

Do not further distribute any of these documents without NAVSEA concurrence. Also do not distribute to any foreign nationals.

UPDATED AS OF 3/19/02

UNCLASSIFIED

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

NAVSEA 0902-LP-006-0000
 Rev 32

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
DDS 051-1	**		Prediction of smooth-water powering performance for surface-displacement ships	15 May 1984
DDS 070-1	**		Determination of list and trim limits for U.S. Navy surface ships	28 Oct 1987
***DDS 072-1	**	G+C CONTROL # 898	Shock design values	15 Sep 1972
***DDS 072-2	**	G+C CONTROL # 1385	Nuclear blast protection environments	1 Apr 1973
***DDS 072-3		G+C CONTROL # 2498	Conventional weapons protection (fragments)	24 Feb 1988
DDS 072-4	**		Hull, mechanical, and electrical systems, survivability	1 Mar 1986
DDS 072-5	**		Equipment sway brace design	15 Jun 1988
***DDS 072-6	**	G+C CONTROL # 2499	Shaped charge warhead weapon effects data	30 Oct 1987
***DDS 072-7	**	G+C CONTROL # 2501	Conventional airblast (proximity)	20 Jan 1988
***DDS 072-8	**	G+C CONTROL # 2500	Conventional airblast (contact and internal) design and analysis methodology	11 Jun 1986
DDS 072-9	**		Nuclear thermal radiation protection data	26 Apr 1989
DDS 074-1	**		Riveting steel or aluminum	CANCELED

- * These Design Data Sheets have not been rewritten and retain the Old Number.
- ** No former Design Data Sheet Number.
- *** Classified Confidential - Listed above for reference only and not part of this book.
- **** These Design Data Sheets have been converted to Mil-HDBK.

FOR UPDATES TO ODS, CONTACT JOHN KALLINIKOS NAVSEA 202-781-3729
 E-MAIL KALLINIKOSJS@NAVSBA.NAVY.MIL

UNCLASSIFIED

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
DDS 077-1	**		Safety design criteria for storage compartments containing hazardous materials on surface ships (with replacement pages 4, 5, 6, and 19 dated 1 March 1982)	1 Jul 1980 (Superceded by SDS 077-1)
DDS 079-1	**		Stability and buoyancy of U.S. Naval surface ships (with errata sheet changes dated 25 June 1976)	1 Aug 1975
DDS 079-2	**		Minimum required freeboard for U.S. Naval surface ships	1 Mar 1982
DDS 100-1	DDS 1100-1		Reinforcement of openings in structure of surface ships other than in protective plating	15 May 1984
DDS 100-2	DDS 1100-2		Openings in decks and bulkheads for stuffing tubes and pipes	26 Oct 1987
DDS 100-4	DDS 9110-4		Strength of structural members	15 Nov 1982
DDS 100-5	*DDS 9110-9		Strength of glass reinforced plastic structural members	1 Aug 1969
DDS 100-6	DDS 2900-1		Longitudinal strength calculation	29 May 1987
DDS 100-7	**		Structure to resist weapons firing effects	15 May 1984

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

**** These Design Data Sheets have been converted to Mil-HDBK.

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
DDS 100-9	**		Nuclear airblast design for surface ship structures	27 Feb 1991
***DDS 110-1	DDS 1100-5	<i>DO NOT HAVE THIS DDS</i>	Criterion for submarine structure (Amended 1 July 1961)	1 Aug 1957
***DDS 110-2	DDS 9110-8	<i>DO NOT HAVE THIS DDS</i>	Submarine structural design	27 May 1987
DDS 112-1	**		Submarine main ballast tank structural design	18 Nov 1987
DDS 116-1	**		Stem shape design	15 May 1984
DDS 130-1	*DDS 1106-1		Structural design of aircraft handling decks	1 Nov 1957
DDS 130-2	**		Structural design and analysis of helicopter handling decks	1 Jul 1984
DDS 130-3	**		Structural design and analysis of wheeled and tracked vehicle decks	3 Sep 1987
DDS 130-4	**		Deck camber and sheer for USN surface ship	2 Sep 1987
DDS 150-1	*DDS 9110-7		Design of foundations and other structures to resist shock loading	1 Mar 1964
DDS 161-1	DDS 4301-2		Shaft struts	15 Nov 1982
DDS 161-2	**		Propulsion shaft fairings	26 Aug 1987
DDS 170-0	DDS 170-1		Mast designs (with	1 Jul 1980

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

**** These Design Data Sheets have been converted to Mil-HDBK.

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
	DDS 170-2 DDS 170-3		replacement pages 1, 2, 3, and 4 dated 1 March 1982)	
DDS 185-1	**		Designs of foundations for arresting gear sheaves	1 Aug 1975
DDS 200-1	DDS 9400-1		Calculation of surface ship endurance fuel requirements	1 Mar 1982
DDS 221-1	*DDS 9520-1		Data for estimating pressure losses in engine and boiler inlet and exhaust systems	1 Oct 1972
DDS 243-1	DDS 4301		Propulsion shafting (with replacement pages 2, 5, 7, 11, 20, and 21 dated 1 Oct 1966; replacement pages 17 and 19 dated 1 Dec 1966; replacement page 12 dated 1 Dec 1970; replacement page 18 dated 1 Oct 1972)	1 Jan 1960
DDS 245-1	**		Controllable pitch propellers with bolted on blades	1 Mar 1986
DDS 251-1	*DDS 53-1		Forced draft blowers, duct work for	1 Jun 1935
DDS 254-1	*DDS 4601-1		Steam condensers	15 Oct 1953
DDS 300-1	DDS 9620-1		Fault current calculations for direct current systems	1 Dec 1970
DDS 300-2	DDS 9620-3		Fault current calculations and protective device coordinations for 60 and 400 Hz power systems	28 Jun 1995

