

RESTRICTED

# GENERAL INFORMATION

INCLUDING DESCRIPTIONS AND  
TESTS OF ELECTRIC AUXILIARIES

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U. S. S. CONNER, TORPEDO BOAT DESTROYER No. 72  
U. S. S. STOCKTON, TORPEDO BOAT DESTROYER No. 73

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INFORMATION RELATIVE TO ITEMS UNDER COGNIZANCE OF  
THE BUREAU OF CONSTRUCTION AND REPAIR  
NAVY DEPARTMENT



**RESTRICTED**

Serial No. **62**

**GENERAL INFORMATION**

INCLUDING DESCRIPTIONS AND TESTS  
OF ELECTRIC AUXILIARIES

**TORPEDO BOAT DESTROYER No. 72**

**U. S. S. CONNER**

**TORPEDO BOAT DESTROYER No. 73**

**U. S. S. STOCKTON**

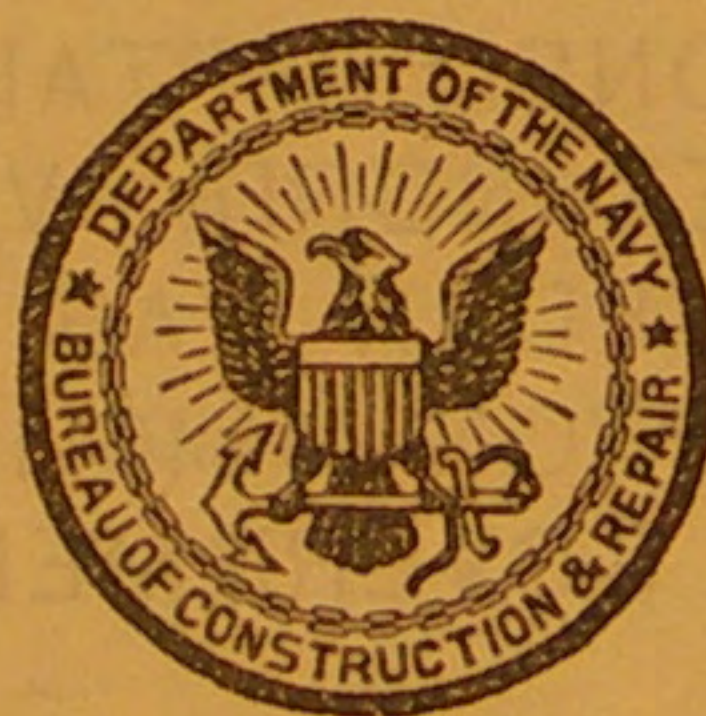
Information relative to items under cognizance of  
Bureau of Construction and Repair  
Navy Department

BUILDERS: WILLIAM CRAMP AND SONS' SHIP AND ENGINE BUILDING COMPANY  
PHILADELPHIA, PA.

OFFICE OF THE SUPERINTENDING CONSTRUCTOR FOR THE UNITED STATES NAVY  
WILLIAM CRAMP AND SONS' SHIP AND ENGINE BUILDING COMPANY  
PHILADELPHIA, PA.

**FINISHED PLAN No. 41**

TAKEN FROM WORK 1918



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1919

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NATIONAL ARCHIVES FILES



### CHRONOLOGY OF BUILDING.

Event.	Conner.	Stockton.
Authorized by act of Congress.....	Mar. 3, 1915.....	Mar. 3, 1915.
Advertisement issued by Navy Department.....	July 6, 1915.....	July 6, 1915.
Bids received.....	Oct. 6, 1915.....	Oct. 6, 1915.
Plans and specifications delivered to contractors.....	Oct. 27-28, 1915.....	Oct. 27-28, 1915.
Contract signed.....	Jan. 6, 1916.....	Jan. 6, 1916.
First hull material ordered.....	Dec. 20, 1915.....	Dec. 20, 1915.
Lines faired in mold loft.....	About Dec. 20, 1915.....	Dec. 20, 1915.
First hull material received.....	Jan. 27, 1916.....	Jan. 27, 1916.
Keel laid.....	Oct. 16, 1916.....	Oct. 16, 1916.
First frame raised.....	Nov. 9, 1916.....	Nov. 14, 1916.
First compartment tested.....	July 25, 1917.....	May 29, 1917.
Vessel launched.....	Aug. 21, 1917.....	July 17, 1917.
Vessel docked (see record of docking before delivery).....	Nov. 26-27, 1917.....	Oct. 7-8, 1917.
Dock trial.....	Dec. 2, 1917.....	Oct. 10, 1917.
First sea trial by contractors.....	Dec. 10-11, 1917.....	Oct. 15-16, 1917.
Contract date of completion.....	Aug. 20, 1917.....	Sept. 5, 1917.
Standardization trial.....		Oct. 16, 1917.
Delivered to Navy Department at Philadelphia Navy Yard.....	Feb. 10, 1918.....	Nov. 26, 1917.
Vessel commissioned at Cramp's shipyard.....	Jan. 12, 1918.....	
Contract price.....	\$845,000.....	\$845,000.

