

RESTRICTED

SERIAL No. 42

GENERAL INFORMATION

INCLUDING DESCRIPTIONS AND
TESTS OF ELECTRIC AUXILIARIES

TORPEDO BOAT DESTROYER No. 70
U. S. S. CRAVEN

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

RESTRICTED

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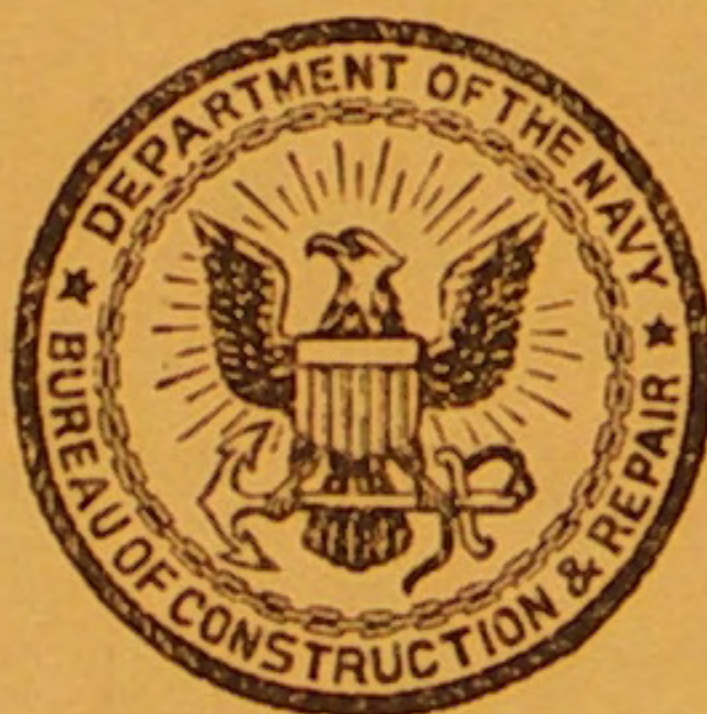
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U. S. S. CRAVEN

Information relative to items under cognizance of
Bureau of Construction and Repair
Navy Department, Washington, D. C.

1921

Finished Plan No. 41



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INTRODUCTION.

HISTORICAL DATA.

Authorized by act of Congress.....	Mar. 3, 1915.
Vessel built by.....	Norfolk Navy Yard, Portsmouth, Va.
Contract signed.....	Oct. 20, 1915.
Contract date of completion.....	
Keel laid.....	Nov. 20, 1917.
Vessel launched.....	June 29, 1918.
Christened by.....	Ellin Craven Learned.
Date of delivery to Government.....	Oct. 19, 1918.
Date of official preliminary trial.....	
Vessel commissioned.....	Oct. 19, 1918.

DIMENSIONS AND DISTANCES.

Length over all.....	315 feet 6 inches.
Length between perpendiculars.....	310 feet 0 inch.
Breadth, molded.....	30 feet 7 inches.
Breadth, over guards.....	31 feet 2 inches.
Depth, molded at side (frame No. 89).....	19 feet 8½ inches.
Depth, molded at center (frame No. 89).....	20 feet 10⅛ inches.
Tons per inch (8 feet ½ inch water line).....	14.7.
Mean displacement, normal, mean draft 8 feet ½ inch, tons.....	1,119.
Wetted surface (8 feet ½ inch water line), square feet.....	9,720.
Coefficient block (designed 8 feet ½ inch water line).....	0.51.
Coefficient prismatic (designed 8 feet ½ inch water line).....	0.60.
Coefficient midship (designed 8 feet ½ inch water line).....	0.86.
Coefficient water line (designed 8 feet ½ inch water line).....	0.65.
Area of rudder, square feet.....	66.5.
Center of buoyancy (8 feet ½ inch water line) above bottom of keel, feet.....	4.65.
Center of buoyancy (8 feet ½ inch water line) forward of frame No. 89, feet.....	0.50.
Transverse metacenter above C. B. (8 feet ½ inch water line), feet.....	8.50.
Longitudinal metacenter above C. B. (8 feet ½ inch water line), feet.....	722.
Center of gravity of water line abaft frame No. 89, feet.....	3.77.
Center of gravity of full load water line abaft frame No. 89, feet.....	4.97.
Frame spacing.....	1 foot 9 inches.

