

1840

CONFIDENTIAL

SERIAL NO. 123

BLUE, ORANGE and RED FLEETS

JUNE, 1933

*Cancelled by Edition of June 1934*

DECLASSIFIED IAW DOD MEMO OF 3 MAY 1972, SUBJ:  
DECLASSIFICATION OF WWII RECORDS

DEPARTMENT OF OPERATIONS  
NAVAL WAR COLLEGE  
Newport, R.I.  
June, 1933

---

**RESTRICTED**  
CONFIDENTIAL

Not to pass out of the custody of officers of the U.S. Naval or Military Service.

When no longer required this pamphlet should be returned to Publication Section,  
Naval War College.

Serial No. 123

# BLUE, ORANGE AND RED FLEETS

DEPARTMENT OF OPERATIONS

NAVAL WAR COLLEGE

NEWPORT, R. I.

1 JUNE 1933

**CONFIDENTIAL**

*Not to pass out of the custody of officers of the U.S. Naval or Military Service  
When no longer required this pamphlet should be returned to the Publication Section,  
Room N-11, Naval War College, Newport, R.I.*



BLUE, ORANGE and RED FLEETS

Table of Contents

	<u>Page</u>
Classification of Vessels - - - - -	b
Abbreviated Titles - - - - -	c-d
Preface - - - - -	e-f
BLUE, ORANGE and RED Fleet data - - -follows	f

Note: For index of each Fleet see page following cover sheet of respective Fleet.



2851 A  
5/15/33

- b -

WAR COLLEGE CLASSIFICATION OF VESSELS

June 1933

Class of Ship	Class Designation
BATTLESHIP	BB
MONITOR	BM
BATTLE CRUISER	CC
HEAVY CRUISER	CA
LIGHT CRUISER	CL
FLYING-DECK CRUISER	CF
AIRCRAFT CARRIER	CV
MINE LAYER	CM
DESTROYER LEADER	DL
DESTROYER	DD
LIGHT MINELAYER	DM
SUBMARINE	SS
MINELAYING SUBMARINE	SM
PATROL VESSELS Eagle Type	PE
Sub-Chaser	PC
Gunboat	PG
Sloop	PS
Yacht	PY
AUXILIARIES Destroyer Tender	AD
Submarine Tender	AS
Submarine Rescue Vessel	ASR
Aircraft Tender (heavier than air)	AV
Airship Tender (lighter than air)	AZ
Repair Ship	AR
Provision Storeship	AF
Collier	AC
Oiler	AO
Ammunition Ship	AE
Cargo Ship	AK
Transport	AP
Hospital Ship	AH
Ocean-Going Tug	AT
Mine Sweepers	AM
Miscellaneous	AG
District Craft	Y

X BEFORE ANY CLASS DESIGNATION REPRESENTS AUXILIARY TYPE  
 O " " " " " " OBSOLESCEMENT VESSELS

AIRCRAFT  
Class Designation

	: Heavier than Air	: Rigid airship	: Non-rigid airship	: Kite balloon and balloon
H - Ambulance	: VH	:	:	:
O - Observation	: VO	:	: ZNO	: ZKO
F - Fighting	: VF	:	:	:
T - Torpedo and Bombing	: VT	:	:	:
S - Scouting	: VS	: ZRS	: ZNS	:
P - Patrol	: VP	: ZRP	: ZNP	:
J - Utility	: VJ	:	:	:
N - Training	: VN	: ZRN	: ZNN	: ZKN
B - Bombing	: VB	:	:	:
R - Transport	: VR	:	:	:



ABBREVIATED TITLES

(United States Fleet Letter No. 8-31. United States  
Fleet Radio Communication Instructions, Radio  
Frequency Plans, 1 April, 1931).

The abbreviated titles shown below are authorized for use in official  
correspondence and dispatches where brevity is desirable:

<u>Title</u>	<u>Written</u>
Commander-in-Chief, U.S. Fleet	Cincus
Commander Battle Force	Combatfor
Battle Force	Batfor
Commander Scouting Force	Comscofor
Scouting Force	Scofor
Commander Submarine Force	Comsubfor
Submarine Force	Subfor
Commander Base Force	Combasefor
Base Force	Basefor
Commander Battleships, U.S. Fleet	Combatus
Battleships, U.S. Fleet	Batus
Commander Battleships, Battle Force	Combatships
Battleships, Battle Force	Batships
Commander Battleship Division	Combatdiv
Battleship Division*	Batdiv*
Commander Cruisers, U.S. Fleet	Comcrusus
Cruisers, U.S. Fleet	Crusus
Commander Cruisers, Scouting Force	Comcruscofor
Cruisers, Scouting Force	Cruscofor
Commander Cruisers, Battle Force	Comcrubatfor
Cruisers, Battle Force	Crubatfor
Commander Cruiser Division	Comcrudiv
Cruiser Division	Crudiv
Commander Destroyers, U.S. Fleet	Comdesus
Destroyers, U.S. Fleet	Desus
Commander Destroyers, Battle Force	Comdesbatfor
Destroyers, Battle Force	Desbatfor
Commander Destroyers, Scouting Force	Comdescofor
Destroyers, Scouting Force	Descofor
Destroyer Flotilla	Desflot
Commander Destroyer Squadron	Comdesron
Destroyer Squadron**	Desron**

Notes: \*"Divisions" will be abbreviated "Divs".  
\*\*"Squadrons" will be abbreviated "Rons".



2851 B  
5/15/33

- d -

<u>Title</u>	<u>Written</u>
Commander Destroyer Division	Comdesdiv
Destroyer Division	Desdiv
Commander Aircraft, U.S. Fleet	Comairus
Aircraft, U.S. Fleet	Airus
Commander Aircraft, Battle Force	Comairbatfor
Aircraft, Battle Force	Airbatfor
Commander Aircraft, Scouting Force	Comairscofor
Aircraft, Scouting Force	Airscofor
Commander Carrier Division	Comcardiv
Carrier Division	Cardiv
Commander Minecraft, U.S. Fleet	Cominus
Minecraft, U.S. Fleet	Minus
Commander Minecraft, Battle Force	Cominbatfor
Minecraft, Battle Force	Minbatfor
Commander Mine Squadron	Cominron
Mine Squadron	Minron
Commander Mine Division	Comindiv
Mine Division	Mindiv
Commander Training Squadron	Comdrillron
Training Squadron	Drillron
Commander Submarine, U.S. Fleet	Comsubus
Submarines, U.S. Fleet	Subus
Commander Submarine Squadron	Comsubron
Submarine Squadron	Subron
Commander Submarine Division	Comsubdiv
Submarine Division	Subdiv
Commander Train Squadron	Comtrainron
Train Squadron	Trainron
Commander-in-Chief, Asiatic Fleet	CinCasiatic
Commander Yangtze Patrol	Comyangpat
Yangtze Patrol	Yangpat
Commander South China Patrol	Sopatecom
South China Patrol	Sopat
Commander Special Service Squadron	Comsperon
Special Service Squadron	Speron



PREFACE

1. To make more interesting the problems studied at the Naval War College, and to familiarize officers with the characteristics and capabilities of existing ships, it is desirable to use in such studies the actual types and numbers of ships in our own navy and in such other navies as may be selected as the opposing force in these hypothetical problems. This pamphlet is intended only for such use.

2. Classification. - Vessels are classified in this pamphlet in accordance with the classification given on page b.

3. Reliability. - Data entered without comment may be taken as reasonably reliable. Where information is doubtful or lacking, the data required for War College use has been estimated or assumed, and is indicated by one of the following symbols:

- ? - Doubtful or unconfirmed
- e - Estimated
- a - Assumed
- x - Approximate

SHIP DATA

4. Part I, Ship Data, includes all U.S. naval ships built, building, projected or allowed by the London Treaty, except some small craft of no value in fleet operations. (The RED Fleet contains three CFs in excess of London Treaty tonnage). (ORANGE "

5. In the ship data tables, vessels which have common characteristics are grouped together. The data shown for the first vessel of a group applies to all vessels of the group, unless otherwise shown.

6. Displacement. - The figures given are for Standard Displacement (Tonnage).

7. Date. - The dates given show the year completed or to be completed.

8. Speed. - The figures given are for maximum individual speed under favorable conditions, at normal displacement.

9. Drive. - The following symbols are used to indicate the various types of propulsion:

- R - Reciprocating
- T - Turbine
- G - Geared turbine
- E - Electric
- C - Internal combustion
- TR - Turbine. Reciprocating cruising engine
- TG - Turbine. Geared cruising turbine
- TC - Turbine. I.C. cruising engine
- CE - Internal-combustion electric

10. Fuel. - Figures given are for maximum bunker capacity, in tons of 2240 pounds. Symbols used to indicate kind of fuel:

- Oil, unless otherwise shown
- " - Coal
- g - Gasoline

For submarines two figures are given, one for normal and one for emergency capacity.

11. Radius. - Figures given are for radius at economical and best sustained speeds, at maximum fuel capacity.



12. Armament. - Symbols used here are:

- m - Machine guns
- h - High-angle (anti-aircraft guns)
- d - Deck tubes
- s - Submerged tubes

The range of all guns is given in Part III.

13. Armor. - The figures given are for the thickness of the side armor and the thickness of the horizontal armor protecting the vitals. For vessels of more than one armored deck, the aggregate thickness of horizontal armor has been reduced to a figure of virtual thickness intended to indicate the protective equivalent in a single thickness.

14. Aircraft. - The data given as to catapults and number and type of planes carried by each ship is based either on what such vessels actually carry now, or on what they might reasonably be expected to carry in war. Symbols used include ("Cat." for catapult and VO, VF, etc., to indicate types of planes.

#### FUEL EXPENDITURE TABLES

15. Part II, Fuel Expenditure Tables, gives for all completed ships the data for maximum bunker fuel, in tons; port expenditure, in tons per day; sea expenditure at various speeds, in tons per hour.

16. For vessels burning both coal and oil, the total fuel has been reduced to its equivalent in either coal or oil, on the basis of 140 tons of oil equals 190 tons of coal, and expenditure figures are on the basis of coal or oil.

17. Fuel expenditure at the different speeds are those for good conditions; smooth sea, clean bottom, vessel at normal displacement. For approximate estimates for average conditions they should be increased 5% for large vessels, 10% for others. For foul bottoms, or unfavorable conditions of sea or wind, they should be further increased.

18. In the Chart Maneuver, sea expenditure figures are increased as prescribed by the rules to account for:

- (1) Maintaining reserve steam,
- (2) Sea effect,
- (3) Foul bottom,
- (4) Over-draft,
- (5) Paravanes,
- (6) Towing, and
- (7) Station-keeping in formation.

#### ORDNANCE DATA

19. Part III, Ordnance Data, gives ballistic data on guns, types of torpedoes and mines, fire control data, ammunition allowances, ship bomb and torpedo allowances, and aircraft organization.

#### AIR DATA

20. Air Data, published under separate cover, "Aircraft Characteristics", gives more detailed data on the tactical characteristics of aircraft types in our own service.

#### ERRORS

21. It is requested that errors and discrepancies discovered in this pamphlet be reported to the Secretary of the War College.



2722  
3/31/33

BLUE FLEET

Naval War College  
Newport, R.I.  
June, 1933



INDEX

BLUE FLEET

	<u>PART I</u> <u>Ship Data</u>	<u>PART II</u> <u>Fuel Expenditure</u>
Battleships . . . . .	2	31
Aircraft Carriers . . . . .	2	31
Cruisers . . . . .	4	31
Destroyers . . . . .	6	32
Minelayers . . . . .	16	32
Patrol Vessels, Eagles . . . . .	16	33
Sloops, Sub-chasers . . . . .	18	33
Submarines . . . . .	20	33
Destroyer Tenders . . . . .	24	34
Submarine Tenders . . . . .	24	34
Aircraft Tenders . . . . .	24	34
Repair Ships . . . . .	26	34
Provision Storeships . . . . .	26	34
Cargo Ships . . . . .	26	34
Ammunition Ships . . . . .	26	35
Colliers . . . . .	26	35
Oilers . . . . .	28	35
Transports . . . . .	28	35
Hospital Ships . . . . .	28	35
Minesweepers . . . . .	28	35
Miscellaneous . . . . .	28	35
Ocean Going Tugs . . . . .	28	35
PART III. Ordnance Data . . . . .		36



2722  
3/31/33

- 1 -

PART ONE

SHIP DATA



2722  
3/51/33

- 2 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

BATTLESHIPS  
Treaty Tonnage

BB

WEST VIRGINIA	48	1923	L	31800	21 E	4680	18 9900	10 21100	<u>1344</u> 100
MARYLAND	46	1921		31500					
COLORADO	45	1923		32500					
CALIFORNIA	44	1921	L	32600	21 E	4750	18 9700	10 20500	<u>1344</u> 100
TENNESSEE	43	1920		32300					
IDAHO	42	1919	L	33800	21 G	5840	18 12450	10 26200	1304
MISSISSIPPI	41	1917		33000			e	e	1344
NEW MEXICO	40	1918		33100					1304
ARIZONA	39	1916	L	32100	21 TG	5560	18 7310	10 19900	1304
PENNSYLVANIA	38								
OKLAHOMA	37	1916	L	28900	20.5 R	4700	18 6090	10 15700	1260
NEVADA	36			28700	20.5 G				
TEXAS	35	1914	L	27000	20.5 R	5180	18 6500	10 15400	<u>1268</u> 110
NEW YORK	34								
ARKANSAS	33	1912	L	26000	20.5 T	5160	18 7000	10 14000	1250

CV

AIRCRAFT CARRIERS  
Treaty Tonnage

CV	*7 *6 *5		L**	14570	32.5	5247 (e)	30 3045 (e)	12 14000 (e)	650
RANGER	4		L**	13800	29.3	3630 (1)	26 4310 (e)	10 18300 (e)	650
SARATOGA	3	1928	L	33000	33 E	6830	30 3200	12 11000	1266
LEXINGTON	2					(2)			
LANGLEY (c)	1	1922	L**	11500	15 E	1920 (3)	13 7080	10 8740	361

\*\*Classed as large size for gunfire and visibility, Rule A-2.

\*New construction permitted by London Treaty.

(c) Experimental, may be replaced.

(1) Fuel for planes - 40,000 gallons Aviation Gasoline, not including capacity of plane tanks.

(2) Fuel for planes - 140,000 gallons Aviation Gasoline, not including capacity of plane tanks.

(3) In ships tanks, 60,000 gallons (approx.) of Aviation Gasoline.



NO.	LIFE	ARMOR Side Deck	GUNS							TORPEDOES			MINES Moored Drifting D.C.	AIR
			No.	Cal.	Range	Number			End Arc	No. Type	Tubes			
						Side	Bow	Qtr.			Total	Side		

BB

BATTLESHIPS  
Treaty Tonnage

48	18.5	13"5	8	16"/45	33	8	4	4	30°	12 A	2 s	1 s	0	2 Cat 3 VO
46		3"68	12	5"/51	17	6	0	0	30°					
45			8	5"/25h	14	4	2	2	30°					
			8	0"50/63mh										
44	17.7	13"5	12	14"/50	34	12	6	6	30°	12 C	2 s	1 s	0	2 Cat 3 VO
43		3"68	12	5"/51	17	6	0	0	30°					
			8	5"/25h	14	4	2	2	30°					
			8	0"50/63mh										
42	17.3	13"5	12	14"/50	34	12	6	6	30°	0	0	0	0	2 Cat 3 VO
41		5"18	12	5"/51	17	6	0	0	30°					
40			8	5"/25h	14	4	2	2	30°					
			8	0"50/63mh										
39	16.9	13"5	12	14"/45	33	12	6	6	30°	0	0	0	0	2 Cat 3 VO
38		4"57	12	5"/51	17	6	0	0	30°					
			8	5"/25h	14	4	2	2	30°					
			8	0"50/63mh										
37	16.0	13"5	10	14"/45	33	10	5	5	30°	0	0	0	0	2 Cat 3 VO
36		4"32	12	5"/51	17	6	0	0	30°					
			8	5"/25h	14	4	2	2	30°					
			8	0"50/63mh										
35	15.5	12"	10	14"/45	22	10	4	4	30°	0	0	0	0	1 Cat 2 VO
34		4"13	16	5"/51	15	8	0	0	30°					
			8	3"/50h	13	4	1	1	30°					
			8	0"50/63mh										
33	15.2	11"	12	12"/50	23	12	4	4	30°	0	0	0	0	1 Cat 2 VO
		4"39	16	5"/51	15	8	0	0	30°					
			8	3"/50h	13	4	1	1	30°					
			8	0"50/63mh										

CV

AIRCRAFT CARRIERS  
Treaty Tonnage

7	9.8	3"	8	5"/38h	17	4	2	2		54E (1)	0	0	0	18 VF 18 VB 18 VS 18 VT
6		3"	40	0"50/63mh										
5				(a)										
4	5.6	0"	8	5"/25h	14	4	2	2		0	0	0	0	18 VF 18 VS 36 VB
		0"	40	0"50/63mh										
3	15.5	7"*	8	8"/55	30	8	4	4	30°	90E (1)	0	0	0	36 VF 12 VS 18 VB 18 VT
2		2"	12	5"/25h	14	6	3	3	30°					
			40	0"50/63mh										
1	4.1	0"	4	5"/51	17	2	1	1	30°	0	0	0	0	18 VF 18 VB
		0"	40	0"50/63mh										

\*Inclined 10°.  
(1) For torpedo planes only.



2722  
3/31/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	CCMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

GA-CF-CL

CRUISER CLASS  
Treaty Tonnage - Heavy Cruisers

CA	41	Appr.	Int	10000	32.5G	2210	30 3040	12 12600	450
CA	40	"							
QUINCY	39	Bldg.							
SAN FRANCISCO	38	"							
TUSCALOOSA	37	"							
MINNEAPOLIS	36	1933							
ASTORIA	34	Bldg.							
NEW ORLEANS	32	1932							
INDIANAPOLIS	35	1932	Int	10000	32.5G	2825	30 3890	12 16150	450
PORTLAND	33	1933		9800					
AUGUSTA	31	1931	Int	10000	32.5G	2825	30 3890	12 16150	450
HOUSTON	30	1930							
CHICAGO	29	1931							
LOUISVILLE	28	1930							
CHESTER	27	1930							
NORTHAMPTON	26	1930							
SALT LAKE CITY	25	1929	Int	10000	32.5G	2825	30 3890	12 16150	450
PENSACOLA	24								

Treaty Tonnage - Light Cruisers

CF*	*52		Int	10000	32.5G	2825	30 3890	12 16150	500
CF	*51					(e)	(e)	(e)	
CF	*50								
CL*	*46		Int	10000	32.5G	2725	30 3750	12 15550	450
CL	*45					(e)	(e)	(e)	
CL	*44								
CL	*43								
MEMPHIS	13	1924	S	7050	33 G	1890	30 2200	12 11700	467
MARBLEHEAD	12								
TRENTON	11								
CONCORD	10								
RICHMOND	9								
DETROIT	8						30 1800	12 7600	
RALEIGH	7								
CINCINNATI	6					1880	30 2300	12 8400	
MILWAUKEE	5								
OMAHA	4								

\*New construction permitted by the London Treaty.

Note - CA-40 cannot be completed before 1938.

CA-41 cannot be completed before 1939.



2722  
3/31/33

NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES Moored Drifting D.C.	AIR		
			No.	Cal.	R ang e	Number			End No. Arc	Tubes					
						Side	Bow	Qtr.		Total	Side				
<b>CRUISER CLASS</b>															
<b>CA-CF-CL Treaty Tonnage - Heavy Cruisers</b>															
41	4.7	5"00	9	8"/55	34	9	6	3	30°	0	0	0	0	2 Cat	
40		2"25	8	5"/25h	14	4	2	2	30°					4 VS	
39				8	0"50/63mh										
38															
37															
36															
35	4.7	3"00	9	8"/55	34	9	6	3	30°	12G	6 d	3 d	0	2 Cat	
33		2"00	4	5"/25h	14	2	1	1	30°					4 VS	
				8	0"50/63mh										
31	4.7	3"	9	8"/55	34	9	6	3	30°	12G	6 d	3 d	146*	2 Cat	
30		1"	4	5"/25h	14	2	1	1	30°				130	4 VS	
29				8	0"50/63mh								0		
28															
27															
26															
25	4.7	3"	10	8"/55	34	10	5	5	30°	12G	6 d	3 d	0	2 Cat	
24		1"	4	5"/25h	14	2	1	1	30°					4 VS	
				8	0"50/63mh										
<b>Treaty Tonnage - Light Cruisers</b>															
52	4.7	3"50	9	6"/53	27	9	6	3	30°	0	0	0	0	18 VB	
51		1"40	20	0"50/63mh											
50															
46	4.7	5"00	12	6"/53	27	12	6	6	30°	0	0	0	0	2 Cat	
45		2"25	8	5"/25h	14	4	2	2	30°					4 VS	
44				8	0"50/63mh										
43															
13	3.7	3"	10	6"/53	22	7	4	3	30°	12A	6 d	3 d	132*	2 Cat	
12		1"5	13**										172	2 VS	
11				4	3"/50h	13	2	2	2	30°				0	
10				8	0"50/63mh										
9															
8															
7															
6															
5															
4															

\*\*Turret guns 22, others 18.

\*Only 1/3 these allowances can be carried without interference with gunfire. Either moored mine allowance only, or drifting mine allowance only, can be carried.



