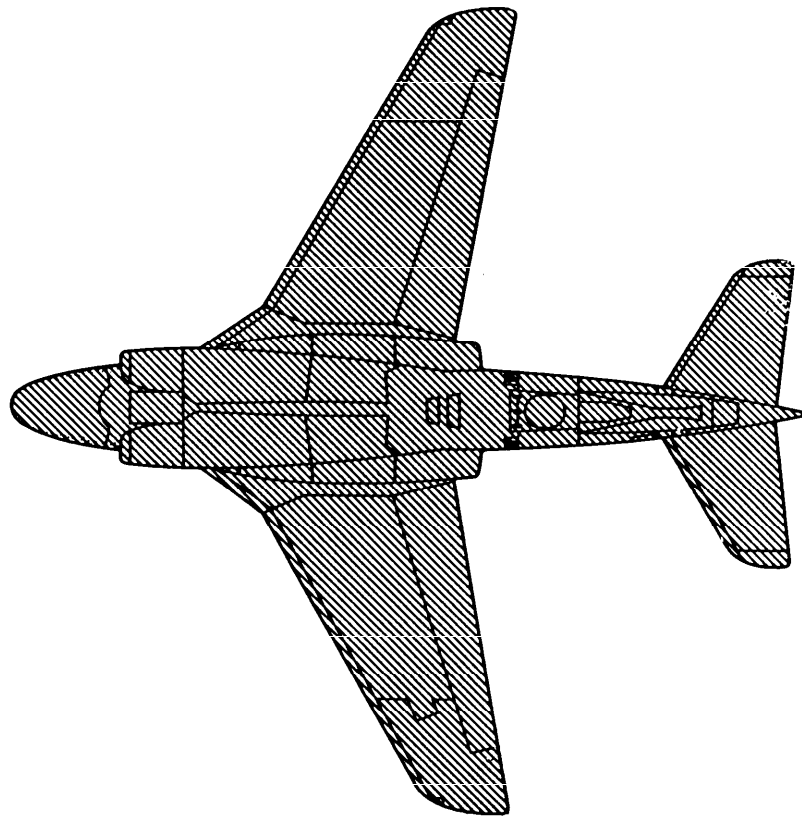


FIGURE E-2. A-6 tactical paint scheme.

MIL-STD-2161A(AS)

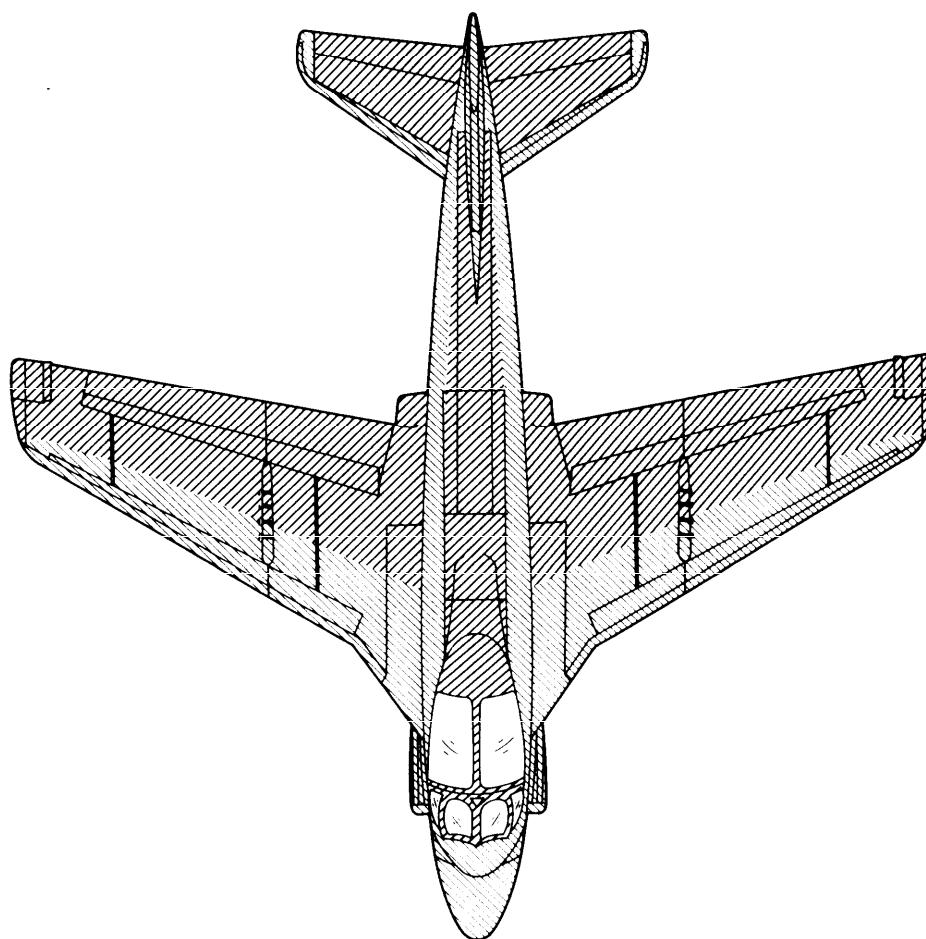
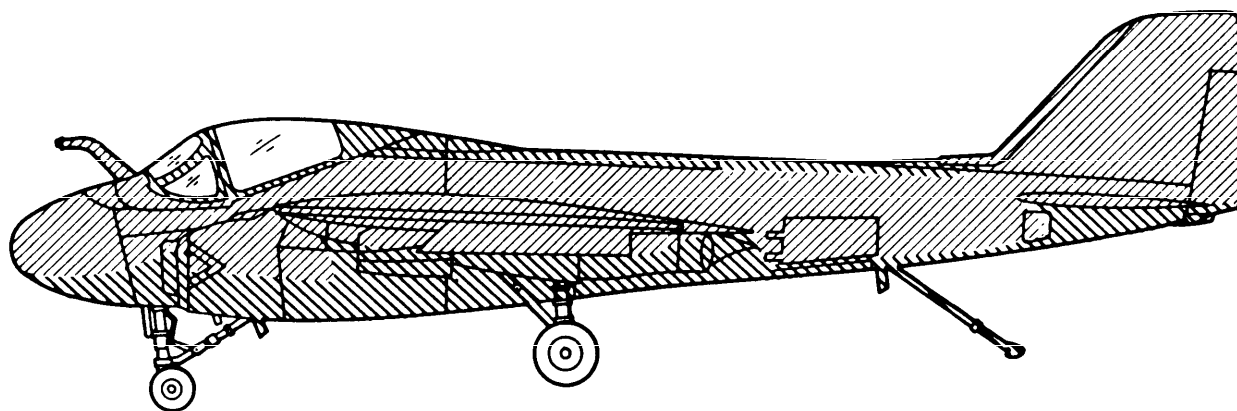


FIGURE E-2. A-6 tactical paint scheme - Continued.

MIL-STD-2161A(AS)

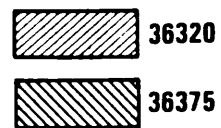
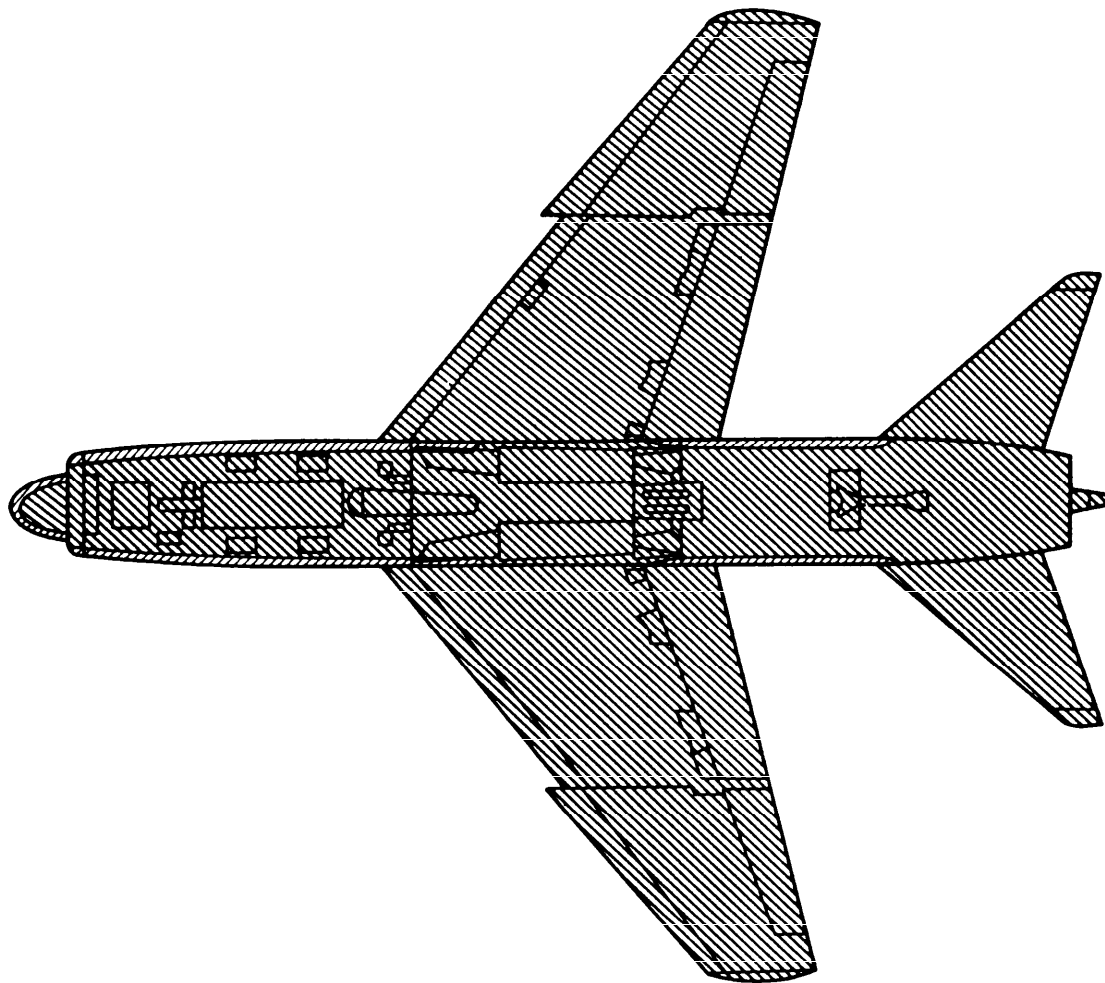


FIGURE E-3. A-7 tactical paint scheme.

MIL-STD-2161A(AS)

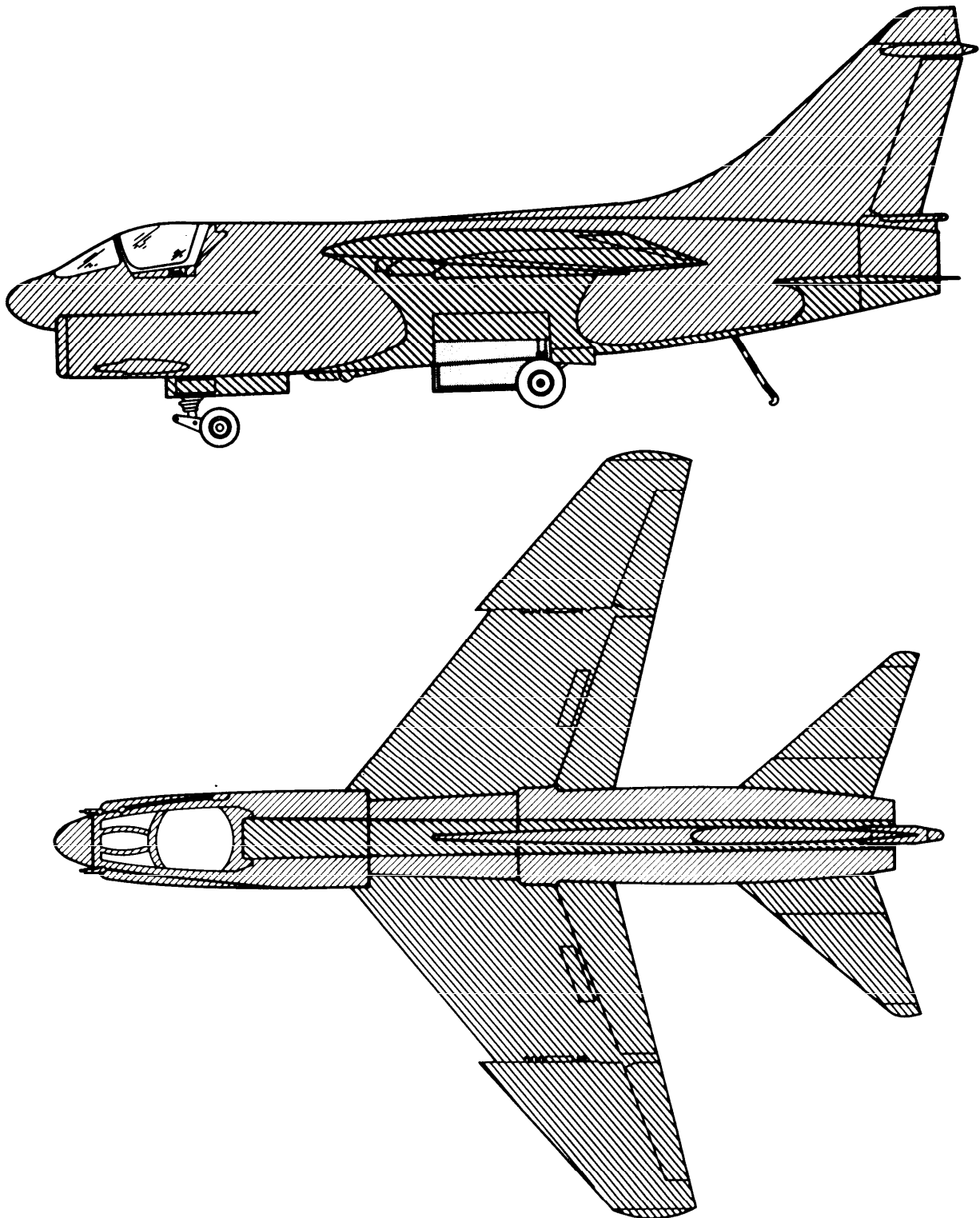


FIGURE E-3. A-7 tactical paint scheme - Continued.

MIL-STD-2161A(AS)

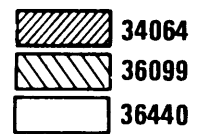
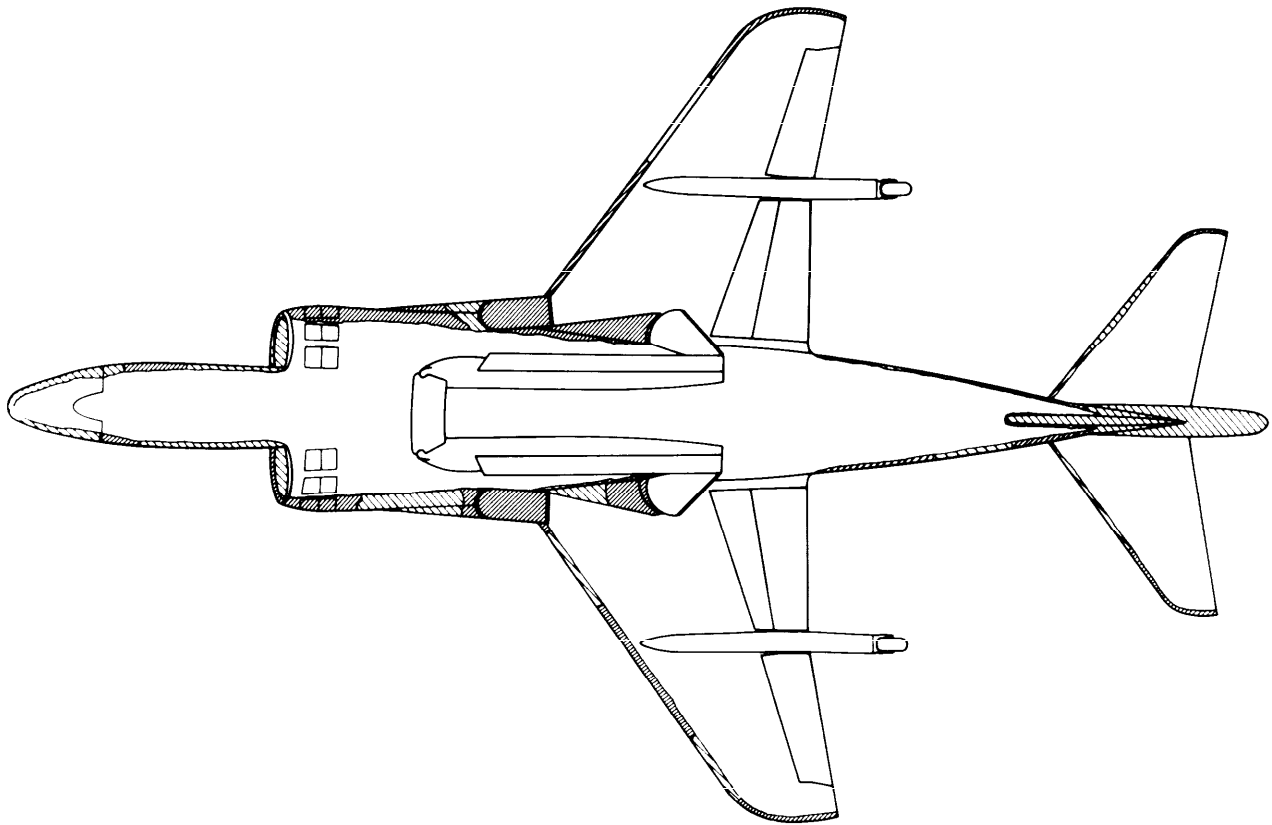


FIGURE E-4. AV-8B land camouflage paint scheme.

MIL-STD-2161A(AS)

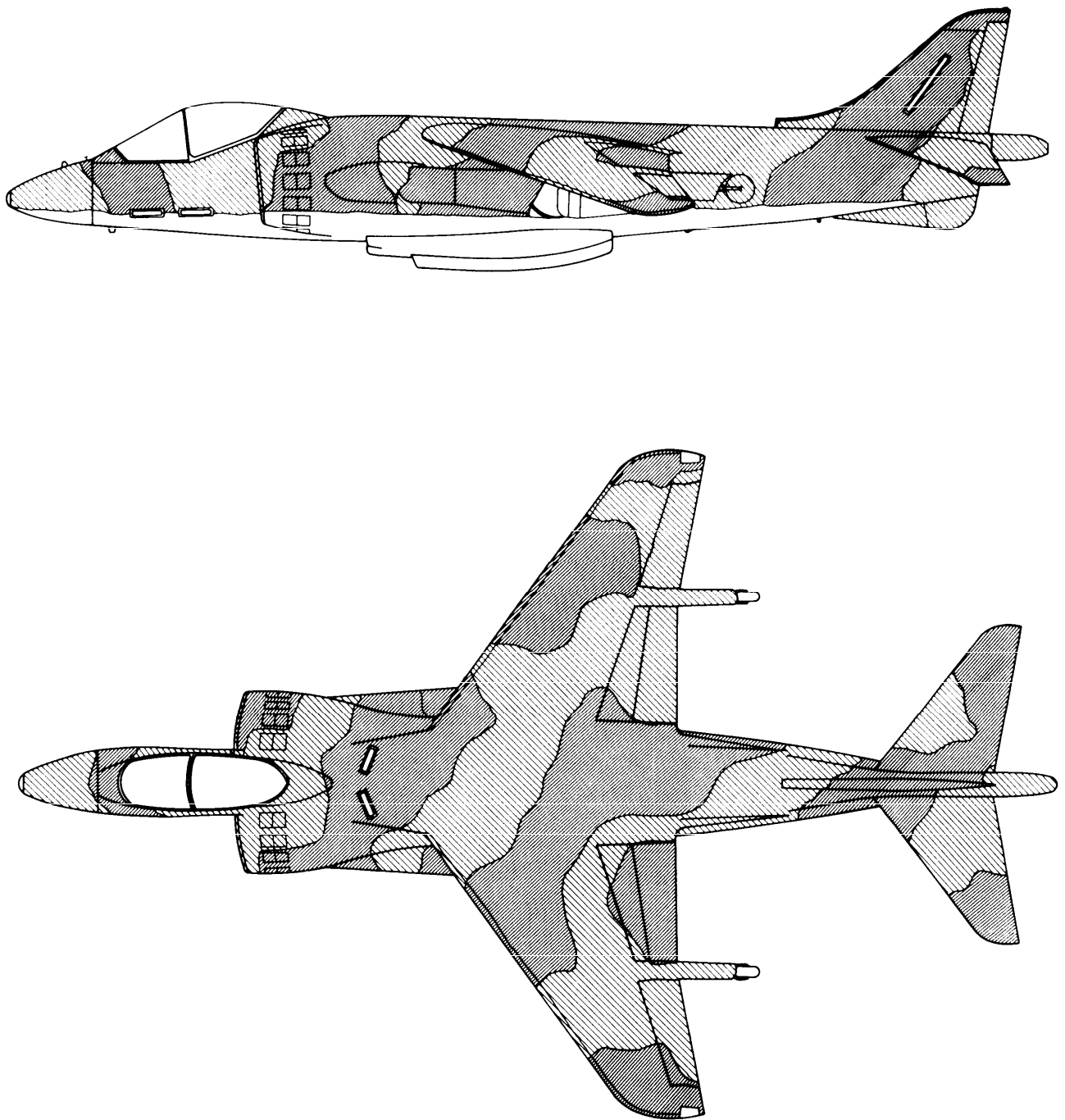


FIGURE E-4. AV-8B land camouflage paint scheme - Continued.

MIL-STD-2161A(AS)

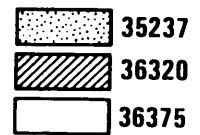
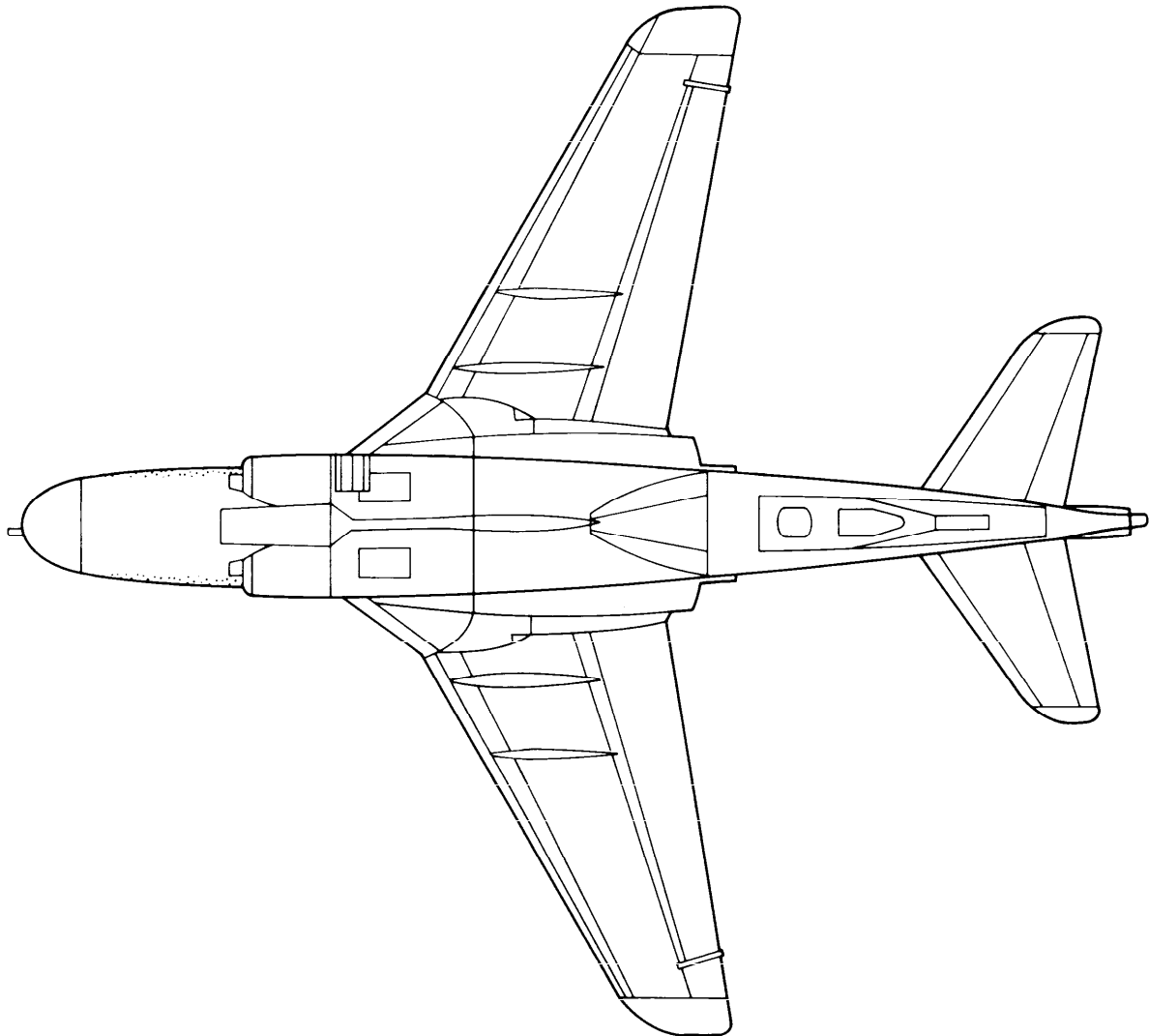


FIGURE E-5. EA-6B tactical paint scheme.