LONGITUDINAL DISTANCES.

Projection of stern at main deck, abaft after perpendicular.....	2 feet 6 inches.
Axis of rudder, forward of after perpendicular.....	6 feet 4½ inches.
Forward end of straight keel, from forward perpendicular.....	12 feet 3 inches.
After end of straight keel, from after perpendicular.....	33 feet 4 inches.
Length of straight keel.....	264 feet 5 inches.
Forward end of bilge keel, from forward perpendicular.....	Port and starboard 108 feet 3 inches.
After end of bilge keel, from after perpendicular.....	Starboard 92 feet 9 inches, port 114 feet 0 inches.
Frame No. 89 is aft of middle perpendicular.....	9 inches.
Forward perpendicular to center of foremast, at main deck.....	91 feet 10⅞ inches.
Forward perpendicular to center of stack No. 1, at main deck.....	110 feet 11 inches.
Forward perpendicular to center of stack No. 2, at main deck.....	125 feet 5⅛ inch.
Forward perpendicular to center of stack No. 3, at main deck.....	147 feet 8⅛ inches.
Forward perpendicular to center of stack No. 4, at main deck.....	161 feet 9¾ inches.
Center of mainmast, at main deck, to after perpendicular.....	47 feet 9⅝ inches.
Center of shaft struts forward of after perpendicular.....	20 feet 11 inches.
Propellers, forward of after perpendicular.....	17 feet 4 inches.

GENERAL INFORMATION.

HEIGHTS ABOVE DESIGNER'S WATER LINE.

(8 feet 0 inch above base line or 8 feet $\frac{1}{2}$ inch above bottom of keel, amidship.)

Bridge at center (frame No. 53).....	22 feet 2 inches.
Bridge at outboard ends (frame No. 53).....	21 feet $2\frac{5}{8}$ inches.
Forward smokestack on center line.....	39 feet $8\frac{5}{8}$ inches.
Signal platform, port and starboard wings, 30 feet $7\frac{1}{2}$ inches.....	At center line 29 feet $3\frac{1}{2}$ inches.
Signal yard.....	87 feet $8\frac{1}{4}$ inches.
Radio:	
Upper wireless ariel, to band on mast.....	foremast 92 feet 8 inches; mainmast, 93 feet $6\frac{1}{2}$ inches.
Lower wireless ariel (auxiliary).....	foremast 35 feet 5 inches; mainmast, 38 feet 5 inches; center 34 feet 9 inches.
Main deck, at side (frame No. 89), molded.....	11 feet $8\frac{1}{4}$ inches.
Main deck, at side (frame No. 52), molded.....	13 feet $9\frac{1}{4}$ inches.
Top of after deck house on center line (frame No. 146 $\frac{1}{2}$).....	16 feet $11\frac{2}{8}$ inches.
Freeboard at stem.....	17 feet $4\frac{1}{4}$ inches.
Freeboard at stern.....	8 feet $4\frac{3}{8}$ inches.

CONDITIONS OF LOADING.

Ship complete, ready for service in every respect, with full complement of officers and crew with their effects, and consumable load, is tabulated below, for Normal, Full, and Emergency conditions.

In the design of the vessel the mean draft corresponding to the "designer's water line," viz, foot-inches contemplates the condition of loading given under the heading "NORMAL."