2722  
3/31/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL Long Tons	SPEED RADIUS Sustained	SPEED RADIUS Economic	COMP. Ship Flag
------	-----	------	------	---------------------	-----------------------	----------------------	------------------------------	-----------------------------	-----------------------

DESTROYER CLASS

DL Treaty Tonnage - Destroyer Leaders

DL	*10		Des	1850	36.5 G	800	32.5	1400	12	6000	175
	*9					e	e			e	
	*8										
	*7										
	*6										
	*5										
	4	Appr.									
	3	"									
	2	"									
	1	"									

DD Treaty Tonnage - Destroyers

DD	355	Bldg.	Des	1500	36.5 G	584	32	1230	12	6100	140
	354	"									
	353	"									
Worden	352	"									
MacDonough	351	"									
Hull	350	"									
Dewey	349	"									
Farragut	348	"									
PRUITT	347	1920	Des	1051	35 G	375	30	1000	12	4600	130
SICARD	346										
PREBLE	345										
Wm. B. PRESTON	344	1920	Des	1051	34 G	375	30	1100	12	5200	130
NOA	343										
HULBERT	342										
DECATUR	341	1922	Des	1051	35 G	375	30	1100	12	5200	130
PERRY	340										
TREVER	339										
WASMUTH	338	1921									
ZANE	337										
LITCHFIELD	336	1920									
LAWRENCE	250	1921	Des	1190	34 G	375	30	900	12	5300	130
HOPKINS	249			1051							
BARRY	248	1920									
GOFF	247	1921		1190							
BAINBRIDGE	246										
WILLIAMSON	244	1920		1051							
CHILDS	241										
FOX	234	1920	Des	1190	34 G	375	30	900	12	5300	130
GILMER	233			1051							
BROOKS	232			1190							
HATFIELD	231										
PAUL JONES	230	1921	Des	1051	35 G	375	30	1200	12	6200	130
TRUKTUN	229										
FORD	228	1920									
PILLSBURY	227										
PEARY	226										
COPE	225										
STEWART	224										
McCORMICK	223										
BULMER	222										
SIMPSON	221										
MacLEISH	220										
EDSALL	219										
PARROTT	218										
WHIPPLE	217										
J. D. EDWARDS	216										
BORIE	215										
TRACY	214										

\*New construction permitted by London Treaty.







2722  
3/31/33

- 8 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Long Tons	SPEED RADIUS Sustained	SPEED RADIUS Economic	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	-----------------------	------------------------------	-----------------------------	-----------------------

## DD Treaty Tonnage - Destroyers (Cont.)

BARKER	213	1919	Des	1051	35 G	375	30	1200	12	6100	130
SMITH THOMPSON	212										
ALDEN	211										
BROOME	210										
LONG	209										
HOVEY	208										
SOUTHARD	207										
CHANDLER	206										
DALLAS	199	1920	Des	1051	34 G	375	30	900	12	4000	130
GOLDSBOROUGH*	188										
DALHGREN	187										
CLEMSON *	186										
HERBERT	160	1919	Des	1047	35 G	280	30	1000	12	3900	130
SCHENK	159										
LEARY	158										
DICKERSON	157										
J. F. TALBOTT	156	1919	Des	990	35 G	280	30	1000	12	4300	130
COLE	155										
ELLIS	154										
BERNADOU	153										
DUPONT	152										
BIDDLE	151										
BLAKELY	150										
BARNEY	149										
BRECKINRIDGE	148										
ROPER	147										
ELLIOTT	146										
GREER	145										
UPSHUR	144										
YARNALL	143										
TARBELL	142										
HAMILTON	141	1919	Des	990	35 G	280	30	900	12	3400	130
CLAXTON	140										
TILLMAN	135	1919	Des	990	35 G	280	30	1100	12	3900	130
CROWNINSHIELD	134										
HALE	133										
AARON WARD	132										
BUCHANAN	131										
JACOB JONES	130	1919	Des	1047	35 G	280	30	1000	12	3900	130
BABBITT	128										
TWIGGS	127										
BADGER	126										
TATNALL	125										
LEA	118	1918	Des	990	35 G	280	30	1000	12	4300	130
DORSEY	117										
DENT	116										
WATERS	115										
TALBOT	114										
RATHBURNE	113										
TAYLOR	94	1918	Des	990	33 G	280	30	1000	12	3000	130
FAIRFAX	93										
EVANS	78	1918	Des	990	35 G	280	30	1100	12	3900	130
PHILIP	76										
WICKES	75										
MANLEY	74										

\*No gun or torpedo director system.



NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES		AIR
			No.	Cal.	R Side	Number		End Arc	No., Type	Tubes		Moored Drifting D.C.		
						Bow	Qtr.			Total	Side			
213	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
212			1	3"/23h	7								$\frac{0}{0}$	
211			4	0"50/63mh									$\frac{0}{50}$	
210														
209)			8*	4"/50	13	6	4	4						
208)			1	3"/23h	7				*Twin mounts					
207			4	4"/50	13	3	2	2						
206			1	3"/23h	7									
			4	0"50/63mh										
199	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
188			1	3"/23h	7								$\frac{0}{0}$	
187			4	0"50/63mh									$\frac{0}{50}$	
186														
160	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	0	0
159			1	3"/23h	7									
158			4	0"50/63mh										
157														
156	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
155			1	3"/23h	7								$\frac{0}{0}$	
154			4	0"50/63mh									$\frac{0}{50}$	
153														
152														
151														
150														
149														
148														
147														
146														
145														
144														
143														
142														
141	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
140			1	3"/23h	7								$\frac{0}{0}$	
			4	0"50/63mh									$\frac{0}{50}$	
135	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
134			1	3"/23h	7								$\frac{0}{0}$	
133			4	0"50/63mh									$\frac{0}{50}$	
132														
131														
130	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
128			1	3"/23h	7								$\frac{0}{0}$	
127			4	0"50/63mh									$\frac{0}{50}$	
126														
125														
118	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
117			1	3"/23h	7								$\frac{0}{0}$	
116			4	0"50/63mh									$\frac{0}{50}$	
115														
114														
113														
94	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
93			1	3"/23h	7								$\frac{0}{0}$	
			4	0"50/63mh									$\frac{0}{50}$	
78	1.3	0	4	4"/50	13	3	2	2	25°	12 C	12 d	6 d	$\frac{0}{0}$	0
76			1	3"/23h	7								$\frac{0}{0}$	
75			4	0"50/63mh									$\frac{0}{50}$	
74														

Treaty Tonnage - Destroyers (Cont.)



2722  
3/31/33

- 10 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Long Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	-----------------------	------------------------------	-------------------------------	-----------------------

## DD Treaty Tonnage - Destroyers (Cont.)

HERNDON*	198	1920	Des	1190	34 G	375	30 900	12 4000	130
GEO. E. BADGER*	196								
W. C. WOOD*	195								
HUNT*	194								
ABEL P. UPSHUR*	193								
SEMMESE*	189								

## DD To be scrapped by 31 Dec. 1936 - Destroyers

SINCLAIR**	275	1919	Des	1190	34 G	375	30 1000	12 4000	130
MEADE**	274								
SWASEY**	273								
TINGEY**	272								
MORRIS**	271								
THORNTON**	270								
BAILEY**	269								
SHUBRICK**	268								
BALLARD**	267								
GREENE**	266								
EDWARDS**	265								
McLANAHAN**	264								
LAUB**	263								
GILLIS**	260	1919	Des	1190	34 G	375	30 900	12 3500	130
TURNER**	259								
AULICK**	258								
WELLES**	257								
BANCROFT**	256								
OSMOND INGRAM**	255								
RODGERS**	254								
McCALLA**	253								
McCOOK**	252								
BELKNAP**	251								
REUBEN JAMES	245	1920	Des	1190	34 G	375	30 1100	12 5150	130
SANDS	243								
KING	242								
STURTEVANT	240								
OVERTON	239								
J. K. PAULDING**	238								
McFARLAND	237								
HUMPHREYS	236								
KANE	235	1920	Des	1190	34 G	375	30 900	12 5300	130
BRANCH**	197	1920	Des	1190	34 G	375	30 1000	12 4000	130
MASON**	191								
SATTERLEE**	190	1919							
BAGLEY**	185	1919	Des	1060	33 Tg	275	30 840	12 2900	130
ABBOTT**	184								
HARADEN**	183								
THOMAS**	182								
HOPEWELL**	181								
STANSBURY**	180	1920	Des	1060	35 G	275	30 860	12 2500	130
HOWARD**	179								
HOGAN**	178	1919							
O'BANNON**	177								
RENSHAW**	176								
MacKENZIE**	175								

\* Assigned to Coast Guard.

\*\* No gun or torpedo director system.







NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL Long Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
DD To be scrapped by 31 Dec. 1936 - Destroyers (Cont.)									
KALK**	170	1919	Des	1060	35 G	275	30 800	12 2300	130
FOOTE **	169								
MADDOX**	168								
COWELL**	167								
BUSH **	166								
MEREDITH**	165								
CROSBY**	164								
WALKER**	163								
THATCHER**	162								
PALMER**	161	1918							
WARD**	139	1918	Des	1060	35 G	275	30 840	12 2500	130
KENNISON**	138	1919							
RADFORD**	120	1918	Des	1060	34 Tg	275	30 840	12 2900	130
LAMBERTON	119	1918		1090					
CRANE**	109	1919	Des	1060	34 G	275	30 833	12 2360	130
WILLIAMS**	108								
HAZELWOOD**	107								
CHEW**	106	1918							
MUGFORD**	105	1918							
CHAMPLIN**	104								
SCHLEY**	103								
BELL**	95	1918	Des	1060	34 G	275	30 785	12 2050	130
GRIDLEY**	92	1919	Des	1060	34 G	275	30 825	12 2500	130
HARDING**	91								
McKEAN**	90								
RINGGOLD**	89	1918							
ROBINSON**	88								
McKEE**	87								
STEVENS**	86	1918	Des	1060	34 G	275	30 860	12 2300	130
COLHOUN**	85								
DYER**	84								
STRINGHAM**	83								
GREGORY**	82								
SIGOURNEY**	81								
KIMBERLY**	80								
LITTLE**	79								
STOCKTON**	73	1917	Des	1020	30 Tg	275	27 920	12 2050	130
CONNER**	72	1918							
GWIN**	71	1920							
GRAVEN**	70	1918			33 G		30 800	12 2050	130
CALDWELL**	69	1917			30 G		27 920	12 2050	
SHAW*	68	1917	Des	920	29 Tg	310	26 1150	12 3000	104
WILKES*	67	1916							
ALLEN**	66	1917							
DAVIS*	65	1916							
ROWAN**	64								
SAMPSON**	63								
WAINWRIGHT*	62	1916	Des	910	29 Tg	310	26 1150	12 3000	104
WADSWORTH**	60	1915			29 G				
PORTER*	59	1916			29 Tg				
CONYNGHAM*	58								
TUCKER*	57								
ERICSSON**	56	1915		860	29 Tr				
CUSHING**	55				29 Tg				
McDOUGAL*	54	1914							
WINSLOW**	53	1915							
NICHOLSON**	52								
O'BRIEN**	51								

\*Assigned to Coast Guard.  
\*\*No gun or torpedo director system.







2722  
3/31/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL Long Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	----------------------	------------------------------	-------------------------------	-----------------------

DD To be scrapped by 31 Dec. 1936 - Destroyers (Cont.)

BALCH**	50	1914	Des	820	29 Tr	310	26 1150	12 3000	104
BENHAM**	49								
PARKER**	48	1913							
AYLWIN**	47	1914							
DUNCAN**	46	1913							
DOWNES**	45	1915							
CUMMINGS**	44	1913							
CASSIN*	43								
JENKINS**	42	1912	Des	650	30 T	225	25 1000	12 2000	88
JOUETT**	41								
BEALE **	40								
HENLEY**	39				30 G				
JARVIS**	38				30 T				
FANNING**	37								
PATTERSON**	36	1911							
AMMEN**	35								
WALKE**	34								
TRIPPE**	33								
MONAGHAN**	32								
MAYRANT**	31				30 G				
WARRINGTON**	30				30 T				
BURROWS**	29								
McCALL**	28								
STERETT**	27	1910							
PERKINS**	26								
TERRY**	25								
ROE **	24								
DRAYTON**	23								
PAULDING**	22								

DM

Treaty Tonnage - Light Minelayers

BREESE	18	1918	Des	1049	33 G	280	30 700	12 2400	130
MONTGOMERY	17								
GAMBLE	16								
RAMSAY	15								
ANTHONY	14	1919	Des	1160	34 G	275	30 785	12 2350	130
INGRAHAM	13								
SPROSTON	12								
ISRAEL	11	1918							
LANSDALE	10								
LUCE	9								
MURRAY	8								
STRIDLING	7								

\*Assigned to Coast Guard.

\*\*No gun or torpedo director system.



NO.	LIFE	ARMOR Side Deck	GUNS							TORPEDOES			MINES		AIR
			No.	Cal.	Range	Number			End Arc	No., Type	Tubes		Moored Drifting D.C.		
						Side	Bow	Qtr.			Total	Side			

DD To be scrapped by 31 Dec. 1936 - Destroyers (Cont.)

50	1.1	0	4	4"/50	13	3	1	1	20°	8 E	8 d	4 d	0	0
49			4	0"/50/63mh									0	
48													0	
47													0	
46													0	
45													0	
44													0	
43													0	
42	1.0	0	5	3"/50	8	4	2	1	30°	6 E	6 d	4 d	0	0
41			4	0"/50/63mh									0	
40													0	
39													0	
38													0	
37													0	
36													0	
35													0	
34													0	
33													0	
32													0	
31													0	
30													0	
29													0	
28													0	
27													0	
26													0	
25													0	
24													0	
23													0	
22													0	

DM Treaty Tonnage - Light Minelayers

18	1.3	0	4	4"/50	13	3	2	2	25°	0	0	0	89*	0
17			1	3"/23h	7								34	
16			4	0"/50/63mh									0	
15													0	
14	1.3	0	4	4"/50	13	3	1	1	25°	0	0	0	89*	0
13			1	3"/23h	7								34	
12			4	0"/50/63mh									0	
11													0	
10													0	
9													0	
8													0	
7													0	

\*Either moored mine allowance only or drifting mine allowance only can be carried.



2722  
3/31/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------	-----------------	------------	------------------------	-------------------------	-----------------

CM MINELAYERS

OGLALA AROSTOOK	4 3	1907	S	4950	16 R	563	14 3600	10 4800	333
YOSEMITE	2	1889	S	4083	19 R	660#	16 2100	10 4100	347
BALTIMORE	1	1888	S	4413	20 R	1090#	17 2500	10 6000	347

PG GUNBOATS

TULSA	22	1923	Des	1575	12 G	450	11 6500	7 10900	194
ASHEVILLE	21	1920							
SACREMENTO	19	1914	Des	1425	12 R	428#	11 4700	7 6100	153

PR RIVER GUNBOATS

MINDANAO	8	1928	Des	575	16 R	173	14 2800	8 5530	53
LUZON	7								
OAHU	6			450	16 R	103	14 1660	8 3300	
PANAY	5				(e)	(e)	(e)	(e)	
TUTUILA	4	1928		388	15 R	75	14 1100	12 1200	
GUAM	3	1927							
MONOCACY	2	1914	Des	190	13 R	32#	11 250	6 400	51
PALOS	1								

PE EAGLES

EAGLES	60-55 52-51 48-46 44 39-38 36-34 32 27-26 22 19 15 12-10	1919	Des	500	17 G	152	16 1900	10 3400	34
--------	---	------	-----	-----	------	-----	---------	---------	----







2722  
3/31/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

PS

SLOOPS

PS	30		Des	2000	20 G	480	20 2220	10 12000	220
	29				(a)	(e)	(e)	(e)	(e)
	28								
	27								
	26								
	25								
	24								
	23								

PY

CONVERTED YACHTS

ISABEL	10	1917	Des	938	24 T	216	22 1100	12 2300	84
NIAGARA	9	1918		2600	13 R	400#	11 3600	10 4000	129
NOKOMIS	6	1917		1265	15 R	303#	11 5000	7 4300	100

PC

SUBCHASERS

TOTAL	26	1921	MB	77	14 C	2400 gals. g.	14 420	9 960	12
-------	----	------	----	----	------	---------------------	--------	-------	----



2722  
3/31/33

NO.	LIFE	ARMOR Side Deck	GUNS							TORPEDOES			MINES	AIR
			No.	Cal.	R a p e	Number			End Arc	No., Type	Tubes		Moored	
						Side	Bow	Qtr.			Total	Side	Drifting	
												D.C.		

PS

SLOOPES

30	1.6	0	4	5"/38h	17	5	2	2	25°	0	0	0	0	1 VS
29			8	0"/50/63mh									0	(a)
28				(a)									75	
27													(a)	
26														
25														
24														
23														

PY

CONVERTED YACHTS

10	1.0	0	2	3"/50	8	2	1	1	45°	0	0	0	0	0
9	1.2	0	4	4"/50	13	3	2	2	45°	0	0	0	0	0
6	1.0	0	2	3"/50	8	2	1	1	45°	0	0	0	0	0
			All have 4	0"/50/63mh										

PC

SUBCHASERS - 110 foot

25	0.3	0	1	3"/23h	7	1	1	0	45°	0	0	0	0	0
			4	0"/50/63mh									0	
												10		



2722  
3/31/33

- 20 -

NAME	No.	DATE	SIZE	STAND. TON- NAGE	FUEL Normal Emerg.	SURFACE			SUBMERGED Speeds 1 hr.	COMP.
						Speeds		Radii*		
						Max.	Sust'd			

SS

SUBMARINE CLASS  
Treaty Tonnage - Submarines

CUTTLEFISH	171	1933	Sub	1550	$\frac{140}{260}$	17 CE	14	7970 (e)	8	17200 (e)	9	60
CACHALOT	170			(e)								
DOLPHIN	169	1932										
NAUTILUS	168	1930	Sub	2730	$\frac{165}{589}$	17 CE	14	9760	8	30200	9	37
NARWHAL	167											
BONITA	165	1926	Sub	1910	$\frac{159}{271}$	19 CE	15	3700	9	8000	8	87
BASS	164	1925										
BARRACUDA	163	1924										
S-48	159	1922	Sub	1000	$\frac{75}{138}$	14 C	11	7260	8	8620	9	44
S-47	158	1924	Sub	850	$\frac{57}{139}$	13 C	11	6000	8	9000	10.5	44
S-46	157											
S-45	156											
S-44	155											
S-43	154											
S-42	153											
S-41	146	1924	Sub	800	$\frac{35}{132}$	13 C	10	6400	8	7700	10.3	44
S-40	145	1923										
S-39	144											
S-38	143											
S-37	142											
S-36	141											
S-35	140											
S-34	139											
S-33	138	1922										
S-32	137	1923										
S-31	136	1923										
S-30	135	1920										
S-29	134	1924										
S-28	133	1923										
S-27	132	1924										
S-26	131	1923										
S-25	130											
S-24	129											
S-23	128											
S-22	127	1924										
S-21	126	1923										
S-20	125	1922										
S-19	124	1923										
S-18	123	1924										
S-17	122	1921	Sub	790	$\frac{65}{114}$	15 C	10	8140	8	8770	10.5	44
S-16	121	1920										
S-15	120	1921										
S-14	119											
S-13	118	1923	Sub	790	$\frac{66}{114}$	15 C	10	7130	8	8150	9.5	44
S-12	117											
S-11	116											
S-10	115	1922										
S-9	114	1921	Sub	790	$\frac{62}{118}$	12 C	11	7120	8	8640	8.5	44
S-8	113	1920										
S-1	105	1920	Sub	800	$\frac{36}{97}$	14 C	10	6930	8	7460	9.5	44

\*Note: All radii given are based upon emergency fuel capacities, allowing for normal amount of submerged operations.



2722  
3/31/33

NO.	LIFE	GUNS			TORPEDOES			MINES Moored Drifting D.C.	AIR
		No.	Cal.	Range	No., Type	Tubes			
					Total	Bow	Stern		

SUBMARINE CLASS

SS

Treaty Tonnage - Submarines

171	0.8	1	4"/50	13	24 G	6	4	2	0	0
170		4	0:50/63mh							
169										
168	1.0	2	6"/53	24	24 G	6	4	2	0	0
167		4	0:50/63mh							
165	0.9	1	5"/51	17	12 G	6	4	2	0	0
164		4	0:50/63mh							
163										
159	0.7	1	4"/50	13	14 F (21")	5	4	1	0	0
		4	0:50/63mh							
158	0.7	1	4"/50	13	12 F (21")	4	4	0	0	0
157		4	0:50/63mh							
156										
155										
154										
153										
146	0.7	1	4"/50	13	12 F (21")	4	4	0	0	0
145		4	0:50/63mh							
144										
143										
142										
141										
140										
139										
138										
137										
136										
135										
134										
133										
132										
131										
130										
129										
128										
127										
126										
125										
124										
123										
122	0.7	1	4"/50	13	12 F (21")	4	4	0	0	0
121		4	0:50/63mh							
120										
119										
118	0.7	1	4"/50	13	14 F (21")	5	4	1	0	0
117		4	0:50/63mh							
116										
115										
114	0.7	1	4"/50	13	12 F (21")	4	4	0	0	0
113		4	0:50/63mh							
105	0.7	1	4"/50	13	12 F (21")	4	4	0	0	1 (2)
		4	0:50/63mh							



NAME	NO.	DATE	SIZE	STAND. TON- NAGE	FUEL Normal Emerg.	SURFACE			SUBMERGED Speed 1 hr.	COMP.
						Speeds		Radii*		
						Max.	Sust'd			

SS To be scrapped by 31 Dec. 1936 - Submarines

S-7	112	1920	Sub	790	$\frac{62}{118}$	12 c	11	7120	8	8640	8.5	44
S-6	111											
S-3	107	1919										
R-20	97	1918	Sub	530	$\frac{25}{61}$	13.5 c	9	6100	8	6800	9	33
R-19	96											
R-18	95											
R-17	94											
R-16	93											
R-15	92											
R-14	91	1919										
R-13	90											
R-12	89											
R-11	88											
R-10	87											
R-9	86											
R-8	85											
R-7	84											
R-6	83											
R-5	82											
R-4	81											
R-3	80											
R-2	79											
R-1	78	1918										
O-10	71	1918	Sub	480	$\frac{33}{60}$	14 c	9	8500	8	9430	9.5	33
O-9	70											
O-8	69											
O-7	68											
O-6	67											
O-4	65											
O-3	64											
O-2	63											
O-1	62											

SM Treaty Tonnage - Minelaying Submarines

ARGONAUT	1	1928	Sub	2660	$\frac{185}{530}$	14 CE	12	11000	8	17900	9	87
----------	---	------	-----	------	-------------------	-------	----	-------	---	-------	---	----

\*Note: All radii given are based upon emergency fuel capacities, allowing for normal amount of submerged operations.