MIL-STD-2161A(AS)

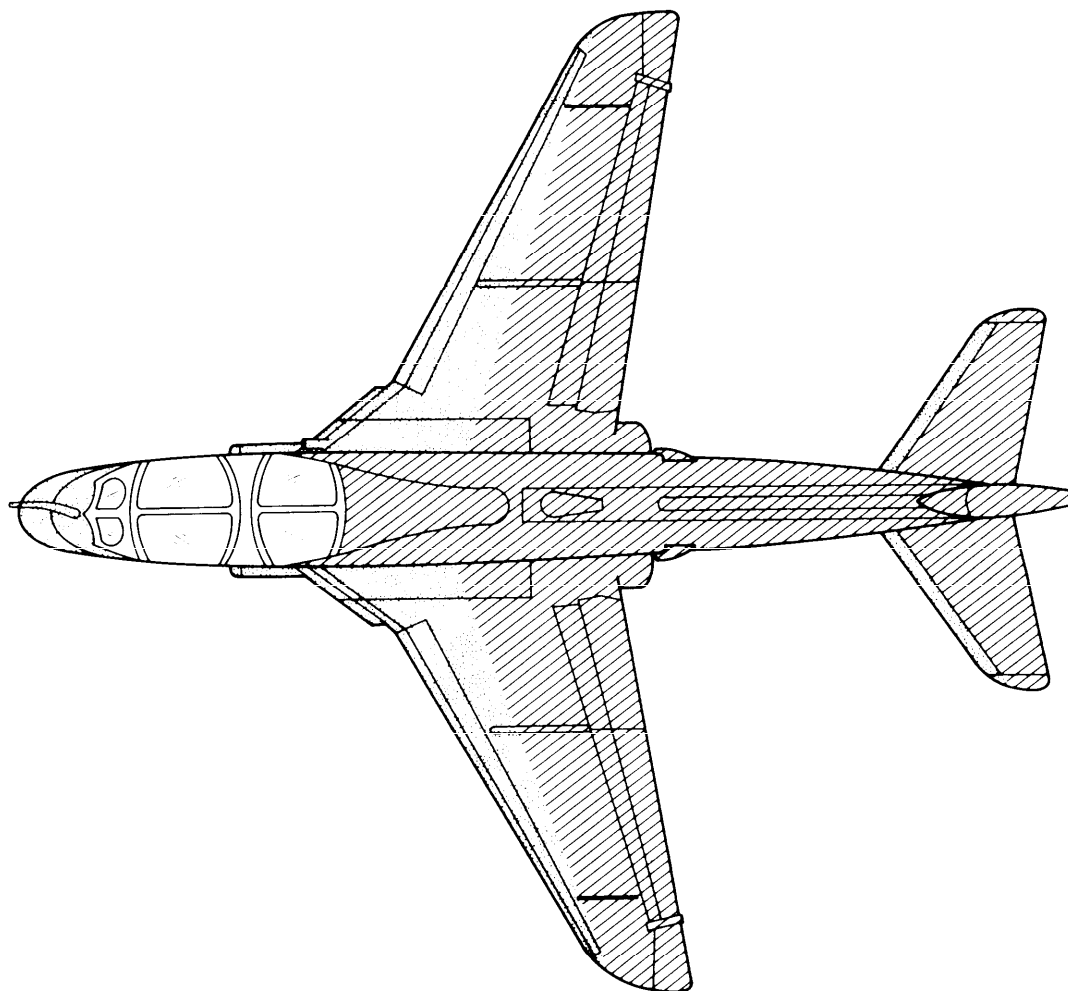
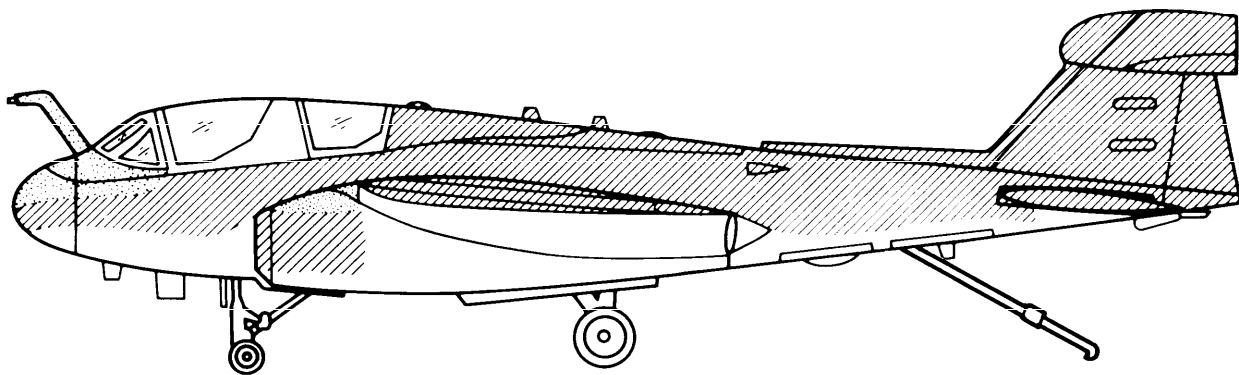
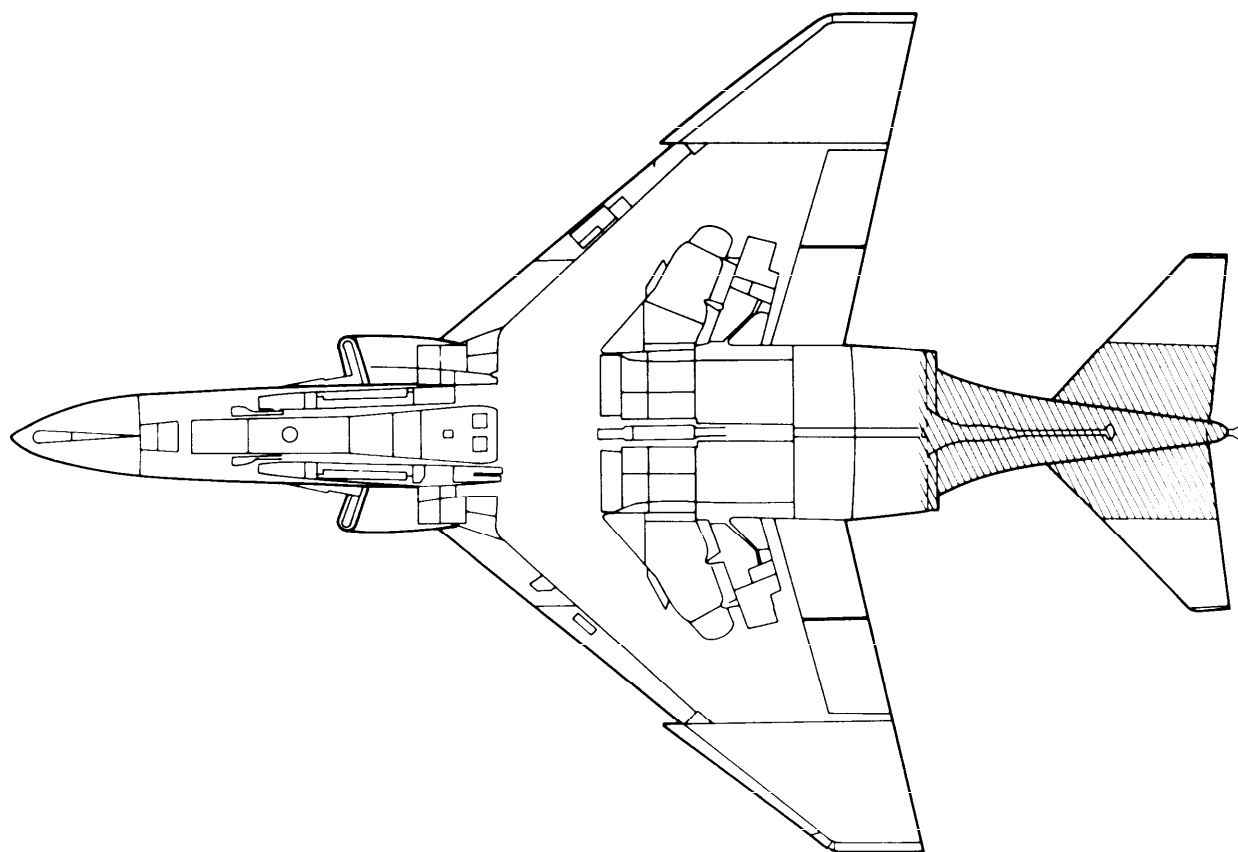


FIGURE E-5. EA-6B tactical paint scheme - Continued.

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-  35237
-  36320
-  UNPAINTED
-  36375

FIGURE E-6. RF/F-4 tactical paint scheme.

MIL-STD-2161A(AS)

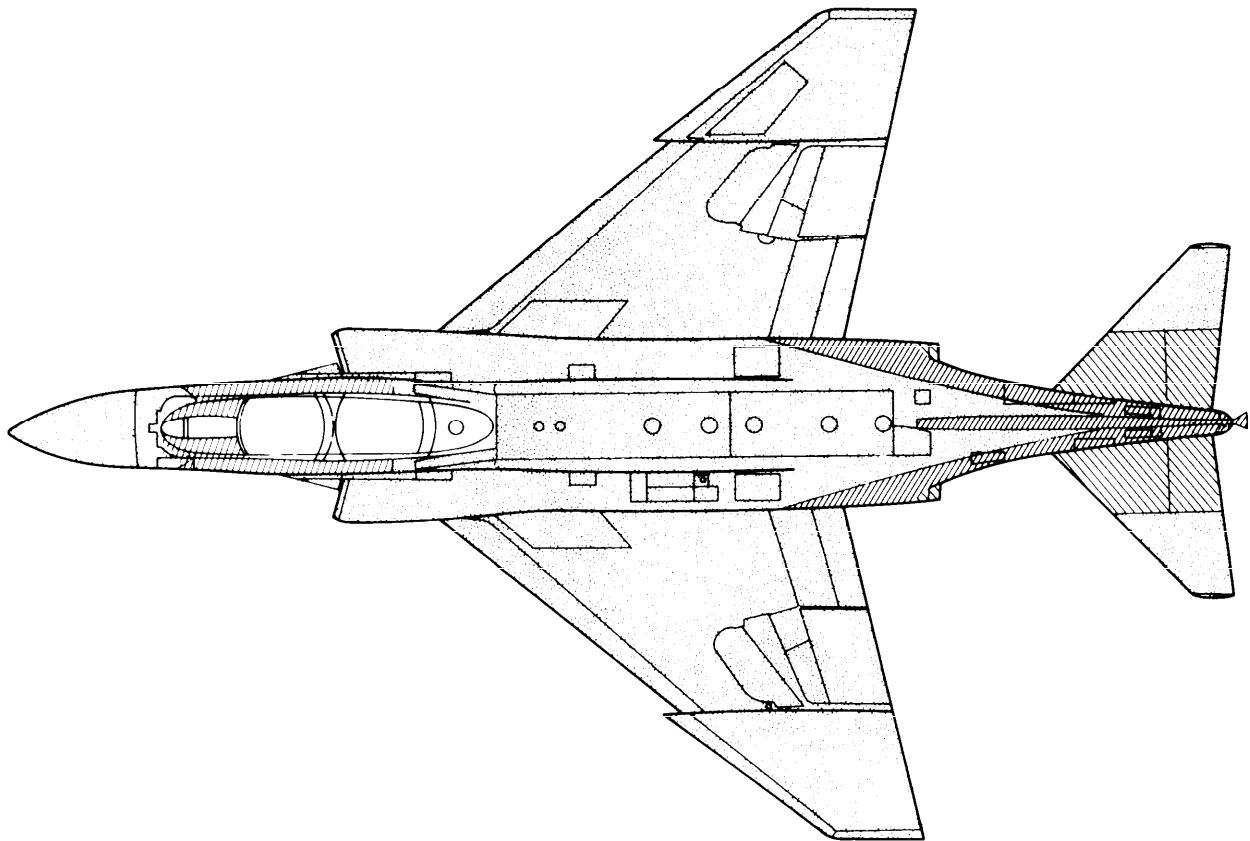
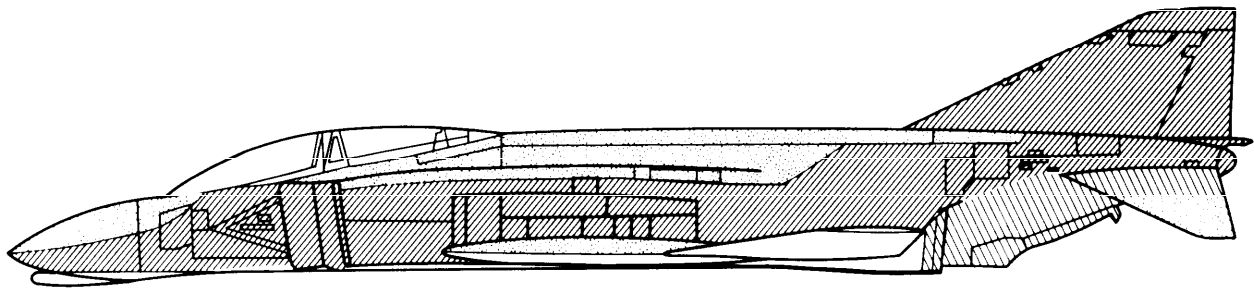


FIGURE E-6. RF/F-4 tactical paint scheme - Continued.

MIL-STD-2161A(AS)

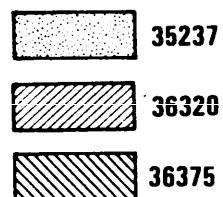
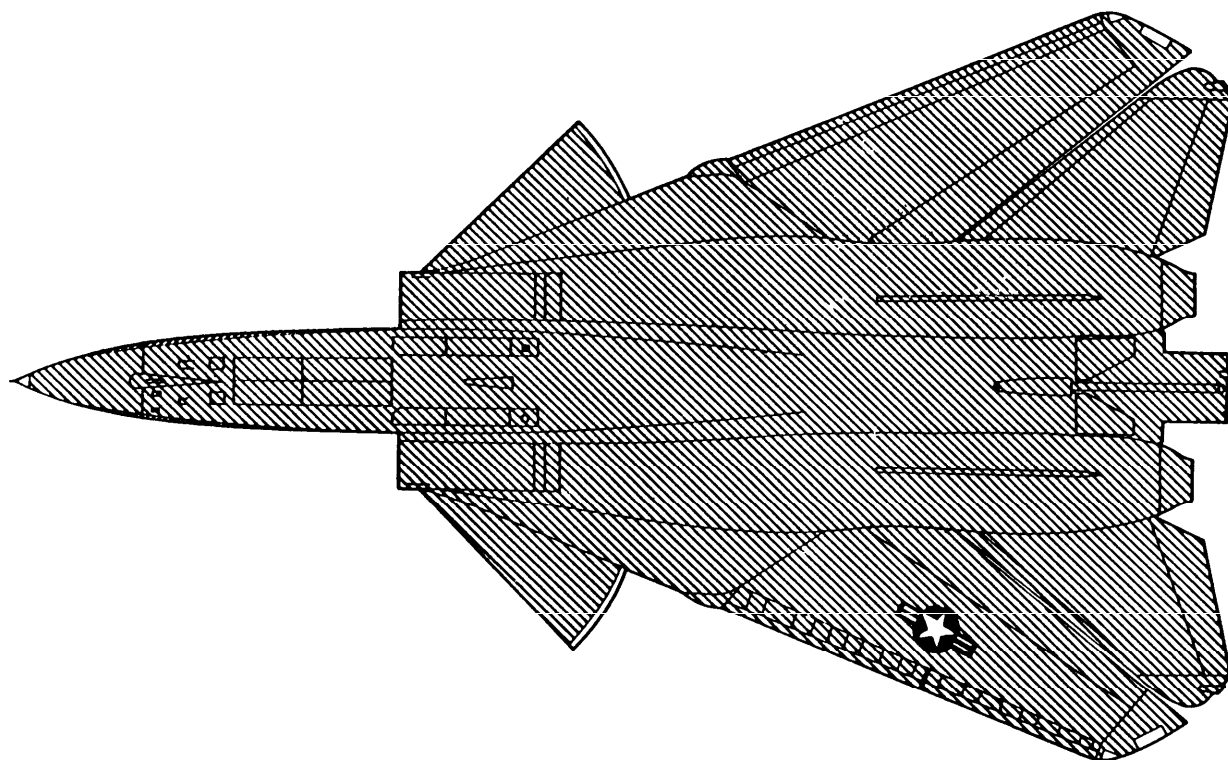


FIGURE E-7. F-14 tactical paint scheme.

MIL-STD-2161A(AS)

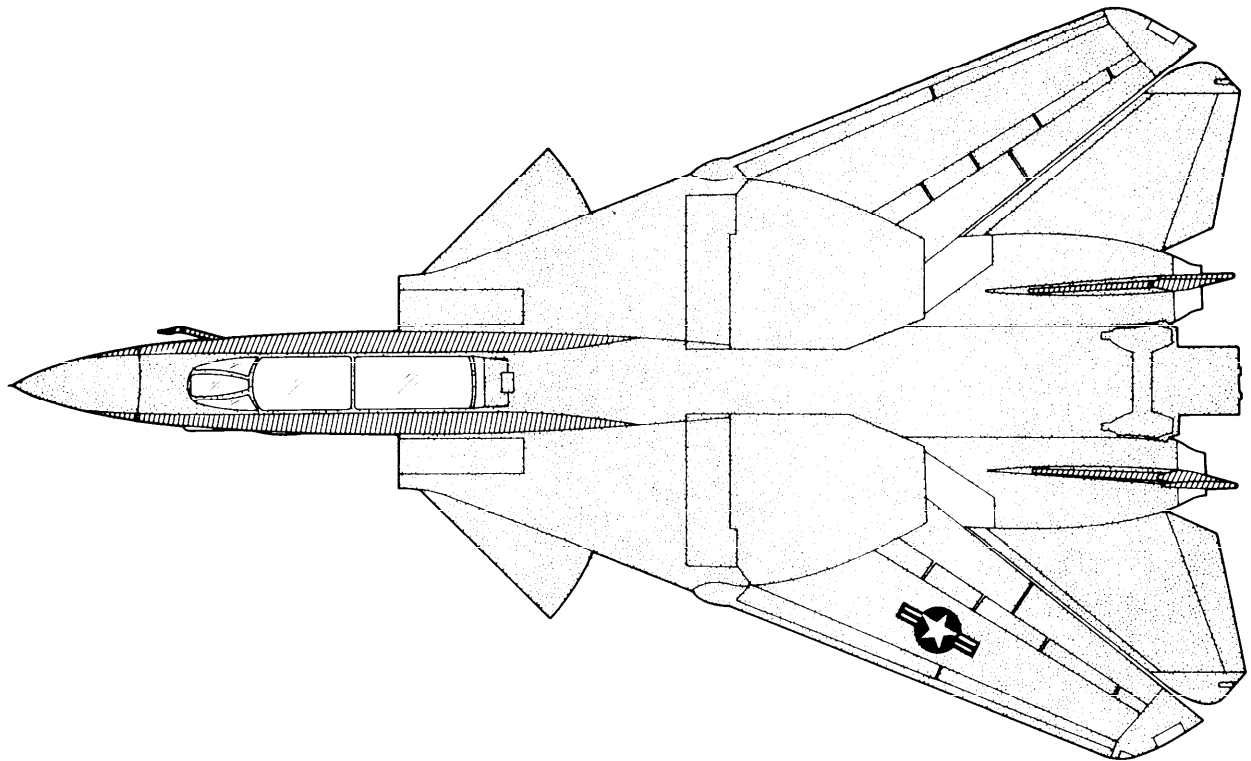
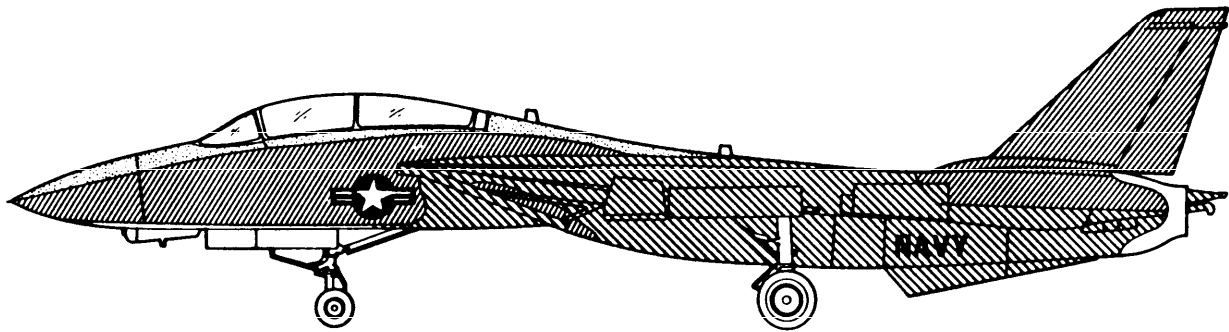


FIGURE E-7. F-14 tactical paint scheme - Continued.

MIL-STD-2161A(AS)

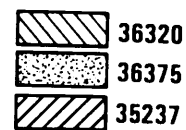
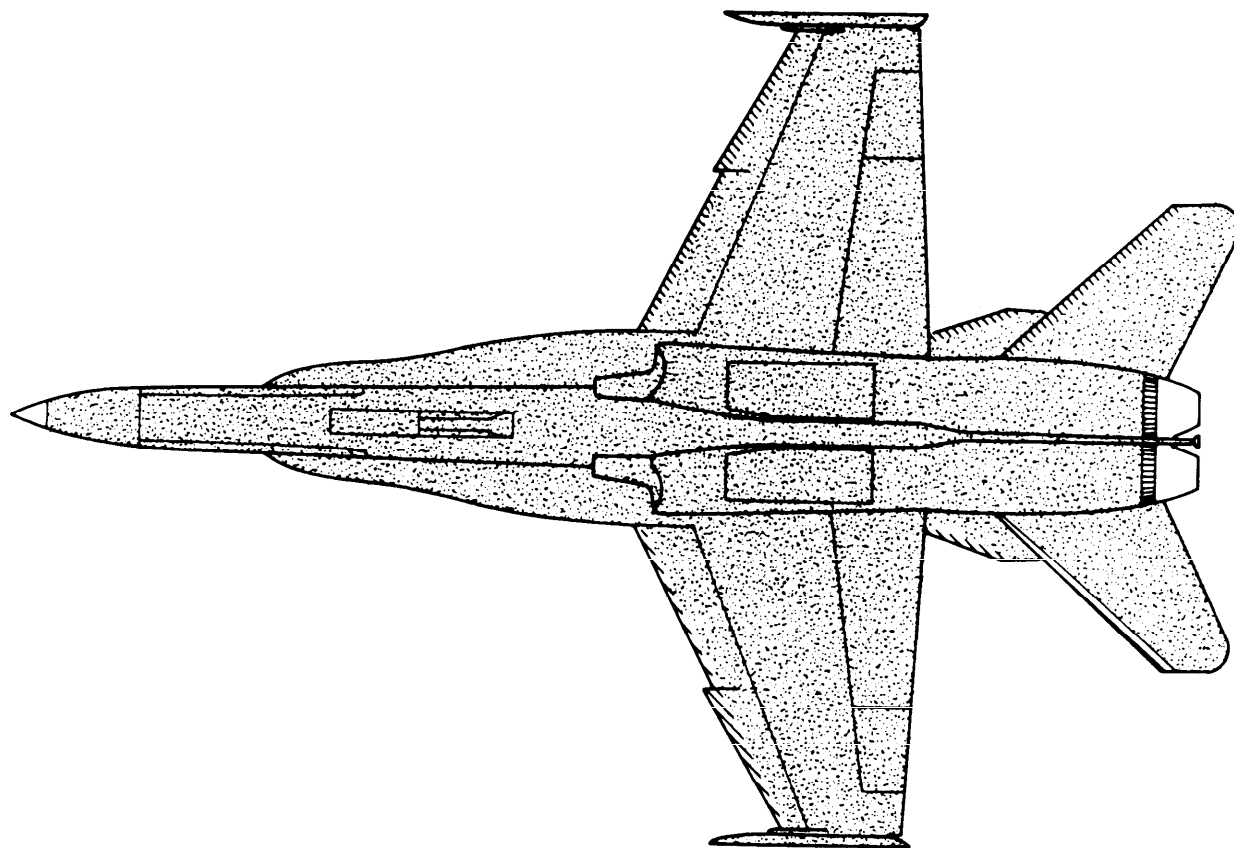


FIGURE E-8. F-18 tactical paint scheme.