Kind.	Normal.		Full.		Emergency.	
	Quantity.	Weight (tons).	Quantity.	Weight (tons).	Quantity (per cent).	Weight (tons).
Hull and fittings.....		428.5		428.5		428.5
Steam engineering (dry).....		333.7		333.7		333.7
Steam engineering water.....		31.2		31.2		31.2
Reserve feed water.....		12.3		18.5		30.2
Battery.....		40.7		40.7		40.7
Ammunition and ordnance stores.....		35.9		36.3		36.3
Equipment and equipment stores.....		27.1		27.5		27.5
Outfit and stores.....		42.6		53.0		65.2
Officers and crew.....		10.2		14.9		14.9
Fuel oil.....		173.3		260.0	95	276.7
Total.....		1,135.5		1,244.3		1,284.9

Actual draft for normal load=8 feet $1\frac{1}{2}$ inches.
 Actual draft for full load=8 feet 9 inches.

DESIGNED COMPLEMENT.

(Section X-3.)

Officers:

Commanding officer.....	1
Wardroom officers.....	5

Seaman branch:

Chief boatswain's mate.....	1
Boatswain's mate, second class.....	1
Coxswain.....	1
Chief gunner's mates.....	2
Gunner's mates, first class.....	2
Gunner's mates, second class.....	2
Chief quartermaster, navigating.....	1
Quartermaster, first class.....	1
Quartermasters, second class.....	2
Seamen.....	16
Ordinary seamen.....	13
Total.....	42

Artificer branch:

Electrician, first class.....	1
Electricians, first class, radio.....	2
Electrician, second class, radio.....	1
Carpenter's mate, second class.....	1
Total.....	5

Artificer branch (engine-room force):

Chief machinist's mates.....	3
Machinist's mates, first class.....	3
Machinist's mates, second class.....	3
Chief water tender.....	1
Water tenders.....	5
Boilermaker.....	1
Blacksmith.....	1
Coppersmith.....	1
Oilers.....	4
Firemen, first class.....	10
Firemen, second class.....	7
Total.....	39

Special branch:

Yeoman, first class, commanding officer.....	1
Yeoman, second class, engineer department.....	1
Hospital steward.....	1
Total.....	3

Commissary branch:

Ship's cook, first class.....	1
Ship's cook, third class.....	1
Total.....	2

Messmen branch:

Cabin steward.....	1
Cabin cook.....	1
Mess attendants.....	2
Total.....	4

RECAPITULATION.

Officers.....	6
Crew.....	95
Total.....	101

VOICE TUBES.

(Section U-21.)

Voice tubes are installed to accomplish two general purposes, namely: General ship's service and fire control. Return electric calls with watertight push buttons, bells, annunciators, etc., are installed in connection with general ship's service. The fire-control system is not provided with calling appliances. The following table contains the principal data relative to points connected, size of tubes, type of mouthpiece, etc.:

Serial No.	Size.	From—	Type of mouth-piece.	To—	Type of mouth-piece.	With return calls.	Without return calls.	Remarks.
1	In. 2½	Signal bridge, port and starboard.	2 N. W.	Bridge at fire control; voice tube station and mechanical engine telegraph transmitter.	W. T.	}	X	
2	3	Bridge and engineer's stateroom.	N. W., W. T.		N. W.			
3	2½	Bridge and pilot house.	N. W., N. C.		2 N. W.			
4	3	Forward engine room.	N. W.	Forward and after engine rooms.	Meg.	X	.....
5	3	Bridge	N. W.	Wardroom	2 N. W.	X	.....
6				Fire room No. 1 & 2.	N. C., W. T., Meg.	X	.....
7	3	Bridge	N. W.	Commanding officer's stateroom.	N. W., N. C.	X	.....	Omitted.
8	3	Bridge, port (at director).	N. W.	After steering station and steering engine room.	2 S. O.		X	Special outlet at torpedo tubes furnished by Bureau of Ordnance. Do.
9	3	Bridge, starboard (at director).	N. W.	Port torpedo tubes....	2 S. O.		X	
10	3	After steering station..	N. W.	Starboard torpedo tubes.	N. W.	X	.....
11	3	Engineer officer's stateroom.	N. W.	Forward and after engine rooms.	2 N. W.	X	.....
12	3	Bridge, port and starboard.	2 N. W.	.....do.....	W. T., Meg.		X	
13	3	.....do.....	2 N. W.	Antiaircraft gun No. 1.	W. T., Meg.		X	
14	3	Bridge (at wheel).....	N. W.	Antiaircraft gun No. 2.	Meg., N. C.	X	.....
15	2½	Forward engine room.	N. W.	Executive officer's stateroom and master gyro compass.	N. W.	X	.....
16	3	After steering station..	N. W.	After engine room....	N. C.	X	.....
17	3	Main radio room and chart house.	.....	Steering engine room..	N. C.	X	.....
18	3	Forward spotter.....	.....	Auxiliary radio room..	2 N. C.			Call from spotter to bridge (forward of chart house).
19	3	Bridge (midship).....	N. W.	Bridge at fire control; voice tube station and forward of chart house.	W. T., Meg.		X	Omitted. 14 feet of metallic flexible tubing at each gun. Do. Do. Do.
20				Pilot house.....	Dk. O., Meg.		X	
21	3	Bridge.....	N. W.	Gun No. 1.....	Dk. O., Meg.		X	
22	3	.....do.....	N. W.	Gun No. 4.....	N. W., Dk. O., Meg.		X	
23	3	.....do.....	N. W.	Gun No. 3.....	O., Meg.		X	
24	4	.....do.....	N. W.	Top of deck house, gun No. 2.	2 W. T., N. W., 2 Meg.		X	15 feet of metallic flexible tubing for each outlet.
25	3	Top of deck house....	N. W.	Center line between guns No. 3 and No. 4 and spotter's platform.	N. C.		X	
26	3	.....do.....	N. W.	After spotter.....				

GENERAL INFORMATION.

In the above table the following abbreviations have been used for mouthpieces:

Symbol.	Symbol stands for—	In accordance with plan No. —
N. C.	Nose-covered mouthpiece, non-watertight.....	C. & R. Std. Pl. No. 132, Alt. D.
N. W.	Watertight nose-covered mouthpiece.....	C. & R. Std. Pl. No. 132, Alt. D.
W. T.	Hinged, covered, watertight mouthpiece.....	C. & R. Plan No. 4051-A, Alt. 4.
Meg.	Megaphone.....	C. & R. Plan No. 4058-A, Alt. 4.
S. O.	Special outlet furnished by Bureau of Ordnance.....	
Dk. O.	Special deck outlet, watertight.....	C. & R. Plan No. 59447-A.

DESCRIPTION OF STEERING GEAR.

The main steering arrangement is a right and left hand screw with traversing nuts directly connected by link rods to a crosshead, which is keyed to the rudder stock. The weight of the rudder is carried at the main deck. A bronze disk with graphite inserts floating between the casting at the main deck and the emergency tiller palm forms the thrust bearing. The upper end of the tube incasing the rudder stock is fitted with a stuffing box.

The engine is disconnected by operating the clutch handwheel which hauls the forward part of the clutch forward and disengages the clutch grabs, but does not haul the gears out of mesh. Before connecting up the clutch the helm indicating dials at the steering stand, at the engine trick wheel, and on the sliding sleeve should read alike. This will place the steering wheel approximately in position for coupling up, but before the clutch is driven home the corresponding numbers on the clutch grabs should register. This can be done expeditiously by leaving the hand-gear clutch connected, so that the engine-pinion clutch grabs may be rotated in either direction. During this operation close the steam cut-out valve.

NOTE.—Disconnect hand-gear train by slipping gears out of mesh before opening cut-out valve.

When the regular hand gear is in use, the large gear on the screw shaft in the engine train idles. The hand gear consists of two 60-inch handwheels connected to the screw shaft through a sliding gear. The screw shaft is a double thread, $1\frac{1}{4}$ inches lead, and $\frac{5}{16}$ inch in depth; 43.89 turns of the handwheels are required to put the rudder hard to hard, or 70 degrees. The engine is a 7 by 7 inch two-cylinder horizontal steering engine built by the Lidgerwood Manufacturing Co., of New York, N. Y. The operation of the engine by steam is controlled by means of a steel wire rope leading from a drum near the engine to a steering stand on the bridge; also from a similar drum at the engine to a steering stand on the after deck house.