NO.	LIFE	GUNS			TORPEDOES			MINES Moored Drifting D.C.	AIR
		No.	Cal.	Range	No., Type	Total	Bow		

SS

To be scrapped by 31 Dec. 1936 - Submarines

112	0.7	1	4"/50	13	12 F (21")	4	4	0	0	0
111		4	0:50/63mh							
107										
97	0.5	1	3"/50	8	12 F (21")	4	4	0	0	0
96		4	0:50/63mh							
95										
94										
93										
92										
91										
90										
89										
88										
87										
86										
85										
84										
83										
82										
81										
80										
79										
78										
71	0.5	1	3"/23	7	8 F (18")	4	4	0	0	0
70		4	0:50/63mh							
69										
68										
67										
65										
64										
63										
62										

SM

Treaty Tonnage - Minelaying Submarines

1	1.0	2	6"/53	24	16 G	4	4	0	60	0
		4	0:50/63mh							



2722  
3/31/33

NAME	NO.	SIZE	STAND. TON-NAGE	LIFE	Bunker FUEL Tons	SPEED and DRIVE	RADIUS 10 kts.	GUNS No. Caliber	COMP.
------	-----	------	-----------------	------	------------------	-----------------	----------------	------------------	-------

AD

DESTROYER TENDERS

RIGEL	13	Int	13925	4.3	1420	10 G	7100	4 5"/51	452
DEMEBOLA	12							4 3"/50h	
ALTAIR	11							4 0"50/63mh	
BRIDGEPORT	10	Int	11750	3.8	1050#	12 R	5000	8 5"/51	450
BLACKHAWK	9	Int	13400	4.2	1568	13 R	11300	4 3"/50h	473
							Both have	4 5"/51	
								4 0"50/63mh	
WHITNEY	4	Int	12450	3.7	886	16 G	6450	8 5"/51	469
DOBBIN	3							4 3"/50h	
								4 0"50/63mh	
MELVILLE	2	S	7150	3.0	924	15 G	5570	8 5"/51	465
								1 3"/50h	
								4 0"50/63mh	

AS

SUBMARINE TENDERS

CANOPUS	9	S	7800	3.0	810	13.5R	5000	1 5"/51	367
								4 3"/50h	
								4 0"50/63mh	
SAVANNAH	8	Int	10800	3.7	1230#	10.5R	6500	4 5"/51	371
								4 3"/50h	
								4 0"50/63mh	
CAMDEN	6	S	9000	3.3	1030#	12 R	7500	4 4"/50	358
								4 0"50/63mh	
BEAVER	5	S	5970	2.5	685	16.5R	5590	4 5"/51	322
								4 0"50/63mh	
HOLLAND	3	Int	11570	3.8	1305	16 G	10785	8 5"/51	425
								4 3"/50h	
								4 0"50/63mh	
BUSHNELL	2	S	3604	1.8	426	14 G	5550	4 5"/51	221
								4 0"50/63mh	
FULTON	1	S	1400	1.3	234	12 C	4680	2 3"/50h	158
								4 0"50/63mh	

AV

AIRCRAFT TENDERS

ARGONNE	2	Int	13400	4.2	1465	14 R	9900	4 5"/51	339
								4 3"/50h	
								4 0"50/63mh	
WRIGHT	1	Int	12600	3.8	1510	16 G	9300	2 5"/51	338
								2 3"/50h	
								4 0"50/63mh	



NO.	TONNAGE			Maximum capacity in excess of own requirements
	Gross	Net	D.W.	

AD

DESTROYER TENDERS

13 12 11	7000	5500	10000	For 19 DD-rations for 30 days. Dry provisions for 4 months. Six DD propellers. 24 torpedoes (to be increased to 100). General stores - four months.
10				For 19 DD - same as for RIGEL class.
9	6309	4035	9500	For 19 DD-rations for 30 days, dry provisions for 2 mos. Six propellers. 12 torpedoes. General stores - 6 months.
4 3	8154	5294	2457	For 19 DD-rations for 60 days. General stores 6 mos. 6 DD propellers. 216 torpedoes. Cargo fuel oil 1532 tons.
2	5522	3127	-	For 19 DD-rations for 40 days. General stores 4 mos. 6 propellers. 66 torpedoes.

AS

SUBMARINE TENDERS

9	5281	3083	5600	Rations for 1 Div SS for 90 days. 100 torpedoes. General stores 6 mos. Diesel oil-450 tons. Lubricating oil 45 tns.
8	5755	2615	-	Rations for 1 Div SS for 60 days. 50 torpedoes. Stores for 6 months.
6	4752	2360	-	Rations for 1 Div SS for 90 days. 50 torpedoes. Stores for 6 mos. 720 tons Diesel oil. Lubricating oil 140 tons.
5	4461	2425	-	Rations for 1 Div SS for 90 days. 60 torpedoes. Stores for 4 mos. Diesel oil 460 tons. Lubricating oil 80 tons.
3	8008	5097	2910	Rations for 2 Div SS for 120 days. 72 torpedoes. General stores 6 mos. Diesel oil 1144 tons. Lubricating oil 430 tns.
2	2869	1495	-	Rations for 1 Div SS for 60 days. 20 torpedoes. General stores 4 mos. Diesel oil 250 tons.
1	1173	345	-	Repair facilities only.

AV

AIRCRAFT TENDERS

2	7556	3908	6860	Supports 2 squadrons (18 VP). Rations 60 days. Stores and spares for 3 months. Aviation Gasoline 216 tons. Aviation oils 40 tons.
1	9193	3943	-	Supports 2 squadrons (18 VP). Rations 60 days. Stores and spares for 3 months. Aviation Gasoline 210 tons. Aviation oils 40 tons.



2722  
3/31/33

- 26 -

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	Bunker FUEL Tons	SPEED and DRIVE	RADIUS 10 kts.	GUNS No.	Cal.	COMP.
AR REPAIR SHIPS										
VESTAL	4	S	3100	3.1	920	16 R	5000	4	5"/50	465
PROMETHEUS	3				870			1	3"/50h	
								4	0"50/63mh	
MEDUSA	1	Int	10715	3.6	1834	16 G	13700	4	5"/51	465
								2	3"/50h	
								4	0"50/63mh	

AF PROVISION STORE SHIPS										
YUKON	9	Int	12600	4.0	1445	11 G	8000	2	5"/51	211
BOREAS	8					11 T		4	3"/50h	
ARCTIC	7					11 G		4	0"50/63mh	
RAPPAHANOCK	6	Int	15200	4.5	3060#	11.5R	12200	4	5"/51	291
								1	3"/50h	
								4	0"50/63mh	
BRIDGE	1	S	8500	3.2	1000	14 R	7690	4	5"/50	212
								1	3"/50h	
								4	0"50/63mh	

AK CARGO SHIPS										
VEGA	17	Int	11450	3.8	1222	11.5G	11100	2	5"/51	113
SPIGA	16							4	3"/50h	
SIRIUS	15							4	0"50/63mh	
CAPELLA	14									
REGULUS	13		10550	3.6						
GOLDSTAR*	12									
									*Officially listed as AG-12.	
LITTERY	2	S	3333	1.8	350#	14 R	2370	4	3"/50	115
								4	0"50/63mh	

AE AMMUNITION SHIPS										
NITRO	2	Int	10600	3.7	1532	16 G	9230	4	5"/51	177
PYRO	1				1078#		7260	2	3"/50h	
								4	0"50/63mh	

AC COLLIERS										
JASON	12	Int	19250	5.1	2300#	14 R	8500	4	5"/51	181
ORION	11							4	0"50/63mh	
NEREUS	10		19080	5.1	1925#	14 R	7130	4	5"/51	181
PROTEUS	9							4	0"50/63mh	
NEPTUNE	8		19480	5.2	2500#	13 G	9620	4	5"/51	181
								4	0"50/63mh	



2722  
3/31/33

NO.	Tonnage			Maximum capacity in excess of own requirements
	Gross	Net	D.W.	

AR

REPAIR SHIPS

4 3	6690	3710	-	Facilities for repairs to any type ship not requiring docking. Stores consist of materials for use in repair work. Self sustaining for six months, including stores.
2	10715	6741	-	Same. Also carries two VO and facilities for tending one Squadron (18 VO or VF) at base.

AF

PROVISION STORE SHIPS

9 8 7 6	5975	3913	8369	Self sustaining 30 days. Cargo - Refrigerated meats 845 tons fresh vegetables 1300 tons. Dry provisions 1875 tons.
1	8680	4680	-	Self sustaining 30 days. Cargo - Refrigerated meats 1000 tons - fresh vegetables 1500 tons. Dry provisions 2500 tons.
1	6357	3390	-	Self sustaining 30 days. Cargo - Refrigerated meats 800 tons fresh vegetables 1250 tons. Dry provisions 1600 tons. Has towing engine.

AK

CARGO SHIPS

17 16 15 14 13 12	5784	3513	7400	General cargo space - 288,000 cu.ft. Gold Star has 223,000 cu.ft. for general cargo, plus refrigerator space of 11,500 cu.ft. (130 tons) 5 holds - hatches 22'x32' - Booms 1-30 tons, 1-10 tons, 8-5 tons. Self sustaining 30 days.
2	1671	715	-	3 Hatches - #1-16'x12', #2-23'x14', #3-18'x13'. Booms 6-5 ton.

AE

AMMUNITION SHIPS

2 1	7440	4405	-	Cargo - Ammunition 2438 tons - frozen meats 203 tons. Chilled storage space for powder 93450 cu.ft. Total space 176,440 cu.ft.
--------	------	------	---	--

AC

COLLIERS

12 11	10180	6174	-	Coal - 11800 tons. Fuel oil - 1125 tons.
10 9	9681	5722	-	Coal - 11500 tons. Fuel oil - 2575 tons.
8	9899	5876	-	Coal - 11700 tons. Fuel oil - 1250 tons.



2722  
3/31/33

- 28 -

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	Bunker FUEL Tons	SPEED and DRIVE	RADIUS 10 kts.	GUNS No.	Cal.	COMP.
AO OILERS										
TIPPECANOE	21	Int	16800	4.7	1109	10.5T	9420	2	5"/51	107
SEPULGA	20					10.5R		2	3"/50h	
SALINAS	19							4	0"50/63mh	
RAPIDAN	18									
MATTOLE	17	Int	14450	4.4	1288	11	9000	2	5"/51	107
LARAMIE	16							2	3"/50h	
KAWEAH	15							4	0"50/63mh	
TRINITY	13	Int	16800	4.7	1109	11.5T	5375	2	5"/51	107
RAMAPO	12					11.5R		4	0"50/63mh	
SAPELO	11									
PATOKA (1)	9				1478			1	5"/51	
								4	0"50/63mh	
PECOS	6	Int	14800	4.4	824	14 R	5800	4	5"/51	136
NECHES	5							2	3"/50h	
BRAZOS	4							4	0"50/63mh	
CUYAMA	3							4	4"/50	
MAUMEE	2					14 C		4	0"50/63mh	
KANAWHA	1					14 R				

(1) Fitted with Mooring Mast.

AP TRANSPORTS										
CHAUMONT	5	Int	13400	4.2	1475	15 G	11500	4	0"50/63mh	287
HEYWOOD	2	Int	10000	Proj.						
HENDERSON	1	Int	10000	3.5	1242	16 T	9000	3	5"/51	378
								2	3"/50h	
								4	0"50/63mh	

AH HOSPITAL SHIPS										
MERCY	4	Int	10100		1776#	18 R	5500		None	377
RELIEF	1	S	9800		1950	16 G	6600			417

AM MINESWEEPERS (Bird Class)										
AMs 1-5,7,9, 10,13-21, 23-27,30, 31,33-37, 40,41,43, 51-52		S	950	1.1	275	14 R	6500	2	3"/50h	59
								4	0"50/63mh	

AG AT ASR MISCELLANEOUS and TUGS										
ANTARES	10	Int	11450	3.8	1222	11.5G	11100	2	5"/51	280
PROCYON	11							4	3"/50h	
								4	0"50/63mh	
ATs 10 to 60 less 11,35,40-45,47,48,50,51,53,54,57.		S	850	1.1	#200a	13.15	3500		Miscellaneous	35
ASRs 1 to 6		S	950	1.1	275	14 R	6500	2	3"/50h	59
								4	0"50/63mh	



NO.	TONNAGE			Maximum capacity in excess of own requirements.
	Gross	Net	D.W.	

AO

OILERS

21	8246	6258	-	Fuel oil 11145 tons.
20				
19				
18				
17	7253	5393	-	Fuel oil 8850 tons.
16				
15				
13	8266	6308	-	Fuel oil 11145 tons.
12				
11				
9				Fuel oil 6533 tons. Aviation gas 100 tons. Helium 200,000 cu.ft.
6	7449	5063	-	Fuel oil 7455 tons. Gasoline 601 tons. AOs 1-2-3-5 have towing engines.
5				
4				
3				
2				Note: Sarah Thompson, AO-8, used for storage Cavite - 3826 tons.
1				Robert L. Barnes, AO-14 used for storage Guam - 1806 tons.

AP

TRANSPORTS

5	7550	3908	7290	Passengers - 117 1st Cl., 1200 Troops, Cargo 1430 tons.
2				
1	7493	3992	-	Passengers - 80 1st Cl., 1200-2000 troops. Cargo 1450 tons.

AH

HOSPITAL SHIPS

4				Patients 312
1				Patients 500

AM

MINESWEEPERS

	-	-	-	Can also carry 80 drifting mines or 85 moored mines.
--	---	---	---	--

AG

AT

ASR

MISCELLANEOUS  
and TUGS

10	5784	3550	-	Fitted as Base Force and Train Squadron flagships.
11				
ATs	-	-	-	Miscellaneous service. Ocean going. Can be used as AM.
ASRs	-	-	-	Submarine Rescue Vessels.



2722  
3/31/33

- 30 -

PART II.

FUEL EXPENDITURE TABLES



BB		BATTLESHIPS												
VESSELS	FUEL Long Tons	Port Use Day	Long Tons per hr. at speeds shown 1 Ton = 292 gals.											
			10	11	12	13	14	15	16	17	18	19	20	21
45, 46, 48	4600	11.5	2.23	2.56	3.04	3.56	4.22	4.98	6.08	7.16	8.44	9.96	11.8	14.5
43, 44	4750	11.2	2.33	2.71	3.25	3.83	4.60	5.34	6.35	7.68	8.75	9.83	12.0	14.2
40, 41, 42	5340	12.0	2.23	2.56	3.04	3.56	4.22	4.98	6.08	7.16	8.44	9.96	11.8	14.2
38, 39	5560	13.0	2.80	3.40	4.20	4.90	5.80	7.20	8.90	11.2	13.7	16.2	19.2	22.5
36, 37	4700	14.0	3.00	3.60	4.40	5.10	6.00	7.40	9.10	11.4	13.9	16.4	19.4	22.7
34, 35	5180	14.2	3.36	3.88	4.60	5.39	6.38	7.76	9.48	11.7	14.2	16.7	19.7	23.0
33	5160	14.3	3.66	4.11	4.64	5.43	6.37	7.99	9.03	10.9	13.3	16.0	19.5	23.0

CV		AIRCRAFT CARRIERS												
			10	12	14	15	18	22	26	28	30	31	32	33
1	1878	12.4	2.09	3.12	4.22									
2, 3	6830	38.6	6.47	7.44	8.82	9.86	13.3	29.9	44.2	52.5	63.7	70.9	79.5	90.1
4, 5	3630	9.5	1.98	3.15	4.98	5.55	6.55	14.3	21.9	26.0	28.8			
6, 7 (e)	5247	11.5	3.3	4.5		7.5	11.8	20.5	33.5	41.0	51.7	57.5	63.5	77.5

CA-CF-CL		CRUISERS												
			12	16	20	22	24	26	28	30	31	32.5		
CF 50-52	2825	11.0	2.10	3.60	6.40	8.00	9.70	12.4	15.8	21.8	28.0	37.30		
CA 24-35	2825													
36-41	2210													
CL 43-46 (e)	2725	10.0	2.10	3.60	6.40	8.00	9.70	12.4	15.8	21.8	28.0	37.30		
CL 9-13	1890	6.08	1.93	3.56	7.12	8.97	11.4	14.5	18.5	25.1	29.5	36.0	43.1	
7, 8	1890	10.7	3.00	4.93	8.49	11.1	14.4	17.8	22.4	30.1	34.4	38.6	42.9	
4, 6	1880	8.88	2.67	4.55	7.40	9.50	11.9	15.1	19.3	24.4	28.0	32.0	36.6	

DL		DESTROYER LEADERS											
			10	12	16	20	24	28	30	32.5	36.5		
1-10 (e)	800	3.2	1.30	1.60	2.40	3.60	6.0	10.1	13.2	18.6	32.0		

CM		MINELAYERS												
			10	11	12	13	14	15	16	17	18	19	20	
CM-4,3	563	6.66	1.17	1.32	1.56	1.84	2.16	2.67	3.29					
2	660#	8	1.6	1.9	2.2	2.7	3.4	4.1	4.8	6.1	7.6	9.5		
1	1090#	9	1.8	2.2	2.6	3.1	3.9	4.8	5.8	7.3	9.0	11.4	14.0	



DD

DESTROYERS

VESSELS	FUEL Tons	Port Use Day	Long Tons per hour at speeds shown												
			12	15	20	24	25	28	30	31	32	33	35	36.5	
348-355	584	4.8	1.15	1.64	2.67	4.77	6.50	8.72	11.6	13.3	15.2	17.5	20.5	30.2	
345-347	375	3.3	0.93	1.70	3.08	5.17	6.67	8.63	11.4	13.6	16.4	20.4	24.4	29.2	
342-344		2.9	0.86	1.53	2.81	4.77	5.96	7.57	9.96	11.8	14.1	18.1	22.1		
336-341		2.8	0.86	1.48	2.60	4.52	5.88	7.46	9.96	11.8	14.3	18.0	22.0	26.4	
263-275		3.2	1.1	2.1	3.6	5.8	7.3	9.0	11.3	12.7	14.4	16.5	18.7		
251-260		3.2	1.9	3.2	4.6	6.5	8.1	10.8	12.3	13.6	15.4	17.5	19.7		
231-250		3.3	0.86	1.48	2.74	5.09	6.76	8.72	11.6	13.5	15.9	19.2	23.1		
206-230		2.8	0.74	1.26	2.40	4.27	5.61	7.19	9.45	10.8	12.6	15.3	18.6	23.4	
186-199		3.9	1.15	1.64	2.67	4.77	6.50	8.72	11.6	13.5	15.9	19.2	23.1		
181-185	275	3.2	1.1	2.0	3.3	5.3	6.8	8.2	9.8	10.8	11.9	13.7			
175-180		3.2	1.3	2.1	3.0	4.3	5.7	7.8	9.6	10.5	11.6	13.4	15.4	17.5	
161-170		3.2	1.3	2.3	3.2	4.5	6.0	7.9	10.0	11.0	12.2	13.9	15.7	17.9	
157-160	280	4.8	0.86	1.32	2.19	3.70	4.90	6.33	8.22	9.02	10.3	11.5	12.8	14.5	
142-156		4.6	0.78	1.21	1.92	3.29	4.54	5.94	7.70	8.70	9.64	10.8	12.2	13.8	
138-141		4.0	0.99	1.48	2.33	3.95	5.34	6.90	8.63	9.66	10.6	11.6	12.8	14.1	
131-135		3.7	0.86	1.21	1.85	3.21	4.27	5.65	7.19	7.96	8.76	9.72	10.6	11.6	
125-130		4.85	0.86	1.32	2.19	3.70	4.90	6.33	8.22	9.02	10.3	11.5	12.8	14.5	
119-120	275	3.2	1.1	2.0	3.3	5.3	6.8	8.2	9.8	10.8	11.9	13.7	16.0		
113-118	280	4.6	0.78	1.21	1.92	3.29	4.54	5.94	7.75	8.70	9.64	10.8	12.2	13.8	
103-109	275	3.2	1.4	2.1	3.2	5.5	7.8	10.5	12.3	13.6	15.5	17.5	19.7		
95		3.2	1.2	2.0	3.2	5.5	7.8	10.5	12.5	13.7	15.6	17.7	20.0		
93-94	280	6.2	1.11	1.70	2.74	4.36	5.52	6.81	8.43	9.25	10.2	11.1			
87-92	275	3.2	1.3	2.1	3.2	5.4	7.6	10.0	11.5	12.3	13.2	14.3	16.5		
79-86		3.2	1.4	2.2	3.2	5.3	7.5	9.6	10.2	11.6	13.0	14.2	16.3		
74-78	280	3.7	0.86	1.21	1.85	3.21	4.27	5.65	7.19	7.96	8.76	9.72	10.6	11.6	
69-73	275	3.5	1.0	1.6	2.4	3.8	5.2	6.3	7.5	8.9	10.5	12.6			
43-68	310	3.3	1.1	2.2	3.5	5.1	7.0	8.9	12.0						
22-42	225	3.2	1.3	1.3	1.5	1.9	2.4	2.9	3.7	4.6	5.6	6.7	8.0	9.8	

