Coded Note Number: **F1070**
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Title: **MIL-S-1222 REV. H-(2) MODS**

This revision history is provided for convenience and does not alleviate the supplier's responsibility with understanding and complying with the full coded note.
Change from Revision A– Editorial change to reformat to current standard.
Bolded font indicates changed/added content.
[*Text deleted*] inserted in the document indicates the removal of content.

Whenever reference is made to military specification MIL-S-1222 Revision H, Interim Amendment 2, the following modifications shall also apply.

Page 8 table I; add new entry under "Copper Alloys, Silicon Bronze", as follows;

Material Grade	Fastener Type	Chemical Requirement Government/Industry Standard	Identification Marking
651	Stud, Bolt, Hex Cap Screw	ASTM-F468	651
651	Nut	ASTM-F467	651

Page 9 Table I Footnote 6 (F); insert "651" before "655".

Page 11 TABLE II; under "Full-Size Fasteners Tensile Strength" for Grade 5 steel, delete "120-150", "105-150" and "90-150" and substitute "120-155", 105-155" and "90-155" respectively.

Table II; under "Full-Size Fasteners, Tensile Strength" for Grade 8 steel, delete "150-170" and "140-170" and substitute "150 minimum" and "140 minimum" respectively.

Page 3 of Amendment 2 Table II; for 300 series corrosion resistant steels, delete section of horizontal line immediately above "316, 321".

Page 12 Table II; insert "651" before "655" under "Copper Alloys, Grade".

Page 15 Table IV; insert "651" before "655" under "Copper Alloys, Grade".

Page 17 Para. 3.7.1; for "Electrodeposited Zinc Coating", delete “Class FE/ZN 13” and substitute “Class FE/ZN 8.” For "Mechanically Deposited Zinc Coating", delete "Class

12." and substitute "Class 8."

Page 18 Para. 3.7.1.2; under "Coating Thickness (Min)" for ASTM-B633, delete "0.0005 inch" and substitute "0.0003 inch". Under "Coating Thickness (Min)" for ASTM-B695, delete "0.0005 inch" and substitute "0.0003 inch".

Page 6 of Amendment 2 Para 3.9; after "order of precedence:", delete "material symbol, lot number, manufacturer's symbol" and substitute "material symbol, manufacturer’s symbol, lot number".

Page 27 Para 4.2; delete and substitute:

4.2 Inspection Lot. For the purpose of inspections, tests, identification and traceability, a lot shall be defined as either (A) or (B) below (see 6.2.1):

(A) A lot of fasteners shall consist of finished fasteners of one part number (i.e., the same material type, grade and condition, style, class, plating/coating, nominal diameter, length and threading) produced from the same heat/lot or melt of metal, same processing of raw material, heat treated in the same batch or heat-treated by a continuous process under the same conditions of time and temperature, and offered for inspection at one time.

(B) A lot of fasteners shall consist of finished fasteners of one part number (i.e., the same material type, grade and condition, style, class, plating, coating, nominal diameter, length, and threading) produced under the same conditions including heat-treatment and offered for inspection at one time."

Page 30 Para 4.4.4; after "as specified in" delete "Table II" and substitute "Tables II and III."

Para 4.4.4.1; add "axial tensile strength tests performed per Paragraph 4.4.4 may be substituted for wedge tensile strength tests for: fasteners greater than 1-1/2 inch nominal size; or, fasteners where the length is insufficient for the testing equipment."

Para 4.4.4.3; delete "Table II" and substitute "Tables II and III".

Page 31 Table XIII; add "6" after "test on full size fasteners".

Table XIII add new footnote: 6-bolts, screws and studs which are too short or have insufficient threads for wedge tensile, axial tensile, elastic proof load, and yield strength tests shall be tested by preparing and testing standard tension test specimens from each lot of bar stock from which the bolts, screws and studs are made. The test specimens shall be subjected to the same heat-treatment as the bolts, screws and studs. For fasteners made with cold working, tension specimens must be made from

finished fasteners. The parent bar stock may not be used to determine the physical properties of cold worked fasteners.

Page 7 of Amendment 2 Para 4.4.4.6; delete and substitute;

4.4.4.6 Alternate Mechanical Testing. Certified mechanical test reports (see 4.5) furnished by the bar stock supplier which demonstrate compliance with the mechanical property requirements (tensile strength, yield strength, percent elongation, reduction of area, and hardness) of Tables II, III and IV may be substituted for mechanical property test requirements of table XIII provided that each of the following conditions are satisfied:

A. Bolts, screws, studs or nuts were fabricated solely by machining without further heat-treatment or cold working.

B. Lot definition (A) is specified and marking or identification is maintained to ensure traceability to the raw material.

C. Mandatory mechanical tests (wedge and proof stress) on full size fasteners are performed on finished fasteners as specified in Table XIII.

Add new paragraph:

4.4.4.6.1 Size Limitations. When bolts and studs are machined from heat treated bar stock, the following requirements apply when using mechanical test results from the bar stock:

1. For studs, the nominal diameter of the finished stud shall not be less than one-half the nominal diameter of the heat treated bar stock.

2. For bolts greater than 1/2-inch nominal diameter, the nominal diameter of the finished bolt shall not be less than one-half the nominal diameter of the heat treated bar stock.

3. For bolts less than or equal to 1/2-inch nominal diameter, the nominal diameter of the finished bolt shall not be less than one-quarter the nominal diameter of the heat treated bar stock.

These limitations are not applicable if testing is performed on full size fasteners or on tensile specimens machined from full size fasteners.

Pages 35 and 36 Table XV; for "Metals to be Joined- Steel and Steel, CRES and Steel" in columns "Less Than 5/8 Inch Diameter" and "5/8 Inch Diameter or Greater", delete "Silicon Bronze, Grades 655,661" and substitute "Silicon Bronze, Grades 651, 655, 661".

For "Metals to be Joined - Steel and Aluminum Alloys" in columns "Less Than 5/8 Inch Diameter" and "5/8 Inch Diameter or Greater", delete "Silicon Bronze, Grades 655, 661" and substitute "Silicon Bronze, Grades 651, 655, 661".

For “Metals to be Joined - Copper and Copper Alloys" in columns "Less Than 5/8 Inch Diameter" and "5/8 Inch Diameter or Greater" delete "Silicon Bronze, Grades 655, 661" and substitute "Silicon Bronze, Grades 651, 655, 661".

Page 37 Table XVI under "Coating Type, Zinc Coating", delete "Class 12" and "Class FE/ZN 13" and substitute "Class 8" and "Class FE/ZN 8" respectively.

Table XVI delete Footnote 2 and substitute:

“2 - Within one hour after coating, alloy steel fasteners shall be baked at a minimum of 190 Deg C. For a minimum of 24 hours to provide hydrogen embrittlement relief."