MIL-STD-2161A(AS)

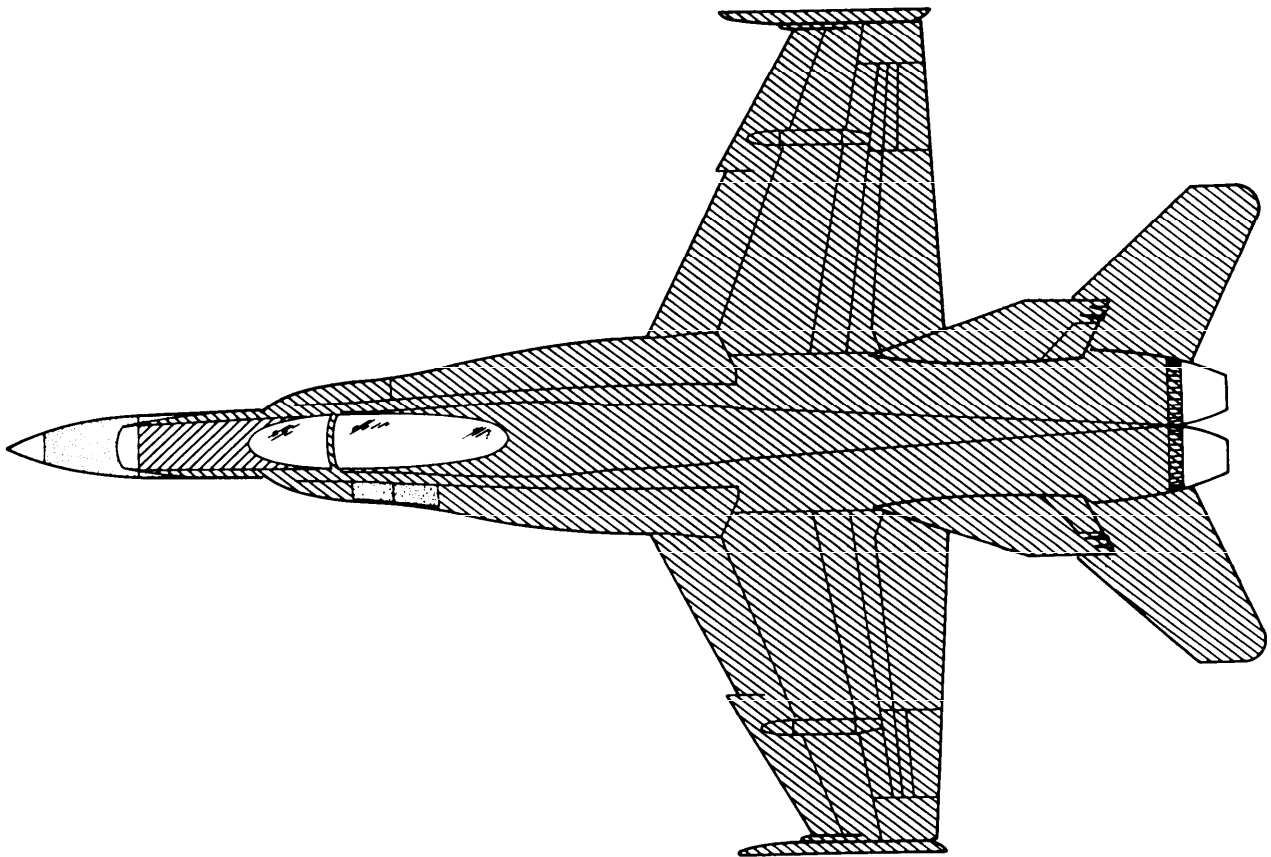
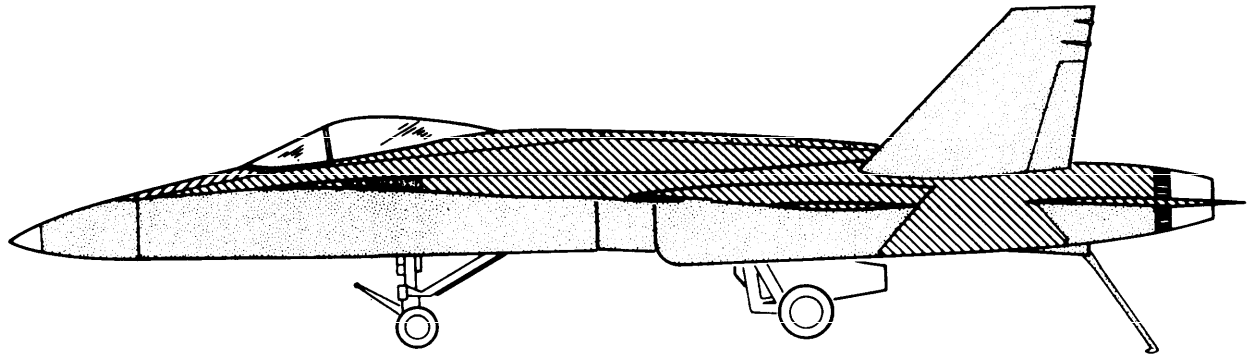
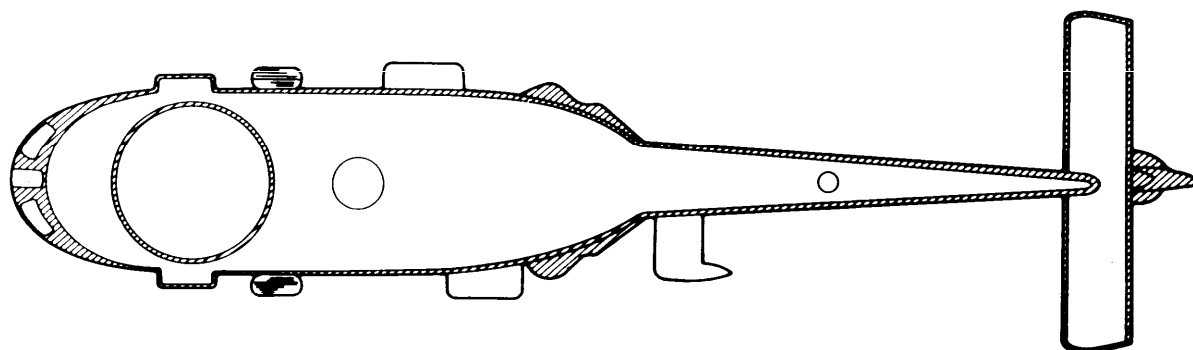


FIGURE E-8. F-18 tactical paint scheme - Continued.

MIL-STD-2161A(AS)






| | |
|---|-------|
|  | 35237 |
|  | 36320 |
|  | 36495 |

FIGURE E-9. SH-60B tactical paint scheme.

MIL-STD-2161A(AS)

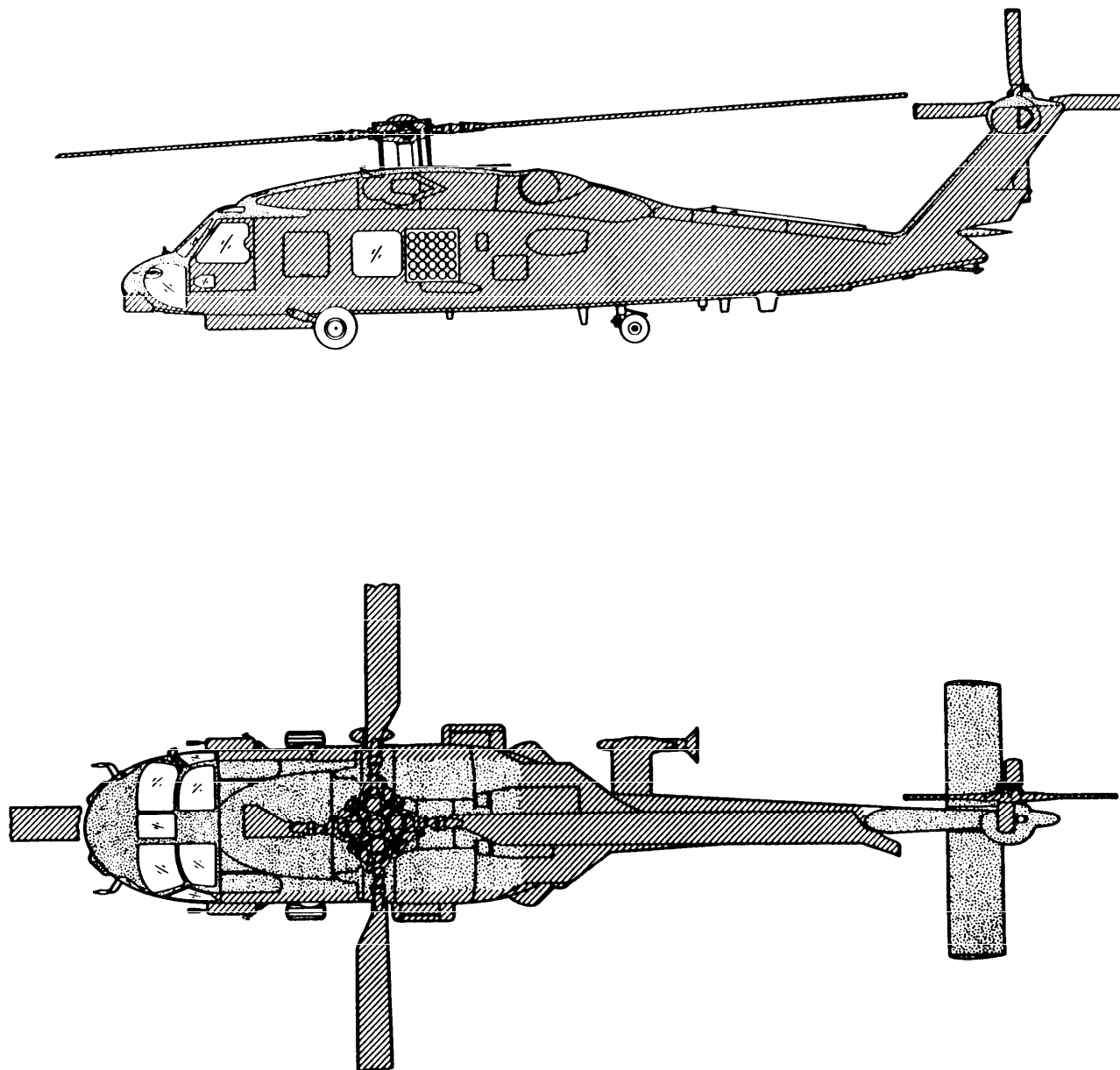


FIGURE E-9. SH-60B tactical paint scheme - Continued.

MIL-STD-2161A(AS)

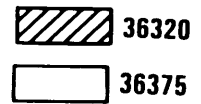
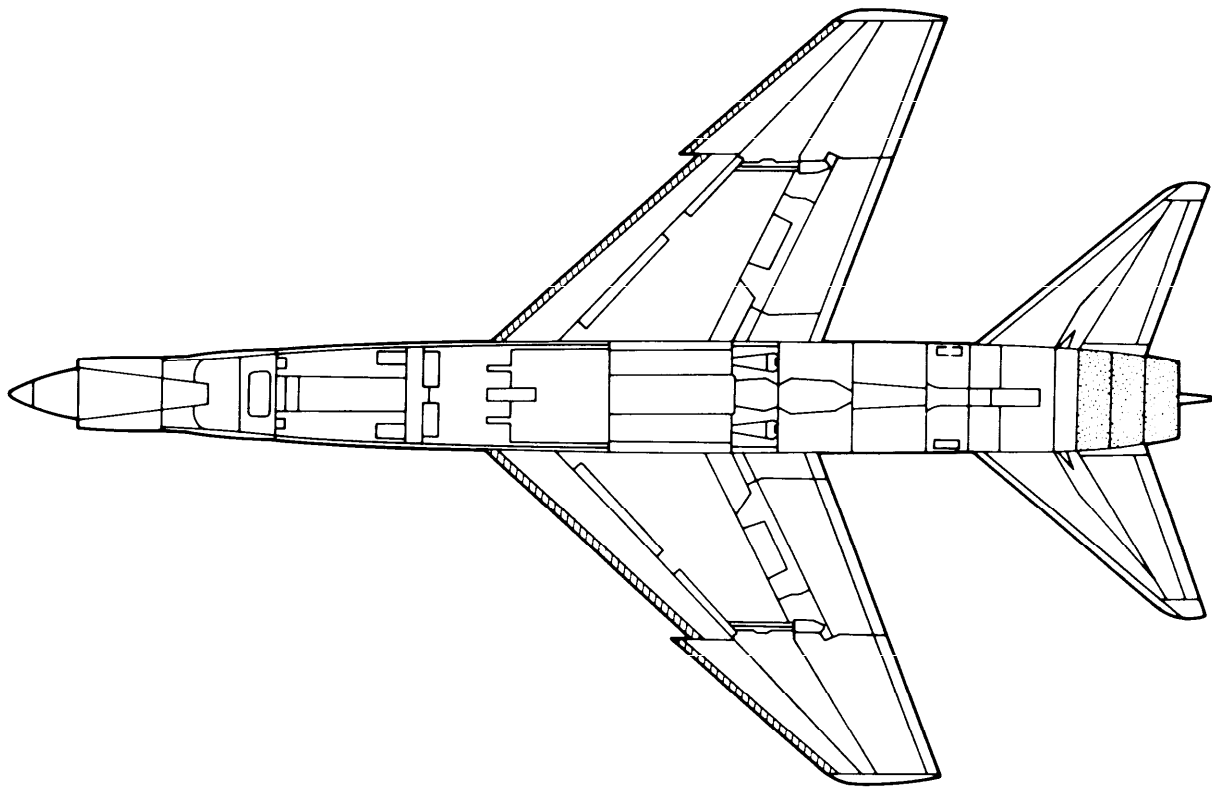


FIGURE E-10. RF-8G tactical paint scheme.

MIL-STD-2161A(AS)

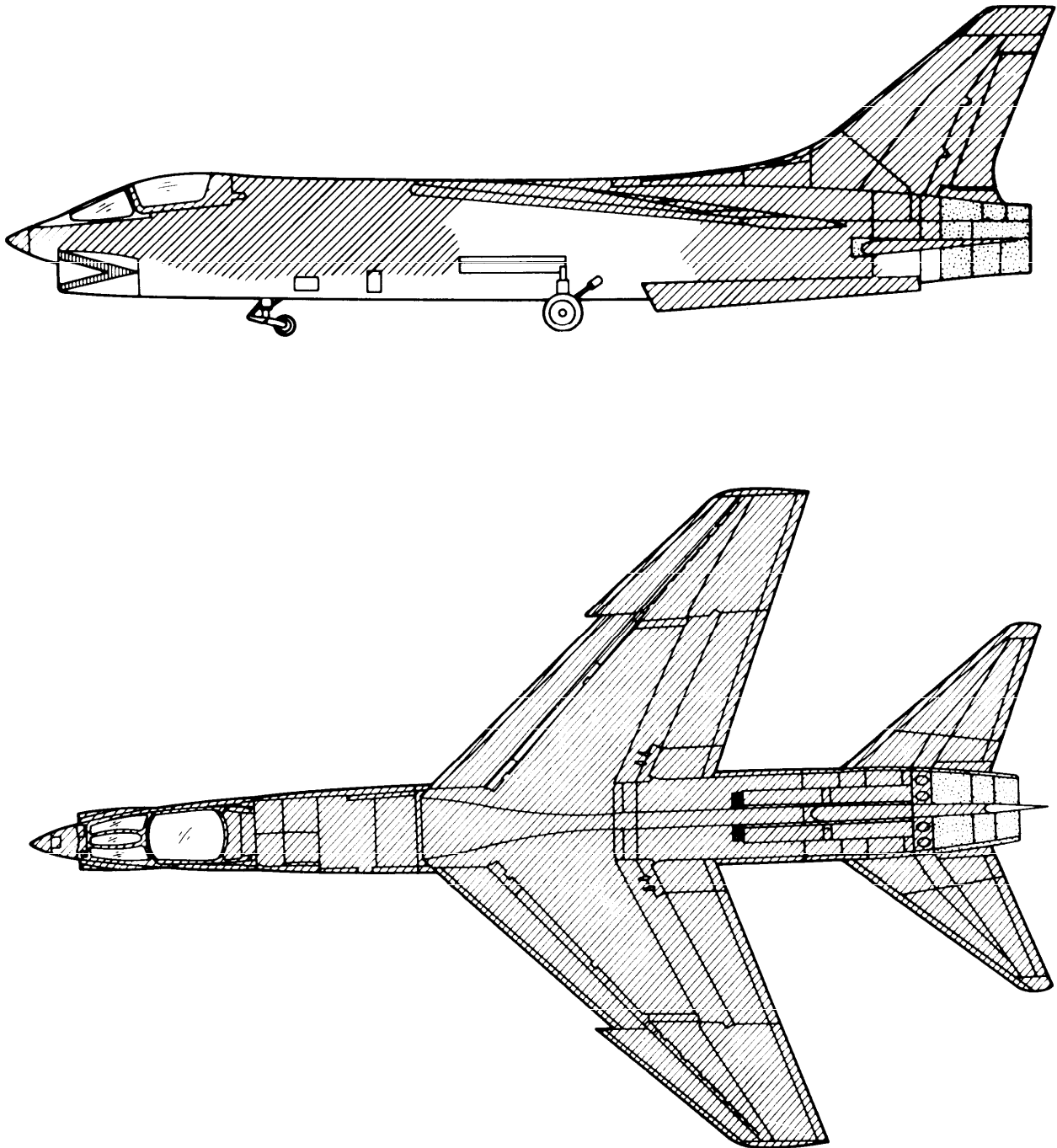


FIGURE E-10. RF-8G tactical paint scheme - Continued.

MIL-STD-2161A(AS)

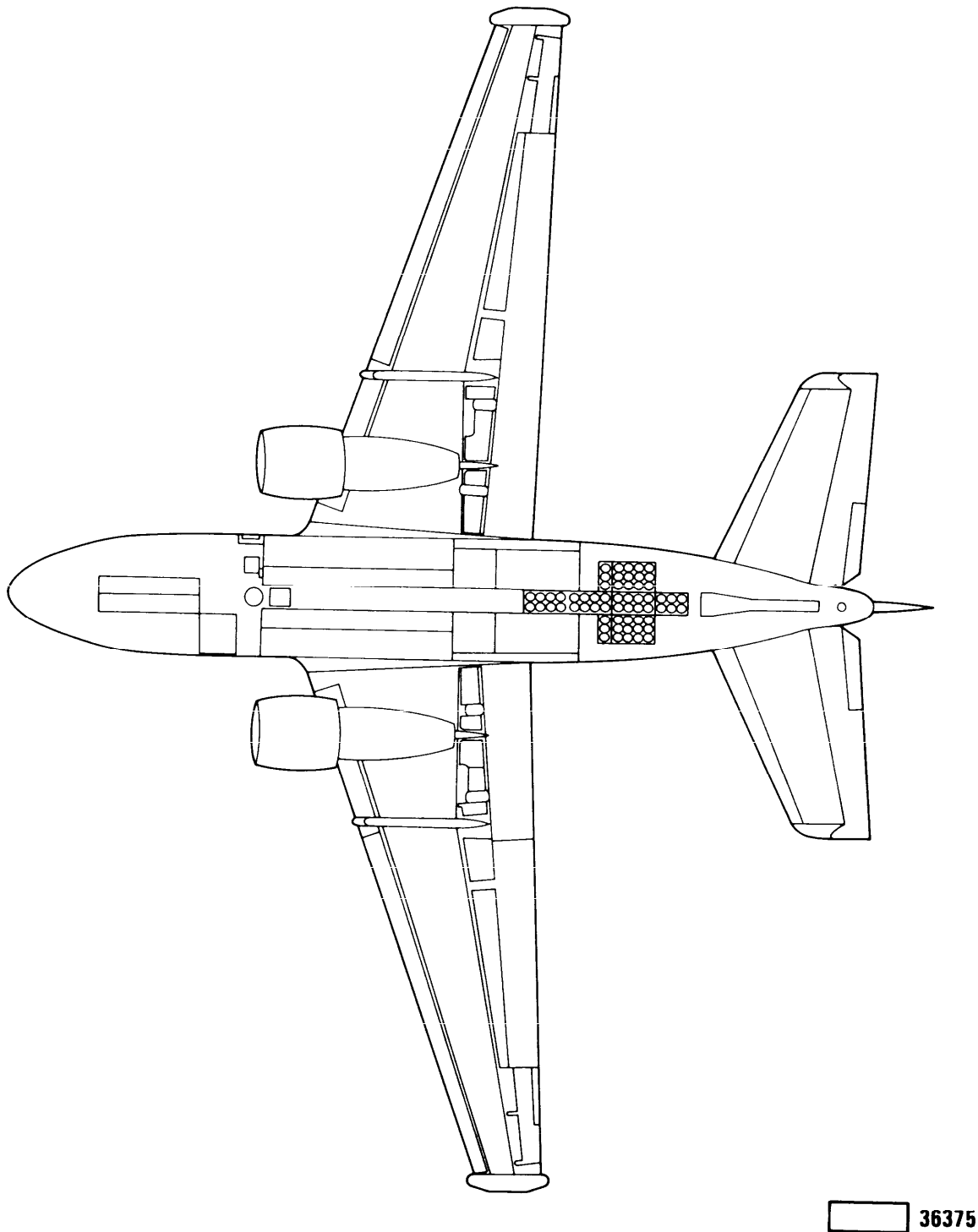


FIGURE E-11. S-3A/B tactical paint scheme.

MIL-STD-2161A(AS)

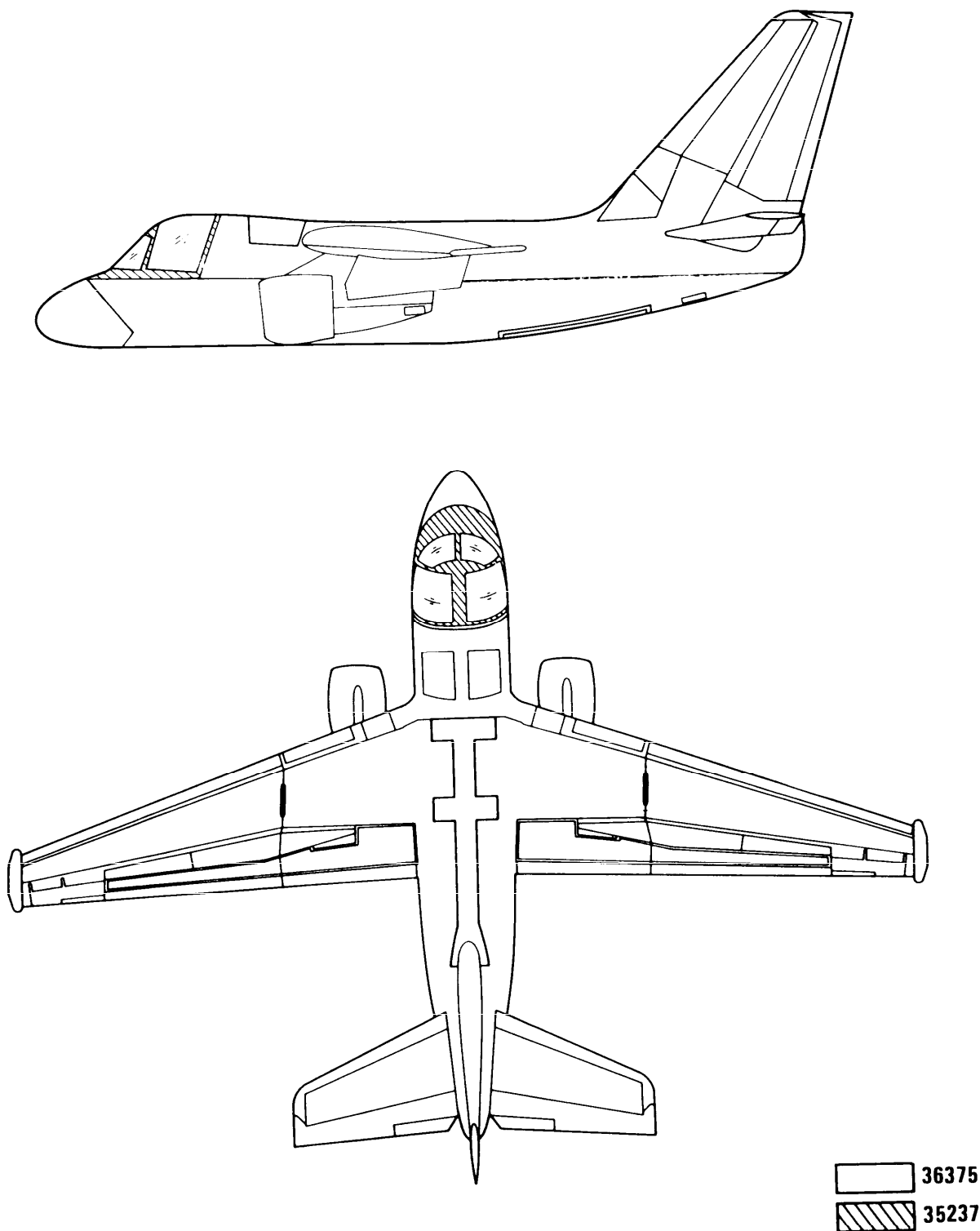


FIGURE E-11. S-3A/B tactical paint scheme - Continued.

MIL-STD-2161A(AS)

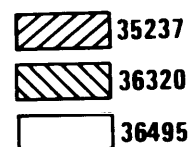
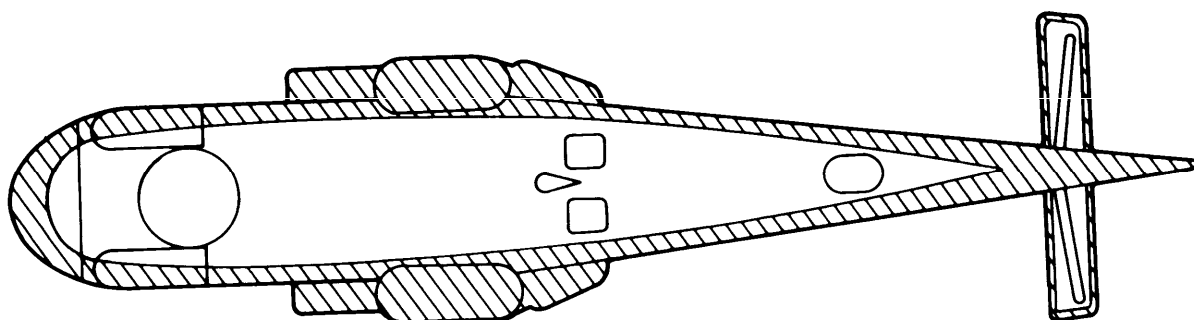


FIGURE E-12. SH-2F tactical paint scheme.