DM

LIGHT MINELAYERS

VESSELS	FUEL Tons	Port Use Day	Long Tons per hour at speeds shown												
			12	16	20	24	25	26	27	28	29	30	31	32	
15-18	280	5.3	1.36	1.97	3.22	5.67	6.94	8.82	10.6	11.5	12.4	13.3			
7-14	275	3.2	1.2	2.0	3.2	5.5	6.7	7.8	9.1	10.5	11.5	12.5	13.7	15.6	



2722  
3/31/33

PY, PR, PG, PE, PC

PATROL VESSELS

VESSELS	FUEL Tons	Port Use Day	Long Tons per hour at speeds shown													
			7	8	9	10	11	12	13	14	15	16	17	22		
PG 22-21	450	2.71	.29	.36	.43	.55	.75	1.03								
PG 19	428#	7.68	.49	.56	.63	.80	.90	1.20								
PR 8-7	173	1.23		.25	.31	.38	.53	.58	.71	.86	1.03	1.21				
PR 6-5	103	1.23		.25	.31	.38	.53	.58	.71	.86	1.03	1.21				
PR 4-3	75	1.23	.43	.49	.55	.62	.68	.73	.85	.96	1.13					
PR 2-1	32#	2.62	.09	.10	.11	.12	.13	.14	.15							
PE 10-60	152	2.06		.36	.40	.45	.53	.62	.71	.91	1.03	1.26	1.51			
PC (gals/hr.)	2400 gals.	---			22.5	32.0	36.3	43.2	52.0	70.4						
PY 10	216	3.37			.86	.96	1.05	1.15	1.28	1.44	1.59	1.81	2.04	4.22		
PY 9	400#	5.52	.70	.80	.90	1.00	1.21	1.32	1.43							
PY 6	303#	4.32	.49	.48	.54	.60	.66	.72	.91							

PS

SLOOP

			7	8	9	10	11	12	13	14	15	16	18	20
PS 23-30 (e)	480	4.0	.40	.36	.38	.40	.49	.58	.76	.94	1.22	1.53	2.48	4.32

SS, SM

SUBMARINES

			8	9	10	11	12	13	14	15	16	17	18	19
SS 169-171 (e)	260		.121	.153	.196	.246	.298	.375	.457	.554	.672	.824		
SS 167-168	589		.156	.213	.295	.394	.508	.656	.845	1.07	1.28	1.62		
SM 1	560		.251	.321	.402	.498	.611	.740	.887					
SS 163-165	254		.225	.285	.365	.457	.553	.697	.850	1.03	1.25	1.53	1.85	2.22
SS 159	138		.13	.15	.18	.21	.25	.30	.35					
SS 153-158	139		.123	.154	.192	.253	.281	.336						
SS 123-146	132		.137	.168	.206	.257	.308	.401						
SS 119-122	114		.10	.12	.14	.17	.20							
SS 115-118	114		.11	.14	.17	.19	.23	.27	.32	.40				
SS 113-114 107-112	110		.10	.12	.14	.17	.21	.25	.30	.38				
SS 105	97		.10	.12	.14	.17	.20	.25	.30					
SS 78-97	61		.07	.09	.11	.14	.17	.20	.23	* At 13.5 knots				
SS 62-71	68		.06	.07	.09	.11	.14	.18	.23					



AD

DESTROYER TENDERS

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown							
			10	11	12	13	14	15	16	
AD 11-13	1420	12	2.0							
10	1050 <sup>#</sup>	15	2.1	2.4	2.9					
9	1568	10	1.3	1.5	1.8	2.3				
3-4	886	14	1.4	1.6	2.0	2.3	2.8	3.5	4.3	
2	924	15	1.6	1.9	2.2	2.6	3.2	4.1		

AS

SUBMARINE TENDERS

			10	11	12	13	14	15	16	
AS	9	810	10	1.6	1.8	2.1	2.5			
	8	1230 <sup>#</sup>	12	1.9						
	6	1030 <sup>#</sup>	12	1.4	1.8	2.2				
	5	685	13	1.2	1.4	1.6	1.9	2.3	2.8	3.4
	3	1305	9	1.2	1.4	1.8	2.1	2.6	3.2	3.9
	2	426	8	0.8	1.0	1.1	1.3	1.5		
	1	234	4	0.5	0.7	1.0				

AV

AIRCRAFT TENDERS

			10	11	12	13	14	15	16	
AV	2	1485	10	1.5	1.7	1.9	2.2	2.6	3.0	3.5
	1	1510		1.5	1.7	1.8	2.0	2.2	2.5	2.8

AR

REPAIR SHIPS

			10	11	12	13	14	15	16	
AR	4	920	12	1.7	2.1	2.5	3.0	3.5	4.3	5.4
	3	870								
	1	1834	10	1.3	1.5	1.7	1.9	2.3	2.6	3.1

AF

PROVISION STORE SHIPS

			10	11	12	13	14	
AF	7-9	1445	13	1.8	2.1			
	6	3060 <sup>#</sup>	12	2.5	3.0			
	1	1000	11	1.3	1.5	1.8	2.2	2.8

AK

CARGO SHIPS

			10	11	11.5	12	13	14	
AK	12-17	1222	8	1.1	1.3	1.5			
	2	350 <sup>#</sup>	10	1.2	1.4	1.5	1.6	1.8	2.1



2722  
3/31/33

AE

AMMUNITION SHIPS

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown							
			10	11	12	13	14	15	16	
AE 2	1532	8	1.7	1.8	2.0	2.2	2.5	2.8	3.4	
1	1078 <sup>1/2</sup>	11	1.5	1.7	1.9	2.3	2.8	3.4	4.5	

AC

COLLIERS

			10	11	12	13	14
AC 11,12	2300 <sup>1/2</sup>	12	2.7	3.1	3.3	3.5	4.1
9,10	1925 <sup>1/2</sup>	12	2.7	3.1	3.3	3.6	4.2
8	2500 <sup>1/2</sup>	12	2.6	2.9	3.2	3.5	4.1

AO

OILERS

			10	11	12	13	14
AO 18-21	1109	10	1.2	1.5			
15-17	1288	10	1.4	1.7			
11-13	1109	10	1.7	2.1			
9	1478	4	1.1	1.7			
1-6	824	10	1.4	1.7	2.1	2.6	3.6

AP

TRANSPORTS

			10	11	12	13	14	15	16
AP 5	1475	14	1.3	1.4	1.6	1.8	2.3	2.9	
1	1242	14	1.4	1.6	1.9	2.2	2.5	3.0	3.7

AH

HOSPITAL SHIPS

			10	11	12	13	14	15	16	17	18
AH 4	1776 <sup>1/2</sup>	20	3.2	3.7	4.1	4.7	5.6	6.6	8.1	10.0	12.0
2	1162 <sup>1/2</sup>	15	2.6	2.9	3.3	3.8	4.4	5.3			
1	1950	12	2.9	3.3	3.7	4.1	4.6	5.2	5.9		

AM

MINE SWEEPERS

			10	11	12	13	14
AMs	275	3	0.4	0.45	0.5	0.8	1.0

AG, AT, ASR

MISCELLANEOUS

			10	11	11.5	12	13	14	15
AG 10,11	1222	8	1.1	1.3	1.5				
ATs	200 <sup>1/2</sup> (a)	1	0.5	0.7	0.9	1.2	1.5	1.9	2.4
ASRs	275	3	0.4	0.45	---	0.5	0.8	1.0	



PART III

ORDNANCE DATA



GUN DATA

The following data on BLUE guns is based on the latest information available.

Where two ranges are given, the first is the theoretical range - table range; the second, the figure used at the War College as representing the estimated practical range in thousands of yards.

Caliber	Weight of Projectile	Muzzle Velocity	Maximum Elevation	Maximum Range	
				Tables	Practical
16"/45	2100	2600	30°	34400	33
14"/50	1400	2800	30°	35000	34
14"/45	1400	2700	30°	34500	33
			15°	23100	22
12"/50	870	2900	30°	33800	33
			15°	23600	23
8"/55	260	3000	40°	35200	(c) 34
				31000	(d) 30
6"/53	105	3000	(a) 30°	22850	22
			(b) 20°	18700	18
			(e) 40°	28100	27
5"/51	50	3150	20°	17200	17
5"/50	50	3000	20°	16700	16
5"/38	54	2600	85° A.A.	17500	17
5"/25	50	2250	85° A.A.	15000	14
4"/50	33	2900	15°	13100	13
3"/50	13	2700	85° A.A.	13600	13
			15°	8700	8
3"/23	13	1650	85° A.A.	7800	7
			15°	6000	

- (a) Turret guns of CLs 4-13.
- (b) Other 6"/53 guns of CLs 4-13.
- (c) Guns of CAs 24, 25, etc.
- (d) Guns of CV 2, 3.
- (e) Guns of CLs 43-46 and CFs.

FIRE CONTROL DATA

Main Battery Fire of BBs, CVs, CLs, CAs, CFs and DDs is director controlled. BBs and CAs 26 to 39 have one Stable Zenith instrument for indirect fire. Destroyers as indicated have no director system.

Secondary Battery Fire and A.A. Fire of BBs, CVs, CLs, CAs and CFs (except CLs 4-13) is director controlled.

Plane Spot may be used with Main Battery Fire of BBs, CVs, CLs, CAs and CFs.

Searchlights are controlled with Secondary and A.A. batteries for night firing in BBs, CVs, CLs, CAs and CFs.



1. Torpedoes are classified according to the following table:

Type	Size	Speed	Range (yards)
A	21"	26	17000
C	21"	27	13500
E	18"	30	6000
F	18", 21"	35	3500
G (x)		27	15000
G (y)	21"	34	10000
G (z)		46	6000

2. Type F are short length (5.3 meters) for submarines. Type E is used for aircraft and some submarines.

DEPTH CHARGES AND MINES

1. Depth Charges - Effective radius 70-100 feet. Charge 300 lbs. TNT. Depth setting adjustable between 35 and 300 feet.
2. Mk VI mine - Adjustable to any depth up to 150 fathoms. Charge 300 lbs. TNT.

Mk VII mine - Drifting type. Charge 550 lbs. TNT.

AMMUNITION ALLOWANCES (Rounds per gun)

(1) <u>Combatant ships</u>	<u>AP</u>	<u>Common</u>	<u>H.E.</u>	<u>F.N.</u>	<u>Star</u>
12"/50 and larger	100				
8"/55	100 (CVs)	100 (CAs, CLs)			
6", 5" (except DD & SS)		200		10	25
4", 5" (in DD)		90		10	25
5" A.A. (in DD)		100			100
5" A.A.		400		100	50
3" A.A.			600*	100*	100
Machine		1000			

Submarines - 10 rounds per 100 tons displacement, not to exceed 100 rounds.

\*DD and DM carry 150 H.E. only, no F.N.

(2) Auxiliary Ships

4" - 6"	100
3" or smaller	200



2722  
3/31/33

- 39 -

BLUE SHIP BOMB AND TORPEDO ALLOWANCES

<u>Ship or Type</u>	<u>1000#</u>	<u>500#</u>	<u>116#</u>	<u>Torpedoes</u>
CV-1 LANGLEY	--	70	1310	--
CV-2 LEXINGTON	230	436	827	90 E
CV-3 SARATOGA	230	436	827	90 E
CV-4 RANGER	125	344	1500	--
CV-5	130	350	1500	54 E
CV-6	130	350	1500	54 E
CV-7	130	350	1500	54 E
Heavy Cruisers	--	--	56	
Light Cruisers	--	--	40	
BB	--	--	114	
AV-1 WRIGHT	62	151	407	
AV-2 ARGONNE	62	151	407	
AZ-1	24	48	50	
<u>CONSTRUCTIVE SHIPS</u>				
CV-5, 6, 7	125	344	1500	
CF-50, 51, 52	54	90	--	



BLUE FLEET AIRCRAFT ORGANIZATION

(Figures in parenthesis indicate number of planes attached to Squadron)

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-1 (LANGLEY)	VF-1 (18)		VB-1 (18)			
CV-2 (LEXINGTON)	VF-2 (18) VF-12(18)	VS-12(12)	VB-2 (18)	VT-2 (18)		
CV-3 (SARATOGA)	VF-3 (18) VF-13(18)	VS-13(12)	VB-3 (18)	VT-3 (18)		
CV-4 (RANGER)	VF-4 (18)	VS-14(18)	VB-4 (18) VB-5 (18)			
AV-1 (WRIGHT)						VP-1 (12) VP-3 (6)
AV-2 (ARGONNE)						VP-2 (12) VP-4 (6)
BB	3 VO per BB (BB-33,34,35 - two VO). Squadron number corresponds to assigned Batdiv Number.					
Heavy Cruisers plus CL 43-46	4 VS per ship. Squadron number corresponds to assigned Crudiv Number.					
Light Cruisers	2 VS per ship. Squadron Number corresponds to assigned Crudiv Number.					
ZR-2	VF-10 (5)					
F.A.B. Coca Solo						VP-10 (12) VP-11 (12) VP-12 (12)
F.A.B. Pearl Harbor				VT-13(12)		VP-13 (12) VP-14 (12)

Note: Capacity output M plus 6 months 2000 planes.

BLUE FLEET AIRCRAFT ORGANIZATION (CONSTRUCTIVE SHIPS)

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-5 (14,500 tons)	VF-5 (18)	VS-15(18)	VB-5 (18)	VT-5 (18)		
CV-6 (14,500 tons)	VF-6 (18)	VS-16(18)	VB-6 (18)	VT-6 (18)		
CV-7 "	VF-7 (18)	VS-17(18)	VB-7 (18)	VT-7 (18)		
CF-50(10,000tons)			VB-11(18)			
CF-51 "			VB-12(18)			
CF-52 "			VB-13(18)			



2836  
4/24/33

ORANGE FLEET

Naval War College  
Newport, R.I.  
June, 1933

(Cancels edition of June, 1932)



2036  
4/24/33

- a -

INDEX

ORANGE FLEET

	<u>PART I</u> <u>Ship Data</u>	<u>PART II</u> <u>Fuel Expenditure</u>
Battleships . . . . .	2	19
Battle Cruisers . . . . .	2	19
Aircraft Carriers . . . . .	2	19
Cruisers . . . . .	4	19
Destroyer Leaders . . . . .	6	20
Destroyers . . . . .	6	20
Submarines . . . . .	10	20
Submarine Minelayers . . . . .	12	20
Minelayers . . . . .	14	20
Light Minelayers . . . . .	14	20
Minesweepers . . . . .	14	21
Gunboats . . . . .	14	21
Destroyer Tenders . . . . .	16	21
Submarine Tenders . . . . .	16	21
Plane Tenders . . . . .	16	21
Store Ships . . . . .	16	21
Colliers . . . . .	16	21
Oilers . . . . .	16	21
PART III. Ordnance Data . . . . .		22



2836  
4/24/33

- 2 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED, RADIUS Sustained	SPEED, RADIUS Economical	COMP. <u>Ship</u> Flag
BB BATTLESHIPS									
MUTSU NAGATO	6 5	1921 1920	L	32720	23 G	5000 a	20 4700 e	10 10400 e	<u>1336</u> 100e
HYUGA ISE	4 3	1918 1917	L	29990	23 T	4000e	20 5600 e	10 10500 e	1360
KANASHIRO FUSO	2 1	1917 1915	L	29330	22.5 T	4000e	13.5 7000e	10 12100 e	1272
CC BATTLE CRUISERS									
KIRISHIMA HARUNA KONGO	4 3 1	1915  1913	L	29330 29330 29330*	26 T 26 T 27.5 T	5000e	23 4500 e	10 13900 e	960
*Tonnage after modernization.									
CV AIRCRAFT CARRIERS									
RYUJO	5 4	Appro. "	L**	8000 7600	25	2000e	22 1000 e	10 8000 e	700 e
KAGA (ex-BB)	3	1920	L	26900	23 G	4040e	20 5000 e	10 7400 e	1400 e
AKAGI (ex-CC)	2	1927	L	26900 x	28.5 G	6740e	25.5 3500e	10 8300 e	1400 e
HOSHO (c)	1	1922	L**	7470	25 G	1500a	22 3900	10 8300 a	1000 a

\*\*Classed as large size for gunfire and visibility, Rule A-2  
(c) Experimental, may be replaced.



2836  
4/24/33

NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES D.C.	AIR	
			No.	Cal.	R ange	Number			End Arc	No., Type	Tubes			
							Side	Bow	Qtr.		Total	Side		
BB BATTLESHIPS														
6 5	18.0	$\frac{13''}{3''75}$	8 20 4 8	16"/45 5"5/50 3"/40h 0"50/63mh	33 19 7	8 10	4 2	4 2	30° 30°	24A (21")	4d 4s	2d 2s	None	1 Cat. 2 VO
										Nagato has 8-4"7/45h, Twin mounts.				
4 3	16.3	$\frac{12''}{3''75}$	12 20 4 8	14"/45 5"5/50 3"/40h 0"50/63mh	30 19 7	12 10	4 3	4 2	30° 30°	18B (21")	6s	3s	None	1 Cat. 2 VO
2 1	16.2	$\frac{12''}{3''75}$	12 16 4 8	14"/45 6"/50 3"/40h 0"50/63mh	30 20 7	12 8	4 2	4 2	30° 30°	16C (21")	6s	3s	None	1 Cat. 2 VO
CC BATTLE CRUISERS														
4 3 1	12.0	$\frac{8''*}{3''75}$	8 16 4 8	14"/45 6"/50 3"/40h 0"50/63mh	30 20 7	8 8	4 2	4 2	30° 30°	12B (21")	4s	2s	None	1 Cat. 2 VO
										*CC-4 has 4" deck armor.				
CV AIRCRAFT CARRIERS														
5 4	4.1	$\frac{6''}{2''}$	12 4 20	5"1/50 4"7/45h 0"50/63mh	18 19	8	4	4	30°	0 40F (1)	0	0	None	16 VF 16 VT 8 VB
3	16.9	$\frac{14''}{3''}$	10 12 40	8"/50 4"7/45h 0"50/63mh	27 19	5	4	3	30°	24B 72F (1)	4d 4s	2d 2s	None	32 VF 32 VT 16 VB
2	12.8	$\frac{8''}{2''75}$	10 12 40	8"/50 4"7/45h 0"50/63mh	27 19	5	4	3	30°	10B 72F (1)	6d	3d	None	32 VF 24 VT 16 VB
1	4.5	$\frac{3''}{0''}$	4 2	5"5/50 3"/40h	19 7	2	2	2	30°	24F (1)	0	0	None	16 VF 8 VT 8 VB

(1) For torpedo planes only.



236  
4/24/33

- 4 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	Speed and Drive	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COIT. Ship Flag
CF, CA, CL CRUISER CLASS In Excess of Treaty Tonnage - Flight Deck Cruisers									
CF	*46 *45 *44		S	8475	33 G	1900 a	30 2910 e	10 12660	$\frac{604}{630e}$
*If used in a problem, an equivalent tonnage must be deducted from CLs listed as "Treaty Tonnage - Light Cruisers".									
CA Treaty Tonnage - Heavy Cruisers									
MAYA	39	Bldg.	Int	10000	35 G	3000	30 3100	10 6000 a	$\frac{692}{725e}$
CHOKAI	38	1931				a			
TAKAO	37								
AYAGO	36								
ASHICARA	35	1929							
HAGURO	34								
NACTI	33	1928							
MYOKO	32	1929							
AOBA	31	1927	S	7100	33 G	400# (1200)	30 2200	10 6000 e	$\frac{604}{630e}$
KINUGASA	30								
KANO	29	1926							
PURUTAMA	28								
CL Treaty Tonnage - Light Cruisers									
MOGAMI	43	Bldg.	S	8450	33 G	1900	30 2910 e	10 12660	$\frac{604}{630e}$
MIKUMA	42	"				a			
CL	41	Appr.							
CL	40	"							
NAGA	27	1925	S	5195	33 G	300# (1200)	30 2100	10 6000 e	$\frac{450}{475e}$
JINTSU	26	1924							
SENDAI	25	1925							
ABUKUMA	24	1923	S	5170	33 G	300# (1200)	30 2100	10 6000 e	438
YURA	23								
KINU	22	1922							
NATORI	21								
MAKARA	20								
ISUDZU	19	1923							
YUBARI	18	1923	S	3010	33 G	800	30 1800	10 6000 a	328
OI	16	1921	S	5100	33 G	300# (1200)	30 2100	10 6000 x	440
KISO	15								
KITAKAMI	14								
To be scrapped by 31 Dec. 1936 - Light Cruisers									
TAMA	13	1921	S	5100	33 G	300# (1200)	30 2100	10 6000 x	440
KUHA	12	1920							
TEIRYU	11	1919	S	3250	31 G	200# (700)	29 2200	10 6000 e	332
TATSUTA	10								
YAMAGI	9	1912	S	4400	26 T	300# (300)	25 2000	10 6000	452
HIRATO	8								
TSUSHIMA	7	1904	S	3120	20 R	600#	17 1900	10 4600	311







236  
4/24/33

- 6 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

## DESTROYER CLASS

DL

Treaty Tonnage - Destroyer Leaders\*

INADZUMA	24	1932	Des	1700	34G	450	30 1000	12 3500	150 e
IKAZUCHI	23					a	e	e	
HIBIKI	22								
AMATSUNI	21	1932							
OBORO	20								
AKEBONO	19								
USHEIO	18								
SAZANAMI	17								
SAGIRI	16								
YUGIRI	15								
SHIKANAMI	14	1929							
AMAGIRI	13	1931							
ASAGIRI	12								
AYANAMI	11	1930							
URUNAMI	10	1929							
ISONAMI	9	1928							
SHIRAKUMO	8	1928							
USUGUMO	7								
SHINONOME	6								
MURAKUMO	5	1929							
MIYUKI	4								
HATSUYUKI	3								
SHIRAYUKI	2	1928							
FUEUKI	1								

\*These ships are classed as Destroyers by  
ORANGE and are organized in divisions  
as are other DD.