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

**** These Design Data Sheets have been converted to Mil-HDBK.

UNCLASSIFIED

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

NAVSEA 0902-LP-006-0000
Rev 32

FILED UNDER DDS
 TAB 304-1

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
			supplied by rotating machinery	
DDS 302-1	DDS 9630-1		Motor and controller application requirements (a.c. and d.c.) (with replacement pages 1 and 20 dated 4 Feb 1987)	3 May 1979
DDS 304-1	DDS 9620-5	MIL-HDBK-299	Electric cable voltage drop calculations	CANCELED
DDS 304-2	DDS 9620-5	MIL-HDBK-299	Electrical cables ratings and characteristics	CANCELED
DDS 305-1	DDS 9280-2		Designation and marking of electric system (with replacement page 1 dated 1 Oct 1972; replacement pages 2 and 7 dated 2 Oct 1977)	1 May 1970
DDS 310-1	DDS 9610-2		Electrical system load and power analysis for surface ships	1 Jul 1980
DDS 311-1	DDS 9610-1		Frequency regulation of a.c. ship service electric power systems	1 Dec 1970
DDS 311-2	DDS 9610-3		Voltage regulation of a.c. ship service electric power systems	1 Oct 1972
DDS 311-3	*DDS 9620-4		Ship service electric power system, application and coordination of protective devices	1 Sep 1962

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

**** These Design Data Sheets have been converted to Mil-HDBK.

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
DDS 313-1	**		Submarine battery endurance calculations	1 Mar 1986
DDS 314-1	**		Calculation of fault currents and coordination of protective devices for 400 HZ power systems supplied by solid state frequency changers.	21 Jun 1991
DDS 314-4	**		400-Hz power system test procedures	1 Jul 1980
DDS 320-2			Electrical system interface - voltage & current harmonic calculations	24 Feb 1988
DDS 430-1	DDS 9650-1		General requirements for interior communication systems	22 Feb 1995
DDS 430-2	*DDS 9650-2		Procedure for determining synchro system loading capacity	2 Dec 1968
DDS 430-3	**		Shipboard fire detection system	1 Mar 1986
DDS 505-1	DDS 4800-1		Friction pressure drop in piping (replacement pages 5, 6, and 7 dated 1 March 1964; replacement page 29 dated 1 Feb 1967)	1 Jan 1960
DDS 511-1	*DDS 3802-1		Methods of heating - description and selection of heating equipment	UNDATED

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

*** These Design Data Sheets have been converted to Mil-HDBK.

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number ****	Title	Date
DDS 511-2	*DDS 3901-2		Heat transfer coefficients	1 Dec 1948
DDS 512-1	DDS 3801-2		Pressure losses of ventilation fittings	18 Dec 1991
DDS 512-2	DDS 3801-3		A method for determining the size of ventilation ducts	18 Dec 1991
DDS 512-3	*DDS 3801-4		Design of slotted duct terminals	UNDATED
DDS 514-1	DDS 3803-1		Methods of cooling and dehumidifying air conditioned spaces, selection of equipment, and control of temperature and humidity (amended by MOD 1 dated 1 Oct 1958)	CANCELED 15 May 1984
DDS 516-1	*DDS 9590-1		Refrigerating equipment for storage compartment - heat load calculation and selection	1 Feb 1967
DDS 522-1	DDS 4803-1		Shipboard sprinkler systems	18 Nov 1987
DDS 522-2			Miscellaneous Wet-Type Sprinkling systems	27 Apr 1995
DDS 531-1	DDS 9580-1		Surface ship distilling plant sizing details	23 Jul 1986
DDS 562-2	**		Control surface structure design	4 Nov 1987
DDS 565-1	*DDS 9290-4		Passive anti-roll tanks (with replacement page 1	1 Sep 1962

* These Design Data Sheets have not been rewritten and retain the Old Number.

** No former Design Data Sheet Number.

*** Classified Confidential - Listed above for reference only and not part of this book.

**** These Design Data Sheets have been converted to Mil-HDBK.

DESIGN DATA SHEETS
 NAVAL SEA SYSTEMS COMMAND
 TABLE OF CONTENTS
 1 January, 2000

Ship Work Breakdown Structure (ESWBS) DDS No.	Former DDS number	MIL HDBK number *****	Title	Date
			dated 1 Nov 1963)	
DDS 568-1	**		Thruster maneuvering systems	25 Nov 1987
DDS 581-1	**		Calculation and use of anchoring monographs	1 Jul 1984
DDS 582-1	**		Calculations for mooring systems	16 Jan 1987
DDS 593-1	**		Vacuum collecting, holding, and transfer (VCHT) systems - collection piping	1 Jul 1984
DDS 613-1	**		Wire rope systems design	22 May 1991
***DDS 636-1	**	<i>DO NOT HAVE THIS DDS</i>	Damping and special acoustic materials	15 Jun 1985
DDS 671-1	**		Stowage for chemical, biological, radiological defense outfitting equipments and material	4 Feb 1987
DDS 672-1	**		Calculation of storeroom capacities	15 May 1984

- * These Design Data Sheets have not been rewritten and retain the Old Number.
- ** No former Design Data Sheet Number.
- *** Classified Confidential - Listed above for reference only and not part of this book.
- *** These Design Data Sheets have been converted to Mil-HDBK.