MIL-STD-2161A(AS)

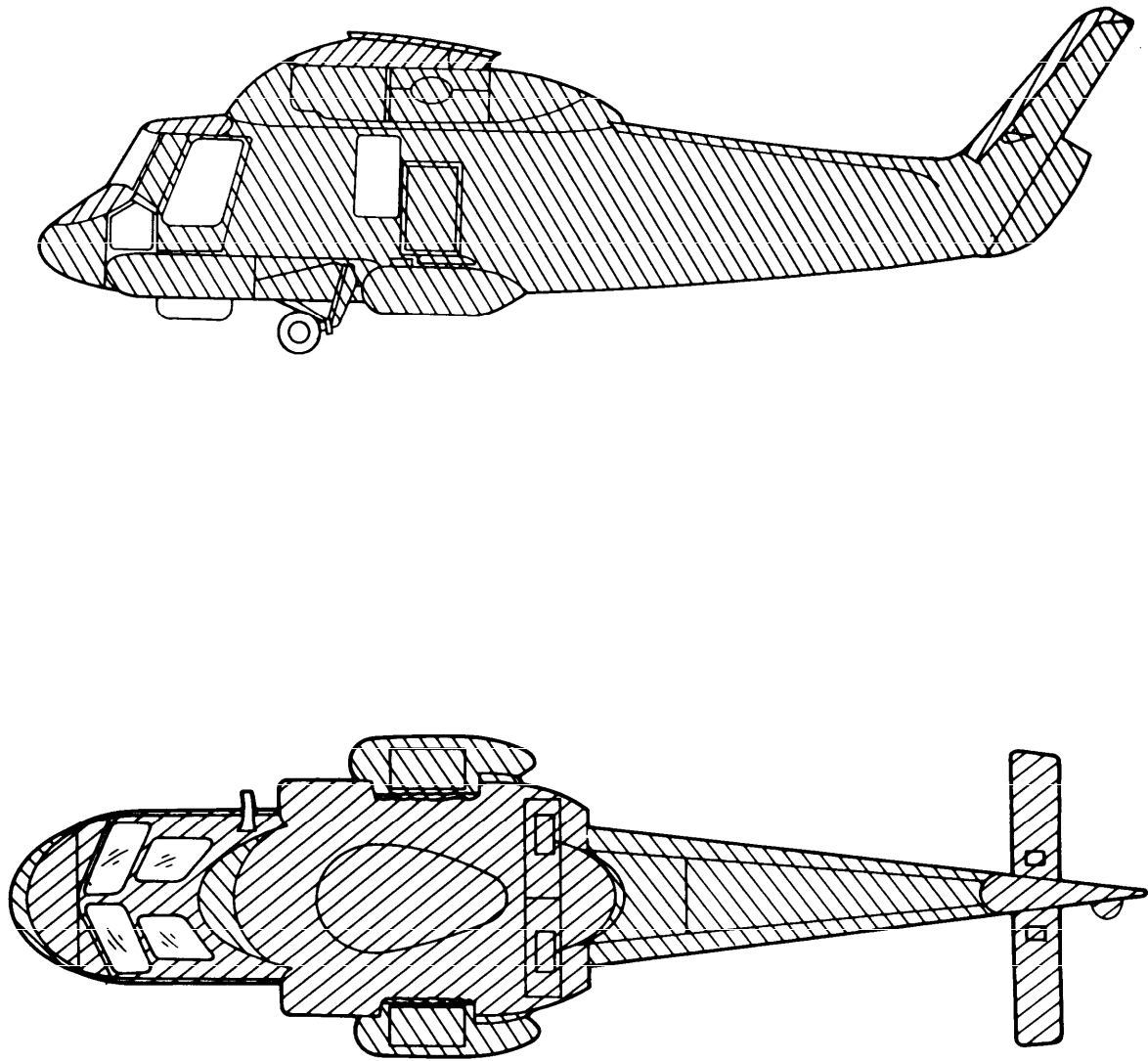


FIGURE E-12. SH-2F tactical paint scheme - Continued.

MIL-STD-2161A(AS)

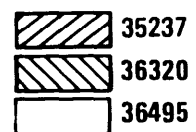
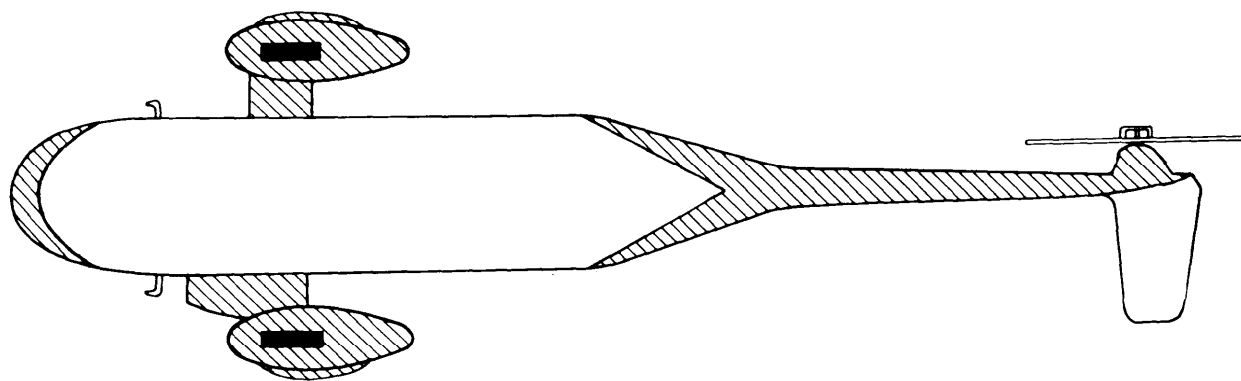


FIGURE E-13. SH-3D/H tactical paint scheme.

MIL-STD-2161A(AS)

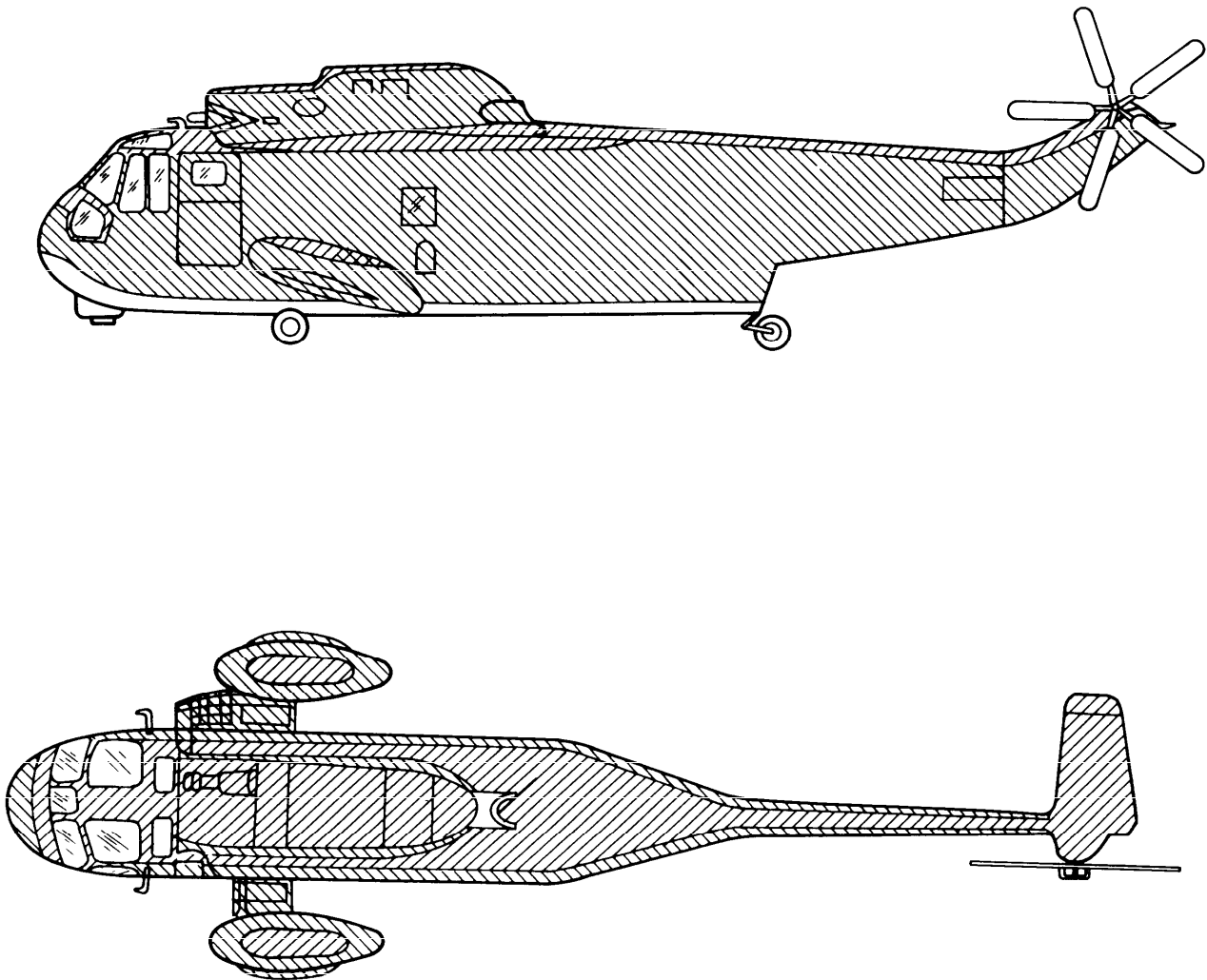


FIGURE E-13. SH-3D/H tactical paint scheme - Continued.

MIL-STD-2161A(AS)

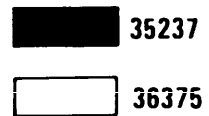
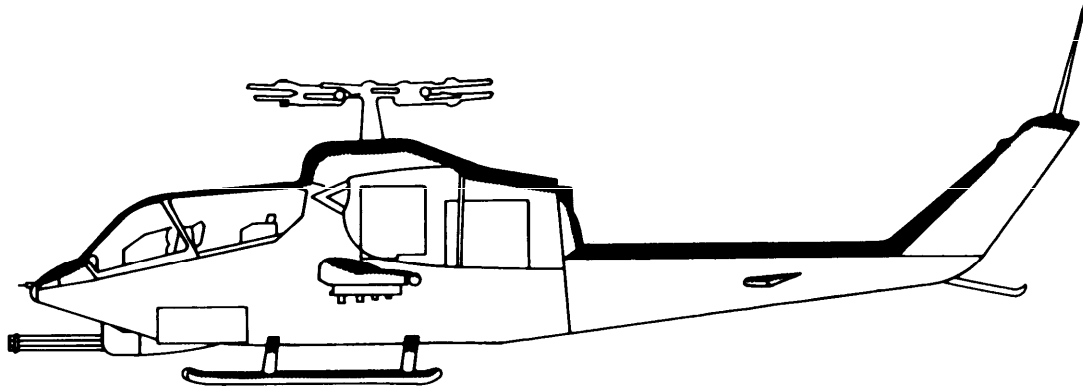


FIGURE E-14. AH-1J/1T/1W tactical paint scheme.

MIL-STD-2161A(AS)

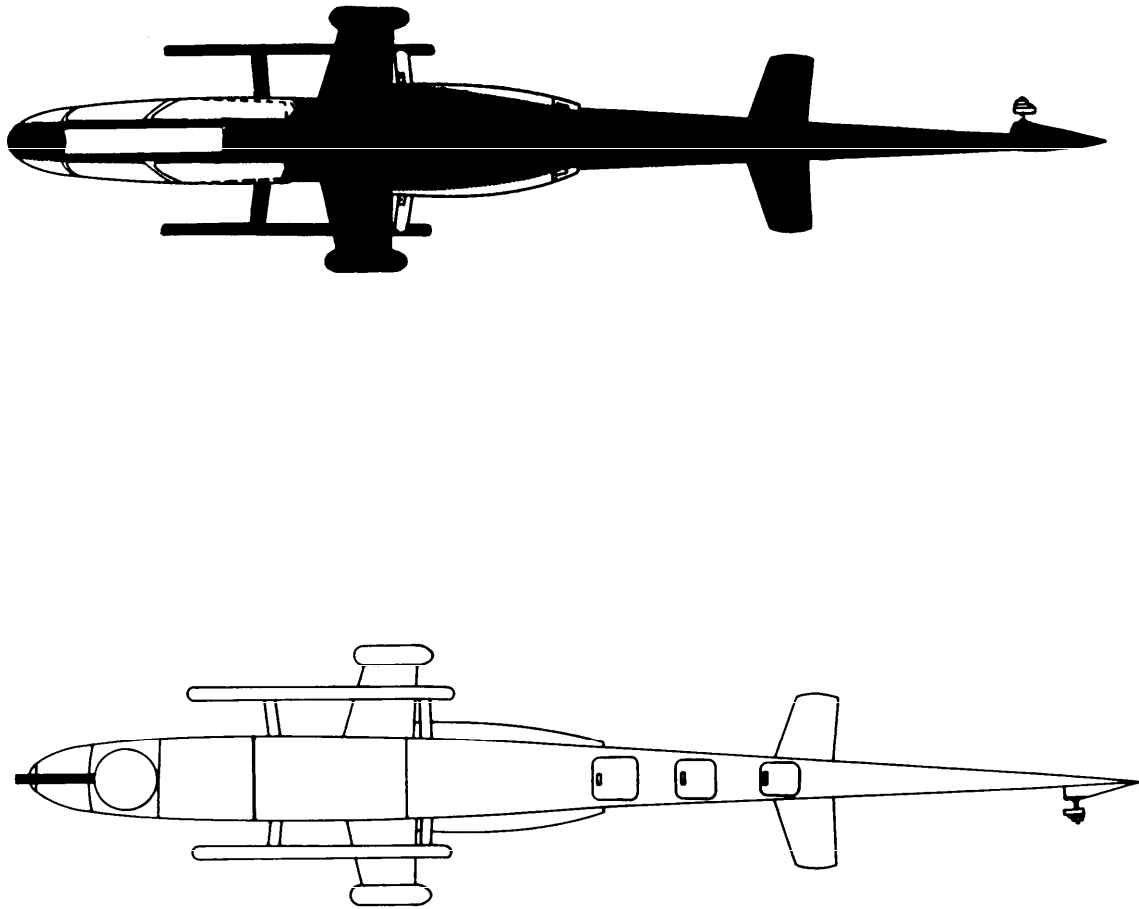


FIGURE E-14. AH-1J/1T/1W tactical paint scheme - Continued.

MIL-STD-2161A(AS)

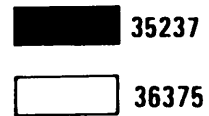
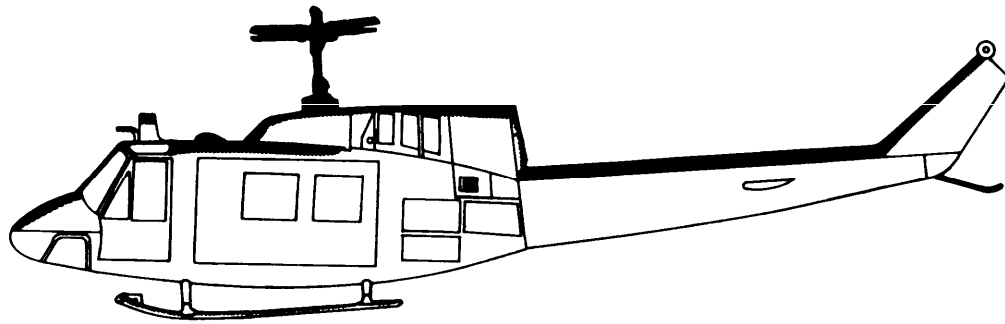


FIGURE E-15. UH-1N tactical paint scheme.

MIL-STD-2161A(AS)

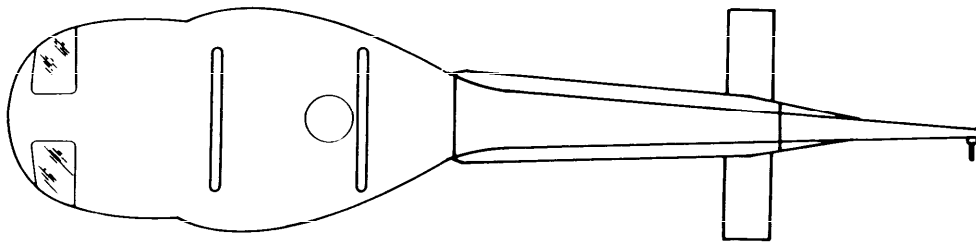
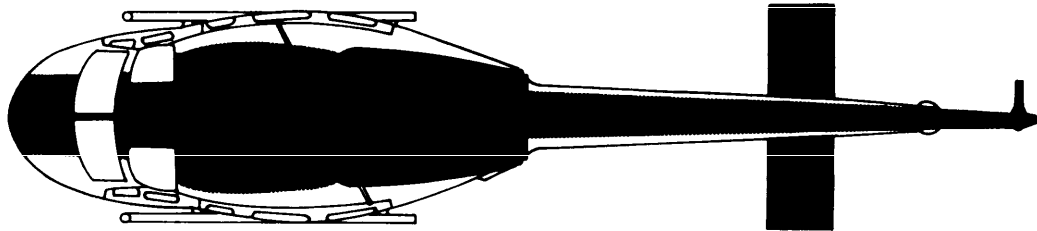


FIGURE E-15. UH-1N tactical paint scheme - Continued.

MIL-STD-2161A(AS)

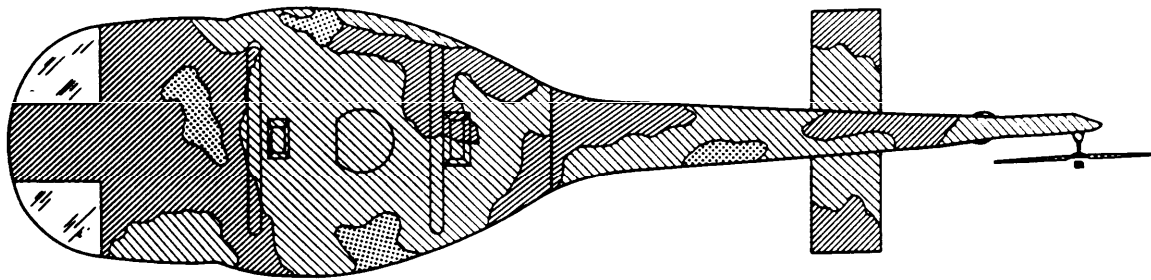


FIGURE E-16. HH-1K land camouflage paint scheme.

MIL-STD-2161A(AS)

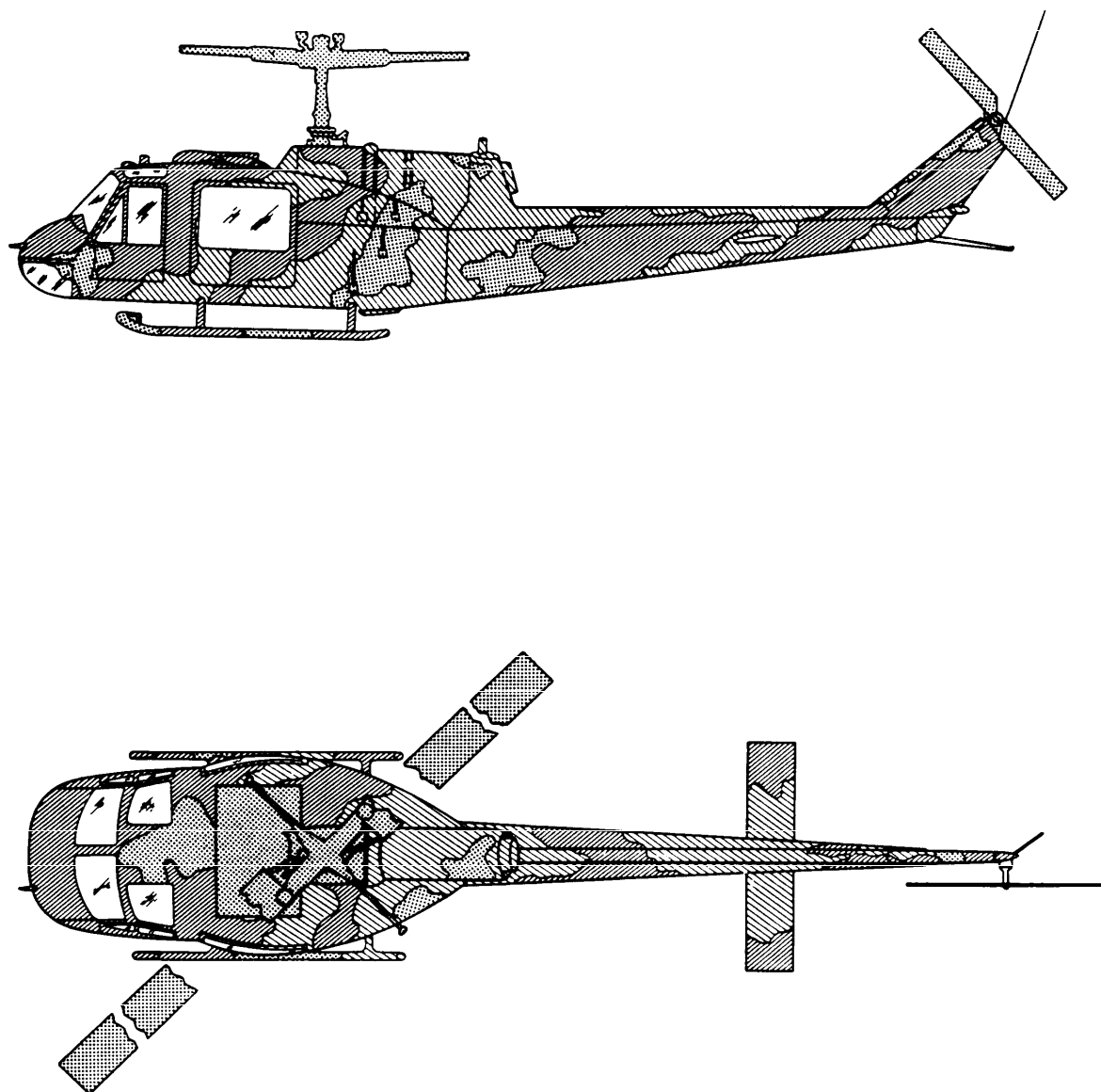
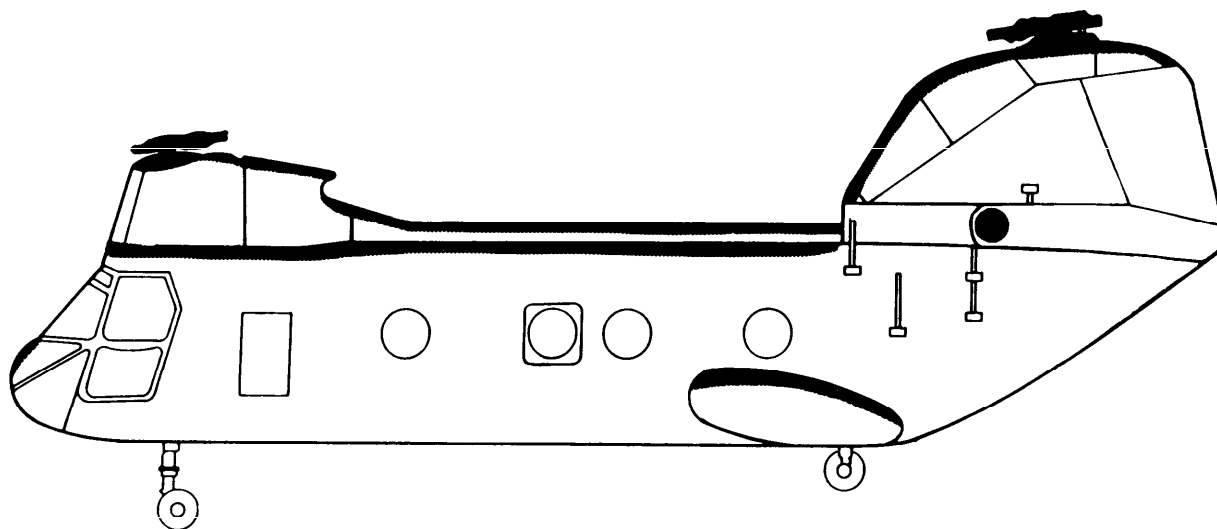


FIGURE E-16. HH-1K land camouflage paint scheme - Continued.

MIL-STD-2161A(AS)



■ 35237

□ 36375

FIGURE E-17. CH-46E tactical paint scheme.