DD

Treaty Tonnage - Destroyers

DD**	110	Appr.	Des	1378	34G	350	30 1100	12 3500	150
	109	"					e	e	
	108	"							
	107	"							
	106	"							
	105	"							
Yugure	104	Bldg.							
Ariake	103	Bldg.							
Hatsushimo	102	"							
Hatsuharu	101	"							
Nenohi	100	"							
Wakaba	99	"							
YUZUKI	98	1927	Des	1315	34G	350	30 1100	12 3500	150
MOCHIZUKI	97					a	e	e	
MIKAZUKI	96								
NAGATZUKI	95								
MINATSUKI	94								
KIKUZUKI	93	1926	Des	1315	34G	350	30 1100	12 3500	150
FUMITSUKI	92					a	e	e	
SATSUKI	91	1925							
UZUKI	90	1926							
YAYOI	89								
KISARAGI	88	1925							
MITSUKI	87	1926							
YUNAGI	86	1925	Des	1270	34G	350	30 1100	12 3500	148
ASANAGI	85	1924				a	e	e	
HAYATE	84	1925							
OITE	83								
HATAKAZE	82	1924							
MATSUKAZE	81								
ASAKAZE	80	1923							
HARUKAZE	79								
KAMIKAZE	78	1922							

\*\*DDs 99 to 110 - New construction permitted as replacements by London Treaty.



2336  
4/24/33

NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES	AIR
			No.	Cal.	R ange	Number			End No., Arc	Tubes		Moored	
						Side	Bow	Qtr.		Type	Total	Side	

DESTROYER CLASS

DL

Treaty Tonnage - Destroyer Leaders

24	1.4	0	6	5"1/50	18	6	2	4	30°	12G (21")	9d	9d	50*	0
23			4	0"50/63mh									47	
22													50	
21														
20														
19														
18														
17														
16														
15														
14														
13														
12														
11														
10														
9														
8														
7														
6														
5														
4														
3														
2														
1														

DD

Treaty Tonnage - Destroyers

110	1.3	0	4	5"1/50	18	4	2	2	30°	12G (21")	6d	6d	40	0
109			4	0"50/63mh									30	
108													50	
107														
106														
105														
104														
103														
102														
101														
100														
99														
98	1.3	0	4	4"7/45	15	4	1	1	30°	12C (21")	6d	6d	40	0
97			4	0"50/63mh									30	
96													50	
95														
94														
DDs 87-98 also fitted for mine sweeping.														
93	1.3	0	4	4"7/45	15	4	1	1	30°	12C (21")	6d	6d	40	0
92			4	0"50/63mh									30	
91													50	
90														
89														
88														
87														
86	1.3	0	4	4"7/45	15	4	1	1	30°	12C (21")	6d	6d	40	0
85			4	0"50/63mh									30	
84													50	
83														
82														
81														
80														
79														
78														

\*DLs and DDs are assumed to carry either mines or depth charges, but not both.



2836  
4/24/33

- 3 -

NAME	NO.	DATE	SIZE	STAND. TON- NAME	SPEED and DRIVE	FUEL Tons	SPEED RADIUS Sustained	SPEED RADIUS Economic	COMP. Ship Flag
DD Treaty Tonnage - Destroyers (Continued)									
NAMIKAZE	77	1922	Des	1215	34G	315	30 1000 e	12 3500 e	145e
NUMAKAZE	76					a			
HOKAZE	75								
TACHIKAZE	74	1921							
HOKAZE	73								
NADAKAZE	72								
YUKAZE	71								
SHIOKAZE	70								
AKIKAZE	69								
SHIMAKAZE	68	1920							
HAKAZE	67								
OKIKAZE	66								
YAKAZE	65								
HINEKAZE	64								
SAYAKAZE	63								
YUGAO	62	1924	Des	820	31.5G	275	27 1400 e	12 3500	110
SANAE	61	1923							
KARUKAYA	60								
DD <u>To be scrapped by 31 Dec. 1935 - Destroyers</u>									
ASAGAO	59	1923	Des	820	31.5G	275	27 1400 e	12 3500	110
FUYO	58								
KURETAKE	57	1922							
WAKATAKE	56								
YONOGI	*55	1922	Des	770	31.5G	275	27 1400 e	12 3500	110
HASU	*54								
SUMIRE	*53	1923							
TADE	*52	1922							
HISHI	*51								
ASHI	*50	1921							
TSUTA	*49								
FUJI	*48								
SUSUKI	*47								
HAGI	*46								
AOI	*45	1920							
KIKU	*44								
KAKI	*43								
TSUGA	*42								
KURI	*41								
MIRE	*40								
KAYA	*39								
TAKE	*38	1919							
NASHI	*37								
MOHI	*36								
KSYAKI	*35	1918							
MAI	*34								
TSUDAKI	*33								
KUDA	*32								
YAMAGI	*31	1917		755					
HIBIKI	*30								
KASHI	*29								
MONO	*28	1916							
TANIKAZE	*27	1919	Des	1100	34 G	315	30 1200 e	12 3500 e	120 e
KAMAKAZE	*26	1917							
FUKUYAMA KAZE	*25	1917	Des	1105	34 T	(145# 135 a)	30 1200	12 3500	145 e
HAMANAZE	*24								
ISONAZE	*23								
AMATSUKAZE	*22								
URAKAZE	*21	1915	Des	610	20 T	250	25 1200	12 3100	117

\*DDs 21 to 55 have no gun or torpedo director system.



NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES Moored Drifting D.C.	AIR	
			No.	Cal.	Ocas Side	Number			End Arc	No., Type	Tubes			
						Side	Bow	Qtr.			Total	Side		
DD Treaty Tonnage - Destroyers (Continued)														
77	1.3	0	4	4"7/45	15	4	1	1	30°	12C	6d	6d	30*	0
76			4	0"50/63mh						(21")			28	
75													0	
74														
73														
72														
71														
70														
69														
68														
67														
66														
65														
64														
63														
62	1.1	0	3	4"7/40	10	3	1	1	30°	8C	4d	4d	30	0
61			4	0"50/63mh						(21")			20	
60													0	
DD To be scrapped by 31 Dec. 1936 - Destroyers														
59	1.1	0	3	4"7/40	10	3	1	1	30°	8C	4d	4d	30	0
58			4	0"50/63mh						(21")			20	
57												0		
56														
55	1.1	0	3	4"7/40	10	3	1	1	30°	8C	4d	4d	30	0
54			4	0"50/63mh						(21")			20	
53													50	
52														
51														
50														
49														
48														
47														
46														
45														
44														
43														
42														
41														
40														
39														
38														
37														
36														
35														
34														
33														
32														
31														
30														
29														
28														
27	1.3	0	3	4"7/45	15	3	1	1	30°	12Ca	6d	6d	30	0
26			4	0"50/63mh						(21")			20	
25	1.3	0	4	4"7/40	10	4	1	1	30°	12E	6d	6d	30	0
24			4	0"50/63mh						(18") <sub>a</sub>			20	
23													0	
22														
21	1.2	0	1	4"7/40	10	1	1	0	30°	8C <sub>a</sub>	4d	4d	30	0
			4	3"/40	5	3	0	1	30°	(21")			20	
			4	0"50/63mh									0	

\*DLs and DDs are assumed to carry either mines or depth charges, but not both.











2836  
4/24/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	FUEL <u>Normal</u> Emerg.	SURFACE			Submerged Speed 1 hr.	COMP.
						Max.	Sustained	Economical		

SS To be scrapped by 31 Dec. 1936 - Submarine (Continued)

RO-28	23	1923	Sub	746	$\frac{60}{100}$	16	14	3060	8	7470	10	40
RO-27	22	1924										
RO-26	21											
RO-25	20	1921	Sub	735	$\frac{75}{100}$	17	14	3060	8	7470	10	40
RO-24	19	1920										
RO-23	18	1923										
RO-22	17	1922										
RO-21	16											
RO-20	15											
RO-19	14											
RO-18	13	1921										
RO-17	12											
RO-16	11	1922										
RO-15	10	1921	736									
RO-14	9											
RO-13	8	1920										
RO-12	7	1919	Sub	717	$\frac{65}{120}$	15.5	14	4140	8	7330	9.7	40
RO-11	6											
RO-5	5	1922	Sub	682	$\frac{60}{120}$	16.5	14	4140	8	7330	9.5	40
RO-4	4											
RO-3	3											
RO-2	2	1920										
RO-1	1											

SM Treaty Tonnage - Submarine Linelayers

I-24	4	1928	Sub	1142	$\frac{80}{150}$	14	11	5500	3	9000	9	57a
I-23	3											
I-22	2	1927										
I-21	1											



2036  
4/24/33

NO.	LIFE	GUNS			No., Type	TORPEDOES			MINES No., Type	AIR
		No.	Caliber	Range		Total	Bow	Stern		

SS To be scrapped by 31 Dec. 1936 - Submarines (Continued)

23	0.6	1	3"/25h	6	8F	4-21"	4	0	0	0
22		4	0:50/63mh							
21										
20	0.7	1	3"/25h	6	10F	6-18"	4	2	0	0
19		4	0:50/63mh							
18										
17										
16										
15										
14										
13										
12										
11										
10										
9										
8										
7	0.7	1	3"/25h	6	10F	5-18"	2	1	0	0
6		4	0:50/63mh							
*2 Deck Tubes - available either side - end arc 30°.										
5	0.7	1	3"/25h	6	10F	5-18"	4	1	0	0
4		4	0:50/63mh							
3										
2										
1										
<u>SM Treaty Tonnage - Submarine Linelayers</u>										
4	0.7	1	5:5/50	19	GG	4-21"	4	0	40	1 VO**
3		4	0:50/63mh							
2										
1										

\*\*SM-2 only.



2336  
4/21/33

- 14 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL Tons	SPEED RADIUS Sustained	SPEED RADIUS Economic	COMP Ship Flag
------	-----	------	------	------------------------	-----------------------	--------------	------------------------------	-----------------------------	----------------------

CM

## MINELAYERS

CM Natsushima	2* 1*	1931- 36	S	5000	20	1000 e	13 1730e	10 4000e	450e
*New construction permitted by London Treaty.									

DM

## LIGHT MINELAYERS

YAEYAMA	45	1932	Des	1970	17	300	15 1250e	10 2500e	100e
ITSUKUSHIMA	44	1931				a			
KATSURIKI	43	1917	Des	2000	13R	100% (200)	12 2500	10 3000	100e
SOKUTEN (12 in class)	42 to 31	1920 to 1915	Des	425x	12R	75a	11 1200	10 1500	70e
#1 class (3 ships)	30 to 23	/	Des	300x	10R	50a	10 1200		50e
#2 class (22 ships)	22 to 1		Des	75x	10R	12a	10 600		10e

Note: DMs also fitted for minesweeping. #2 class available for coastal work only.

AM

## MINESweepERS

#6	24	1928	Des	700	20R	50# (150)	17 1850	10 3000	37
5	23					a			
4	22	1925							
3	21	1923							
2	20								
1	19								
#7	18	1909	Des	381	25R	100	22 500	10 1200	75e
8	17								
9	16	1908							
10	15	1907							
11	14								
12	13	1906							
13	12	1911	Des	1030	20T	250 (180%)	30 1200	12 3500	139
14	11								
15	10	1918	Des	770	20T	92# (212)	27 1400	12 3500	109
16	9								

PG

## GUNBOATS

PG	10 9	Prof.	No details; assume same as PG-8.						
ATAKA	8	1922	Des	820	15R	450% a	14 3200	10 5000	118
SAGA	7	1912	Des	730	15R	400% a	13 3300	10 5000	99
YODO	5	1908	Des	1320	22R	340% a	19 1600	10 4500	132
UJI	4	1903	Des	620	13R	150% a	11 4000	10 4500	86



NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES Moored Drifting D.C.	AIR
			No.	Cal.	Range Side	Number Bow Qtr.		End Arc	No., Type	Tubes Total Side			

CM

MINELAYERS

2	3.5	0	4	6"/50	25	4	2	2	45°	0	0	0	420	0
1			4	3"/40h	7								400	
			4	0"/50/53mh a									0	

DM

LIGHT MINELAYERS

45	1.5	0	3	5"/5/50	20	3	1	1	45°	0	0	0	150	0
44			2	3"/40h	7								143	
			4	0"/50/53mh									0	
43	1.5	0	3	4"/7/40	10	2	1	0	45°	0	0	0	150	0
			1	3"/40h	7								143	
			4	0"/50/53mh									0	
42 to 31	0.9	0	2	3"/40	5	2	1	0	45°	0	0	0	50	0
			4	0"/50/53mh									47	
30 to 23	0.0	0	1	3"/40 a	5	1	1	0	30°	0	0	0	25 a	0
			4	0"/50/53mh									23	
22 to 1													10 a	
													0	

AM

MINESweepERS

24	1.0	0	2	4"/7/45	15	2	1	1	30°	0	0	0	50a*	0
23			1	3"/40h	7								47	
22			4	0"/50/53mh									0	
21														
20														
19														
18	0.8	0	3	3"/40	5	2	3	0	45°	0	0	0	50 a	0
17			4	0"/50/53mh									47	
16													0	
15														
14														
13														
12	1.2	0	1	4"/7/40	10	1	1	0	30°	0	0	0	50 a	0
11			4	3"/40	5								47	
			4	0"/50/53mh									0	
10	1.1	0	2	4"/7/40	10	2	1	1	30°	0	0	0	30 a	0
9			4	0"/50/53mh									23	
													0	

\*Note: AM are fitted with tracks for mine-laying. They are not habitually equipped with mines.

PG

GUNBOATS

10	No details; assume same as PG-3.																
9																	
8	1.1	0	2	4"/7/45	15	2	1	1	45°	0	0	0	0	0			
			2	3"/40h	7										0		
			4	0"/50/53mh											0		
7	1.1	0	1	4"/7/45	15	1	1	0	45°	0	0	0	0	0			
			3	3"/40h	7										0		
			4	0"/50/53mh											0		
5	1.3	0	2	4"/7/40	10	2	1	1	45°	6E (10")	2d	1d	0	0			
			4	3"/40h	7										2	2	30°
			4	0"/50/53mh													
4	1.1	0	4	3"/40	5	3	1	1	45°	0	0	0	0	0			
			4	0"/50/53mh													



2836  
4/24/33

- 16 -

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	DUNKER FUEL Tons	SPEED and DRIVE	RADIUS 10 Kts.	GUNS			COMP.
								No.	Cal.	Side	

## AD

## DESTROYER TENDERS

KOMAKASU	2	Des	1230	1.3	233	14R	2600	2	3"/40	2	135a
								1	3"/40h		
								4	0"50/53mh		
KARASAKI	1	S	6170	2.5	300	13R	2600	1	3"/40	1	250
								1	3"/40h		
								4	0"50/53mh		

## AS

## SUBMARINE TENDERS

AS	5	Int	10000	3.5	1000a	20T	5300a	4	5"5/50	4	320
								4	0"50/53mh		
CHOGEI JINGEI	4 3	S	8500	3.2	1000a	16T	5,000a	4	5"5/50	4	320
								4	0"50/53mh		

## AV

## PLATE TENDERS

KAMOI (ex-AO-14)	3	L	19500	5.2	2500#a	15E	8000	2	4"7/45	2	160
								2	3"/40h		
								4	0"50/53mh		
MOTORO (ex-AO-4)	2	Int	15400	4.6	1000a	12R	5700a	2	5"5/50	2	300a
								2	3"/40h		
								4	0"50/53mh		

## AC

## COLLIERS

NOSHIMA MUROTO	2 1	Int	8750 x	3.4	877#	12R	5500	2	4"7/40	2	100a
								2	3"/40h		
								4	0"50/53mh		

## AF

## STONE SHIPS

SEITO	3	S	8300	3.2	500#	9R	4000	2	3"/40	2	85
								4	0"50/53mh		
TANASAKI	2	S	5947	2.6	700#	10R	5600	2	3"/40	2	80
								4	0"50/53mh		
YAMAYI	1	Int	17500	4.8	1600#	14R	6000	2	4"7/40	2	195
								2	3"/40h		
								4	0"50/53mh		

## AO

## OILERS

NARUTO HAYATOMO OHDO IRO	13 12 11 10	Int	15400	4.6	1000	12R	6700	2	5"5/50	2	157
								2	3"/40h		
								4	0"50/53mh		
SUKIRIYA TSURUMI SAPA ERIMO	9 8 7 6										
SUNOZAKI	2	Int	9800	3.5	450	14R	3460	2	4"7/40	2	135
								2	3"/40h		
								4	0"50/53mh		
TSURUGIZAKI	1	Des	1970	1.3	100	9R	1250	2	3"/40	2	75
								4	0"50/53mh		



283  
4/24/33

NO.	Tonnage			Capacity in excess of own requirements
	Gross	Net	D.W.	
AD DESTROYER TENDERS				
2	-	-	-	Ammunition - 100 rounds, Torps. 20, Rations for one (1) division DD for 30 days.
1	-	-	-	Diesel oil - 400 Tons, Am un. 200 rounds. Torps. 100, Rations for 3 divisions DD for 30 days.
AS SUBMARINE TENDERS				
5	-	-	-	Diesel oil-475 tons, Ammun. 300 rds. 4"7 or 5"5, Torps. 100. Lub. oil, 30 tons. Rations for 9 SS (3 divs) for 30 days.
4 3	-	-	-	Diesel oil-475 tons, Ammun. 300 rds. 4"7 or 5"5, Torps. 100. Lub. oil, 30 tons. Rations for 9 SS (3 divs) for 30 days.
AV PLANE TENDERS				
3	-	-	-	Aviation Gasoline - 250 tons. Aviation oils 50 tons. 16 VP.
2	-	-	-	Aviation Gasoline - 250 tons. Aviation oils 50 tons. 16 VP.
AC COLLIERS*				
2 1	-	-	-	Coal 4000 Tons. *Also available for general cargo.
AF STORE SHIPS				
3	3044	3000e	-	Available for any general cargo.
2		2000e	-	
1		6000e	-	
AO OILERS				
13 12 11 10 9 8 7 6	-	-	-	8500 oil.
2	-	-	-	5000 oil.
1	-	-	-	1100 oil.



2036  
4/24/33

- 13 -

PART II

FUEL EXPENDITURE TABLES







2835  
4/24/33

DL, DD		DESTROYER LEADERS - DESTROYERS												
VESSELS	FUEL Tons	Port Use, Day	TONS PER HOUR AT SPEEDS SHOWN											
			10	16	18	20	22	24	26	28	30	32	33	34
DL 1-24	450	4	1.3	2.4	2.7	3.6	4.6	6.0	7.8	10.1	13.2	16.9	19.5	22.8
DD 99-110	350	3	1.0	1.8	2.2	2.8	3.5	4.8	6.2	7.8	9.9	12.8	14.9	18.0
DD 78-98	350	3	1.0	1.8	2.2	2.8	3.5	4.8	6.2	7.8	9.9	12.8	14.9	18.0
DD 63-77	315	3	0.9	1.6	2.0	2.6	3.3	4.3	5.7	7.3	9.0	11.5	13.2	15.6
DD 36-62	275	2	0.8	1.4	1.8	2.2	2.9	3.6	4.7	5.9	7.8	10.6		
DD 28-35	280	3	0.8	1.3	1.6	2.0	2.4	3.1	4.0	5.2	6.6	9.0*		
DD 26-27	315	3	0.9	1.4	1.8	2.4	3.2	4.1	5.5	7.0	8.7	11.2	12.5	14.6
DD 22-25	302	3	0.9	1.4	1.8	2.2	2.9	3.6	4.7	5.9	7.5	9.3	10.6	12.6
DD 21	250	3	0.8	1.4	1.8	2.4	3.2	4.3	6.2	7.8				

\*Full speed 31.5 knots.

