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# Stations Manned and Ready

## 2nd Edition

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# Ship Data Glossary

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*A and A Game Engineering*

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This booklet provides an explanatory guide to the content of the ship data sheets, used when playing a wargame using the Stations Manned and Ready 2nd Edition Rules.

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If you have any questions regarding the rules or other products, contact us via the links on the website, or through the email address shown below.

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# *II* *STATIONS* *MANNED AND READY*

## *SHIP DATA GLOSSARY BOOKLET*

BY ANDREW FINCH AND ALAN BUTLER

EDITION 2.0

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## **Introduction to 2nd Edition of the Glossary**

The 2nd Edition of the Glossary has been issued to take account of the revisions to the Stations Manned and Ready II rules which are incorporated in Edition 1.1 from 2016.

The layout of the Ship Data Sheets has been slightly altered and there is now more information provided which (we hope) will be useful to players.

The symbols to depict weapon mounts had to be changed as part of the revision of the ship data (a technical issue which caused us some problems but in the end a satisfactory solution was found).

The important change is that there are now two different types of record sheet, one for a standard vessel, and one for the small ships covered by the category Type "X". The revised rules handle these vessels differently, and a record sheet was designed to facilitate this.

November 2015



Ship name: **Ryuho**

Ryuho Class

**From June 1944; IS option**

Recon values Day: 3 Night: 2  
**Ship has Search Radar**

CV 1944 to 1944 Ship Cost with Crew Code **D** : 547 (Base Cost: 576) Dataset: 3701

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSR:  Saving Throw Modifier:

Spotting Distance: 4 RB Fire Control Value: 2 Gunnery Modifier: + 1 Crew Quality: Spotting Aircraft:

Hit Location # MAIN guns: # 1 - 4 8 5.00 AA I:S2 O0C0 R:S2 O0C0

Hit#: 1:6 II:9 III:12 IV:15 V:18 IP: CV: Radar: No

OTHER guns: #: Cal: Arcs: 5 - 10 6 4.70 RP

TORPEDOES: n/a

ARCS: A: B: C: D: E: F: G: H: I: K: R: S: T: U: V: W: X:

CV Handling (H): 8 CV RRR limit: 6 FD Catapults: 0 Aircraft Capacity at start: 31

Structure (S): 13 S/3: 4 Flotation (F): 13 F/3: 4

Fires: (All Crew Tests are penalised if ship is on fire) Damage Control Teams: 4

Speed: 27 MVR: 10 Steering #: 10

Other Equipment (delete when lost): Searchlights (Optional) Smokescreen; test at - 3

Special Effects: • Poor Underwater Protection • Poor Carrier Safety

Remarks: • From June 1944 • IS option

The name of the ship. On Ship Data Sheets for smaller vessels, this area is left blank.

The Class of the ship.

An abbreviation of the ship type.

This is the cost of the ship modified by the effects of the Crew Code shown to the left, here 'D'. This code is used when generating the Crew Quality for the game.

The Base Cost of a ship is the points value without the application of any modifiers for its crew.

Each dataset has a unique number that identifies this version of the ship class.

These dates show the first and last years for which the data on this sheet is valid.

Some Ship Data Sheets may offer alternative weapons for the same ship during the same time frame, and/or until or after specific dates.

This is the nationality of the ship.

These are the Recon values used at the game set-up stage to determine who gets Strategic Initiative. This ship would contribute 3 points towards reconnaissance by day and 2 at night. If a ship has also been equipped with Search Radar this information appears here.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: WRITE THE NAME OF THE SHIP HERE

Recon values Day: 1 Night: 1

Tribal Class DD 1938 to 1941 Ship Cost with Crew Code C : 201 (Base Cost: 201) Dataset: 138

ARMOUR: Belt: 0 Deck: 0 CT: 0 Turrets #1: n/a Turrets #2: n/a Casemates: n/a Size: -2 Target Type: A%o MSF: +0 Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze Saving Throw Modifier: +0

Spotting Distance: 3 RB Fire Control Value: 1 Gunnery Modifier: +1 Crew Quality: Spotting Aircraft:

Hit Location # WEAPONS MAIN guns: #: Cal: Arcs: Hit#: I:6 II:9 III:12 IV:15 V:18 IP: CV: Radar: 1 - 5 8 4.70 A:S2 OO Z:S2 OO Pen: 4 3 1 - - 2 2 No

If a weapon 'Crit' lands in this section lose 1 ASW or CR factor for each 2 CV or part thereof. Lose factors in order: ASW then CRF CRF: 2 MRF: 0

OTHER guns: #: Cal: Arcs: Hit#: I:6 II:9 III:12 IV:15 V:18 IP: CV: Radar: LRF: 0 6 - 7 ASW Z: DC O Ω (10cm)

In the case of destroyers and ships of that size and smaller, where there are a larger number of vessels using the same data, players will normally need a few record sheets for selected ships in the class. Here the ship name is left blank. Rather than produce hundreds of identical sheets for destroyer and smaller classes, one blank sheet is provided with the game data, which should be copied as many times as required. The names of the ships in the class appear at the bottom of the Ship Data Sheet, here. Ships that were sunk during the period covered by the dataset show the year (in brackets preceded by a '+').

Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: Mod: +1 +1 +0 - - 5 7

GUNS TORPEDOES

I: 7/9 K: 7/9 R: 2/3 S: 1 1/2 / 4 3 T: 7/6 U: 2/3 V: 2/9 6/4 W: 2/6 4/3 X: 6/4 Y: 8/6 4/3 Z: 7/6 2/3 M: N: O: P:

Structure (S): 4 S/3: 1 Flotation (F): 4 F/3: 1 Fires: (All Crew Tests are penalised if ship is on fire) Damage Control Teams: 1 Speed: 36 MVR: 6 Steering #: 6 When Steering # reduced to 0 then the ship requires a Crew Test to turn Other Equipment (delete when lost): Searchlights Smokescreen; test at +0 Changes to CRF or MRF: None Remarks: None

Ships in class: Afridi (+1940), Ashanti, Bedouin, Cossack, Eskimo, Gurkha (+1940), Maori, Mashona, Matabele, Mohawk, Nubian, Punjabi, Sikh, Somali, Tartar, Zulu

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.3 26/09/2015

The Initial Ship Data for a class of ships with a large number of vessels.

Ship name: **Nelson** Recon values Day: 0 Night: 0  
 Nelson Class BB 1943 to 1945 Ship Cost with Crew Code **B** : 2623 (Base Cost: 2498) Dataset: 1894 **See below for changes to CRF/MRF** Ship has Search Radar  
 ARMOUR: Belt: **11** Deck: **6** CT: **11** Turrets #1: **[11]** Turrets #2: **(2)** Casemates: **n/a** Size: **+ 2** Target Type: **A** MSF: **+ 0**  
*Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze* Saving Throw Modifier: **n/a**

Spotting Distance: **5 RB** Fire Control Value: **7** Gunnery Modifier: **+ 0** Crew Quality: \_\_\_\_\_  
 RADAR: Radar for MAIN Guns Radar for OTHER Guns DPAA Radar: **+1 to hit** Spotting Aircraft: \_\_\_\_\_

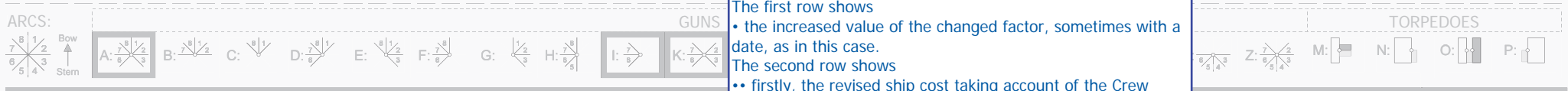
Hit Location #				WEAPONS								
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:
1 - 5	9	16.00	A:[T3] OO K:[T3] O	Pen:	14	13	11	10	9	7	11	Yes

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.  
 OTHER guns: #: Cal: Arcs:  
 6 - 10 12 6.00 I:(T2) OOO R:(T2) OOO  
 6 4.70 AA+ I:S1 OOO R:S1 OOO

Some ships have changes to their small calibre guns which appear as:  
 • Close range Factors (CRF)  
 or  
 • Medium Range Factors (MRF)  
 on the Ship Data Card.  
 Any change means that the points values are altered for the ship, and the revised figures appear below.

CRF: **10** MRF: **0**  
 LRF: **5** Aircraft save at -2  
 LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:  
 n/a



The first row shows  
 • the increased value of the changed factor, sometimes with a date, as in this case.  
 The second row shows  
 • firstly, the revised ship cost taking account of the Crew Code (which is shown at the top of the sheet). Then [in brackets] the revised Base Cost of the ship, which you may wish to use under certain circumstances.

