

**NEWPORT NEWS SHIPBUILDING
NEWPORT NEWS, VIRGINIA**

**APPENDIX D-DoD CONTRACTS
DRAWINGS
August 2012**

I. GENERAL

I.1. All new manufacturer's equipment drawings or revisions to previously approved drawings are to be submitted directly to the Purchaser in accordance with the applicable coded note(s) identified on the purchase order.

I.2. All correspondence required to obtain our local Supervisor of Shipbuilding and/or NAVSEA's approval of drawings will be handled by the Purchaser.

I.3. Correspondence submitting Navy or Commercial drawings to the Purchaser are to itemize all departures from specified requirements. Approval of drawings without the Purchaser being advised that departures are proposed will not constitute approval of such departures nor relieve the supplier of the responsibility of furnishing equipment as specified. Correspondence submitting previously approved drawing for revision approval shall address effect of change(s) on shock and vibration qualifications supported by technical justification.

I.4. Prompt submission of manufacturer's equipment drawings is essential and by accepting the purchase order, of which this appendix forms a part, the supplier acknowledges his obligation to prepare and submit drawings promptly and to cooperate with the Purchaser in securing timely approval of drawings. This is to ensure that the Purchaser's erection schedules will not be placed in jeopardy due to late delivery of equipment.

I.5. All Navy or Commercial drawings for Level I material, as defined in NAVSEA 0948-LP-045-7010, shall show the "MIC Level". When MC-I materials are shown in the lists of material, mark Roman numeral "I" adjacent to the item in the "MIC Level" column. For items which are not Level I, "NA" (not applicable), dash or other appropriate material control symbol shall be marked in the "MIC Level" column. This requirement does not apply to Q-1 material.

I.6. All Navy or Commercial drawings for equipment requiring MIL-S-901 Hi-Shock qualification shall have a note thereon referencing the information required by MIL-S-901D, paragraph 3.3.1.

I.7. All Navy or Commercial drawings for equipment requiring fabrication by welding and allied processes and/or inspection of castings shall meet the requirements of Appendix K-DoD.

I.8. Reproducibles, when required, are to be of a material and quality suitable for making satisfactory copies by xerographic processes. Reproducibles shall be furnished rolled or flat and suitably protected from possible damage. Folded or creased reproducibles and reproducibles unsuitable for printing will be returned for replacement at no additional cost to the Purchaser. REPRODUCIBLES OF NAVY AND COMMERCIAL DRAWINGS MUST ALSO BE SUITABLE FOR PRODUCING MICROFILM THAT WILL MEET THE REQUIREMENTS OF MIL-M-9868.

II. FOUNDATION AND INFORMATION DRAWINGS

II.1. Foundation and information drawings are to be commercial outline or catalog cut showing the following applicable information.

- A. Estimated center of gravity (for all equipment weighing more than 200 pounds)
- B. Overhaul dimensions
- C. Foundation bolting
- D. Estimated, calculated or weighed dry and operating weights
- E. Size and location of pipe and electrical connections
- F. Space required for overhaul of internal parts
- G. Type and quantity of resilient mounts required.
- H. Material

II.2. One reproducible of each Foundation and Information drawing will be required.

II.2.1. If the purchase order contains items for both Foundation and Information drawings and Navy or Commercial drawings, the Foundation and Information drawings will not be required if the Navy or Commercial drawings can be submitted on or before the date the Foundation and Information drawings are required.

III. NAVY DRAWINGS

III.1. Navy drawings for hull, mechanical and electrical equipment shall be prepared in accordance with all the requirements of Military Specification DOD-D-1000B including Amendment 3 dated 13 May 1983 and Military Standard DOD-STD-100C including Notice 4 dated 4 May 1983. Alternately, previously approved drawings in compliance with MIL-D-963H (SHIPS) dated December 7, 1960 (Amendments 1 and 2 and paragraphs 1.1.2, 3.8.1.1, 3.10.1.3 and 3.10.1.4 are not applicable) are acceptable. Navy drawings for hull, mechanical and electrical equipment prepared in accordance with all the requirements of Military Specification MIL-D-1000/2 are also acceptable.