SM, SS

SUBMARINES

			TONS PER HOUR AT SPEEDS SHOWN												
			7	8	10	11	12	13	14	15	16	17	18	19	20
SS 48,55 to 76	200			.160	0.3	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.4	1.7	2.0
SS 49-54	270			.216	0.3	0.3	0.4	0.5	0.7	0.9	1.2	1.4	1.8		
SS 46,47	180			.144	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.1	1.3	1.6	
SM 1-4	150			.153	0.2	0.3	0.4	0.5	0.6	0.8	1.1	1.5			
SS 37-45	140		.098	.140	0.2	0.2	0.3	0.4	0.5	0.7	0.9				
SS 28-36	120			.120	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
SS 24-27	120		.077	.100	0.2	0.2	0.3	0.4							
SS 8-23	100			.107	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.9			
SS 1-7	120			.131	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.9			

CM

MINELAYERS

			TONS PER HOUR AT SPEEDS SHOWN											
			10	11	12	13	14	15	16	17	18	19	20	21
CM 1,2	1000	10	2.5	2.8	3.0	3.3	3.6	3.9	4.3	4.8	5.6	6.5	8.0	

DM

LIGHT MINELAYERS

			TONS PER HOUR AT SPEEDS SHOWN							
			10	11	12	13	14	15	16	17
DM 44,45	300	2	1.2	1.4	1.6	1.9	2.1	2.4	2.8	3.8
DM 43	370	2	1.2	1.4	1.8	2.5				
DM 31-42	75	1	0.5	0.7	1.0					
DM 23-30	50	1	0.4							
DM 1-22	12	0.3	0.2							



2836  
4/24/33

AM MINE SWEEPERS														
VESSELS	FUEL Tons	Port Use, Day	TONS PER HOUR AT SPEEDS SHOWN											
			10	12	14	15	17	18	19	20	22	23	24	25
AM 19-24	252 $\frac{1}{2}$	3	0.9	1.1	1.5	2.0	2.4	2.8	3.4	4.0				
AM 13-18	100 $\frac{1}{2}$	2	0.9	1.1	1.4	1.8	2.1	2.4	2.8	3.2	4.2	4.8	5.7	6.5
AM 11-12	365	3	1.1	1.3	1.5	1.8	2.0	2.2	2.4	2.6	3.3	3.7	4.3	4.9*
AM 9-10	280	3	0.8	0.9	1.1	1.3	1.5	1.6	1.8	2.0	2.4	2.7	3.1	3.5**
			26	28	30	32	33							
		*	5.5	7.0	8.7	11.0	14.2							
		**	4.0	5.2	6.6	9.0								

PG

GUNBOATS

			10	12	13	15	16	17	18	19	20	21	22	23
PG 9,10			No information available.											
PG 8	450 $\frac{1}{2}$	3	0.9	1.3	1.6	2.4	3.2							
PG 7	400 $\frac{1}{2}$	3	0.8	1.2	1.6	2.7								
PG 5	445 $\frac{1}{2}$	5	1.0	1.4	1.7	2.4	2.9	3.6	4.3	5.3	6.0	7.1	8.1	
PG 4	150 $\frac{1}{2}$	2	0.5	0.9	1.2									

TRAIN VESSELS

			10	11	12	13	14	15	15
AS 3-5	1000	10	1.2	1.5	1.9	2.5	3.1	3.8	4.8
AD 2	233	2	0.9	1.1	1.3	1.6	2.1		
AD 1	800	12	2.0	2.3	2.6	3.3			
AV 3	2500 $\frac{1}{2}$	15	3.1	3.5	4.0	4.5	5.0	5.8	
AV 2	1000	10	1.5	1.8	2.4				
AC 1,2	877 $\frac{1}{2}$	10	1.6	1.9	2.4				
AF 3	520 $\frac{1}{2}$	6	1.2						
AF 2	780 $\frac{1}{2}$	6	1.4						
AF 1	1600	15	2.7	3.1	3.5	4.0	4.9		
AO 6-13	1000	10	1.5	1.8	2.2				
AO 2	450	8	1.3	1.5	1.8	2.2	2.8		
AO 1	100	1	0.8						



2876  
4/24/33

- 22 -

PART III

ORDNANCE DATA



GUN DATA

The following data on ORANGE guns is based on the best available information.

Here two ranges are given, the first is the range table range; the second, the figure used at the War College as representing the estimated practical range in thousands of yards.

<u>Caliber</u>	<u>Weight of Projectile</u>	<u>Muzzle Velocity</u>	<u>Maximum Elevation</u>	<u>Maximum Range Tables</u>	<u>Maximum Range Practical</u>
16"/45	2205	2591	30°	34,300	33
14"/45	1400	2559	(a) 25° 30°	28,700 31,500	28 30
8"/50	254	2900	(b) 30° 45°	27,300 31,700	27 31
6"/50	100	2788	(c) 25° 45°	21,500 26,000	20 25
5"5/50	84	2788	(d) 25° (e) 30°	19,700 21,400	19 20
5"1/50	63	2900	25°	19,000	18
4"7/45	45	2772	25°	15,900	15
4"7/45 AA	45	2772	85°	19,900	19
4"7/40	45	2165	20°	10,800	10
3"/40	12.5	2321	20°	6,000	5
3"/40 AA	12.5	2321	85°	8,000	7
3"/25 AA	12.5	1492	85°	7,000	6

- (a) Assuming modernized ORANGE capital ships to have increased gun elevation to 30°.  
 (b) Assuming 70° angle of elevation for MOKO class.  
 (c) CLs 40, 41, etc.  
 (d) In BBs.  
 (e) In all other vessels.

FIRE CONTROL DATA

Main Battery Fire of BBs, CCs, CVs, CLs, CAs, and CFs, DLs and DDs is director controlled. BBs and CCs have one stable Zenith instrument for indirect fire.

Secondary Battery Fire of CBs and CCs is director controlled.

Plane Spot may be used with Main Battery directors of BBs, CCs, CAs, CFs and CLs mounting 6" and 3" guns.

Search Lights are centrally controlled with Secondary Battery director system for night firing on BBs, CCs, CVs, CLs, CFs and CAs.



TORPEDO DATA

1. ORANGE torpedoes are classified by types according to the following table:-

<u>Type</u>	<u>Size</u>	<u>Speed</u>	<u>Range</u>
A	21"	26	17,000
B	21"	28	16,400
C	21"	27	13,500
E	18"	30	6,000
F	18" 21"	35	3,500
G (x		27	15,000
(y	21"	34	10,000
(z		46	6,000

2. Type F (18") is a short torpedo for use in SS and torpedo-planes.

3. All torpedoes are of Whitehead design (reciprocating engines).

DEPTH CHARGES AND MINES

1. Depth Charges. Effective radius 70-100 feet. Charge 300 pounds. Adjustable depth settings 35 to 300 feet.

2. Mines. Anchored: adjustable to any depth up to 150 fathoms. 300 pounds explosive. Drifting: 550 pounds explosive.

AMMUNITION ALLOWANCES (Rounds per gun)

<u>(1) Combatant ships</u>	<u>A.P.</u>	<u>Common</u>	<u>H.E.</u>	<u>F.N.</u>	<u>Star</u>
8"/50 or larger	100				
6", 5"5, 5"1 *		200		10	25
4"7 in L, Int or S ships		225		20	50
in Des size		90		10	25
in Subs		100			
3" in all except subs		275		25	10
in subs, 10 rounds	common per 100 tons displacement up to 100 rounds.				
4"7 AA			400	100	50
3" AA			600**	100**	100
Machine		1000			
<u>(2) Auxiliary Ships</u>					
4" - 6"		100			
3" or less		200			

\*DLs and DDs with 5"1 gun, 90 common.  
\*\*DDs carry 150 H.E. only, no F.N.



2836  
4/24/35

- 25 -

ORANGE SHIP BOMB AND TORPEDO ALLOWANCES

<u>Ship or Type</u>	<u>1000'</u>	<u>500'</u>	<u>116'</u>	<u>Torpedoes</u>
CV-1	24	24	500	24 F
CV-2	200	400	750	72 F
CV-3	200	400	750	72 F
CV-4	75	206	300	43 F
AV-2	62	151	407	
AV-3	62	151	407	
BB and CC			76	
Heavy Cruisers			28	
Light Cruisers			20	
<u>Constructive Ships</u>				
CV-5	75	200	300	24 F
CF-44, 45, 46	50	80	--	--



2836  
4/24/33

- 26 -

ORANGE FLEET AIRCRAFT ORGANIZATION

(Figures in parenthesis indicate number of planes attached to Squadron).

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-1 (HOSHO)	VF-1 (16)		VB-1 (8)	VT-1 (8)		
CV-2 (AKAGI)	VF-2 (16) VF-12 (16)		VB-2 (16)	VT-2 (16) VT-12 (8)		
CV-3 (KAGA)	VF-3 (16) VF-13 (16)		VB-3 (16)	VT-3 (16) VT-13 (16)		
CV-4 (RYUJO)	VF-4 (16)		VB-4 (8)	VT-4 (16)		
AV-2 (NOTORO)						VP-2 (16)
AV-3 (KAMOI)						VP-3 (16)
BB and CC	2 VO per ship. Squadron number corresponds to assigned Batdiv or Batcruron number.					
Heavy Cruisers	2 VSs per ship. Squadron number corresponds to assigned Crudiv number.					
Light Cruisers	1 VS per ship (except CL-18). Squadron number corresponds to assigned Crudiv number.					

SHORE BASED NAVAL AIRCRAFT

<u>Kasumigaura</u>	VF-20 (16) VF-21 (16)	VS-20(16)s		VT-20 (16) VT-21 (16)	VO-20(16)s VO-21(16)s	
<u>Yokosuka</u>	VF-22 (16) VF-23 (8)			VT-22 (16) VT-23 (16)	VO-22(16)s VO-23(16)s	VP-20 (16)
<u>Omura</u>	VF-24 (16)			VT-24 (16) VT-25 (8)		
<u>Sasebo</u>	VF-25 (8)				VO-24(16)s VO-25(16)s	
<u>Kure</u>					VO-25(16)s	

(Note:- In addition to above, A Fleet Reserve of 200 planes is kept available).

Capacity output M plus 6 months - 1000 planes.

(s) Seaplanes.

ORANGE FLEET AIRCRAFT ORGANIZATION (CONSTRUCTIVE SHIPS)

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-5 (3,000 tons)	VF-5 (16)		VB-5 (16)	VT-5 (8)		
CF-44 (8915 tons)			VB-11(16)			
CF-45 "			VB-12(16)			
CF-46 "			VB-13(16)			



~~207~~  
5/5/33

RED FLEET

Naval War College  
Newport, R.I.  
June, 1933.



INDEX

RED FLEET

	<u>PART I</u> <u>Ship Data</u>	<u>PART II</u> <u>Fuel; Radius</u>
Battleships . . . . .	2	29
Battle Cruisers . . . . .	2	29
Aircraft Carriers . . . . .	2	29
Cruisers . . . . .	4	30
Destroyer Leaders . . . . .	8	31
Destroyers . . . . .	8	31
Light Minelayers . . . . .	14	31
Submarines . . . . .	16	32
Submarine Minelayers . . . . .	18	32
Minelayers (CM) . . . . .	20	31
Monitors . . . . .	20	31
Patrol Vessels . . . . .	20	31
Patrol Boats . . . . .	20	31
Destroyer Tenders . . . . .	22	32
Hospital Ship . . . . .	22	32
Minesweepers . . . . .	22	32
Repair Ships . . . . .	24	33
Oilers . . . . .	24	33
Submarine Tenders . . . . .	26	33
Aircraft Tenders . . . . .	26	33
Ocean-Going Tugs . . . . .	26	33
Miscellaneous . . . . .	26	
PART III. Ordnance Data . . . . .		34



2837  
5/5/33

- 1 -

PART ONE

SHIP DATA



2837  
5/5/33

- 2 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

BB

## BATTLESHIPS

NELSON	20	1927	L	33500	23G	4000	20 6000e	10 14000e	<u>1312</u>
RODNEY	19			e		3750 <sup>+</sup>			60
ROYAL SOVEREIGN	18	1916	L	23150	21.5T	3400	16.5 5000	10 13100	<u>1180</u>
ROYAL OAK	17								21
REVENGE	16								
RESOLUTION	15								
RAMILLIES	14	1917							
MALAYA	13	1916	L	31100	23.5G	3400	21 5000	10 13600	<u>1234</u>
VALIANT	12								63
BARRHAM	11	1915							
QUEEN ELIZABETH	10								
WARSPITE	9								

CC

## BATTLE CRUISERS

HOOD	4	1920	L	42100	31G	4000	27 2175	12 6400	<u>1477</u>
RENOUN	3	1916	L	32000	31.5T	4250	27 2735	12 6800	<u>1240</u>
REPULSE	2								

CV

AIRCRAFT CARRIERS  
Treaty Tonnage

CV-6*	8		L**	9825	25G	2000	22 3075	10 6000	664
CV-7*	7								
HERMES (c)	6	1924	L*	10850	25G	2000	22 3075	10 6000	664
EAGLE (c)	5	1923	L	22600	24G	3750	21 4170	10 3375	744
FURIOUS (c)	4	1928	L	22450	31G	4025	27 3500	12 7200	830
COURAGEOUS	3			22500		3250	2825	5000	920
GLORIOUS	2								
ARGUS (c)	1	1918	L**	14450	20T	2000	17 3000	10 5710	401

\*New construction permitted by London Treaty.

(c) Experimental, may be replaced.

\*\*Classed as large size for gunfire and visibility, Rule A-2.



2837  
5/5/33

NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES D.C.	AIR
			No.	Cal.	Range Side	Number Bow Qtr.		End Arc	No., Type	Tubes Total Side			

BB

BATTLESHIPS

20	13.0	14"	9	16"/45	33	9	6	0	30°	12A	2s	1s	-	1 Cat	
19		6"25	12	6"/50	23	6	2	6	10°	(21")				1 VO	
				6	4"7/50h	18									
				8	0"50/63mh										
18	16.1	13"	8	15"/42	23	8	4	4	30°	12A	4s	2s	-	1 Cat	
17		3"55	14*	6"/50	22	7	2	0	25°	(21")				1 VO	
16				2	4"/45h	15									
15				8	0"50/63mh										
14															
										*BB-17 has 12-6" only.					
13	16.6	13"	8	15"/42	23	8	4	4	30°	12A	2s	1s	-	1 Cat	
12		3"65	12	6"/50	22	6	1	0	25°	(21")				1 VO	
11				4	4"/45h	15									
10				8	0"50/63mh										
9															

CC

BATTLE CRUISERS

4	17.7	12"*	8	15"/42	29	8	4	4	30°	12A	2s	1s	-	1 Cat	
		2"4	12	5"5/50	16	6	3	0	20°	(21")	4d	2d		1 VO	
				4	4"/45h	15									
				8	0"50/63mh										
										*Side armor is inclined.					
3	12.5	9"	6	15"/42	29	6	4	2	45°	24A**	2s	1s	-	1 VO	
2		3"75	15	4"/50	14	12	4	6	20°	(21")	3d**	4d			
				4	4"/45h	15									
				8	0"50/63mh										
										**REPULSE only RENOWN carries 12A.					

CV

AIRCRAFT CARRIERS

8	Same as HERMES Class.										36F			12 VF
7											(2)			12 VB
														12 VT
6	4.9	3"	6	5"5/50	16	3	0	0	30°	18F	0	0	-	12 VF
		1"	3	4"/45h	15					(2)				6 VS
				20	0"50/63mh									6 VT
														6 VB
5	14.0	9"	9	6"/50	22	5	0	3	30°	36F	0	0	-	18 VF
		3"	5	4"/45h	15					(2)				12 VO
				40	0"50/63mh									12 VB
														12 VT
4	7.2	3"	10	5"5/50	16	5	0	0	30°	36F	0	0	-	18 VF
3		1"	6	4"/45h	15					(2)				12 VO
2				40	0"50/63mh									12 VT
														12 VB
1	4.4	0	6	4"/45h	15	2	0	2	45°	18F	0	0	-	12 VF
				20	0"50/63mh						(2)			
														6 VT
														6 VB

(1) COURAGEOUS and GLORIOUS have 16-4"7/50, 3 on each side.  
(2) For torpedo planes only.



2837  
5/5/33

- 4 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	------------------------------	-------------------------------	-----------------------

## CRUISER CLASS

CF In Excess of Treaty Tonnage - Flight Deck Cruisers

CF	*73 *72 *71		Int	9750	32.5G (e)	2825	30 3300 (e)	12 13600	500
----	-------------------	--	-----	------	--------------	------	----------------	----------	-----

\*If used in a problem, an equivalent tonnage must be deducted from CLs listed as "Treaty Tonnage - Light Cruisers".

## CA Treaty Tonnage - Heavy Cruisers

EXETER	56	1931	S	8400	32.25G	1900	29 2908	12 10550	554 40
YORK	55	1930							
NORFOLK	52	1930	Int	10000	32.25G	3200	29 4310 (e)	12 10290 (e)	670 40
DORSETSHIRE	51								
LONDON	50	1929							
DEVONSHIRE	49								
SIROPSHIRE	48								
SUSSEX	47								
KENT	46	1928	Int	10000	31.5	3200	29 4715 (e)	12 10000 (e)	670 20
CORNWALL	45	1927							
BERWICK	44								
SUFFOLK	43	1928							
CUMBERLAND	42	1927							
AUSTRALIA	41	1928							
CANBERRA	40	1929							
CAs 40-41 are Australian Navy.									
EFFINGHAM	39	1925	Int	9770	28.5G	2150	26 2700	12 6325	774
PROBISHER	38	1924		9860					
HAWKINS	37	1919		9300					
VINDICTIVE	36	1918		9396					

## CL Treaty Tonnage - Light Cruisers

CL	**70 **69 **68	Appr. " "	S	5000	32.5G a	1200	29 a 2780	12 a 10400	425 a
GALATIN	67	"							
ARETHUSA	66	Bldg.							
CL	**65 64 63 62 61 60 59 58	Appr. Appr. " Bldg. " " "	S	7000	32.25G	1400	29 2305 32 1990	12 12600	525 30
PHAETON	64	Appr.							
APOLLO	63	"							
AMPHION	62	Bldg.							
AJAX	61	"							
ACHILLES	60	"							
ORION	59	"							
NEPTUNE	58	"							
LEANDER	57	1933							
ENTERPRISE	35	1926	S	7500	33G	1700	30 2575	12 10200	574
EMERALD	34	1925		7550					
DESPATCH	33	1922	S	4050	29G	1050	26 2065	12 9130	425
DURBAN	32	1921							
DELHI	31	1919							
DANAÉ	30	1918							
DAUNTLESS	29								
DRAGON	28								
DIOMEDE	27	1922							
DUNEDIN	26	1919							
CLs 26-27 are New Zealand Navy.									

\*\*New construction permitted by London Treaty.



2037  
5/5/33

NO.	LIFE	ARMOR Side Deck	GUNS							TORPEDOES			MINES D.C.	AIR
			No.	Cal.	Range	Number			End Arc	No., Type	Tubes			
						Side	Bow	Qtr.			Total	Side		
<b>CRUISER CLASS</b>														
<b>CF In excess of Treaty Tonnage - Flight Deck Cruisers</b>														
73	4.7	1.5"	9	6"/50	23	9	6	3	30°	0	0	0	0	18 VE
72		3"0	4	4"/45h	15									
71			20	0.50/63mh										
<b>CA Treaty Tonnage - Heavy Cruisers</b>														
56	4.2	0"	6	8"/50	27	6	4	2	30°	6A	6d	3d	0	1 VS 1 Cat
55		3"	4	4"/45h	15					(21")				
			8	0.50/63mh										
52	4.7	0"	8	8"/50	27	8	4	4	30°	8A	8d	4d	0	1 VS 1 Cat
51		4"	4	4"/45h	15					(21")				
50			8	0.50/63mh										
49														
48														
47														
46	4.7	0"	8	8"/50	27	8	4	4	30°	8A	8d	4d	0	1 VS 1 Cat
45		3"	4	4"/45h	15					(21")				
44			8	0.50/63mh										
43														
42														
41														
40														
39	4.6	3"	7	7.5/45	20	6	3	2	30°	8A	4d	2d	0	1 VS 1 Cat
38		1.5"	3	4"/45h	15					(21")	2s	1s		
37			8	0.50/63mh										
36			CL-36 has 6-7.5/45 only.			6	2	2	30°					
<b>CL Treaty Tonnage - Light Cruisers</b>														
70	2.9	0"	6	6"/50	22	6	4	2	30°	12A	6	6	0	1 VS 1 Cat
69		3" a	3	a 4"/45h	15					(21")				
68			4	0.50/63mh										
67														
66														
65	3.7	0"	8	6"/50	23	8	4	4	30°	12A	12d	6d	0	1 VS 1 Cat
64		3"	4	4"/45h	15					(21")				
63			8	0.50/63mh										
62														
61														
60														
59														
58														
57														
35	3.9	3"	7	6"/50	22	6	3	2	30°	12A	12d	6d	0	1 VS 1 Cat
34		1"	3	4"/45h	15					(21")				
			8	0.50/63mh										
33	2.9	3"	6	6"/50	22	6	2	2	30°	12A	12d	6d	0	1 VS 1 Cat
32		1"	3	4"/45h	15					(21")				
31			8	0.50/63mh										*
30														
29														
28														
27														
26														

\*CL-30 not equipped to carry plane.



2837  
5/5/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED RADIUS Sustained	SPEED RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------	-----------------	------------	------------------------	-------------------------	-----------------

CL Treaty Tonnage - Light Cruisers (Continued)

CAIRO	25	1919	S	4200	29G	950	26 2590	12 3260	<u>425</u>
CAPETO IN	24	1922							27
CALCUTTA	23	1919							
CARLISLE	22	1918							
COLOMBO	21	1919							
CARDIFF	20	1917		4290					
COVENTRY	19	1918							
CURLEW	18	1917							
CERES	17								
CURACOA	16	1918							
ADELAIDE	4	1922	S	5100	25.5T	950, 550	22 1435 1255	12 3530 2750	470

CLs 21-25 have trawler bow.

CL-4 in Australian Navy.

CL To be scrapped by 31 Dec. 1936 - Light Cruisers

CALEDON	15	1917	S	4100	29G	935	26 1535	12 4065	438
CALYPSO	14								
CARADOC	13								
CONCORD	12	1916	S	4120	29T	825	26 1330	12 3930	390
CONSTANCE	11	1916	S	3920	29T	841	26 1600	12 4425	<u>368</u>
CANTERBURY	10								12
CAMBRIAN	9								
CASTOR	8	1915				805	1520	4235	
CHAMPION	7					895	1690	4710	
COMUS	6			3895		841	1600	4425	
BRISBANE	5	1916	S	5120	25.5T	1135, 260	20 2800	10 5000	390

CL-5 in Australian Navy.