Structure (S): **90** S/3: **30** Flotation (F): **37** Damage Control Teams: **6**  
 Fires: (All Crew Tests are penalised if ship is on fire)  
 Speed: **23** MVR: **11** Steering #: **11** When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):  
 Searchlights (Optional) Smokescreen; test at - 3  
 Special Effects:

Changes to CRF or MRF:  
 • CRF increased 13 in January 1945  
 • (Revised ship cost with crew = 2631 [Base cost = 2506])  
 Remarks:  
 None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Changes to Small Calibre Weapons (Close and Medium Range Factors)**

Ship name: **Radetzky**

Recon values Day: 0 Night: 0

Radetzky Class SD 1910 to 1915 Ship Cost with Crew Code D : 749 (Base Cost: 788) Dataset: 645

ARMOUR: Belt: **7** Deck: **2** CT: **8** Turrets #1: **[8]** Turrets #2: **(7)** Casemates: **{5}**

Size: **+ 0** Target Type: **A** MSF: **- 1**

Crit. table: Normal Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: **n/a**

Spotting Distance: **4 RB** Fire Control Value: **5** Gunnery Modifier: **+ 0**

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location # WEAPONS Hit#: I:6 II:9 III:12 IV:15 V:18 IP: CV: Radar:

MAIN 1 - BELT Armour Class Cal: 12.00 DECK Armour Class Z:[2] O Turret Armour Class for the MAIN guns on a ship. This is shown in [Square brackets]. Armour Class of Turrets housing guns other than the Main guns. This is shown in (Round Brackets). As will be seen on a subsequent sheet this field may also be used to show a different Armour Class for a MAIN gun turret. CASEMATE Armour Class for guns mounted in the sides of the ship. This is shown in {Pointed brackets}. These guns may appear in both the MAIN and OTHER gun sections on the sheet.

If a weapon 'Crit' lands in this section lose 1 MR factor CRF: 0 MRF: 1

OTHER guns: #: Cal: Arcs: 4 -10 8 9.40 20 3.90 V: Radar: LRF: 0

TORPEDOES: n/a All ships will show an Armour Class for the Belt, Deck and Conning Tower. This will often be 0, which indicates no armour protection. If ships have armour protection on the gun mounts, then the values will be shown in [ ], ( ), or { } if such protection exists, otherwise the field will show "n/a". These symbols are also repeated in the weapon sections on the various gun mounts.

ARCS: Bow Stem A: [Symbol] B: [Symbol] GUNS K: [Symbol] R: [Symbol] S: [Symbol] T: [Symbol] U: [Symbol] V: [Symbol] W: [Symbol] X: [Symbol] Y: [Symbol] Z: [Symbol] TORPEDOES M: [Symbol] N: [Symbol] O: [Symbol] P: [Symbol]

Structure (S): 57 S/3: 19 Flotation (F): 26 F/3: 9  
Fires: (All Crew Tests are penalised if ship is on fire) Damage Control Teams: 4  
Speed: 21 MVR: 7 Steering #: 7 When Steering # reduced to 0 then the ship requires a Crew Test to turn  
Other Equipment (delete when lost): Searchlights (Optional) Smokescreen; test at - 3 Changes to CRF or MRF: None  
Special Effects: • Poor Underwater Protection Remarks: None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1  
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( )) 07/01/2011  
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Basic Armour Data

Ship name: **Bretagne**

Recon values Day: 0 Night: 0

Bretagne Class BB 1915 to 1932 Ship Cost with Crew Code D : 1583 (Base Cost: 1666) Dataset: 414

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:

- Bow and Stern turrets: AC 9
- Centre Turret: AC 11

Saving Throw Modifier:

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Spotting Distance:  Fire Control Value:  Gunnery Modifier:

Crew Quality: \_\_\_\_\_  
Spotting Aircraft: \_\_\_\_\_

Hit Location #	WEAPONS											
MAIN guns: #:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
1 - 6	10	13.40	A:[T2] OO K:(T2) O Z:[T2] OO	Pen:	12	10	8	7	6	9	9	No

If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.

CRF:  MRF:

OTHER guns: #:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
7 - 10	22	5.45	I:{C1} OOOOO...OOOOO...O R:{C1} OOOOO...OOOOO...O	Pen:	1	1	1	1	2	2	No	0

In some cases there are additional remarks regarding armour protection. These may define the protection on specific turrets (as in this case), or a variation in the extent of protection.