III.2. Navy drawings for electronic equipment shall comply with Military Specification MIL-D-23140A (SHIPS) dated May 14, 1965 or MIL-D-17419B (SHIPS) dated November 1, 1963 and Amendment 3 thereto dated April 15, 1965. Paragraph 4 of Military Specification MIL-D-17419 is not applicable.

III.3. All new Navy drawings for hull, mechanical and electrical equipment shall be level 3 of DOD-D-1000B(3).

III.4. Existing Navy approved drawings, including revisions thereto, do not have to meet the requirements of DOD-D-1000B(3) and DOD-STD-100C Notice 4.

III.5. Also, when preparing a drawing, if the major portion is developed by reproducing an existing drawing, upgrading to DOD-D-1000B(3) and DOD-STD-100C Notice 4 is not required. When this is the case, a notation should be added to the drawing so stating.

III.6. Certification Data Sheet drawings shall be furnished when specified in the equipment specification, purchase order or when necessary to identify optional design characteristics or variations. Certification Data Sheet drawings shall, as a minimum, provide the data specified in Mil-D-1000/2, in addition to that required by the applicable equipment specification and purchase order.

NOTE: Previously approved Certification Data Sheets for identical equipment **do not** require revision to solely revise/extend the following data:

- Government Contract Information
- Manufacturer's Order Number (Purchase Order) Information
- Application
- Ship Identification Information
- Number of Items per Ship Data

III.7. Navy drawings for Navy Service "C" motors will not require a list of material.

III.8. The following information is to be listed on the Navy outline drawing of all equipment requiring installation on resilient mounts:

- A. The moments of inertia and products of inertia of the mounted unit in the operating condition about three mutually perpendicular axes with the origin at the center of gravity of the mounted unit and the orientation of the axes indicated with respect to the equipment and ship.
- B. The six natural frequencies of the mounted unit in the operating condition.
- C. List assumptions made in calculating the natural frequencies.

III.9. All Navy drawings submitted for initial approval are to show calculated dry weight, operating weight (where applicable) and centers of gravity. All final Navy drawings are to show weighed dry weight and operating weight (where applicable). The centers of gravity of equipment weighing less than 200 pounds need not be listed.

III.10. One reproducible of each Navy drawing will be required for each original and/or revision approval.

III.11. One reproducible of each revised final Navy drawing will be required after approval (either original and/or revision) has been granted.

III.12. Correspondence submitting Navy drawings for approval are to state which drawings are presently being approved by another Naval Activity. The submittal correspondence shall also advise which Navy Activity and Navy ships are involved.

IV. COMMERCIAL DRAWINGS

IV.1. Commercial drawings are to be a sectional assembly showing the following applicable information.

- 1. A list of material giving the name, quantity, material and material specification of each part.
- 2. Overall dimensions.
- 3. Size and location of pipe and electrical connection.
- 4. Wiring diagrams.
- 5. Sufficient detail of valve hand-wheels, ends of stems and stem nuts to enable us to fit label plates under the stem nuts or to fit extension stems or other remote operating gear.

IV.2. Where the above information is shown on an existing Navy drawing, the Navy drawing may be submitted.

IV.3. One reproducible of each Commercial drawing will be required for each original and/or revision approval.

IV.4. One reproducible of each revised final Commercial drawing will be required after approval (either original and/or revision) has been granted.

IV.5. See Section III of this appendix for Certification Data Sheet requirements.

V. APPLICABLE SPECIFICATIONS

V.1. Unless otherwise indicated, the applicable issue of specification and standards shall be that in effect as defined in Newport News Shipbuilding purchase order Appendix B-DoD .

V.2. Copies of Navy purchase specifications (JAN-STD's, MIL-STD's, NAVSEA drawings, NAVSEA forms, etc.) may be obtained through your local Government Inspector.