2837  
5/5/33

NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES D.C.	AIR
			No.	Cal.	Rate e	Number			End Arc	No., Type	Tubes		

CL Treaty Tonnage - Light Cruisers (Continued)

25	2.7	$\frac{3''}{1''}$	5	6"/50	22	5	2	2	30°	8A (21")	3d	4d	0	0
24			2	3"/45h	11									
23			3	0"50/63mh										
22														
21														
20														
19														
18														
17														
16														
4	3.0	$\frac{3''}{2''}$	9	6"/50	22	5	3	3	45°	7C (21")	2s	1s	0	0
			1	3"/45h	11									
			3	0"50/63mh										

CL To be scrapped by 31 Dec. 1936 - Light Cruisers

15	2.5	$\frac{3''}{1''}$	5	6"/50	22	5	1	2	30°	8A (21")	3d	4d	0	0
14			2	3"/45h	11									
13			3	0"50/63mh										
12	2.4	$\frac{3''}{1''}$	5	6"/50	22	5	1	2	30°	6A (21")	2s	1s	0	0
			2	3"/45h	11									
			3	0"50/63mh										
11	2.4	$\frac{3''}{1''}$	4	6"/45	18	4	1	2	30°	6A (21")	2s	1s	0	0
10			2	3"/45h	11									
9			3	0"50/63mh										
8														
7														
6														
5	3.2	$\frac{3''}{2''}$	8	6"/50	22	5	3	3	45°	7C (21")	2s	1s	0	0
			1	3"/45h	11									
			3	0"50/63mh										

CL-7 only - 10A  
(21")  
2s 1s  
4d 2d



2037  
5/5/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED, RADIUS Sustained	SPEED, RADIUS Economical	COMP. Ship Flag
------	-----	------	------	------------------------	-----------------------	---------------	-------------------------------	--------------------------------	-----------------------

DESTROYER CLASS

DL Treaty Tonnage - Destroyer Leaders

DL	*24	Apr.	Des	1400	36G	440	30 1290	12 5300	138
FAULKNER	*23	"							
EKMOUTH	22	Bldg.							
DUNCAN	21	"							
KEMPENFELT	20	1932	Des	1400	36G	440	30 1290	12 5300	138
KEITH	19	1931			35G				
CODRINGTON	18	1930		1540	36G	560	30 1500	12 6700	183
BROKE	10	1925	Des	1480	36T	560	30 1500	12 6700	183
KEPPEL	9								

DL To be scrapped by 31 Dec. 1936 - Destroyer Leaders

MALCOLM	17	1919	Des	1530	36.5T	504	30 1355	12 6070	183
MACKAY	16								
DOUGLAS	15	1918							
BRUCE	14								
STUART	13								
MONTROSE	12								
CAMPBELL	11								
WALLACE	8	1919	Des	1480	36T	560	30 1500	12 6700	183
SHAKESPEARE	7	1917							
SPENCER	6								
ANZAC**	5	1917	Des	1310	34T	515	30 1400	12 6200	140

\*\* In Australian Navy.

DD Treaty Tonnage - Destroyers

DD	*160	Apr.	Des	1375	36G	440	30 1290	12 5300	138
	*159								
	*158								
	*157								
	*156								
	*155								
	*154								
	*153								
FORESIGHT	152	Apr.							
FOXHOUND	151								
FORTUNE	150								
FORESTER	149								
FURY	148								
FAME	147								
FIRE DRAKE	146								
FEARLESS	145								
EXPRESS	144	Bldg.							
ESCORT	143								
ELECTRA	142								
ECHO	141								
ESCAPADE	140								
ECK	139								
ENCOUNTER	138								
ECLIPSE	137								

\*New construction permitted by London Treaty.







NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED, RADIUS Sustained	SPEED, RADIUS Economical	COMP. Ship Flag	
DD Treaty Tonnage - Destroyers (Continued)										
DECOY	136	1933	Des	1375	36G	440	30 1290	12 5300	138	
DUCHESS	135									
DAINTY	134									
DELIGHT	133									
DIAMOND	132	1932								
DARING	131									
DEFENDER	130									
DIANA	129									
CYGNET	128									
CRESCENT	127									
CRUSADER	126									
COMET	125									
BULLDOG	124	1930-	Des	1360	35G	385#	30 1130	12 4630	138	
BRILLIANT	123	31								
BRAZEN	122									
BOREAS	121									
BOADICEA	120									
BLANCHE	119									
BEACLE	118									
BASILISK	117									
SAQUEMAY*	116			1338						
SKEENA*	115									
ACHERON	114			1350						
ANTHONY	113									
ARROW	112									
ARDENT	111									
ANTELOPE	110									
ACTIVE	109									
ACHATES	108									
ACASTA	107									
AMAZON	106	1926			37G					
AMBUSCADE	105			1170	37G	300#	30 1000	12 3270	98	
WITCH	104	1924	Des	1140	34G	370	30 1000	12 3700	134	
WISHART	103	1920			(1)					
WORCESTER	102	1922		1120						
WOLVERINE	101	1920								
WHITSHED	100	1919								
WILD SWAN	99									
WITHERINGTON	98									
WIVERN	97									
VETERAN	96									
WHITEHALL	95	1924		DDs 89 to 95 differ only in minor details from						
WREN	94	1923		DDs 96-104.						
WANDERER	93	1919								
VANSITTART	92									
VENOMOUS	91									
VERITY	90									
VOLUNTEER	89									
SHIKARI	88	1924	Des	905	36G	300	30 1000	12 3270	98	
THRACIAN	87	1922								
STRONGHOLD	86	1919								
STURDY	85									
SHAIROCK	84									
SALADIN	83									
SARDONYX	82									
SERAPIS	81									
SERENE	80									
SESAME	79									
STEADFAST	78									
SPINDRIFT	77									
TURBULENT	76									
TENEDOS	75									
TRUSTY	74									
THANET	73									

(1) Speed at light draft. At full load  
31 knots maximum.















2837  
5/5/33

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	SPEED and DRIVE	FUEL, Tons	SPEED, RADIUS Sustained	SPEED, RADIUS Economical	COMP. Ship Flag
------	-----	------	------	---------------------	-----------------------	---------------	-------------------------------	--------------------------------	-----------------------

DD To be scrapped by 31 Dec. 1936 - Destroyers  
(Continued)

VOYAGER	26	1918	Des	1100	35G (1)	370	30 1000	12 3700	134
WINDSOR	25								
WRESTLER	24								
WOOLSTON	23			1120					
WOLSEY	22								
WESSEX	21			1100					
WINCHESTER	20								
WOLFHOUND	19								
WESTMINSTER	18								
WESCOTT	17								
WALRUS	16								
WINCHELSEA	15								
WAKEFUL	14	1917							
SKATE	13	1917	Des	900	36G	300	30 1000	12 3330	98
TEMPEST	12								
TETRARCH	11								
THISBE	10								
THRUSTER	9								
TORRID	8								
SALMON	7	1916							
ROMENA	6								
RESTLESS	5								
TYRANT	4	1917	Des	760	36T	256	30 945	12 2830	98

DM Treaty Tonnage - Light Minelayers

ABDIEL	9	1916	Des	1310	34T	515	30 1400	12 6200	135
WALKER	8	1918	Des	1100	35G (1)	370	30 1000	12 3700	134
WARWICK	7								
WATCHMAN	6								
WHIRLWIND	5								
VESPER	4	1918	Des	1090	34G	370	30 1000	12 3700	134
VORTIGERN	3	1918	Des	1090	34G	370	30 1000	12 3700	134
VERSATILE	2								
VANOC	1	1917	Des	1090	34G	370	30 1000	12 3700	134

(1) For light draft only. At full load 31 knots maximum.



NO.	LIFE	ARMOR Side Deck	GUNS						TORPEDOES			MINES Moored Drift. D.C.	AIR	
			No.	Cal.	Completed	Number			End Arc	No., Type	Tubes			
						Side	Bow	Qtr.		Type	Total	Side		

DD To be scrapped by 31 Dec. 1936 - Destroyers (Continued)

26	1.3	-	4	4"/50	14	4	2	2	30°	6A (21")	6d	6d	-	-
25			1	3"/45h										
24			4	0"/50/63mh										
23														
22														
21														
20														
19														
18														
17														
16														
15														
14														
13	1.2	-	3	4"/50	14	3	1	1	30°	4A (21")	4d	4d	-	-
12			1	2pdr AA										
11			4	0"/50/63mh										
10														
9														
8														
7														
6														
5														
4	1.1	-	3	4"/50	14	3	1	1	30°	4A (21")	4d	4d	-	-
			1	2pdr AA										
			4	0"/50/63mh										

DM Treaty Tonnage - Light Minelayers

9	1.4	-	4	4"/50	14	4	2	1	30°	0	0	0	89*	-
			1	2pdr AA										
			4	0"/50/63mh										
8	1.3		4	4"/50	14	4	2	2	30°	6A (21")	6d	6d	89*	-
7			1	3"/45AA										
6			4	0"/50/63mh										
5														
4	1.3	-	4	4"/50	14	4	2	2	30°	6A (21")	6d	6d	89*	-
			1	3"/45AA										
			4	0"/50/63mh										
3	1.3	-	4	4"/50	14	4	2	2	30°	5A (21")	5d	5d	89*	-
2			1	3"/45AA										
			4	0"/50/63mh										
1	1.3	-	4	4"/50	14	4	2	2	30°	4A (21")	4d	4d	89*	-
			1	3"/45AA										
			4	0"/50/63mh										

\*Either moored mine allowance only or drifting mine allowance only can be carried.



2837  
5/5/33

- 16 -

NAME	NO.	DATE	SIZE	STAND. TON- NAGE	FUEL		SURFACE			SUBMERGED Speeds 1 hr.	COMP.	
					Normal	Emerg.	Max.	Speeds, Radii Sustained	Economical			
SUBMARINE CLASS												
SS Treaty Tonnage - Submarines												
SS	*61	Appr.	Sub	1805	$\frac{150}{275}$	17.5	15	4970	9	11800	9	85
CLYDE	60	"										
SEVERN	59	Bldg.		1850								
THAMES	58	1932		1805								
RAINBOW	57	1932	Sub	1475	$\frac{150}{250}$	17.5	15	4900	9	11100	9	85
REGENT	56	1931										
REGULUS	55											
ROVER	54											
PARTHIAN	53	1930										
PHOENIX	52											
PANDORA	51											
PERSEUS	50											
PROTEUS	49											
ODIN	48	1928	Sub	1475	$\frac{150}{250}$	17.5	15	4900	9	11100	9	85
OLYMPUS	47											
ORPHEUS	46	1929										
OSIRIS	45	1928										
OSWALD	44											
OTUS	43											
OXLEY	42	1926		1354		15.5						
OTWAY	41			1349		15.5						
OBERON	40	1926	Sub	1311	$\frac{125}{200}$	15 C	13	3920	8	8880	8.5	85
X-1	39	1924	Sub	2425	$\frac{170}{350^a}$	19.5 C	15	2915	8	12500	8	120
Experimental type. No accurate information.												
SHARK	38	Bldg.	Sub	950	$\frac{100}{165}$	17	15	8000	8	12000	10	44
SS	*37	Appr.	Sub	640	$\frac{35}{60}$	13	11	3500	8	7000	8.8	a
SALMON	36	"										
SEA LION	35	Bldg.										
SEA HORSE	34	1932										
STARFISH	33	1931										
SWORDFISH	32	1930										
STURGEON	31	1931										
L-71	30	1920	Sub	845	$\frac{78}{150}$	17.5 C	15	6520	8	11540	10.5	40
L-69	29	1923										
L-56	28	1919										
L-54	27	1924										
L-53	26	1925										
L-52	25	1921										
L-27	24	1926	Sub	760	$\frac{76}{118}$	17.5 C	15	4700	8	9000	10.5	36
L-26	23											
L-23	22	1924										
SS <u>To be scrapped by 31 Dec. 1936 - Submarines</u>												
L-22	21	1921	Sub	760	$\frac{76}{118}$	17.5 C	15	4700	8	9000	10.5	36
L-21	20	1920										
L-18	19	1919										
L-16	18	1918										
L-20	17	1919	Sub	760	$\frac{76}{118}$	17.5 C	15	4700	8	9000	10.5	36
L-19	16											

\*New construction permitted by London Treaty.



NO.	LIFE	GUNS			TORPEDOES			MINES No., Type	AIR
		No.	Cal.	Range	No., Type	Tubes Total   Bow   Stern			

SUBMARINE CLASS

SS

Treaty Tonnage - Submarines

61	0.8	1	4"7/45	14	12G (21")	6	6	0	-	-
60		4	0"50/63mh							
59	0.8	1	4"/50	14	8G (21")	8	6	2	-	-
58		4	0"50/63mh							
57	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
56		4	0"50/63mh							
55	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
54		4	0"50/63mh							
53	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
52		4	0"50/63mh							
51	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
50		4	0"50/63mh							
49	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
48		4	0"50/63mh							
47	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
46		4	0"50/63mh							
45	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
44		4	0"50/63mh							
43	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
42		4	0"50/63mh							
41	0.8	1	4"/50	14	12G (21")	8	6	2	-	-
40		4	0"50/63mh							
39	0.9	4	5"5/50	16	16G (21")	6s	4	2	-	-
38		4	0"50/63mh							
37	0.7	1	3"/45AA	11	6G	6s	4	2	-	-
36		4	0"50/63mh							
35	0.6	1	3"/45AA	11	6G (21")	6s	4	2	-	-
34		4	0"50/63mh							
33	0.6	1	3"/45AA	11	6G (21")	6s	4	2	-	-
32		4	0"50/63mh							
31	0.6	1	3"/45AA	11	6G (21")	6s	4	2	-	-
30		4	0"50/63mh							
29	0.7	1*	4"/50	14	12F (21")	6s	6	0	-	-
28		4	0"50/63mh							
27	0.7	1*	4"/50	14	12F (21")	6s	6	0	-	-
26		4	0"50/63mh							
25	*SS-25, 26 have 2-4"/50 guns.									
24	0.7	1	4"/50	14	12F (18")	4s	4	0	-	-
23		4	0"50/63mh							
22	0.7	1	4"/50	14	12F (18")	4s	4	0	-	-
21		4	0"50/63mh							
SS										
To be scrapped by 31 Dec. 1936 - Submarines										
21	0.7	1	4"/50	14	12F (18")	6s	4	2	-	-
20		4	0"50/63mh							
19	0.7	1	4"/50	14	12F (18")	4s	4	0	-	-
18		4	0"50/63mh							
17	0.7	1	4"/50	14	12F (18")	4s	4	0	-	-
16		4	0"50/63mh							







2837  
5/5/33

NO.	LIFE	GUNS			TORPEDOES			MINES No., Type	AIR	
		No.	Cal.	Range	No., Type	Tubes				
						Total	Bow			Stern

SS To be scrapped by 31 Dec. 1936 - Submarines (Continued)

15	0.5	None	-	6C (21")	4s	4	0	-	-	
14										
13										
12										
11										
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										0.3
<u>SM Treaty Tonnage - Submarine Minelayers</u>										
6	0.8	1 4	4:7/45 0:50/63mh	14	8G (21")	4s	4	0	32	-
5										
4										
3	0.7	1 4	4"/50 0:50/63mh	14	8G (21")	4s	4	0	16	-
2										
1										



2837  
5/5/37

NAME	NO.	DATE	SIZE	STAND. TON-NAGE	SPEED and DRIVE	FUEL, Tons	SPEED, RADIUS Sustained	SPEED, RADIUS Economical	COMP. Ship Flag
------	-----	------	------	-----------------	-----------------	------------	-------------------------	--------------------------	-----------------

BM

MONITORS

EREBUS	3	1916	S	8000	12R	750	10 1500	10 1500	300
TERROR	2								
MARSHAL SOULT	1	1915	S	6670	6.7D	235	6 940	6 940	228

Note: A special type built for Flanders Coast operations. Not considered available except for coast defense.

CM

MINELAYERS

ADVENTURE	7	1924	S	6740	27.5E	1550	22 2815 e	10 19400 (1)	500 e
MEDUSA	6	1915	Des	540	10R	45	10 225	10 225	52
MELPOMENE	5								
MINERVA	4								
MEDEA	3					28	10 150	10 150	
VERNON	2	1916		435		110	10 100	10 100	15
KATE LEWIS	1			325	11R				

(1) Has Diesel Engines for cruising.

PE

PATROL BOATS

SPEY (P-38)	3	1917	Des	615	20G	90	19 900	10 1800	56
P-40	2								
P-59	1								

Correspond roughly to Eagle Boats.

Note: In addition there are available considerable numbers of trawlers, coastal motor boats, and small yachts for anti-submarine and coastal defense.

PG

PATROL VESSELS

PG	19	Proj.							
GANNET	18	1927	Des	310	16G	60	14 665	10 1000	55
PETREL	17								
SEAMEW	16	1927	Des	262	14G	50	13 625	10 835	55
TERN	15								
APHIS	*14	1915	Des	645	14R	75	13 935	10 1250	65
BEE	13	1916							
CICALA	12	1915							
COCKCHAFER	11								
CRICKET	10								
GNAT	9								
LADYBIRD	8								
MANTIS	7								
MOTH	6								
SCARAB	5								
TARANTULA	4								
WIDGEON	3	1904	Des	180	13R	36	12 480	10 600	35
TEAL	2	1901							
MOORHEN	1								

\*All of this type are specially designed River Gunboats.







2037  
5/5/33

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	Bunker Fuel Tons	SPEED and DRIVE	Radius 10 kts	GUNS			COMP.
								No.	Cal.	Side	

AD DESTROYER TENDERS

SANDWURST	4	Int	11600	3.8	1475#	10.5R	5400	4 1 4	4"/50 3" h 0"50/63mh	2	258
GREENWICH	3	S	8100	3.1	960#	11	4240	4 1 4	4"/50 3" h 0"50/63mh	2	244
AMBROSE	2	S	6600	2.7	540#	14.5R	3900	4	0"50/63mh		238

AH HOSPITAL SHIP  
(Royal Naval Auxiliary)

MAINE	1	Int	10100	3.5	1300#	13R	4330		None		50
-------	---	-----	-------	-----	-------	-----	------	--	------	--	----

AM MINESWEEPERS  
(SLOOPS) (1)

AM 60-73 SANDWICH 59 BRIDGEWATER 58	Des	945 s	1.1	275	17G	7000	2 2 4	4"/50 3" h 0"50/63mh	1	75
ABERDARE 57 (29 in Class) to 29	Des	800	1.0	185#	16R	3700	1 1 4	4"/50 12 pdr. 0"50/63mh	1	73
CHRYSANTHEMUM 28 (5 of Class) to (2) 24	Des	1290	1.3	260#	16.5R	5200	1 4	3" h 0"50/63mh		98
SNAPDRAGON 23 (23 of Class) to (3) 1	Des	1250	1.3	250#	15R	5000	2 1 4	4"/50 3" h 0"50/63mh	2	104

- Notes:- (1) This type all originally Minesweepers now employed in many fleet services as Tenders, Station ships, lighthouse service, etc.  
(2) One of this class, "CORNWALLIS", in employ Indian Government.  
(3) Two of this class, "GERANIUM" and "MARGUERITE" in Australian Navy.



2837  
5/5/33

NO.	TONNAGE			Maximum Capacity in excess of own requirements.
	Gross	Net	D.W.	

AD

DESTROYER TENDERS

4	-	-	(1) 9000	Rations for 2 Flotillas (2 DL-16 DD) for 30 days. Dry provisions 4 mos. General stores - 4 mos. 50 replacement torpedoes. 4-4"/50 guns for DD.
3	-	-	7000	Same (In Reserve. Commissioned only for overseas duty).
2	-	-	5000	Same (In Reserve. Commissioned only for overseas duty).

AH

HOSPITAL SHIP

1	6599	4035	-	Patients 200.
---	------	------	---	---------------

AM

MINESWEEPERS  
(Sloops)

60-72				See notes on opposite page.
59 58				
57 to 29				SNAPDRAGON specially fitted for target photography. No guns.
28 to 24				
23 to 1				

(1) All entries in D.W. Column assumed.



2837  
5/5/33

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	Bunker Fuel Tons	SPEED and DRIVE	RADIUS 10 kts	GUNS			COMP.
								No.	Cal.	Side	

AO

OILERS (1)  
(Royal Fleet Auxiliary) (1)

BRITISH BEACON (4 of Class) 57-60		Int	15000	4.5	1200	10.5R	10000	4 4	(2) 4"7/45 0"50/63mh	2	60
WAR AFRIDI (15 of class) 42-56		Int	12000	3.8	850	10R	6075	4 4	4"7/45 0"50/63mh	2	50
OLEANDER OLNA	41 40	Int	14000	4.4	1200	10R	8575	4 4	4"7/45 0"50/63mh	2	55
DELPHINULA	39	Int	10000	3.5	600	10R	4000	4 4	4"7/45 0"50/63mh	2	50
APPLELEAF (6 of Class) 33-38		Int	11630	3.7	600 a	10R	4000	4 4	4"7/45 0"50/63mh	2	50
DREDGOL	32	S	7600	3.0	350	10R	2500	2 4	4"7/45 0"50/63mh	2	39
FRANCOL (9 of Class) 23-31		S	5050	2.3	300	12R	2000	2 4	4"7/45 0"50/63mh	2	39
BIRCHOL (4) (15 of Class) 8-22		S	5050	2.3	40 (3)	9R	400	2 4	4"7/45 0"50/63mh	2	39
TREFOIL TURMOIL	7 6	S	4500	2.1	200	12D 12R	2500 2000	2 4	4"7/45 0"50/63mh	2	30 35
MIXOL THERMOL	5 4	S	4300	2.0	150	11R	1000	2 4	4"7/45 0"50/63mh	2	30
BURMA	3	S	4115	1.9	210	12R	1500	2 4	4"7/45 0"50/63mh	2	30
PETROLEUM	2	Int	10500	3.5	425	13R	3540	4 4	4"7/45 0"50/63mh	2	50
RUTHENIA	1	Int	12780	3.9	500	12R	3845	4 4	4"7/45 0"50/63mh	2	55

(1) Manned by Naval Reserve crews and available for Navy in time of war. Furnish Fleet service in peace only as required. AOs 6 to 60 inclusive are now in employ of private concerns.