The transmission lines leading to bridge and the line leading to the after deck house are entirely separate and can be thrown in or out by operating the clutch lever located on the drum shaft in the steering engine room. The engine may be controlled, aside from the wire rope transmissions, by a trick wheel installed on the engine direct. The trick wheel on the engine makes 8.24 turns hard to hard, or 70 degrees. The steering stand wheels make 13.73 turns hard to hard, or 70 degrees. Slack in the transmission ropes is eliminated by the after-drum tighteners. Any degree of tension desired can be obtained by shifting the rope drums in relation to the keeper plates. An emergency clamp is provided for the wire-rope transmission.

The emergency tiller is always in place on the main deck, and a relieving tackle can be used for steering or in place of a friction band.

The engine is fitted with a D...
The pipe guards in th...
are fitted with grease plug...
well filled and frequently se...
well packed with heavy greas...
graphite bushed.

TO ST

Clutch on forward end of rop

TO STEER B

Clutch on after end of rope-c

TO STEER BY

Clutch on vertical shaft unde

out of mesh; clutch on tran

TO STEER BY

Shift sliding gear on transmis

clutch on transmission (or s

Builders: Lidgerwood Manufactur

Type: Horizontal screw gear, dou

number of cylinders.....

number of cylinders, inches.....

number of pistons, inches.....

working steam pressure, pounds.....

pressure to withstand full boiler pressur

supply pipe diameter, inches.....

exhaust pipe diameter, inches.....

steering engine stops, degrees.....

rudder stops, degrees.....

distance of screw shaft from extreme

distance of engine pinions, extreme

distance of steering stand wheels, 70

distance of trick wheel on engine, 70

distance of handwheel, 70°.....

distance of screw spur gear to engine pinio

distance of screw (double thread), inches.....

distance of same thread, inches.....

distance of rudder crosshead, inches.....

distance of rudder stock, outside, inch

distance of rudder stock, inside, inch

distance of rudder, square feet.....

distance of balanced portion, square feet.....

LUBRICATION.

The engine is fitted with a Detroit automatic oiler, which operates only when the engine is running. The pipe guards in the after quarters, incasing the transmission rope to after deck house, are fitted with grease plugs. The grease cups on traversing nuts and sleeves should be kept well filled and frequently screwed down. The ball and roller bearings to sheaves should be well packed with heavy grease at all times. The rudder thrust-bearing disk at main deck is graphite bushed.

TO STEER FROM BRIDGE BY STEAM.

Clutch on forward end of rope-drum shaft out; sliding gear out of mesh; all other clutches in.

TO STEER BY STEAM FROM AFTER DECK HOUSE.

Clutch on after end of rope-drum shaft out; sliding gear out of mesh; all other clutches in.

TO STEER BY STEAM FROM STEERING-ENGINE ROOM.

Clutch on vertical shaft under rope-drum shaft out; sliding gear on transmission (or screw) shaft out of mesh; clutch on transmission (or screw) shaft in.

TO STEER BY HAND FROM STEERING-ENGINE ROOM.

Shift sliding gear on transmission (or screw) shaft in mesh with hand-gear shaft and disconnect clutch on transmission (or screw) shaft.

STEERING-GEAR DATA.

Builders: Lidgerwood Manufacturing Co., of New York, N. Y.

Type: Horizontal screw gear, double-thread horizontal steam engine.