MIL-STD-2161A(AS)

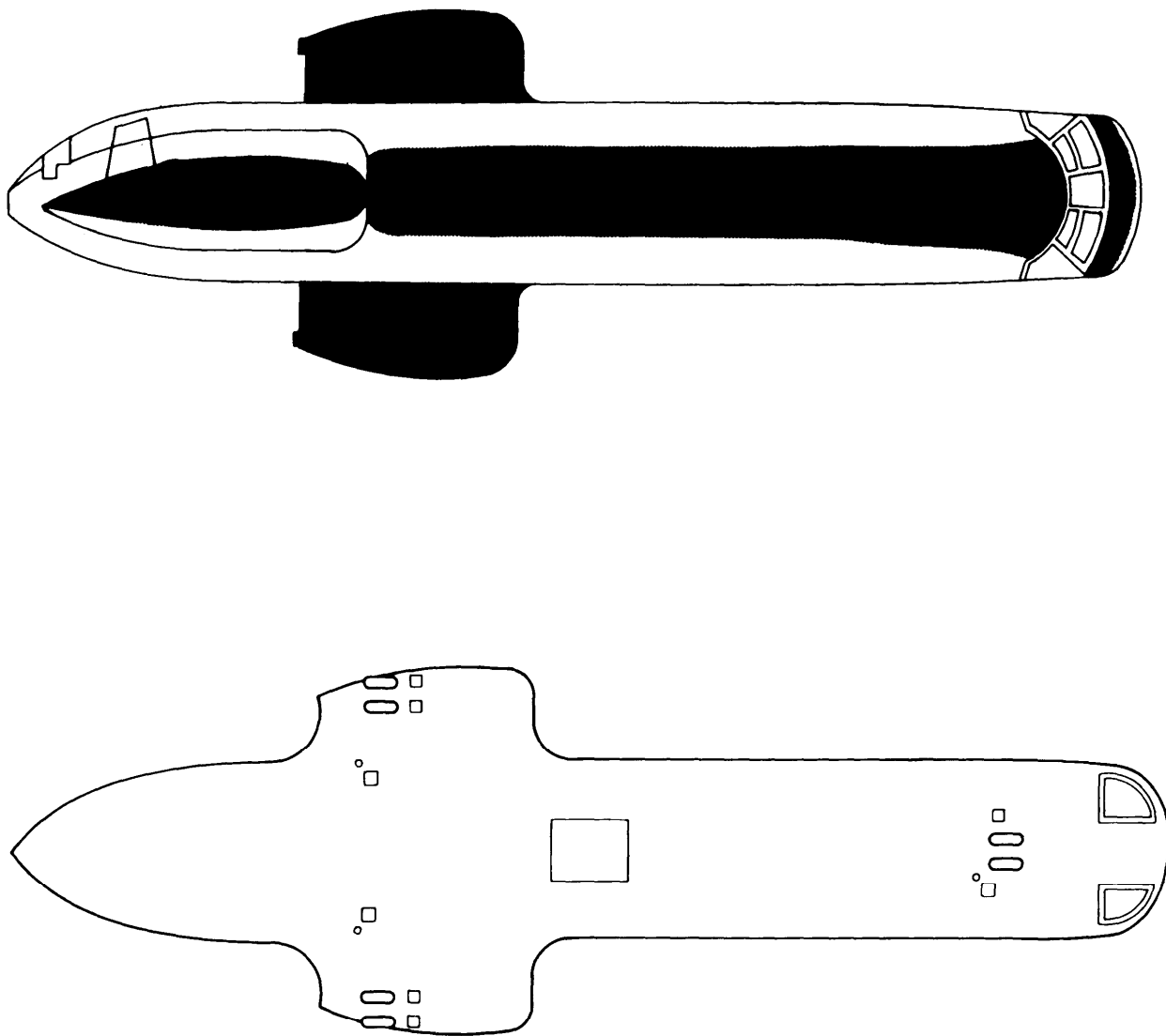


FIGURE E-17. CH-46E tactical paint scheme - Continued.

MIL-STD-2161A(AS)

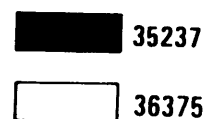
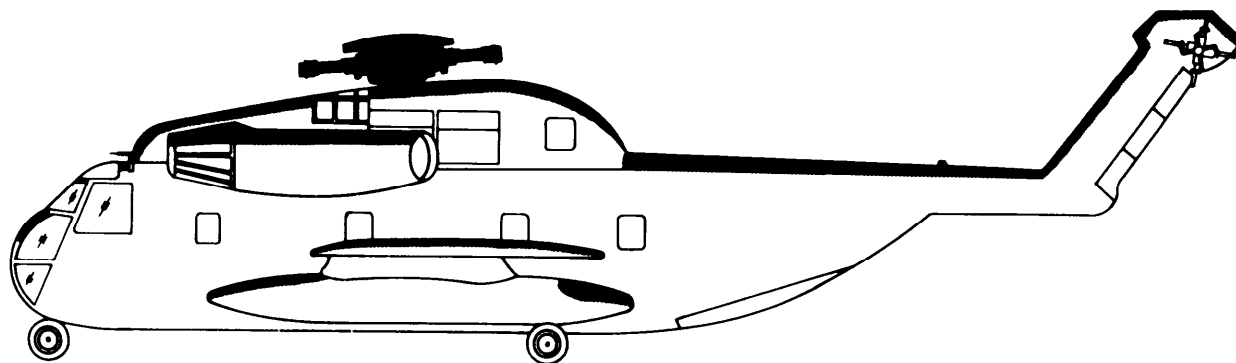


FIGURE E-18. CH-53D/RH-53D tactical paint scheme.

MIL-STD-2161A(AS)

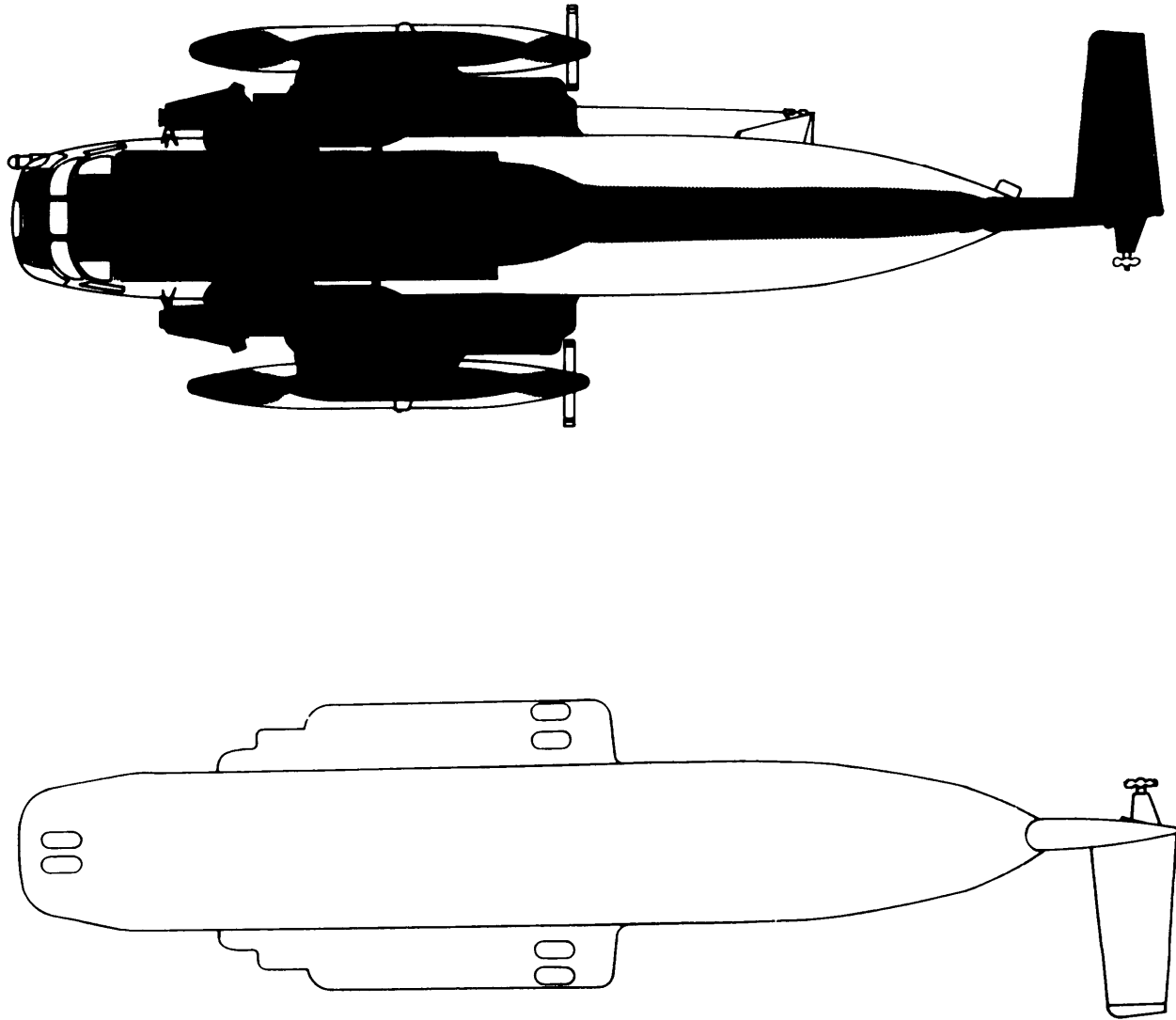


FIGURE E-18. CH-53D/RH-53D tactical paint scheme - Continued.

MIL-STD-2161A(AS)

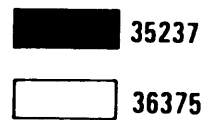
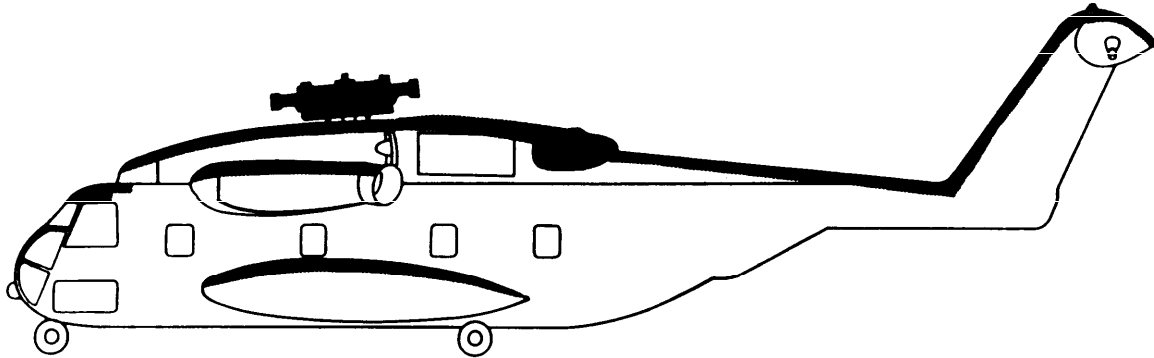


FIGURE E-19. CH-53E tactical paint scheme.

MIL-STD-2161A(AS)

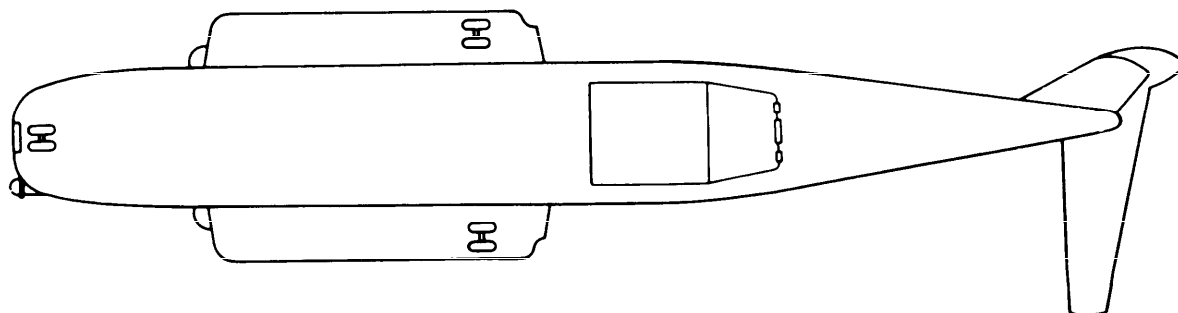
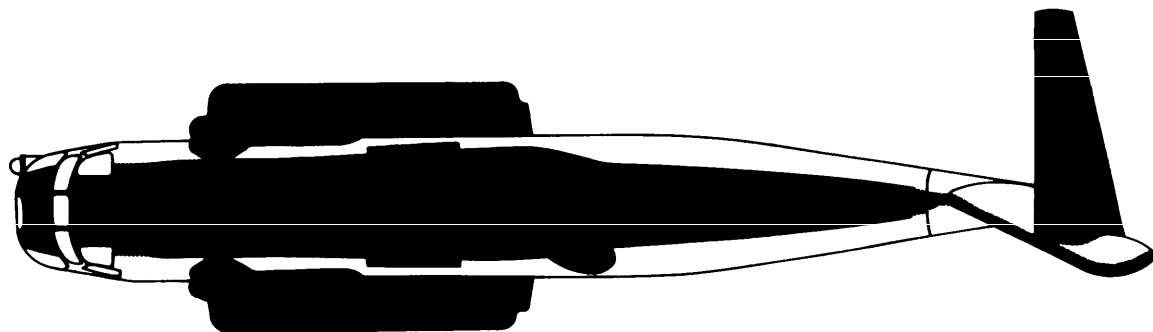


FIGURE E-19. CH-53E tactical paint scheme - Continued.

MIL-STD-2161A(AS)

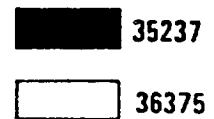
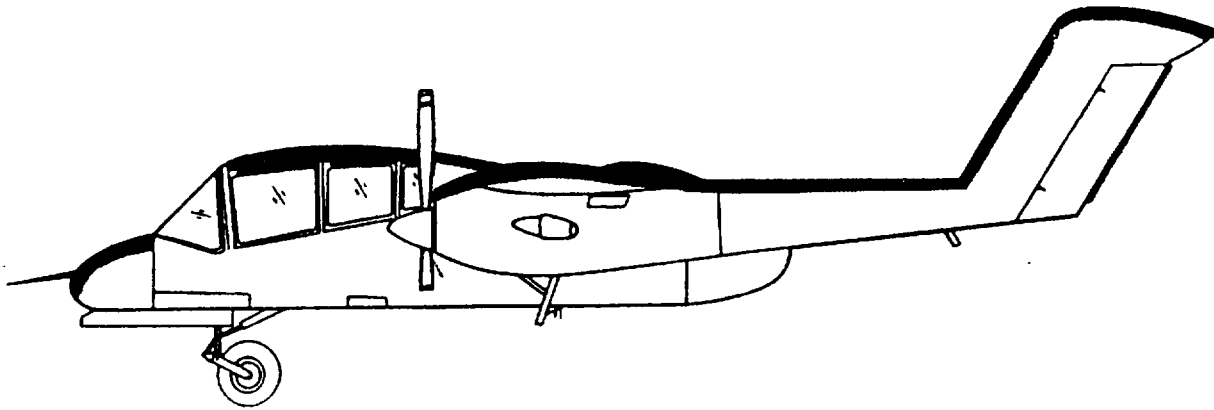


FIGURE E-20. OV-10A tactical paint scheme.

MIL-STD-2161A(AS)

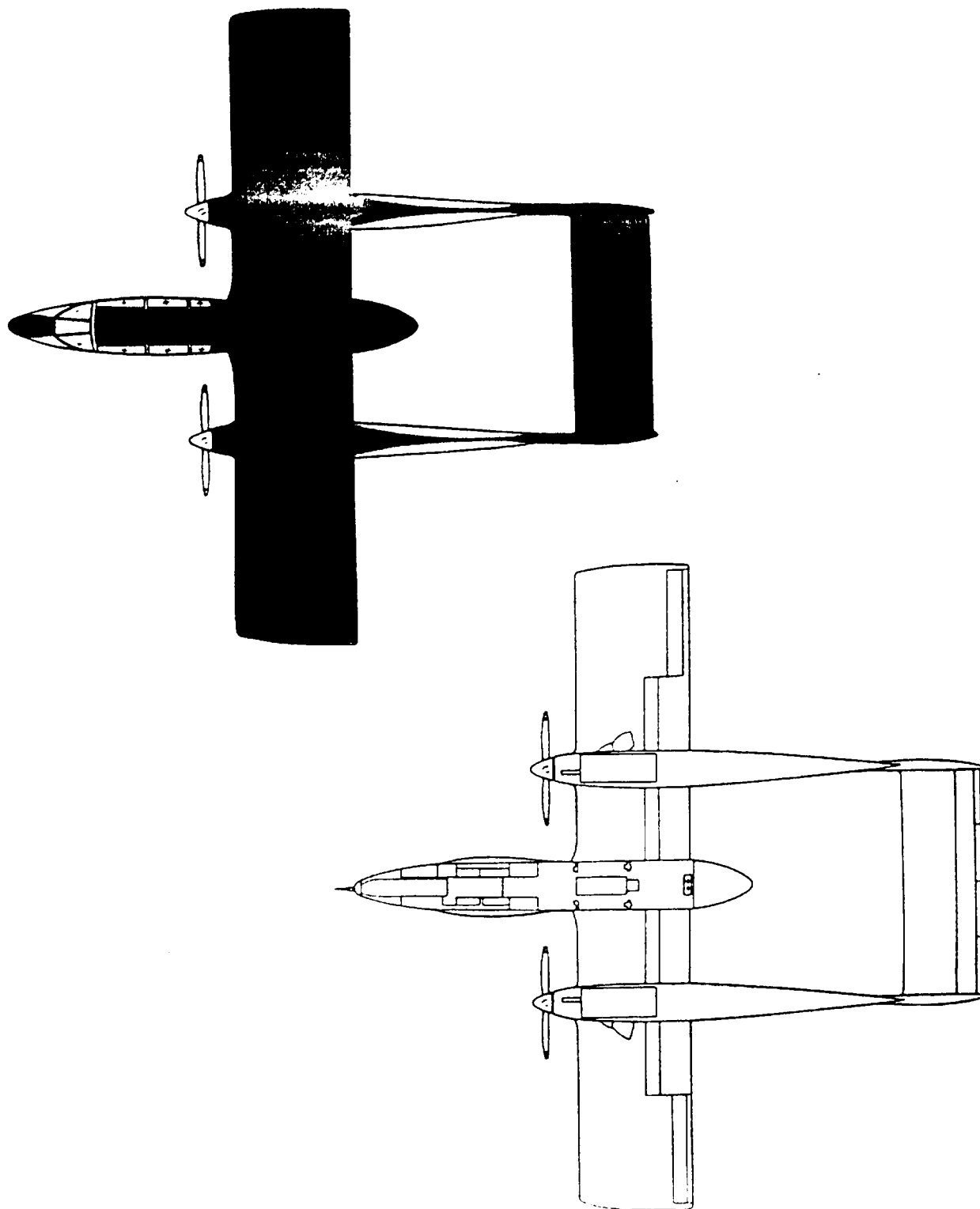


FIGURE E-20. OV-10A tactical paint scheme - Continued.

MIL-STD-2161A(AS)

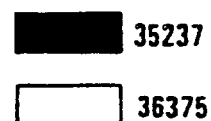
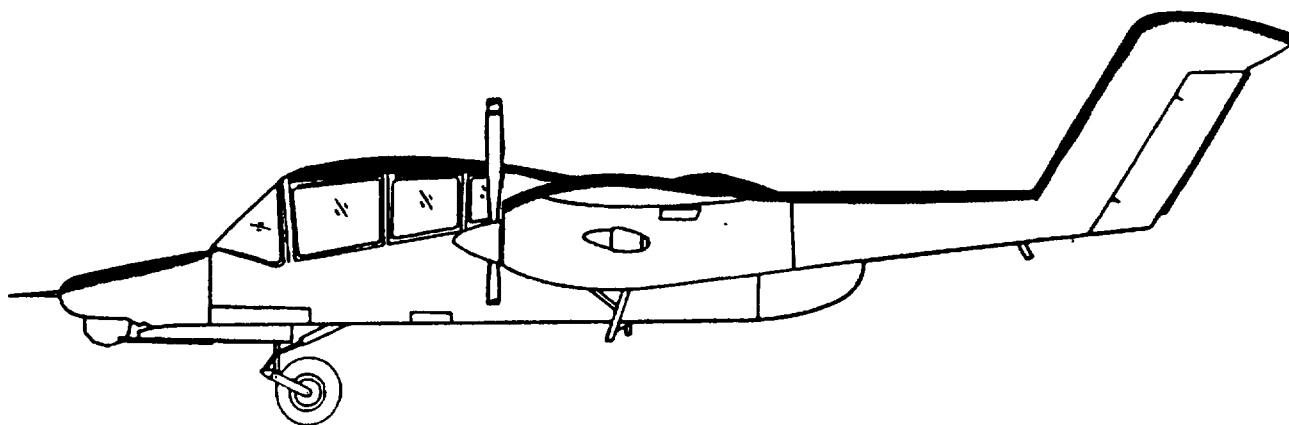


FIGURE E-21. OV-10D tactical paint scheme.

MIL-STD-2161A(AS)

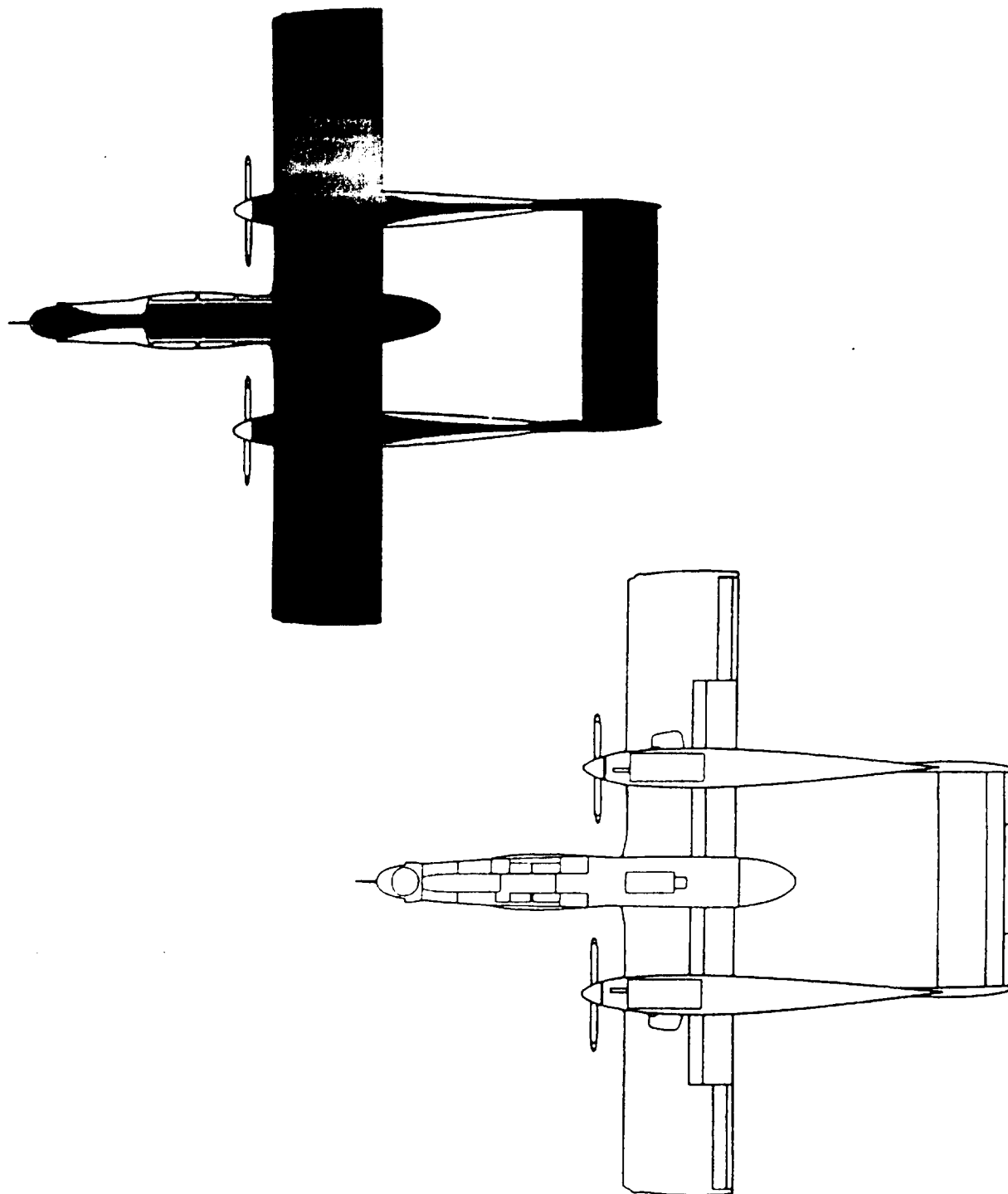


FIGURE E-21. OV-10D tactical paint scheme - Continued.

MIL-STD-2161A(AS)

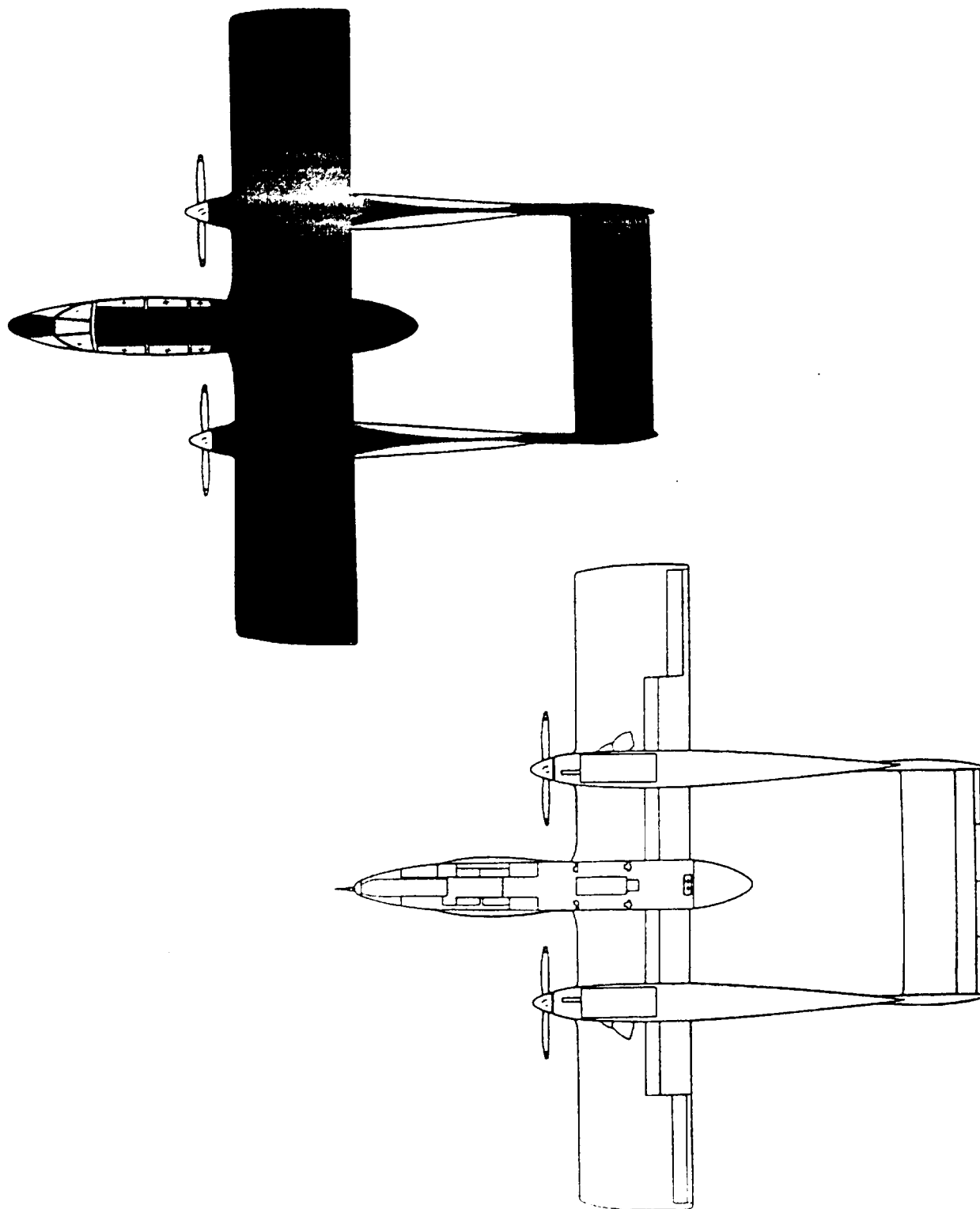


FIGURE E-20. OV-10A tactical paint scheme - Continued.