This book was prepared by authority of the Bureau of Construction and Repair, and the contents on succeeding pages contain lists and descriptions of the various features and systems that have been installed under the cognizance of that bureau.

Statement of loads, contemplated in determining the mean draft corresponding to the "Designers' water line," in accordance with circular letter (Booklets of General Information) 11-1, 96, 44; (15635-A-115) dated June 30, 1915.

In the design of the vessels the mean draft corresponding to the "Designers' water line," viz, 8 feet  $\frac{1}{2}$  inch, contemplated the following condition of loading: Ship, complete, ready for service in every respect, with full complement of officers and crew with their effects, and consumable load as tabulated below:

Item.	Proportion of designed allowance.	Weight. <i>Tons.</i>
Ammunition, including torpedoes.....	Full.	35.27
400 rounds 4-inch cartridges.....		
2,000 rounds 1-pounder antiaircraft cartridges.....		
6,000 rounds .30-caliber rifle (ball), model 1906.....		
2,000 rounds .30-caliber rifle (blank), model 1909.....		
1,000 rounds .30-caliber rifle (dummy), model 1906.....		
4,800 rounds .30-caliber rifle (ball), model 1898.....		
4,000 rounds .30-caliber rifle (blank), model 1898.....		
10,000 rounds .45-caliber rifle (ball), model 1911.....		
12 war heads.....		
12 torpedoes.....	2 3	1.33 1.67
Impulse primers, superheater fuses, net cutters, impulse powder torpedo detonators, etc..		
C. and R. stores.....		
Steam engineering (Government stores).....		



## GENERAL INFORMATION.

Item.	Proportion of designed allowance.	Weight.
		Tons.
Ordnance stores.....		0.67
Equipment stores.....		.90
Supplies and accounts stores.....		6.57
Medical stores.....		.21
Officers' mess stores.....		1.12
Fresh water.....		9.90
Reserve feed water.....		12.33
Fuel oil.....		173.33
Hull, complete.....		367.70
Hull fittings.....		60.80
Steam engineering (including water in machinery).....		360.34
Battery.....		40.70
Equipment.....		26.15
Outfit.....		11.62
Officers and crew.....		10.23
Total.....		1,120.84

## LIST OF PLATES.

Title.	Plate
Location of draft figures and draft marks.....	1
Zinc protectors (finished plan No. 29).....	2
Draft diagram (finished plan No. 43).....	3
Fire-main system.....	4
Magazine flooding system.....	5
Sanitary system.....	6
Drainage system.....	7
Fresh-water system.....	8
Fuel-oil stowage system.....	9
Wiring diagram of ventilation motor control panel connections.....	10
Shop test curves of—	
2,500 cu. ft. ventilation motors (system No. 1).....	11
1,000 cu. ft. ventilation motors (systems No. 2 and No. 3).....	12
Ship test curves of—	
2,500 cu. ft. ventilation motor (system No. 1) <i>Conner</i> .....	13
1,000 cu. ft. ventilation motor (system No. 2) <i>Conner</i> .....	14
1,000 cu. ft. ventilation motor (system No. 3) <i>Conner</i> .....	15
2,500 cu. ft. ventilation motor (system No. 1) <i>Stockton</i> .....	16
1,000 cu. ft. ventilation motor (system No. 2) <i>Stockton</i> .....	17
1,000 cu. ft. ventilation motor (system No. 3) <i>Stockton</i> .....	18