Number of cylinders.....	2
Diameter of cylinders, inches.....	7
Stroke of pistons, inches.....	7
Working steam pressure, pounds.....	200
Designed to withstand full boiler pressure, pounds.....	265
Steam supply pipe diameter, inches.....	2
Steam exhaust pipe diameter, inches.....	2½
Angle of steering engine stops, degrees.....	35
Angle of rudder stops, degrees.....	40
Revolutions of screw shaft from extreme right to extreme left, 70°.....	18. 813
Revolutions of engine pinions, extreme right to extreme left, 70°.....	111. 24
Revolutions of steering stand wheels, 70°.....	13. 73
Revolutions of trick wheel on engine, 70°.....	8. 24
Revolutions of handwheel, 70°.....	43. 89
Ratio of screw spur gear to engine pinion.....	14 to 83
Lead of screw (double thread), inches.....	1¼
Depth of Acme thread, inches.....	⅝
Radius of rudder crosshead, inches.....	20½
Diameter of rudder stock, outside, inches.....	11
Diameter of rudder stock, inside, inches.....	5½
Total area of rudder, square feet.....	66½
Area of balanced portion, square feet.....	

AMMUNITION HANDLING AND LOADING ARRANGEMENTS.

(Section U-2.)

The torpedoes are handled over the side by means of the forward port and after starboard boat davits. Each of these two davits is fitted with a short horizontal boom supported by a wire rope lift, and the boom swings with the davit. A $1\frac{1}{2}$ -ton triplex chain hoist is fitted at the end of the boom. The torpedo is lifted out of the water by this hoist, the davit is swung inboard, and the torpedo transferred to a chain hoist on the trolley track by means of a special hook with double eye. The trolley tracks are 6 by 3.33 by 3.33 inch by 12.25 pounds. I beams run fore and aft and attached to the underside of the boat skid beams, one on each side of the ship. The trolley-chain hoists run the full length of these tracks and provide means for loading the torpedoes directly into the tubes. For transference across the ship, torpedo trucks are provided.

The torpedoes are normally stowed in the triple tubes, provision being made in the forward and after magazines, compartments A-112-M and D-105-M, for war heads. These war heads are handled in the magazines by a purchase hooked into pad eyes suitably located for that purpose.

For striking down the war heads and 4-inch 1-pounder antiaircraft and small-arms ammunition to the handling room and magazines forward, there is provided a pad eye, located on the bridge deck beam at frame 50 directly over the hatch in main deck, between frames 49-51. For the after magazines a portable davit is provided, stepped near the hatch in main deck, between frames 138-140.

Racks for ready-service ammunition for the 4-inch guns are provided in the vicinity of each gun, 27 rounds for the gun on the main deck forward and 28 rounds for each of the others. The ammunition is stowed in the racks in the tanks.

A locker for the stowage of four boxes of 1-pounder antiaircraft ammunition is located on the main deck, on the port side of smokestack No. 2, between frames 70-72.

A locker for the stowage of 10 rifles with bayonets fixed and 10 automatic pistols, together with the necessary ammunition in belts, for emergency use, is located on the main deck just forward of the ladder to the bridge, between frames 50-53.

DEPTH-CHARGE LAUNCHING GEAR.

This vessel has been fitted with a depth-charge launching gear, shown on Bureau of Ordnance plans Nos. 59039, 59021, and 59024, Norfolk Navy Yard Nos. 023496, 0233494, and 023455. The Mark I depth-charge releasing gear comprises, in general, a structural steel track or guide, suitably lengthened to carry 13 Mark II depth charges, a release trap in the rear end of the track, and a bridge control connected by cables with a trap-operating mechanism.

The object is to provide an apparatus which may be operated from the bridge to drop the depth charges over the stern of the vessel and also provide a safety storage for additional charges in position to be readily loaded into the trap.

The gears are built in pairs, one right and one left, and mounted on the starboard and port sides, respectively, the operating connection being inboard in each case. Each gear weighs complete approximately 1 ton.

A pedestal and hand crank is mounted on the outboard side of the bridge between frames 52 and 53 port and starboard, and connected to the gear by $\frac{5}{16}$ -inch diameter steel wire rope leads carried through $\frac{1}{2}$ -inch diameter brass pipes located under the main deck and outboard of No. 3 deck girder, providing a control by means of which an officer on the bridge may drop charges without losing the time necessary in transmitting signals. There are fitted in the pipe line oil-

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tight sheave boxes and where the rope changes direction there are provided sheaves inclosed in oiltight boxes. Lubrication is furnished the pipe through the top of the sheave boxes.