(2) None now armed. Armament assumed to be available.

(3) Can use cargo fuel for bunkers.

(4) Two of this class burn coal.

AR

REPAIR SHIPS

RESOURCE	1	Int	14000	4.3	1500 a	16T	11500 a	4 2 4	5"5/50 3" h 0"50/63mh	2	465 a
----------	---	-----	-------	-----	-----------	-----	------------	-------------	-----------------------------	---	----------



NO.	TONNAGE			Maximum capacity in excess of own requirements
	Gross	Net	D. T.	

A0

OILERS  
(Royal Fleet Auxiliary)

57 to 60	6880	-	(1) 10000	Cargo fuel 8800 tons.
42- 56	5600		7000	Cargo fuel 6150 tons.
41 40	7045		10000	Cargo fuel 8800 tons.
39	4990		6600	Cargo fuel 6000 tons.
33- 38	5900		5400	Cargo fuel 4800 tons.
32			4000	Cargo fuel 3550 tons.
23- 31			2000	Cargo fuel 1700 tons.
8- 22			1000	Cargo fuel 1960 tons.
7 6			2000	Cargo fuel 1800 tons.
5 4			2000	Cargo fuel 1850 tons.
3			2000	Cargo fuel 1800 tons.
2			6000	Cargo fuel 5575 tons.
1			5000	Cargo fuel 4500 tons.

(1) D. T. Tons capacity as per Jane's 1928 Edition - checked from Lloyd's Register where possible. Own fuel deducted from D. T. to give cargo fuel.

AR

REPAIR SHIPS

1	-	-	8000 a	Fitted to make repairs for any type ship not requiring docking. Self-sustaining for 6 months, including stores.
---	---	---	-----------	---



2837  
5/5/33

NAME	NO.	SIZE	STAND. TON- NAGE	LIFE	Bunker Fuel Tons	SPEED and DRIVE	RADIUS 10 kts	GUNS			COMP.
								No.	Cal.	Side	

AS SUBMARINE TENDERS

AS	8	Proj.	16000					- No details -			
MEDWAY	7	Int	15000	4.6	1430% a	16C	10000 a	4 4	4"7/45 0"50/63mh	2	350
CYCLOPS	6	Int	11300	3.7	1595%	13R	6000	2 4	4"/50 0"50/63mh	1	266
LUCIA	5	S	5805	2.4	615%	12.7R	2630	4	0"50/63mh		262
TITANIA	4	S	5250	2.3	498%	14.5R	3100	4	0"50/63mh		249
PENQUIN*	3	S	3476	2.0	450%	15.5R	3000	4	0"50/63mh		229
ADAMANT ALECTO	2 1	Des	935	1.0	180%	14R	2500	4	0"50/63mh		76

\*Australian Navy.

AT OCEAN-GOING TUGS

ATs 1-20 incl.	Des	825	0.2	250%	14R	5000	4	0"50/63mh		
----------------	-----	-----	-----	------	-----	------	---	-----------	--	--

AV AIRCRAFT TENDERS

ALBATROSS (1)	2	S	6000	2.7	997	22.5G	6600	4 2 4	4"7/50h 2 pdr. AA 0"50/63mh	3	175 a
ARK ROYAL (2)	1	S	7080	2.8	500	11R	2500	4 4	12 pdr. 0"50/63mh	2	139

(1) Building for Australian Navy.  
(2) Converted 1914 for use as Tender for Naval Flying Corps. Now employed as Tender for Minesweepers.

AG MISCELLANEOUS

Trawlers 33- 49 incl.	Des	665	0.1	150%	10R	-			Various		
Drifters 1 - 32 incl.	Des	200	0	40%	9R	-		1 4	6 pdr. 0"50/63mh		

NOTE:

In general, RED does not carry Auxiliary type such as AF, AG, AP, AR and AT on the Navy List. When required, these services are obtained by charter of merchant ships for the specific duty required.



NO.	TONNAGE			Maximum capacity in excess of own requirements
	Gross	Net	D.W.	

AS

SUBMARINE TENDERS

8	-	-	10000	*AS 7 & 8 said to have accommodation for personnel of 18 SS each. Rations and Provisions for same for 60 days. 75 spare torps. General stores for 6 mos. Diesel oil-1000 tons.
7	-	-	10000	
6	-	-	6000	Rations & supplies for 1 Flot. (8 SS) for 30 days. Stores for 6 mos.
5	-	-	3000	Rations & supplies for 1 Flot. (8SS) for 30das. Stores for 2mo.
4	-	-	2500	Same as AS-5.
3	-	-	-	Des and Sub Depot Ship and Fleet Repair.
2	-	-	-	Repair facilities only.
1	-	-	-	

\*Details lacking - assumed to approximate BLUE Holland Type. Item of "stores" includes lubricating oil.

AT

OCEAN-GOING TUGS

ATs	-	-	-	Miscellaneous service.
-----	---	---	---	------------------------

AV

AIRCRAFT TENDERS

2	-	-	4000	Tender for 10 VP or VS. Rations 60 days. Stores & spares 3 mos. Aviation gas 100 tons. Oil 25 tons.
1	-	-	4500	Tender for 18 VP or VS. Rations 60 days. Stores & spares 3 mos. Aviation gas 200 tons. Oil 40 tons.

Details of this class largely assumed on basis of similarity to corresponding BLUE types.

AG

MISCELLANEOUS

33-49	500	-	-	Available for Minelaying (10 mines) and minesweeping.
1-32	-	-	-	For Fleet Anti-submarine use. Carry 20 D.C.



2337  
5/5/33

BB

BATTLESHIPS

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown											
			10	12	14	15	16	17	18	19	20	21	22	23
BBs 19-20	3750	12	2.7	3.6	5.2	6.1	7.1	8.3	9.5	11.2	13.5	15.0	16.8	19.0
14-18	3400	11	2.6	3.5	5.2	6.4	7.7	9.5	11.5	13.5	15.8	18.3	22.0 (1)	
9-13	3400	10	2.5	3.4	5.0	5.9	6.9	8.0	9.2	10.7	12.2	14.3	16.5	19.0 (2)
			(1) At full speed 21.5 knots.											
			(2) At 23.5 knots - 24 tons.											

CC

BATTLE CRUISERS

			10	12	15	16	21	24	25	26	27	28	29	31
CC 4	4000	12	8.0	7.5	12.5	13.5	25.5	35.2	40.0	44.2	49.7	56.0	63.5	80.0
2-3	4250	10	7.7	7.5	10.0	16.2	23.5	30.9	34.1	37.5	41.0	47.6	55.1	69.0

CV

AIRCRAFT CARRIERS

			10	12	15	18	20	22	24	26	27	28	29	31
CVs 6-8	2000	10	3.3	4.2	6.2	9.0	11.2	14.3	18.2	23.9				
CV 5	3750	12	4.0	6.5	9.1	12.6	16.8	24.2	40.0					
CV 4	4025 <sup>1/2</sup>	13	5.4	6.7	9.2	12.2	15.0	18.3	22.3	27.8	31.1	34.7	39.7	53.9
CVs 2-3	3250	12	5.4	6.7	9.2	12.2	15.0	18.3	22.3	27.8	31.1	34.7	39.7	53.9
CV 1	2000	13	3.5	4.6	6.8	10.3	14.0							



CA-CL-CF

CRUISERS

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown									
			12	15	18	20	22	24	26	28	30	32
CL 66-70 (50,000 S.H.P.)	1200	4.5	1.38	2.42	3.75	4.92	6.29	7.30	9.52	11.42	14.0	17.6
CLs 57-65 (80,000 S.H.P.)	1400	7	1.33	3.30	5.36	6.94	8.70	10.77	13.30	16.12	19.10	22.50
CAs 55-56 (80,000 S.H.P.)	1900	9	2.10	3.66	5.83	7.50	9.60	12.00	14.55	17.66	20.90	24.50
CAs 47-52 (80,000 S.H.P.)	3200	9	2.10	3.66	5.83	7.50	9.60	12.00	14.55	17.66	20.90	24.50
CAs 40-46 (80,000 S.H.P.)	3200	9	2.13	3.73	5.97	7.66	9.77	12.1	14.8	18.0	21.3	25.0
CLs 34-35 (80,000 S.H.P.)	1700	8	2.0	3.46	5.50	7.10	9.00	11.22	13.70	16.60	19.8	23.22
			At 33 knots 25.0									
CLs 26-33 (40,000 S.H.P.)	1050	4.5	1.38	2.42	3.75	4.92	6.29	7.80	9.52	11.42	12.5*	
CLs 13-25 (40,000 S.H.P.)	950 935	4.5	1.38	2.42	3.75	4.92	6.29	7.80	9.52	11.42	12.5*	
CL 12 (40,000 S.H.P.)	825	4.5	2.10	3.70	5.50	7.0	9.30	12.2	16.10	21.30	25.1*	
CLs 6,9-11 CL 7 8 (40,000 S.H.P.)	841 895 805	4.5	1.90	3.30	4.90	6.20	8.10	10.6	13.8	17.1	20.0*	
CL-4 (25,000 S.H.P.)	950 (coal) 550 (oil)	9 4	3.23 2.4	5.73 3.8	8.9 5.84	11.46 7.55	14.58 9.64	20.2 at 25 kts. 13.23 at 25 kts.				
CL-5 (25,000 S.H.P.)	1196 (coal) 260 (oil)	9 4	3.23 2.4	5.73 3.8	8.9 5.84	11.46 7.55	14.58 9.64	20.2 at 25 kts. 13.23 at 25 kts.				
CFs 71-73	2825	11	2.48	3.80	5.60	7.02	9.32	11.5	14.3	18.7	25.6	42.7**

\*At 29 knots.

\*\*At 32.5 knots.



DL, DD

DESTROYERS AND LEADERS

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown											
			12	15	18	20	22	24	25	27	30	32	34	35
DLs 6-8, 9-10, 18 DLs 11-17 DL 5	560 504 515	3.5	1.0	1.9	2.9	3.5	4.6	5.8	6.5	8.2	11.2	14.4	17.9	20.0
DLs 19-24 DDs 125-160 DDs 106-124	440 385 <sup>1/2</sup>	3.0	1.0	1.2	1.8	2.2	3.2	4.2	5.3	7.1	10.2	12.5	13.9	16.3
DDs 89-104 DDs 56-65 DDs 14-43	370	3.2	1.2	1.9	2.8	3.4	4.5	5.8	6.4	8.2	11.1	14.5	18.0	20.2
DDs 105, 68-88 44-55 5-13	300	2.9	1.1	1.4	1.8	2.2	3.1	4.0	5.1	6.8	9.0	11.5	14.1	16.7
DDs 66-67	297	3.1	1.1	1.4	1.8	2.2	3.1	4.0	5.1	6.8	9.0	11.5	14.0	16.5
DD-4	256	3.0	1.0	1.3	1.7	2.1	3.1	4.0	5.1	6.8	9.0	11.5	14.0	16.4

BM

MONITORS

	FUEL Tons	Port Use Day	Tons per hour at speeds shown				
			6	8	10	11	12
BMs 2-3	750	5.0	-	-	5.0	6.0	7.5
BM 1	235	3.0	1.5				

CM

MINELAYERS

	FUEL Tons	Port Use Day	Tons per hour at speeds shown										
			10	12	15	18	20	22	23	24	25	26	27
CM 7	1550	10	0.8	1.3	3.7	7.3	9.0	11.7	13.3	15.0	16.8	20.0	25.0
CMs 3-6	45	5.0	2.0										
CMs 1-2	110 <sup>1/2</sup>	3.0	1.1	2.0									

Note: CM-7 has Diesel Engines for cruising, at 15 knots and below.

DM

LIGHT MINELAYERS

	FUEL Tons	Port Use Day	Tons per hour at speeds shown											
			12	15	18	20	22	24	25	27	30	32	34	35
DM 9	515	3.5	1.0	1.9	2.9	3.5	4.6	5.8	6.5	8.2	11.2	14.4	17.9	20.0
DMs 1-8	370	3.2	1.2	1.9	2.8	3.4	4.5	5.8	6.4	8.2	11.1	14.5	18.0	20.2

PG, PE

PATROL VESSELS

	FUEL Tons	Port Use Day	Tons per hour at speeds shown											
			10	11	12	13	14	15	16	17	18	19	20	
PG 17-19	60	1.5	0.6	0.6	0.7	0.8	0.9	1.1	1.3					
PG 15-16	50	1.0	0.6	0.6	0.7	0.8	1.0							
PG 4-14	75	2.0	0.6	0.6	0.7	0.8	1.1							
PG 1-3	36 <sup>1/2</sup>	0.5	0.6	0.7	0.8	1.0								
PE 1-3	90	1.0	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.3	1.6	2.0	2.5	



2837  
5/5/33

SM, SS

SUBMARINES

VESSELS	FUEL Tons	Port Use Day	Tons per hour at speeds shown											
			8	9	10	11	12	13	14	15	16	17	18	19
SS 41-57 SM 4-6	250		0.18	0.20	0.25	0.32	0.40	0.50	0.62	0.77	0.94	1.16	1.41	1.7
SS 40	200		0.18	0.20	0.25	0.32	0.40	0.50	0.62	0.77				
SS-58-61	275		0.19	0.21	0.27	0.35	0.44	0.55	0.67	0.83	1.01	1.24		
SS-39	350		0.22	0.26	0.34	0.43	0.56	0.67	0.80	0.97	1.16	1.38	1.62	1.88
SS-38	165		0.11	0.13	0.16	0.19	0.22	0.25	0.28	0.31	0.35	0.40		
SS-31-37	60		0.06	0.07	0.09	0.11	0.13	0.17	0.21	0.23				
SS-25-30	150		0.10	0.12	0.14	0.17	0.20	0.24	0.29	0.35	0.42	0.50		
SS 16-24 SM 1-3	118		0.10	0.12	0.14	0.17	0.21	0.25	0.30	0.33	0.47	0.60		
SS 2-15	50		0.07	0.08	0.10	0.12	0.15	0.19						
SS 1	26		0.05	0.06*										

\*At 9.5 knots.

AD

DESTROYER TENDERS

			10	11	12	13	14	15		
AD 4	1475#	20	2.7	3.2						
AD 3	960#	20	2.2	2.6						
AD 2	540#	10	1.8	2.0	2.4	2.9	3.5	4.3		

AH

HOSPITAL SHIP

			10	11	12	13
AH 1	1300#	15	3.0	3.5	4.1	4.8

AM

MINESWEEPERS

			10	11	12	13	14	15	16	17
AM 58 up	275		0.4	0.45	0.5	0.8	1.0	1.3	1.7	2.2
AM 29-57	185#		0.5	0.7	0.9	1.2	1.5	1.9	2.4	
24-28	260#		0.5	0.7	1.0	1.3	1.6	2.0	2.5	
1-23	250#		0.5	0.7	1.0	1.3	1.7	2.3		







2837  
5/5/33

- 34 -

PART III

ORDNANCE DATA



2837  
5/5/33

GUN DATA

The following data on RED guns is based on the latest information available.

Where two ranges are given, the first is the theoretical range, table range; the second, the figure used at the War College as representing the estimated practical range in thousands of yards.

Caliber	Weight of Projectile	M.V. (f.s.)	Maximum Elevation	Range at Maximum Elevation	
				Tables	Practical
16"/45	2048	2575	40°	40,000	30
15"/42	1920	2450	45° (a)	35,700	35
			30° (b)	30,300	29
			20° (c)	24,300	23
8"/50	257	2800	70°	28,000 (d)	27
7 1/2"/45	200	2750	30°	21,400	20
6"/50	100	3100	70°	23,300 (d)	23
			35°	22,700	22
6"/45	100	2800	30°	19,200	18
5 1/2"/50	82	2775	30°	17,600	16
4 7/8"/50 AA	50	3000	85°	18,650 (d)	18
4 7/8"/45	50	2650	30°	15,300	14
4"/50	31	2750	30°	15,100	14
4"/45 AA	31	2650	85°	16,100 (d)	15
3"/45 AA	16	2500	85°	12,100 (d)	11

- (a) Marshal Soult.
- (b) Hood, Erebus, Terror.
- (c) Royal Oak, Warspite, Renown classes.
- (d) Range corresponding to 45° elevation.

FIRE CONTROL DATA

Main Battery Fire of all combatant ships except submarines is director controlled. BBs and CCs assumed to have one stable zenith instrument for indirect fire.

Secondary Battery Fire and A.A. Fire of BBs, CCs, CVs and CAs is director controlled.

Plane Spot for BBs, CCs, CVs and cruisers equipped with planes.

Searchlights are controlled with Secondary and A.A. batteries in BBs, CCs, CVs, CAs, CLs and CPs.

TORPEDO DATA

RED torpedoes are classified as follows:

Type	Size	Speed	Range (yards)
A	21"	26	17,000
C	21"	27	13,500
(x)		(27)	(15,000)
G (y)	21"	(34)	(10,000)
(z)		(46)	(6,000)
F	18"	35	3,500 (Subs and Aircraft)
	21"		

DEPTH CHARGES AND MINES

1. D.C. Effective radius 70-100 feet. Charge 300 pounds. Adjustable depth settings 35 to 300 feet.

2. Mines. - Anchored: adjustable to any depth up to 150 fathoms. 300 pounds explosive.  
- Drifting: 550 pounds explosive.



AMMUNITION ALLOWANCES (Rounds per gun)

(1) <u>Combatant Ships</u>	<u>A.P.</u>	<u>Common</u>	<u>H.E.</u>	<u>F.N.</u>	<u>Star</u>
8"/50 and larger	100				
7"5/45	150				
6", 5"5		200		10	25
4"7 in L, Int. or S ships		225		20	50
in Des. size		90		10	25
in Subs		100			
4"7 AA, 4" AA			400	100	50
3" AA			600	100	100
Machine		1000			
 (2) <u>Auxiliary Ships</u>					
4" - 6"		100			
3" or less		200			

RED SHIP BOMB AND TORPEDO ALLOWANCES

<u>Ship or Type</u>	<u>1000#</u>	<u>500#</u>	<u>116#</u>	<u>Torpedoes</u>
CV-1		46	1200	18 F
CV-2	160	290	550	36 F
CV-3	160	290	550	36 F
CV-4	160	290	550	36 F
CV-5	160	290	550	36 F
CV-6	80	145	275	18 F
AV-1	30	75	200	
AV-2	30	75	200	
BB and CC			38	
Heavy Cruisers			14	
Light Cruisers			10	
<u>Constructive Ships</u>				
CV-7, 8	85	240	1000	36 F
CF- 71, 72, 73	54	90	--	



RED FLEET AIRCRAFT ORGANIZATION

(Figures in parenthesis indicate number of planes attached to Squadron)

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-1 ARGUS	VF-1 (12)		VB-1 (6)	VT-1 (6)	VO-11 (6)	
CV-2 GLORIOUS	VF-2 (18)		VB-2 (12)	VT-2 (12)	VO-12 (12)	
CV-3 COURAGEOUS	VF-3 (18)		VB-3 (12)	VT-3 (12)	VO-13 (12)	
CV-4 FOURIOUS	VF-4 (18)		VB-4 (12)	VT-4 (12)	VO-14 (12)	
CV-5 EAGLE	VF-5 (18)		VB-5 (12)	VT-5 (12)	VO-15 (12)	
CV-6 HERMES	VF-6 (12)	VS-16 (6)	VB-6 (6)	VT-6 (6)		
AV-1 ARK ROYAL						VP-1 (12)
AV-2 ALBATROSS						VP-2 (10)
BB and CC	1 VO per ship. Squadron number corresponds to assigned Batron Number.					
Heavy Cruisers	1 VS per ship. Squadron number corresponds to assigned Cruron Number.					
Light Cruisers CL 26 to 35 less CL 30 & CL 57 to 70	1 VS per ship. Squadron number corresponds to assigned Cruron Number.					

Shore Based Naval Aircraft

CARLSHOT						VP-10 (12) VP-11 (12)
PLYMOUTH						VP-13 (12)
PEMBROKE						VP-14 (6)
CALAFRANA- MED. STA.						VP-15 (12)
BASRA-IRAQ						VP-16 (6)
SINGAPORE				VT-20 (12)		VP-20 (6)

Notes: Characteristics of Carrier VO same as SU-2.  
Capacity output in plus 6 months - 1600 planes.

RED FLEET AIRCRAFT ORGANIZATION (CONSTRUCTIVE SHIPS)

<u>Base Unit</u>	<u>VF</u>	<u>VS</u>	<u>VB</u>	<u>VT</u>	<u>VO</u>	<u>VP</u>
CV-7 (9825 tons)	VF-7 (12)		VB-7 (12)	VT-7 (12)		
CV-8 (9825 tons)	VF-8 (12)		VB-8 (12)	VT-8 (12)		
CF-71 (9050 " )			VB-11 (18)			
CF-72 " "			VB-12 (18)			
CF-73 " "			VB-13 (18)			