

DATA ITEM DESCRIPTION			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. TITLE		2. IDENTIFICATION NUMBER		
AIRBORNE NOISE CONTROL/DESIGN HISTORY BOOKLET		DI-HFAC-81278		
3. DESCRIPTION/PURPOSE				
3.1 The purpose of the Airborne Noise Control/Design History Booklet is to provide a periodic report that documents the Contractor's efforts for meeting the airborne noise requirements of the Ship Specifications.				
4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
920728	N/SEA 55N3			
7. APPLICATION/INTERRELATIONSHIP				
7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER	
			N6769	
10. PREPARATION INSTRUCTIONS				
10.1 <u>Format</u> . The Airborne Noise Control/Design History Booklet shall be in Contractor's format.				
10.2 <u>Content</u> . The Airborne Noise Control/Design History Booklet shall include airborne noise engineering analyses with supporting calculations which demonstrates that the specified-ship compartments and topside areas noise acceptance levels shall be met. The analyses shall demonstrate that all noise control measures necessary to meet the airborne noise acceptance levels have been identified and incorporated into the ship design. The analyses shall be based on the equipment arrangements used for the ship construction and the most current data, including machinery noise acceptance levels invoked in machinery procurement specifications and pre-installation noise test data. The Airborne Noise Control/Design History Booklet shall include the following:				
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11. DISTRIBUTION STATEMENT				
DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				

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BLOCK 10 - PREPARATION INSTRUCTIONS (Continued)

10.2.1 Equipment Listing. This section shall identify the machinery and equipment to be procured to noise level requirements together with the noise performance requirements to be included in the contract specifications for Contractor furnished machinery.

10.2.2 Compartment Requirements. This section shall include a tabulation of compartments and the assigned airborne noise criteria per Section 073 of the Ship Specifications.

10.2.3 Noise Sources. This section shall identify for each compartment (except lockers, storerooms, and passages), all noise sources, including HVAC systems, equipment noise source levels and transmission paths, and the noise attenuation properties of noise control measures, as well as noise attenuation properties of measures required for other purposes such as vibration and thermal control treatments. Airborne noise source levels used in the predictions shall also be identified. Where measured source levels are not available, estimated levels shall be used. The basis for the source levels shall also be included.

10.2.4 Calculations. This section shall list the noise prediction for each compartment for the machinery operating bill corresponding to the conditions specified in Section 073 of the Ship Specifications. The noise level predictions shall include the effects of noise sources located within each space and those located in adjacent and other nearby spaces. Both airborne and structureborne sound transmission paths shall be included in the calculations. Where noise measurements locations are known, both reverberant and direct field effects shall also be included in the calculations of compartment noise levels. Spreadsheet calculations with assumptions shall be identified.

10.2.5 Noise Prediction Calculations. This section shall include a tabulation of the predicted noise levels calculated for each space compared with the applicable noise level criteria per Section 073 of the Ship Specifications.

10.2.6 Additional Noise Controls. This section shall describe where noise control features, in addition to those specified in the Ship Specifications, are being incorporated into the design to meet compartment airborne noise criteria.

10.2.7 Acoustic Treatments Location. This section shall include a modified compartment and access drawing showing the locations of the various types of bulkhead and overhead acoustic treatments.

10.2.8 References. This section shall list the references, such as specifications, standards, vendor specifications, etc., from which the requirements for the design have been established.