The releasing trap is arranged to carry two charges, which may be dropped one after the other by successive operations of either the control handle at the trap or the handle on the bridge.

A fin is provided at the rear of the trap, which wipes off the safety fork after a charge is released.

Turnbuckles are provided and take up any slack in the wire rope leads.

A pipe tunnel, made of 2-inch diameter brass pipe, port and starboard, has been fitted in the fuel-oil tanks between frames Nos. 125 and 135; the 1/2-inch pipes inclosing the wire-rope leads are carried through these tunnels.

LIST OF AMMUNITION STOWAGE.

(Section U-1.)

Type.	Compartment.	Total capacity.	Allowance.	Number in each box or tank.	Length.	Stowage sizes. (width).	Depth or diameter.	Weight of each box or tank.
					Inches.	Inches.	Inches.	Pounds.
4-inch 50-caliber cartridge	A-111M	308	} 400	{ 1	51.92	.....	6.32 D	83.75
Do	D-106M	166			.....	.....	.....	.....
1-pounder antiaircraft	A-110M	10	10	100	31.25	17	10.3	235
Do	D-106M	10	10	100	31.25	17	10.3	235
Warheads	A-112M	6	6	.....	.....	.....	21 D	430
Do	D-105M	6	6	.....	.....	.....	21 D	430
45-caliber ball, 1911	A-110M	5	1	2,000	16.25	12.75	7.625	110
0.30-caliber dummy, 1906	A-110M	1	1	1,000	21.625	12.5	7.0	66
0.30-caliber blank, 1909	A-110M	1	1	2,000	17.125	12.45	11.75	84
0.30 caliber ball, 1898	A-110M	4	2	1,200	34.5	9	7.5	99.75
0.30-caliber ball, 1906, for rifle	A-110M	5	17	800	34.5	9.5	8.25	100
0.30-caliber ball, 1906, for machine gun	A-110M	20	30	800	34.5	9.5	8.25	100
0.30-caliber blank, 1898	A-110M	4	2	1,000	19.75	13.125	8.0	44.5
Torpedo detonator	Main deck	6	6	4	4 3/8	3 3/8	3 3/8	2
Impulse primer	A-110M	6	6	24	.....	.....	.....	2.5
Superheater fuses	A-110M	7	7	20	.....	.....	.....	3
Net cutters	A-112M	3	3	4	32 1/2	9 1/16	7 9/16	55
Impulse powder	A-110M	1	1	50	.....	.....	.....	58

BATTERY.

GUNS.

(Section A-5.)

Caliber.	Location.		
	Deck.	Frame.	
4-inch rapid-fire gun.....	Main.....	29, center line.....	1
Do.....	do.....	163, center line.....	2
Do.....	Gun platform.....	78, starboard.....	3
Do.....	do.....	78, port.....	4

ANTI-AIRCRAFT.

1-pounder automatic.....	Main.....	37, center line.....	1
Do.....	do.....	64½, port.....	2
30-caliber machine gun.....	do.....	58, starboard.....	1
Do.....	Top of after deck house.	Port.....	2

TORPEDO TUBES.

6.8-m. by 21 inches, triple.....	Main.....	107, starboard.....	1
Do.....	do.....	99, port.....	2
Do.....	do.....	140, starboard.....	3
Do.....	do.....	129-130, port.....	4

SMALL ARMS.

45-caliber Colt's revolvers.....	Hold.....	43-49.....	
30-caliber rifle.....	do.....	43-49.....	

DEPTH-CHARGE PROJECTING GUN.

6-inch Y gun.....	Top of after deck house.	151-152.....	1
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BOATS.

(Section U-5.)

Name.	No.	Carrying capacity (each).
24-foot motor sailing launch.....	1	19
24-foot whaleboat.....	1	23
21-foot motor dory.....	1	10
14-foot wherry.....	1	5
10-foot punt.....	1	28
Life rafts (cylinders).....	4	