## COMPLEMENT—MESSES—BERTHS.

Officers:		Seaman branch:	
Commanding officer.....	1	Boatswain's mate, second class.....	1
Wardroom officers.....	4	Coxswain.....	1
Chief petty officers:		Gunner's mates, first class.....	2
Chief boatswain's mate.....	1	Gunner's mates, second class.....	3
Chief gunner's mates.....	2	Gunner's mate, third class.....	1
Chief quartermaster (navigating).....	1	Quartermaster, first class.....	1
Chief machinist's mates.....	3	Quartermasters, second class.....	2
Chief water tenders.....	1	Seamen.....	16
Hospital steward.....	1	Ordinary seamen.....	13



## Complement—Messes—Berths—Continued.

Artificer branch:		Messmen branch:	
Electrician, first class.....	1	Cabin steward.....	1
Electricians, first class (radio).....	2	Cabin cook.....	1
Electrician, second class (radio).....	1	Mess attendants.....	2
Carpenter's mate, second class.....	1		
Artificer branch (engine-room force):		RECAPITULATION.	
Machinist's mates, first class.....	3	Commanding officer.....	1
Machinist's mates, second class.....	3	Executive officer.....	1
Water tenders.....	5	Senior engineer officer.....	1
Boiler maker.....	1	Torpedo officer.....	1
Blacksmith.....	1	Duty officer.....	1
Coppersmith.....	1	Chief petty officers.....	9
Oilers.....	4	Seamen branch.....	40
Firemen, first class.....	10	Artificer branch.....	5
Firemen, second class.....	7	Artificer branch (engine-room force).....	35
Special branch:		Special branch.....	3
Yeoman, first class, commanding officer.....	1	Commissary branch.....	2
Yeoman, second class, engineer department.....	1	Messmen branch.....	4
Storekeeper, first class, general.....	1	Total.....	103
Commissary branch:			
Ship's cook, first class.....	1		
Ship's cook, third class.....	1		

## NUMBER OF MESSES.

CONNER.		STOCKTON.	
Crew.....	4	Crew.....	4
Chief petty officers.....	1	Chief petty officers.....	1

## STATEROOMS AND BERTHS.

CONNER.		STOCKTON.	
Commanding officer's stateroom and berth.....	1	Commanding officer's stateroom and berth.....	1
Wardroom officers' staterooms and berths.....	5	Wardroom officers' staterooms and berths.....	5
Yeoman's office and berths.....	2	Yeoman's office and berths.....	2
Radio room and berths.....	2	Radio room and berths.....	2
Chief petty officers' berths, compartment A-304.....	10	Chief petty officers' berths, compartment A-304.....	10
Crew's berths:		Crew's berths:	
Compartment A-203.....	8	Compartment A-203.....	8
Compartment A-204.....	15	Compartment A-204.....	14
Compartment A-205.....	37	Compartment A-205.....	30
Compartment D-202.....	39	Compartment D-202.....	32
Additional berthing in hammocks is provided for 2 chief petty officers and 12 men.		Additional berthing in hammocks is provided for 2 chief petty officers and 10 men.	



## LIST OF PLANS FURNISHED THE VESSEL.

The list hereunder contains the plans required by List III, General Specifications, Appendix 16, Edition of 1914, to be furnished the vessel. Plans marked \* furnished, but not required.

Additional copies of any plan tabulated in the list below may be issued to the commanding officer, at his request, by the Bureau of Construction and Repair for use on board ship. All plans and booklets are to be considered confidential.