MIL-STD-2161A(AS)

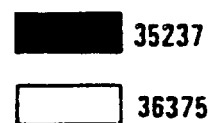
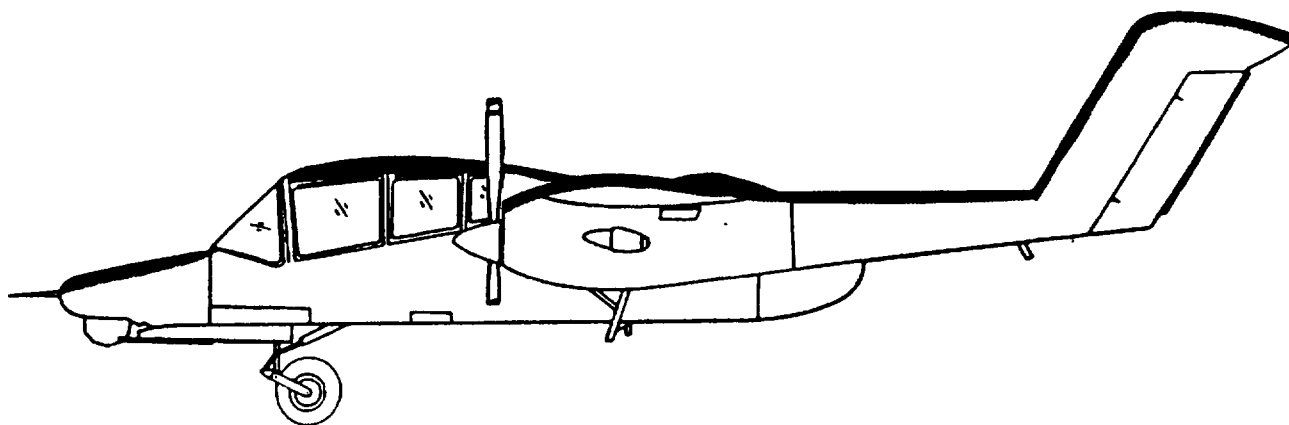


FIGURE E-21. OV-10D tactical paint scheme.

MIL-STD-2161A(AS)

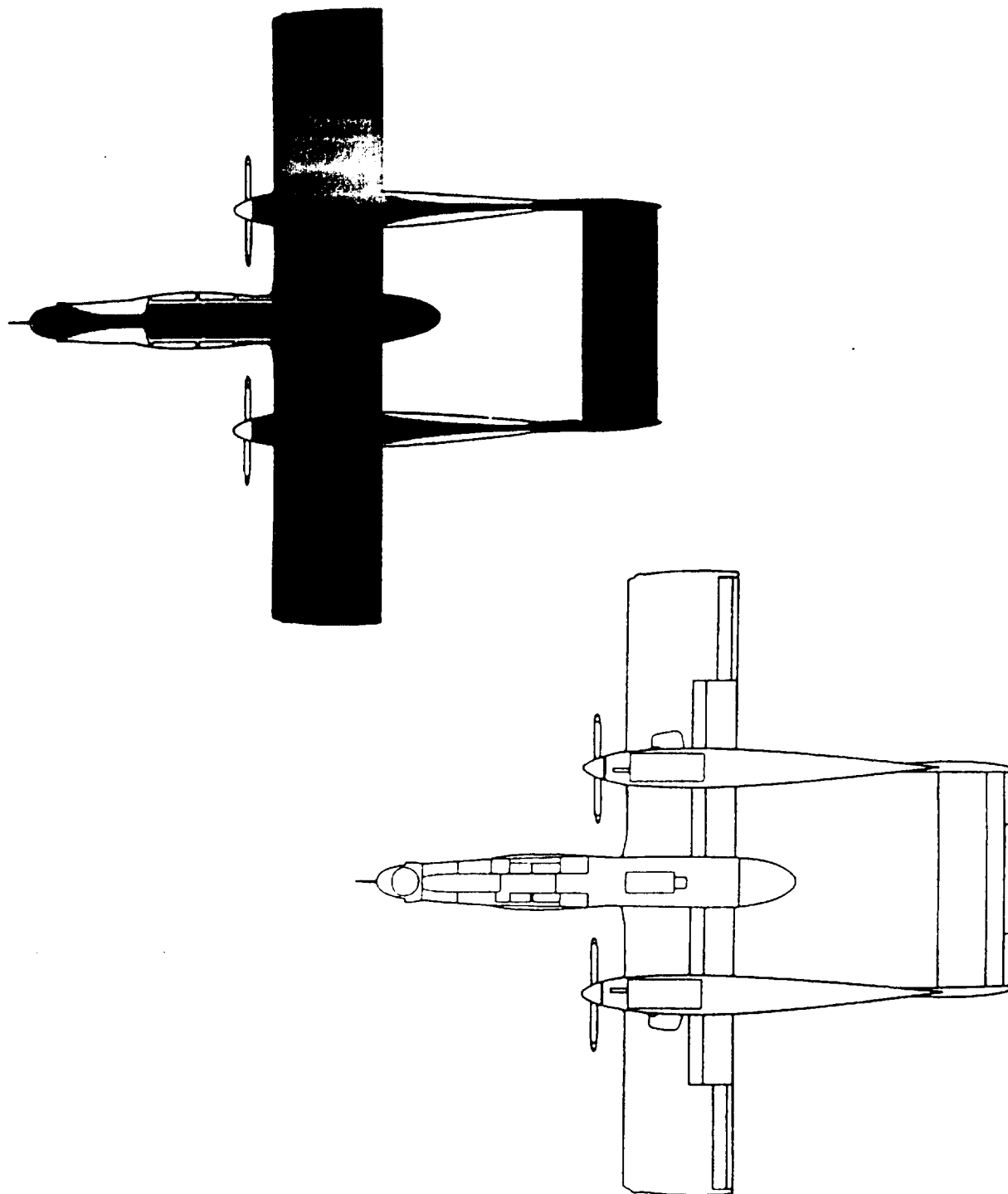


FIGURE E-21. OV-10D tactical paint scheme - Continued.

MIL-STD-2161A(AS)

APPENDIX F

NATIONAL INSIGNIAS FOR FOREIGN AIRCRAFT

10. SCOPE

10.1 Scope. This Appendix illustrates insignias of foreign countries.

10.2 Use. This Appendix is a mandatory part of this standard. The information contained herein is intended for compliance.

20. APPLICABLE DOCUMENTS. This section is not applicable to this Appendix.

30. DEFINITIONS

30.1 Definitions. For purposes of this Appendix, the definitions of this standard shall apply.

40. GENERAL REQUIREMENTS

40.1 Foreign country national insignias. The following figures illustrate national insignias for foreign countries.

MIL-STD-2161A(AS)

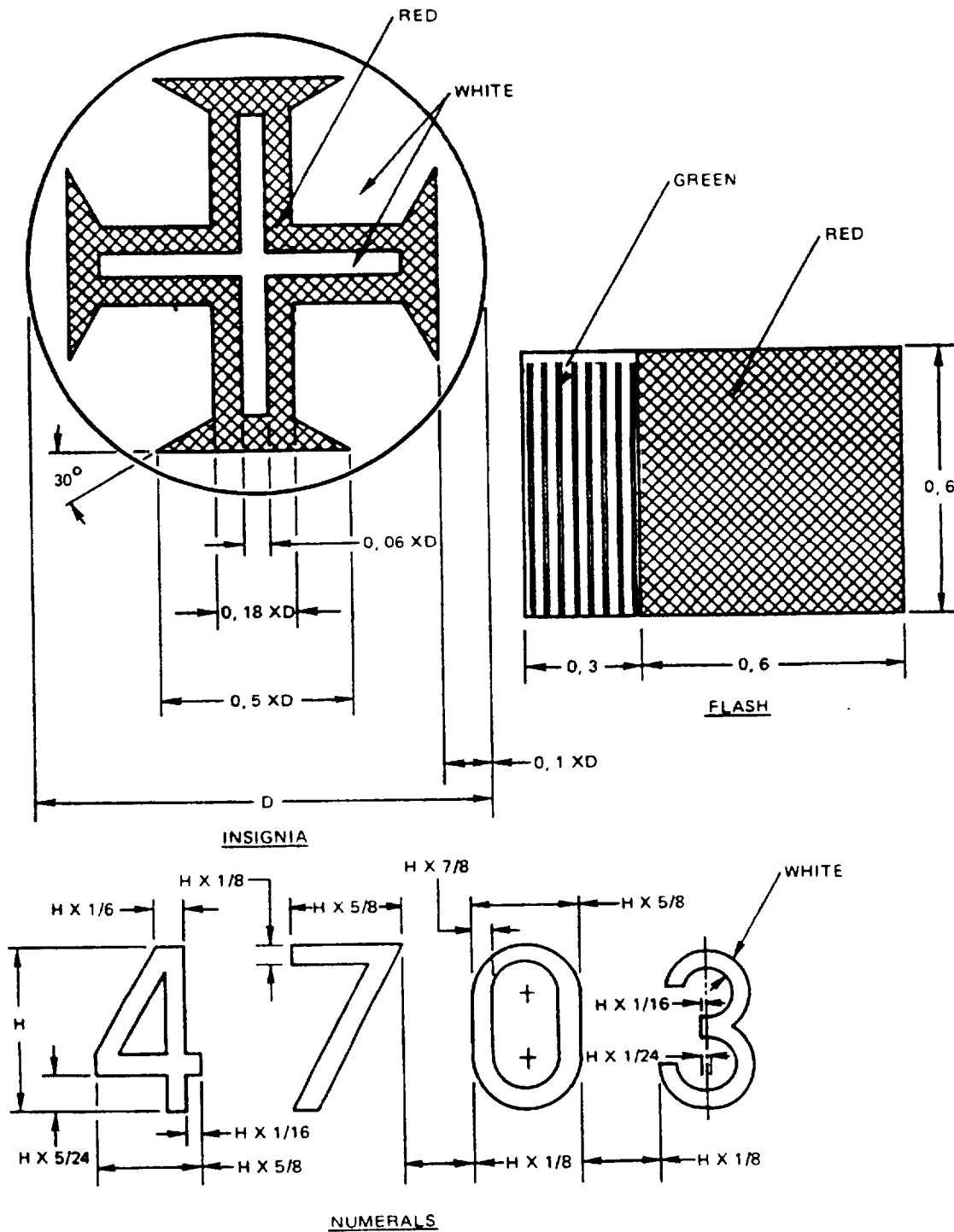


FIGURE F-1. National insignia of Portugal (flash and numerals).

MIL-STD-2161A(AS)

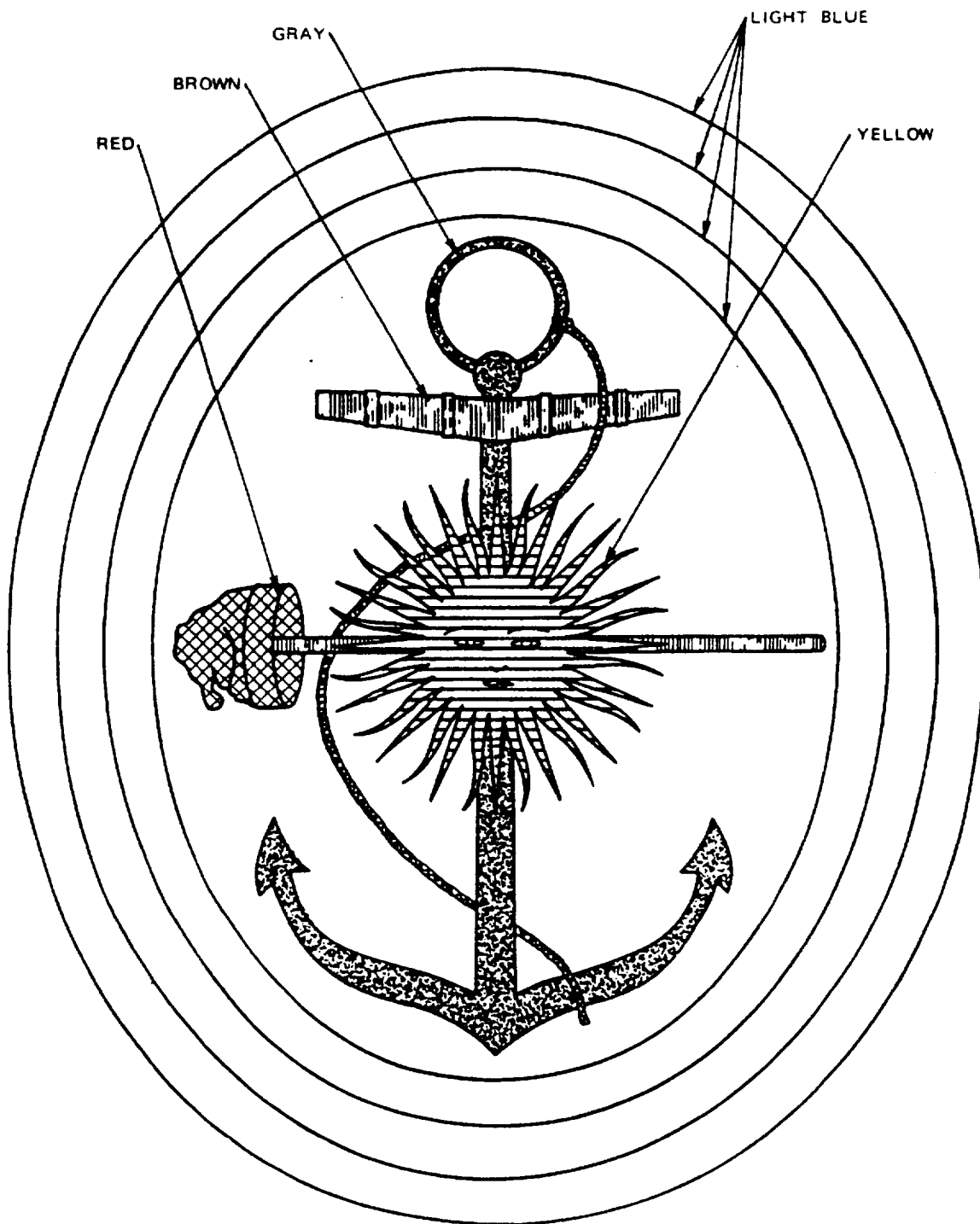


FIGURE F-2. National insignia of Argentina.

MIL-STD-2161A(AS)

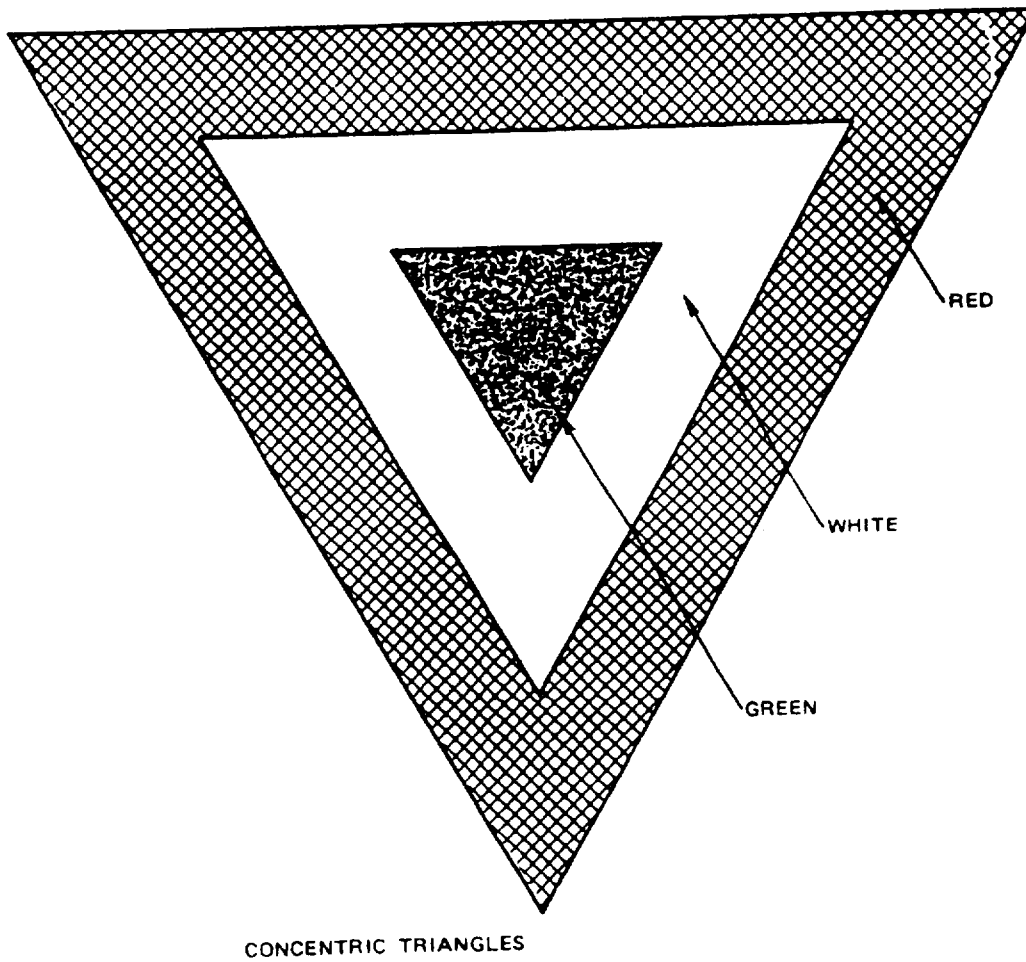
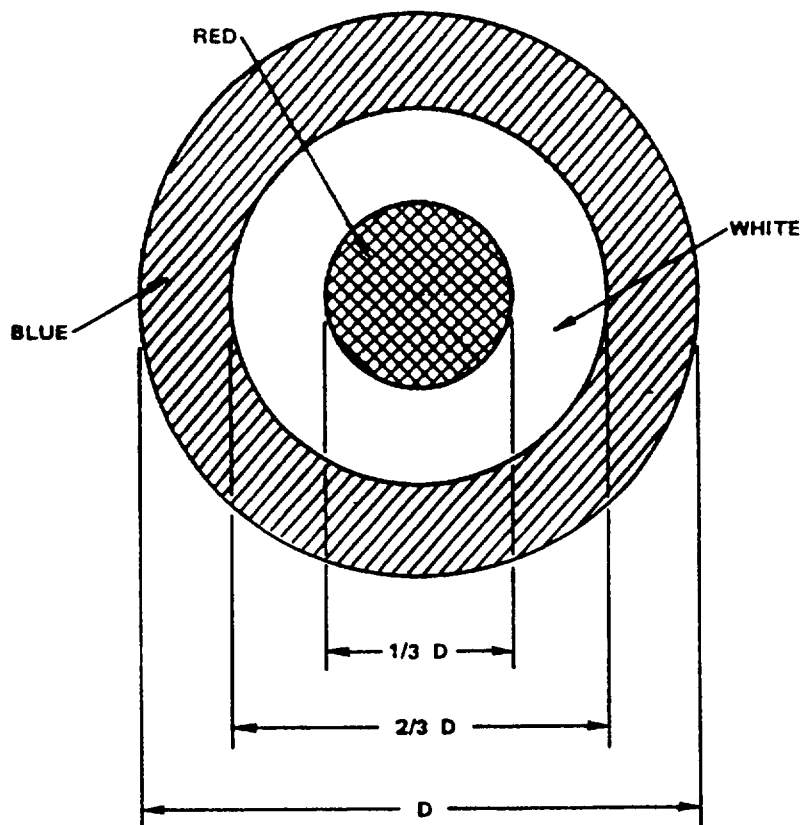


FIGURE F-3. National insignia of Mexico (flash).

MIL-STD-2161A(AS)

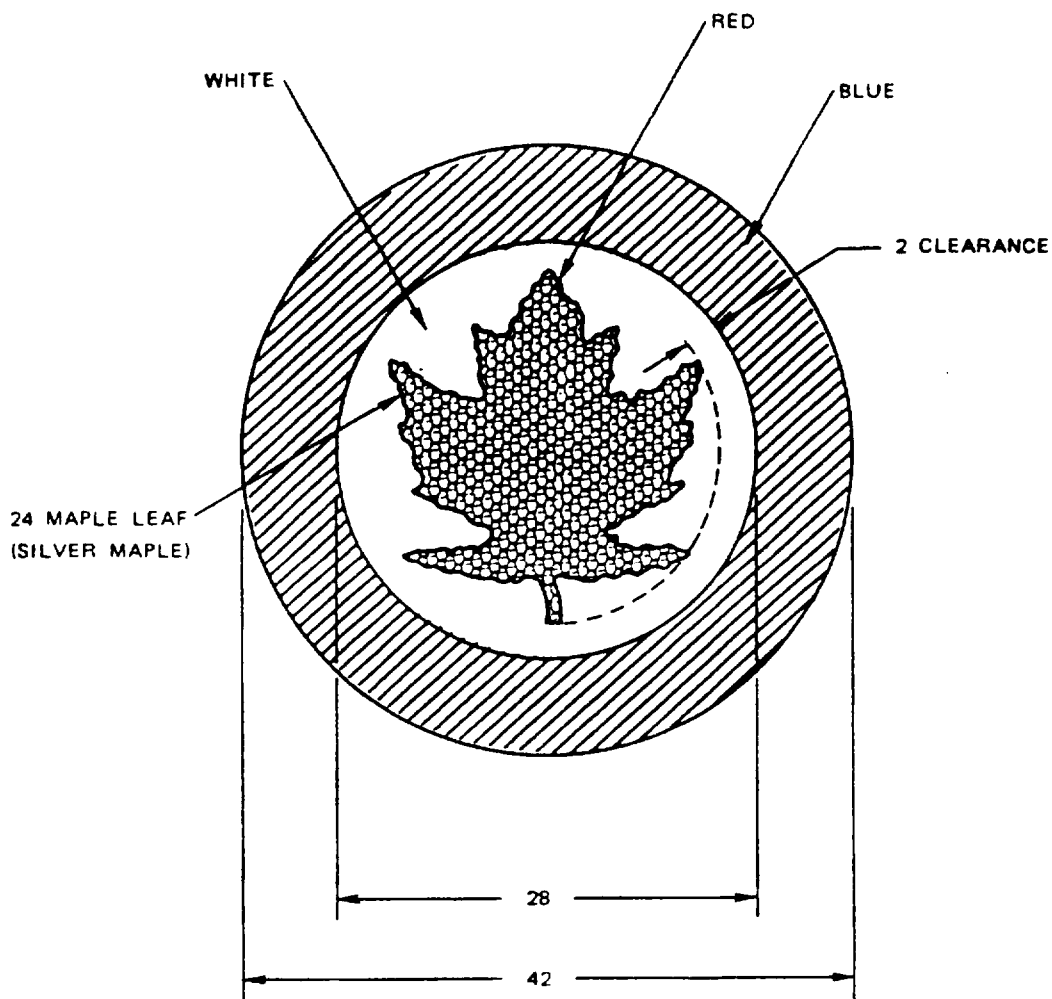


| SIZE | D |
|--------|------------|
| SMALL | 2 FT 6 IN. |
| MEDIUM | 2 FT 8 IN. |
| LARGE | 3 FT |

DIMENSIONS IN INCHES:

FIGURE F-4. National insignia of Great Britain.