Plan No. in portfolio.	Title.	Finished plan No.	Bureau of Construction and Repair drawing No.		Contractor's drawing No.		Number of copies.
			Conner.	Stockton.	Conner.	Stockton.	
PORTFOLIO NO. 1.							
1	Torpedo installation compressed-air pipe system.	34	62199....	62213.....	H-64349.....	H-64328.....	1
2	Ammunition and torpedo handling arrangement.	26	50249....	50249.....	H-64097.....	H-64097.....	1
3	Booklet of general plans.....	42	62209....	62220.....	H-64336.....	H-64292.....	5
			62210....	62221.....	H-64337.....	H-64293.....	
			62197....	62222.....	H-64338.....	H-64294.....	
			62198....	62223.....	H-64339.....	H-64295.....	
4	Bridges and top view.....	6	62206....	50495-B...	H-64345.....	H-64114.....	1
5	Cross sections.....	3	62203....	62216.....	H-64346.....	H-64325.....	1
6	Hold, first and second platforms, and main deck.	8	62201....	50104.....	H-64351.....	H-64079.....	1
7	Displacement and other curves..	38	003047...	003047.....	.....	.....	1
8	Docking plan.....	1	62202....	62215.....	H-64344.....	H-64323.....	1
9	Draft diagram, see also plate No. 3 appended herein.	43	62208....	62219.....	H-12339.....	H-12337.....	1
10	Drainage system, sounding tubes, and air escapes.	30	50250....	50250.....	E-62993.....	E-62993.....	1
11	Fire main, magazine, flood, fresh-water and flushing systems, and steam and exhaust to deck machinery and fuel-oil filling.	31	.....	.....	E-62992.....	E-62992.....	1
12	Foam fire extinguisher system in boiler room.	35	.....	.....	E-62917.....	E-62917.....	1
13	Fuel-oil stowage piping arrangement.	33	.....	.....	E-62052.....	E-62052.....	1
14	General cross sections.....	2	44623....	62211.....	H-64002.....	H-64324.....	1
15	Inboard profile.....	4	62204....	62217.....	H-64347.....	H-64326.....	1
16	Outboard profile.....	5	62205....	50495-A....	H-64348.....	H-64113.....	1
17	Outside plating.....	15	46839....	62212.....	H-64035.....	H-64327.....	1
18	Painting and cementing instructions (pamphlet).	57	.....	.....	.....	.....	1
19	Specifications detail, serial No. 59 (Stockton), serial No. 60 (Conner).	58	.....	.....	.....	.....	1
20	Steering gear and compass installation.	25	62200....	62214.....	H-64343.....	H-64302.....	1
PORTFOLIO NO. 2.							
21	Steering-engine assembly and details (30 plans).	45-45CC	.....	.....	H-18937-a... H-18938-b... H-18939-1a... H-18939-2a... H-18940-1 to H-18940-26.	H-18937-a... H-18938-b... H-18939-1a... H-18939-2a... H-18940-1 to H-18940-26.	(1)
*22	Tables of capacities, peak tanks, fuel-oil tanks, cofferdam, fresh-water tanks, reserve feed tanks, and bilges.	47	.....	.....	.....	.....	1
23	Towing gear.....	56	.....	.....	H-64112.....	H-64112.....	1
24	Ventilation.....	28	62207....	62218.....	H-64350.....	H-64329.....	1
*25	Ventilation sets and specifications.	54	.....	.....	.....	.....	1

PORTFOLIO NO. 2-continued.

26 Windlass assembly and details (12 plans). 46-46H  
27 Zinc protectors (see also plate No. 2 appended herein).  
28 Inclining experiment (booklet).  
29 Plans of Maritime Nations, edition of 1914, for use of commanding officer, officer of the deck, etc. Additional to copy in ship's library.  
General information, including description and tests of electric auxiliaries.

GENERAL

length over all.....  
length between perpendiculars.....  
projection forward of F. P.....  
projection aft of A. P.....  
length of straight keel.....  
F. P. to straight keel.....  
A. P. to straight keel.....  
length of fender.....  
F. P. to fender.....  
A. P. to fender.....  
length of bilge keel.....  
F. P. to bilge keel.....  
A. P. to bilge keel.....  
length on 8' 1/4" water line (D. W. L.).....  
breadth extreme over fenders.....  
breadth extreme outside of plating.....  
breadth molded.....  
breadth extreme outside of 8' 1/4" water line.....  
midship section, frame 88 4/7.....  
frame spacing (regular).....  
construct displacement, tons (about).....  
tons per inch at 8' 1/4" water line.....  
area of wetted surface (to 8' 1/4" W. L.).....  
coefficient of fineness, block.....  
coefficient of fineness, midship section.....  
area of balanced portion of rudder, square feet.....  
total area of rudder, square feet.....  
area of midship section up to 8' 1/4" W. L. of frame 88.....  
main length to beam.....