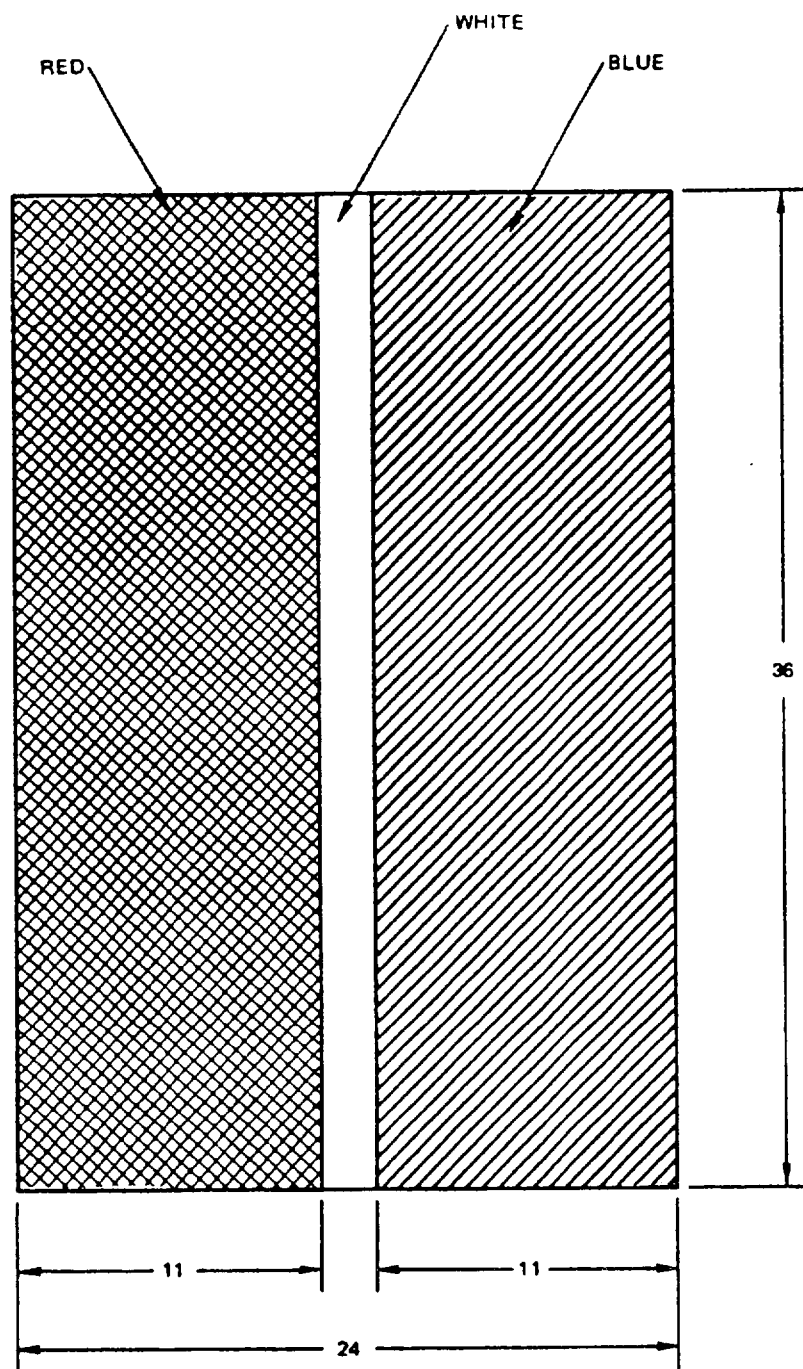
MIL-STD-2161A(AS)



DIMENSIONS IN INCHES

FIGURE F-5. National insignia of Canada (roundel) marking I.

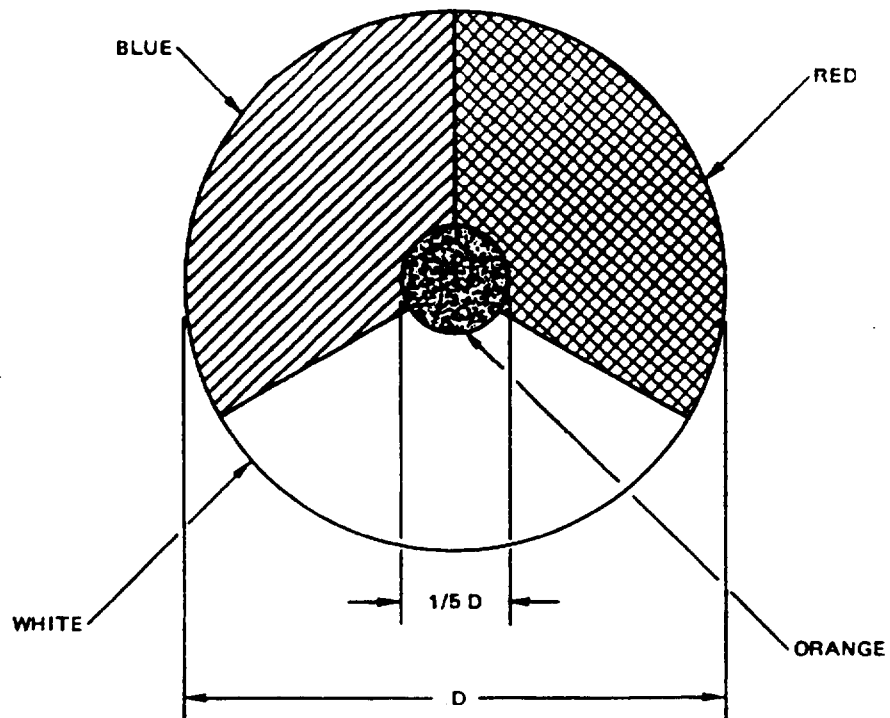
MIL-STD-2161A(AS)



DIMENSIONS IN INCHES

FIGURE F-6. National insignia of Canada (flash) marking II.

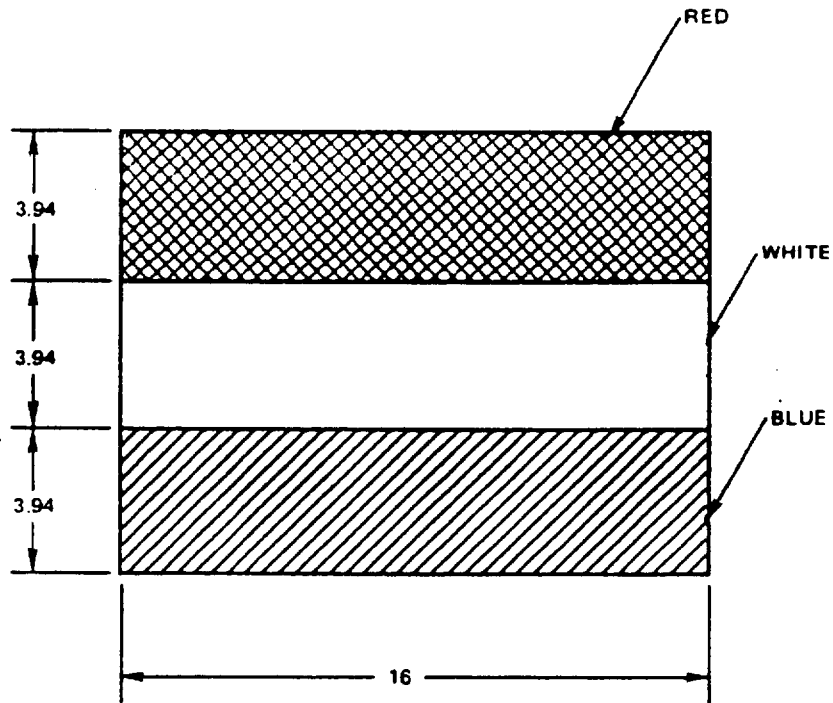
MIL-STD-2161A(AS)



DIMENSIONS IN INCHES:

FIGURE F-7. National insignia of Netherlands (roundel) marking I.

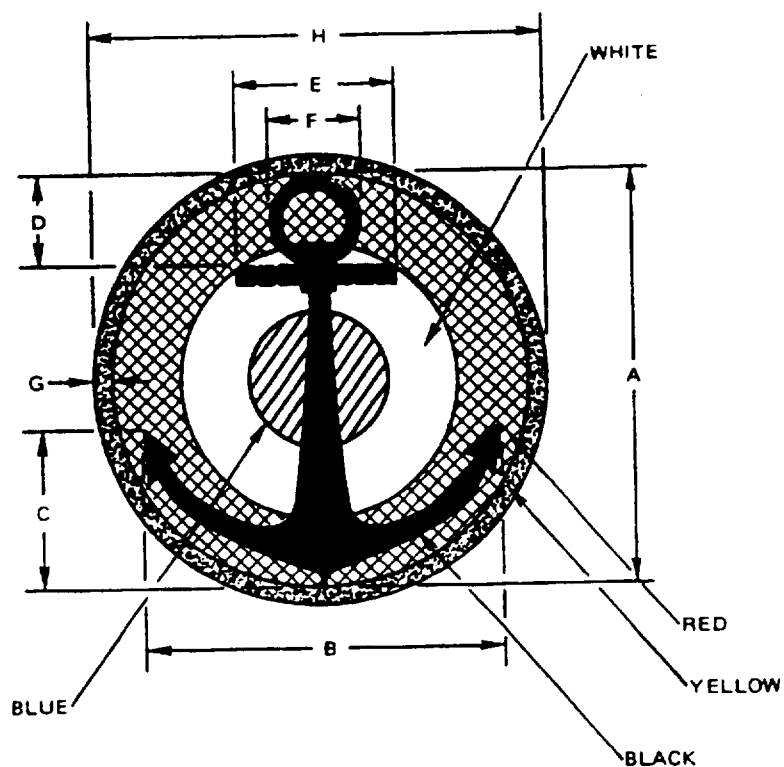
MIL-STD-2161A(AS)



DIMENSIONS IN INCHES

FIGURE F-8. National insignia of Netherlands (flash) marking II.

MIL-STD-2161A(AS)

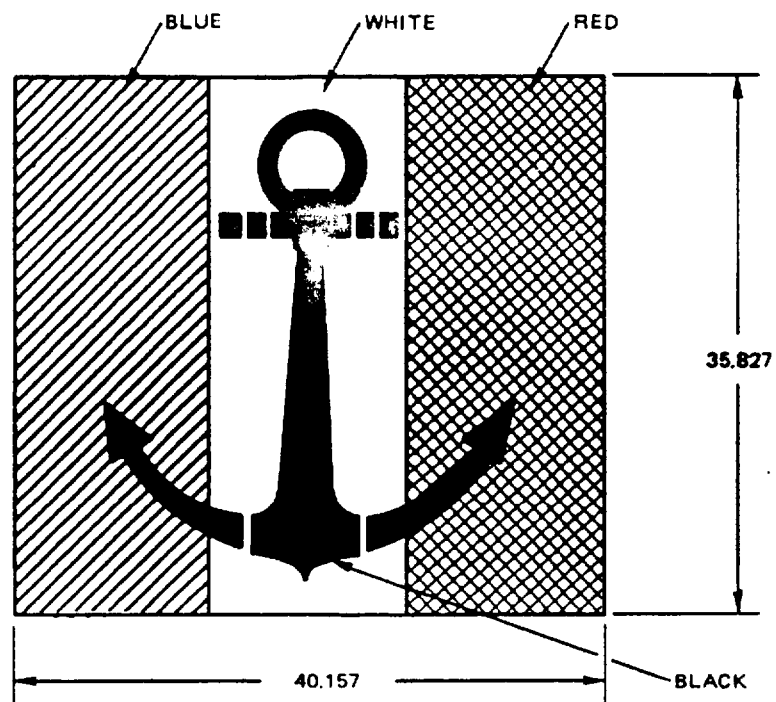


| A DIA | B | C | D | E | F DIA | G | H DIA |
|-------------------|---------|---------|--------|---------|----------|--------|----------|
| 23.622 (60 CM) | 20.6692 | 8.8582 | 5.315 | 20.6692 | 4.7244 | 1.1811 | 25.9842 |
| 27.559 (70 CM) | 24.0942 | 10.3149 | 6.181 | 24.0942 | 5.5118 | 1.1811 | 29.9212 |
| 31.496 (80 CM) | 27.559 | 11.811 | 7.0866 | 11.811 | 6.2992 | 1.1811 | 33.8582 |

DIMENSIONS IN INCHES

FIGURE F-9. National insignia of France (cocarde) marking I (anchor superimposed when planes are intended for French Navy).

MIL-STD-2161A(AS)



DIMENSIONS IN INCHES

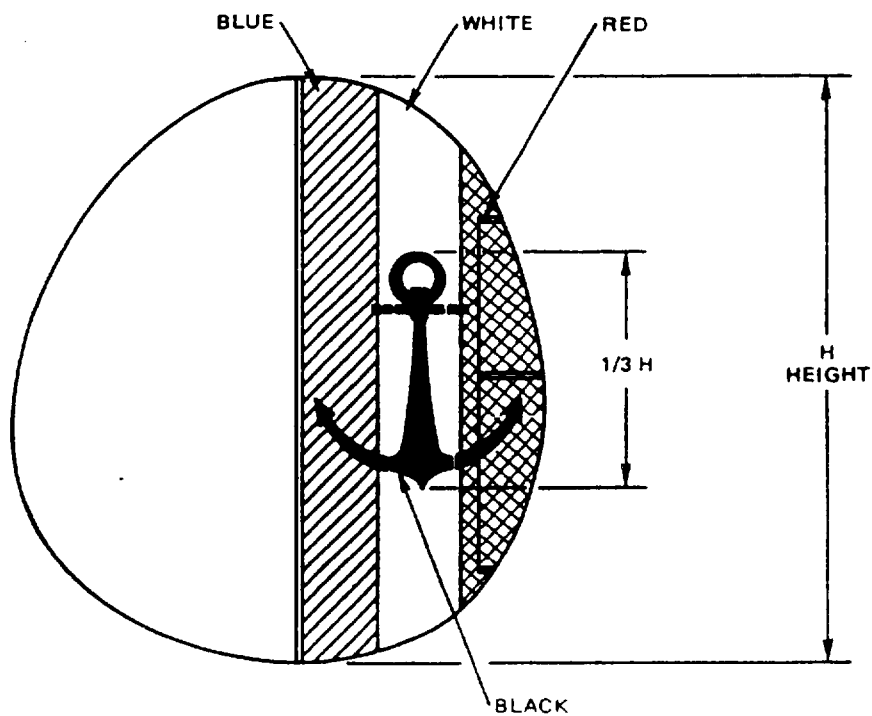
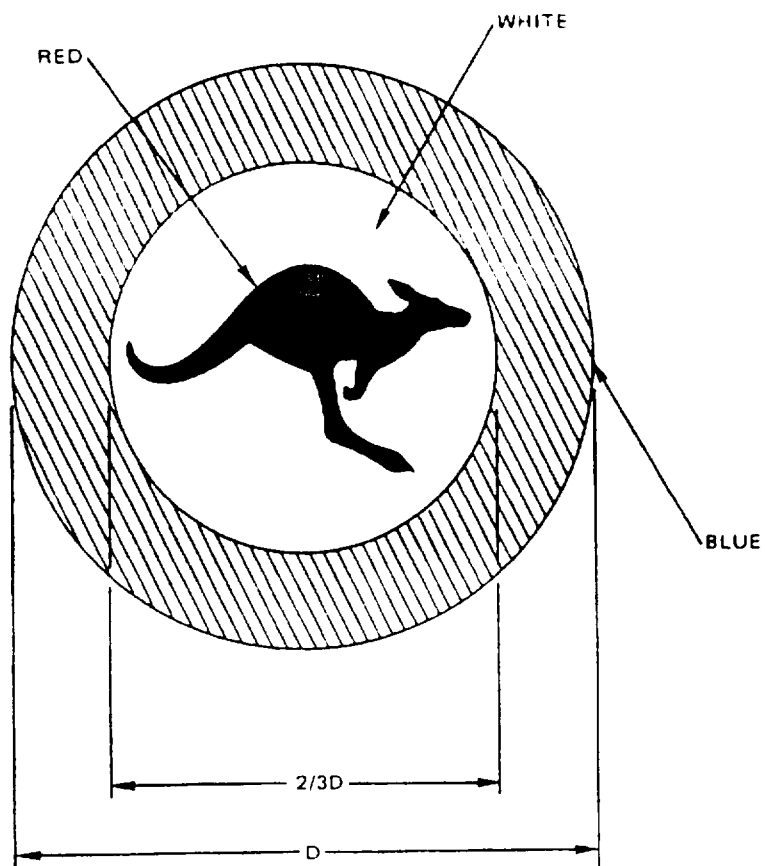


FIGURE F-10. National insignia of France (flash) marking II.

MIL-STD-2161A(AS)

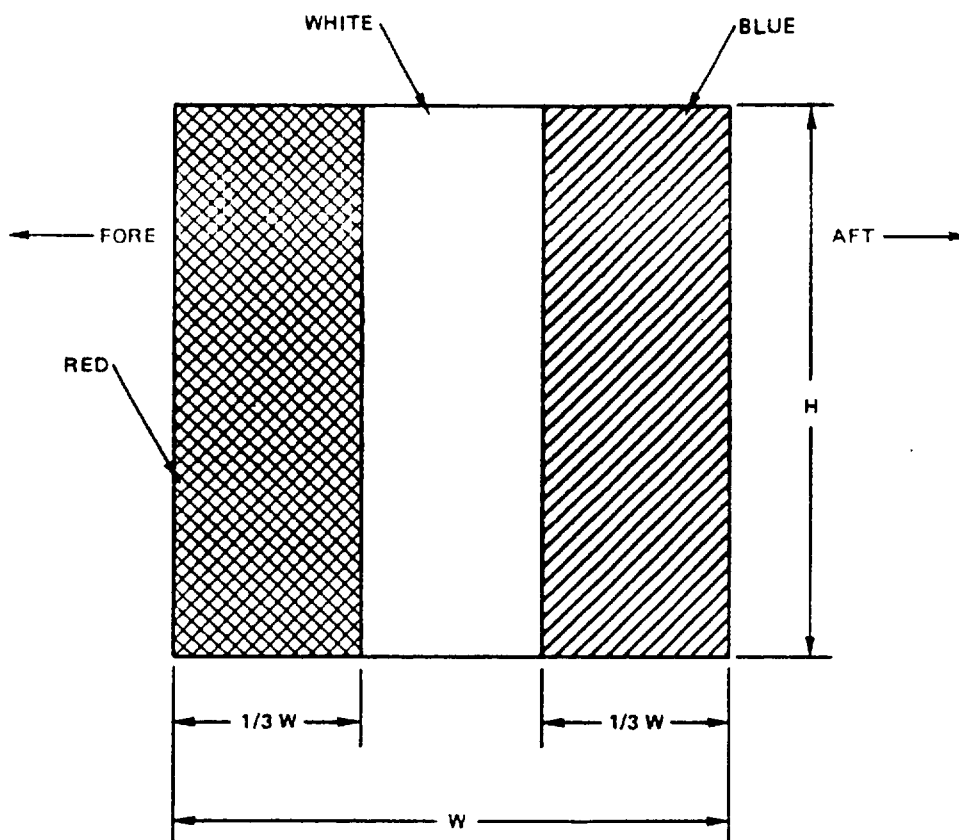


| TYPE OF FUSELAGE | | D |
|------------------|-------------------------------|--------|
| SMALL | TRAINER OR BOOM TYPE FUSELAGE | 16 1/2 |
| MEDIUM | AND FIGHTER AIRCRAFT | 33 |
| LARGE | TRANSPORT AND HEAVY BOMBERS | 48 |

DIMENSIONS IN INCHES

FIGURE F-11. National insignia of Australia (roundel) marking I.

MIL-STD-2161A(AS)



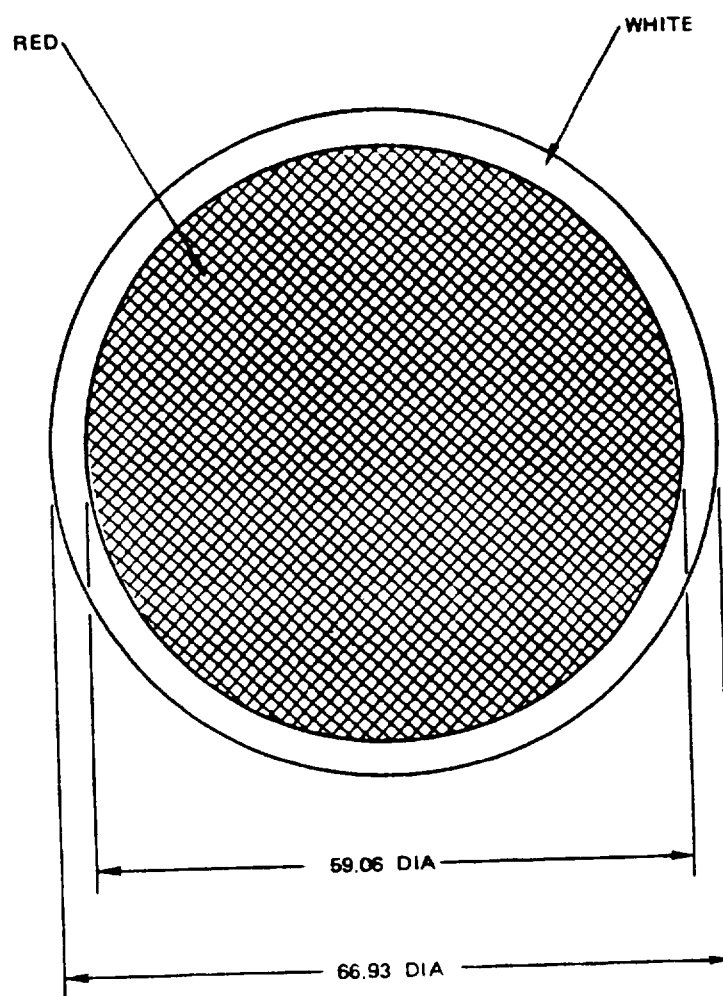
TABLE

| OVERALL SIZE OF TAIL FIN FLASH | | H HEIGHT | W WIDTH |
|-----------------------------------|----------------------------|-------------|------------|
| SMALL: | TRAINING AIRCRAFT | 18 | 16 |
| MEDIUM: | AND FIGHTER AIRCRAFT | 24 | 22 |
| LARGE: | TRANSPORT HEAVY BOMBER | 24 | 34 |

DIMENSIONS IN INCHES

FIGURE F-12. National insignia of Australia (flash) marking II.

MIL-STD-2161A(AS)

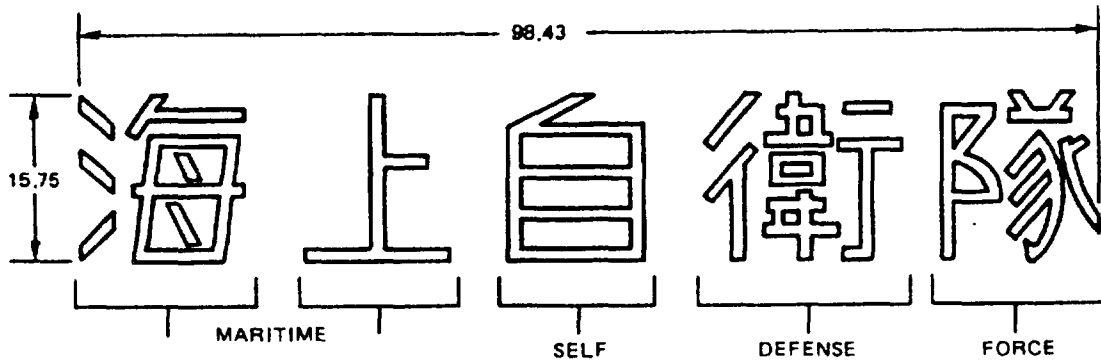


DIMENSIONS IN INCHES

FOR LARGE OR SMALLER AIRCRAFT, MARKINGS SHALL BE PROPORTIONATELY LARGER OR SMALLER AS APPLICABLE

FIGURE F-13. National insignia of Japan (roundel).

MIL-STD-2161A(AS)

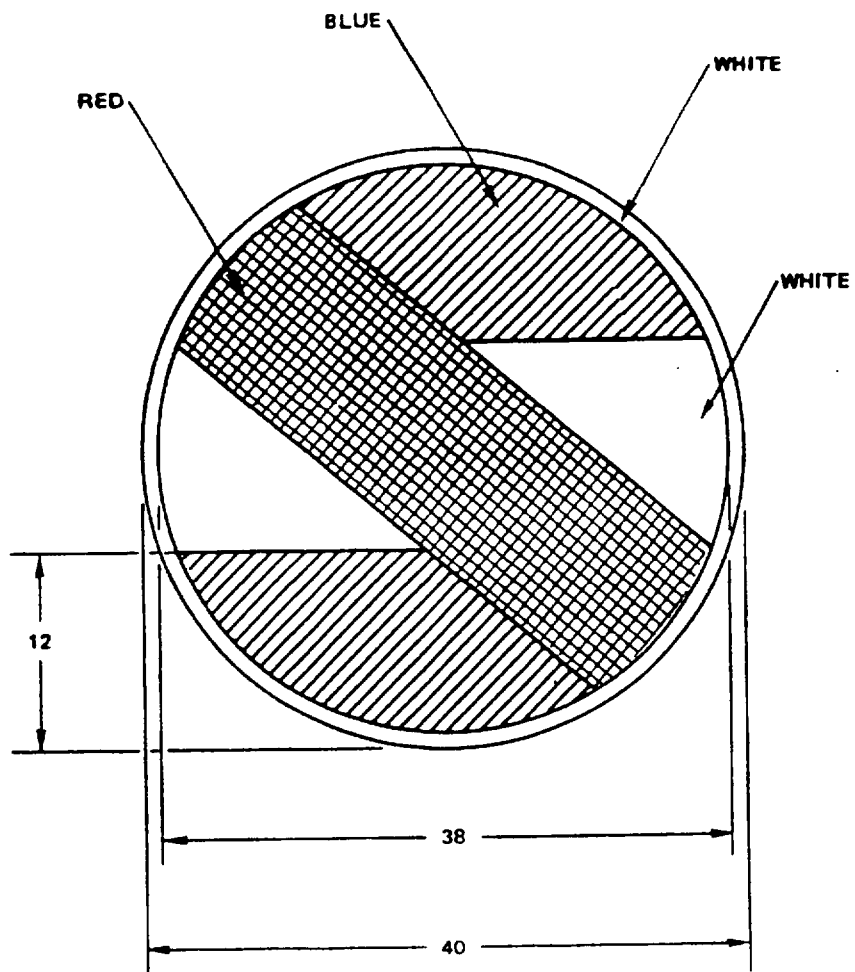


DIMENSIONS IN INCHES

FOR LARGER OR SMALLER AIRCRAFT, MARKINGS SHALL BE PROPORTIONATELY
LARGER OR SMALLER AS APPLICABLE

FIGURE F-14. National insignia of Japan (kanji characters).

MIL-STD-2161A(AS)



FOR LARGER
AIRCRAFT INSIGNIA
SHALL BE
PROPORTIONATELY
LARGER.

DIMENSIONS IN INCHES

FIGURE F-15. National insignia of Uruguay (roundel).

MIL-STD-2161A(AS)

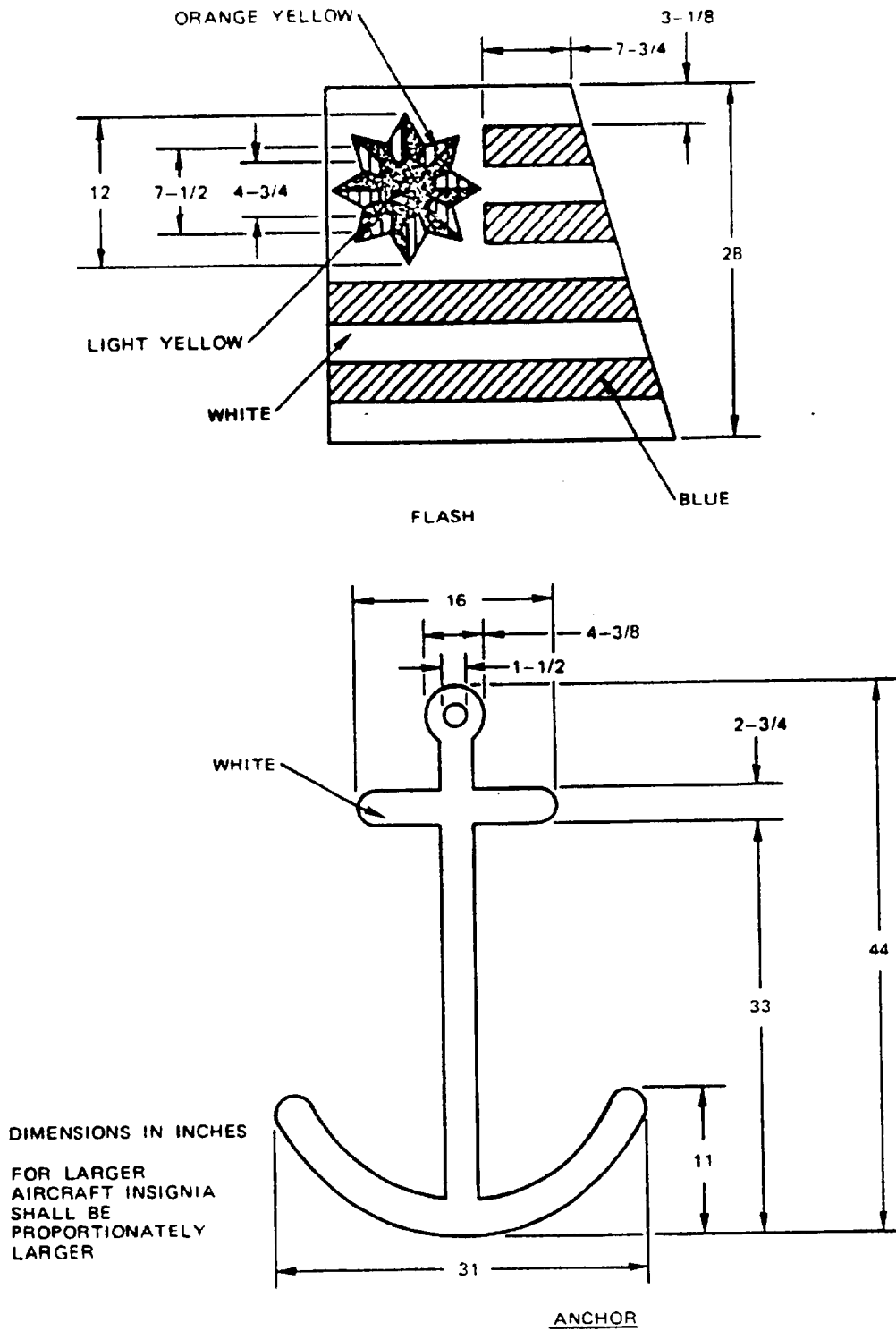


FIGURE F-16. National insignia of Uruguay.

MIL-STD-2161A(AS)

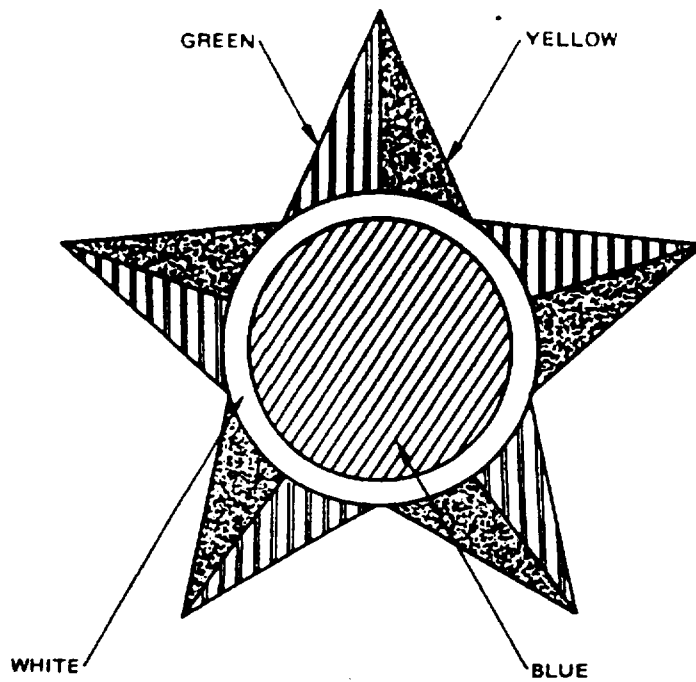


FIGURE F-17. National insignia of Brazil (star) marking I.

MIL-STD-2161A(AS)

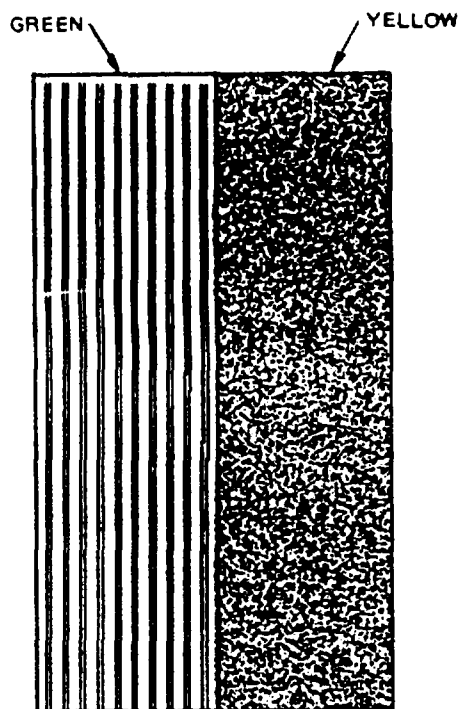


FIGURE F-18. National insignia of Brazil (flash) marking II.

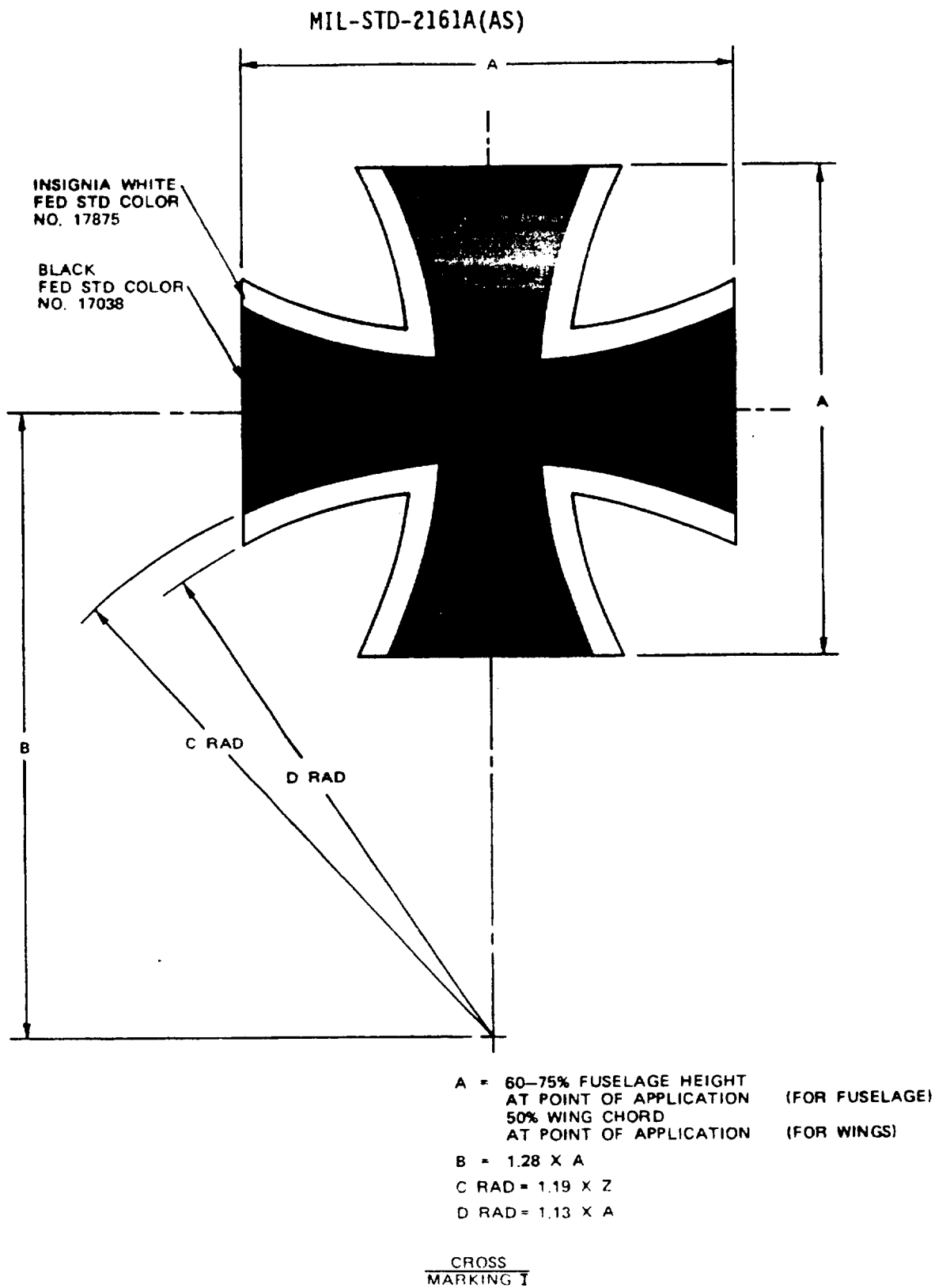
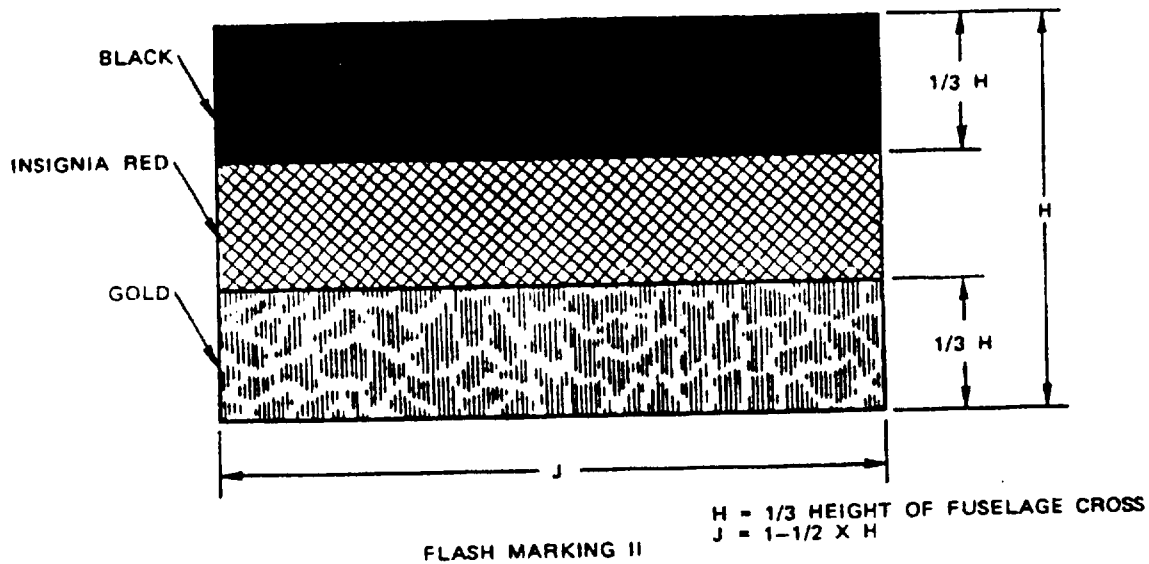


FIGURE F-19. National insignia of Federal Republic of Germany.

MIL-STD-2161A(AS)



$K = 1/2$ WIDTH OF FUSELAGE CROSS
(SEE FIGURE 29)

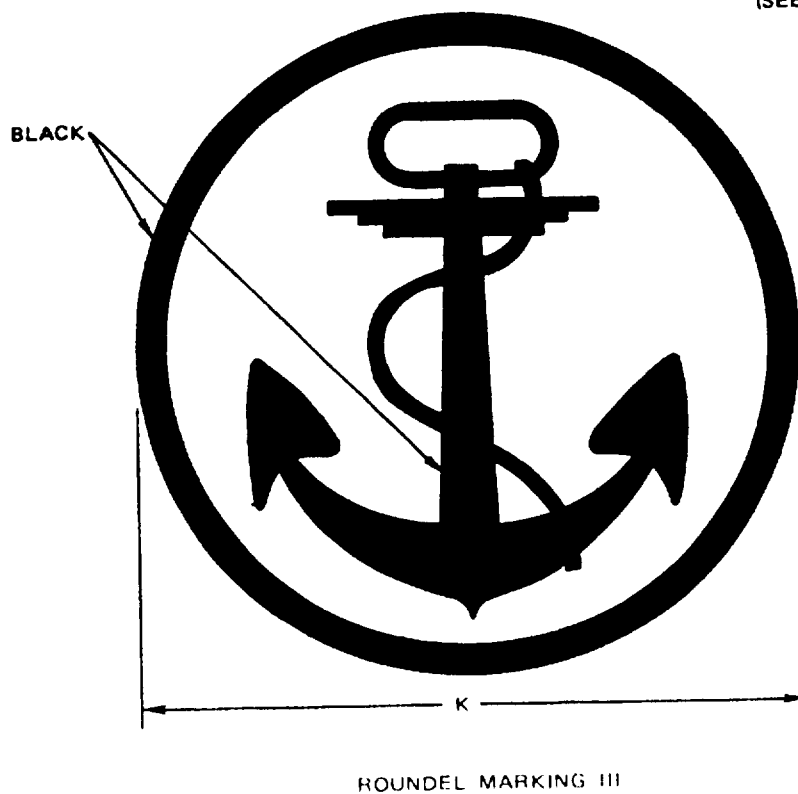
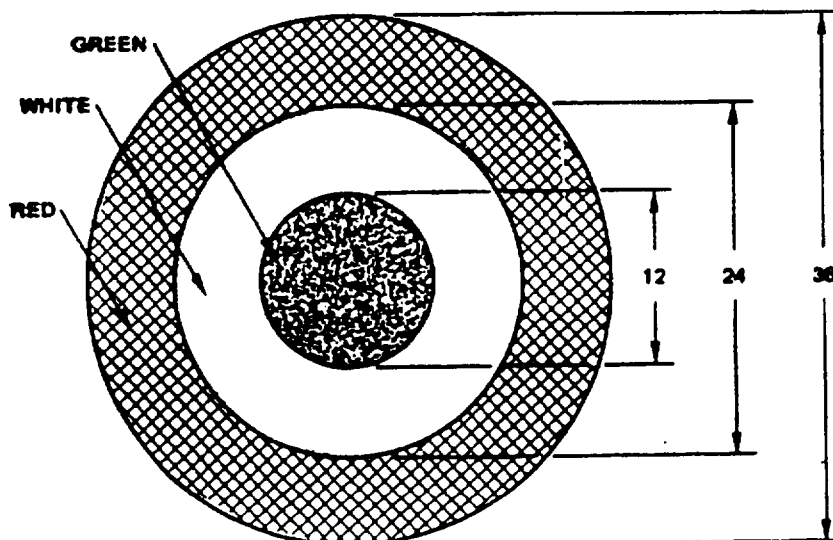
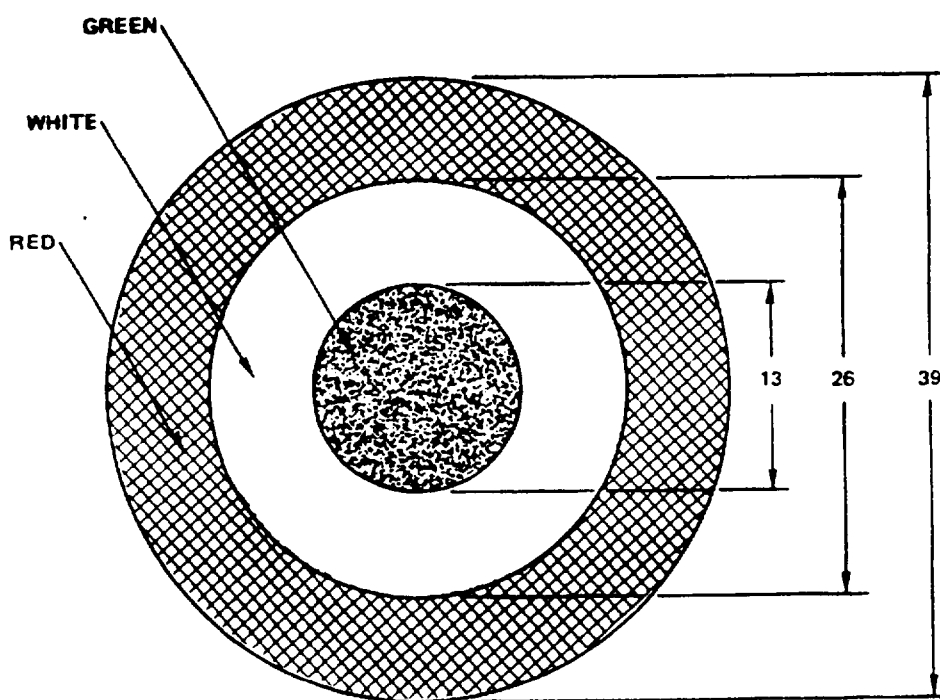


FIGURE F-20. National insignia of Federal Republic of Germany.

MIL-STD-2161A(AS)



INSIGNIA A

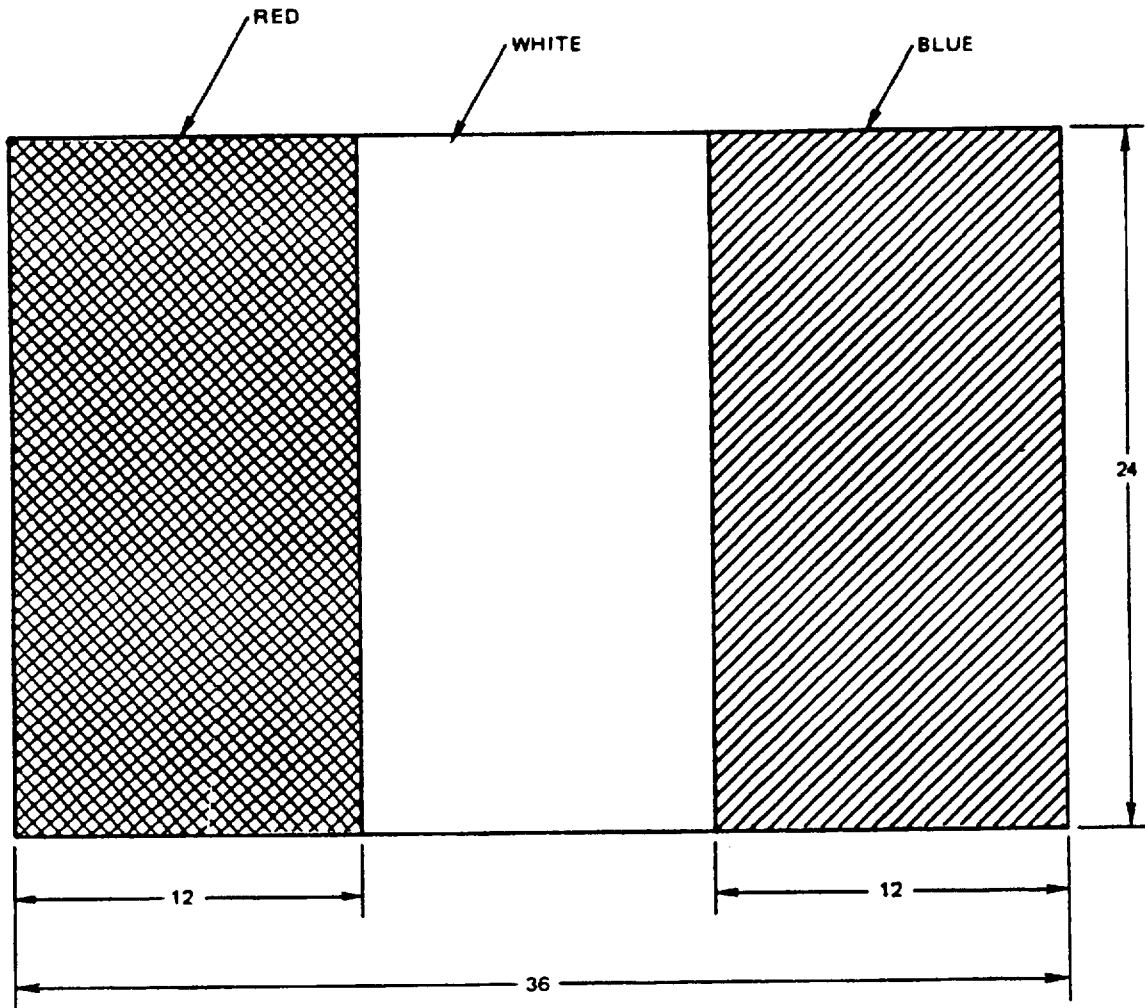


INSIGNIA B

DIMENSIONS IN INCHES

FIGURE F-21. National insignia of Italy (cocarde).

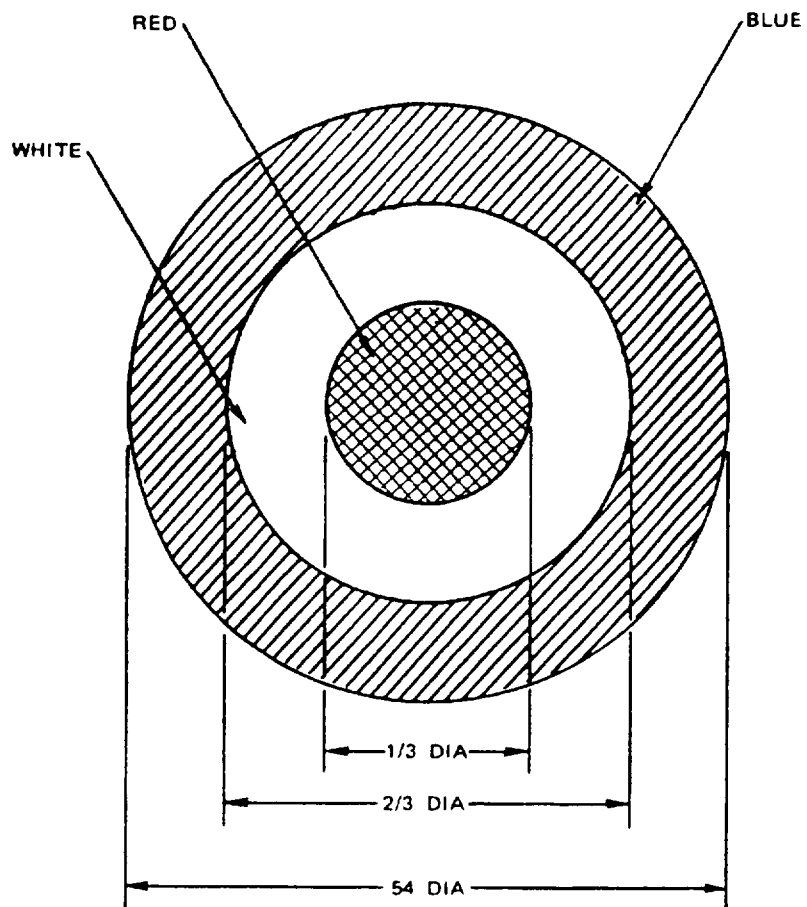
MIL-STD-2161A(AS)



DIMENSIONS IN INCHES

FIGURE F-22. National insignia of New Zealand (roundel) marking I.

MIL-STD-2161A(AS)



DIMENSIONS IN INCHES
DIMENSIONS SHOWN ARE FOR P-3 AIRPLANE

FIGURE F-23. National insignia of New Zealand (flash) marking II.

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
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3. The preparing activity must provide a reply within 30 days from receipt of the form.

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1. DOCUMENT NUMBER

MIL-STD-2161A (AS)

2. DOCUMENT DATE (YYMMDD)

930501

3. DOCUMENT TITLE

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4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)

(1) Commercial

(2) AUTOVON
(if applicable)

7. DATE SUBMITTED

(YYMMDD)

8. PREPARING ACTIVITY

a. NAME COMMANDING OFFICER, NAVAL AIR
WARFARE CENTER AIRCRAFT DIVISION LAKEHURST
SYSTEMS REQUIREMENTS DEPARTMENT

b. TELEPHONE (Include Area Code)

(1) Commercial

(908) 323-7488

(2) AUTOVON

624-7488

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CODE SR3

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