Plan No. in port folio.	Title.	Finished plan No.	Bureau of Construction and Repair drawing No.		Contractor's drawing No.		Number of copies.
			Conner.	Stockton.	Conner.	Stockton.	
	PORTFOLIO NO. 2—continued.						
26	Windlass assembly and details (12 plans).	46-46K	.....	.....	H-18909-1 to H-18909-12.	H-18909-1 to H-18909-12.	( <sup>1</sup> )
27	Zinc protectors (see also plate No. 2 appended herein).	29	.....	.....	E-62972.....	E-62972.....	1
28	Inclining experiment (booklet).	39	.....	.....			3
29	Flags of Maritime Nations, edition of 1914, for use of commanding officer, officer of the deck, etc. Additional to copy in ship's library.	59	.....	.....			1
	General information, including description and tests of electric auxiliaries.	41	.....	.....			3

<sup>1</sup> One of each.

## GENERAL DIMENSIONS.

Length over all.....	315' 6"
Length between perpendiculars.....	310' 0"
Projection forward of F. P.....	3' 0"
Projection aft of A. P.....	2' 6"
Length of straight keel.....	273' 9"
F. P. to straight keel.....	12' 3"
A. P. to straight keel.....	24' 0"
Length of fender.....	143' 6"
F. P. to fender.....	89' 3"
A. P. to fender.....	77' 3"
Length of bilge keel.....	109' 6"
F. P. to bilge keel.....	108' 0"
A. P. to bilge keel.....	92' 6"
Length on 8' ½" water line (D. W. L.).....	310' 0"
Breadth extreme over fenders.....	31' 2½"
Breadth extreme outside of plating.....	30' 8"
Breadth molded.....	30' 7"
Breadth extreme outside of 8' ½" water line.....	30' 8"
Midship section, frame 88 4/7.....	
Frame spacing (regular).....	1' 9"
Contract displacement, tons (about).....	1, 134
Tons per inch at 8' ½" water line.....	14. 66
Area of wetted surface (to 8' ½" W. L.), square feet.....	99. 75
Coefficient of fineness, block.....	. 512
Coefficient of fineness, midship section.....	. 846
Coefficient of fineness, 8' ½" water line.....	. 649
Area of balanced portion of rudder, square feet.....	15. 4
Total area of rudder, square feet.....	64. 2
Area of midship section up to 8' ½" water line, square feet (frame 88 4/7), 12" aft of frame 88.....	208. 4
Ratio length to beam.....	10. 14



## HEIGHTS ABOVE DESIGNED WATER LINE.

	Ft.	In.
Designed load water line above bottom of keel amidships.....	8	0 $\frac{1}{2}$
Top of ball on foremast.....	95	3
Top of flag and pennant staff cap (foremast).....	99	2 $\frac{3}{4}$
Top of truck light on mainmast.....	95	7
Top of flag and pennant staff cap (mainmast).....	99	5 $\frac{1}{2}$
Top of pilot house (bridge) at center line (frame 41) top of plating.....	22	9 $\frac{1}{2}$
Main deck at stem (top of plating).....	17	6 $\frac{1}{16}$
Main deck at stern.....	8	4 $\frac{1}{16}$
Bridge at side frame 47 (top of plating).....	21	8 $\frac{1}{2}$
Bridge at center line above main deck (molded).....	7	6
First platform deck at frame 57 (top of plating).....	6	7 $\frac{1}{2}$
First platform deck at frame 129 (top of plating).....	3	1 $\frac{1}{2}$
Second-platform deck at frame 56 (top of plating), 1 $\frac{1}{2}$ inches below D. W. L.....		
Floor of forward searchlight platform (6'' forward frame 50), top of plating.....	29	5
Center line of forward searchlight (6'' forward frame 50).....	33	7 $\frac{3}{16}$
Center line of after searchlight (frame 154).....	27	3 $\frac{9}{16}$
Floor of after searchlight platform (frame 154), top of plating.....	23	1 $\frac{3}{8}$
Center line of—		
6.8 m. x 21 inch triple torpedo tubes (10'' forward frame 100 starboard).....	14	11 $\frac{9}{16}$
6.8 m. x 21 inch triple torpedo tubes (9'' forward frame 108 port).....	14	6 $\frac{1}{16}$
6.8 m. x 21 inch triple torpedo tubes (10'' aft frame 129 starboard).....	13	6 $\frac{1}{16}$
6.8 m. x 21 inch triple torpedo tubes (1 $\frac{1}{2}$ '' aft frame 140 port).....	13	1 $\frac{1}{2}$
4-inch rapid-fire gun (3 $\frac{1}{2}$ '' forward frame 29 center line).....	19	10 $\frac{1}{2}$
4-inch rapid-fire gun (frame 86 port), top of galley deck house.....	24	0
4-inch rapid-fire gun (frame 86 starboard), top of galley deck house.....	24	0
4-inch rapid-fire gun (2'' aft frame 163 center line).....	13	2 $\frac{1}{16}$
1 pounder antiaircraft gun (frame 37 center line).....	19	8 $\frac{1}{2}$
1 pounder antiaircraft gun (13 $\frac{1}{2}$ '' forward frame 74 port).....	17	7 $\frac{1}{2}$

## CARE AND PRESERVATION.

Attention is invited to instructions for the administration of the Naval Establishment of the United States (Naval Instructions), 1913, particularly to chapter 25, page (164-I), article 2702, "Care and preservation of hulls of ships and of mechanical contrivances pertaining thereto. Inspection of compartments," etc., also to chapter 29, section 7, pages (235-I, 238-I), inclusive. "Articles 3376 and 3377 and such parts of 3378 as apply to destroyers, care and handling of fuel oil on oil-burning vessels."

(a) Steam line from the heating system to the gravity tank located on top of galley deck house should be kept in service during cold weather to prevent water in tank from freezing.

(b) The 4-inch fresh water handy billy pump, located on main deck just outside the galley deck house is provided with drains which are used for draining the pump to prevent freezing.

(c) The rudder stock carrier bearing in main deck is lubricated by means of a  $\frac{1}{2}$ -inch pipe tapped into the deck casting provided with an oil cup. A  $\frac{1}{4}$ -inch pet cock which is tapped into the casting provides drainage for same. The steering gear transmission leads, bearings, etc., are provided with oil holes and oil grooves which provide for the necessary lubrication of the various parts.



(d) Should it become necessary to calk rivets in oiltight work, it is advised that it be done very lightly, as the force of a heavy blow on the rivets is liable to result in more leakage. Shellac, not red lead, should be applied over leaky seams or rivets.

(e) If when steaming out fuel tanks, or when using forced ventilation therein it becomes necessary to provide additional ventilation from the tanks referred to, the automatic air valves fitted to the vent pipes leading therefrom should be removed.

(f) It is advised that drainage valves not actually in use be kept closed in order that they may be effective in maintaining the watertight subdivisions of the ship. The valves should be operated daily to insure their readiness for service at all times.

(g) The fire plugs on the main deck should be protected during freezing weather, and during exceptionally cold weather the fire main should be drained to below the cut-out valves, after which the valves may be closed and the fire main proper kept in service.

(h) Attention is invited to the fact that fuel-oil tanks should be filled to only 95 per cent of their total cubical capacity. (See description of fuel-oil system.)

#### METHOD OF NUMBERING WATERTIGHT COMPARTMENTS.

The ship is divided into four principal divisions lettered A, B, C, and D from forward aft.

Division A comprises all the space between the stem of the ship and the forward transverse bulkhead of the forward boiler compartment.

Division B comprises all the space between the forward transverse bulkhead of the forward boiler compartment and the after transverse bulkhead of the after boiler compartment.

Division C comprises all the space between the after transverse bulkhead of the after boiler compartment and the after transverse bulkhead of the compartment assigned to auxiliaries of the main propelling machinery.

Division D comprises all the space between the after transverse bulkhead of the compartment assigned to auxiliaries of main propelling machinery and the stern of the ship.

These divisions extend from the keel to the highest deck in line of the bulkheads. All numbers in each division begin at the forward end of that division.

Commencing with the lowest compartments, the compartments below the second platform deck are numbered from forward aft, viz: A-101, A-102, etc., B-101, B-102, etc., C-101, C-102, etc., D-101, D-102, etc., according to their respective divisions. The compartments between the second platform deck and first platform deck are numbered from forward aft, viz: A-201, A-202, etc., D-201, D-202, etc. The compartments between the first platform deck and the main deck are numbered from forward aft, viz: A-301, A-302, etc. The number of each compartment is prefixed with a letter indicating the general division of the ship in which it is located.

Magazines, ammunition and torpedo warhead rooms, containing explosives of any kind, have the letter "M" after the number of the compartments, as A-111-M, A-112-M. Compartments on the starboard side of the ship have odd numbers, those on the port side even numbers.