TORPEDOES:

n/a

ARCS: 

GUNS: 

TORPEDOES: 

Structure (S):  S/3:  Flotation (F):  F/3:

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams:

Speed:  MVR:  Steering #:

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):

Changes to CRF or MRF:

Searchlights (Optional) Smokescreen; test at - 3

None

Special Effects:

Remarks:

None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Variation in the Armour Protection**

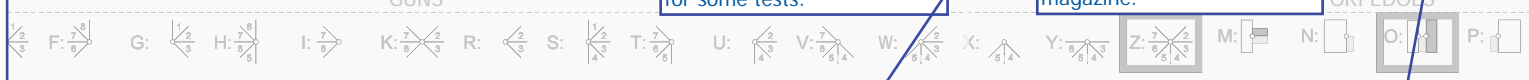
Ship name: \_\_\_\_\_ Recon values Day: 1 Night: 1

Tribal Class DD 1938 to 1941 Ship Cost with Crew Code C : 201 (Base Cost: 201) Dataset: 138

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:  Saving Throw Modifier:

*Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze*

Spotting Distance: 3 RB Fire Control Value: 1 Gunnery Modifier: +1 Crew Quality: \_\_\_\_\_ Spotting Aircraft: \_\_\_\_\_

Hit Location #		WEAPONS												
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:		
1 - 5	8	4.70	A:S2 OO Z:S2 OO	Pen:	4	3	1	—	—	2	2	No		
If a weapon 'Crit' lands in this section lose 1 ASW or CR factor for each 2 CV or part thereof. Lose factors in order: ASW then CRF														
OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	CRF:	MRF:
6 - 7	ASW	7: DC O O (10cm)		Hit#:	I:14	II:14	III:14	IV:14	V:14	IP:	CV:		0	0
GUNS														
														
TORPEDOES														
S/3:	<input type="text" value="1"/>	Flotation (F):	<input type="text" value="4"/>	The Target Type of the ship is used to define which weapons may be able to attack it, and which Critical Damage Table is used when necessary.										
Fires:	(All Crew Tests are penalised if ship is on fire)													
Speed:	<input type="text" value="36"/>	MVR:	<input type="text" value="6"/>	Steering #:	<input type="text" value="6"/>	The Target Size of the ship, which is used when the ship is being attacked. It is also used as a modifier for some tests.								
Other Equipment (delete when lost):	The Magazine Safety Factor is a modifier that is applied should the ship suffer a hit that penetrates to its magazine.													
Searchlights	The Saving Throw Modifier appears on unarmoured ships. These can be attacked by small calibre weapons using MR Factors, and they get a saving throw to gauge their effectiveness.													
Special Effects:														
Ships in class: Afridi (+1940), Ashanti, Bedouin, Cossack, Eskimo, Gurkha (+1940), Maori, Mashona, Matabele, Mohawk, Nubian, Punjabi, Sikh, Somali, Tartar, Zulu														

This field shows, firstly, which Critical hit tables are used.

- 'Normal' signifies that you use the Structural and Flotation tables.
- 'Carrier' indicates that you use the Carrier and Flotation tables.

This is followed by a list of the attack types that can be used on the ship concerned.

Unarmoured ships can be attacked using Medium Range factors (MRF), and get a saving throw to see if the hit causes any damage.

Bear in mind that not all attacks are going to be appropriate in some eras.

This is the Target Size of the ship, which is used when the ship is being attacked. It is also used as a modifier for some tests.

The Magazine Safety Factor is a modifier that is applied should the ship suffer a hit that penetrates to its magazine.

The Target Type of the ship is used to define which weapons may be able to attack it, and which Critical Damage Table is used when necessary.

- A and C are ships that are to a lesser or greater extent protected by armour.
- A% and C% are ships that have no armour protection at all, and can be damaged by smaller calibre weapons.
- X is a type used to classify ships of small size such as early predreadnought torpedo craft, and Motor Torpedo Boats as found in the Second World War. Ships of Type "X" have a different form of Record Sheet, described later in this document.

The Saving Throw Modifier appears on unarmoured ships. These can be attacked by small calibre weapons using MR Factors, and they get a saving throw to gauge their effectiveness.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.3 26/09/2015

• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))

Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: Iowa (BB 61)

Recon values Day: 2 Night: 0

Iowa Class BB 1943 to 1943 Ship Cost with Crew Code C : 5477 (Base Cost: 5477) Dataset: 458

Ship has Search Radar

ARMOUR: Belt: 10 Deck: 6 CT: 13 Turrets #1: [14] Turrets #2: (3) Casemates: n/a

Size: +2 Target Type: A MSF: +1

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 8 Gunnery Modifier: +1 Crew Quality: \_\_\_\_\_

RADAR: Radar for MAIN Guns Radar for OTHER Guns DPAARadar: +1 to hit Spotting Aircraft: 2

Hit Location # WEAPONS

MAIN guns: #: Cal: Arcs: Hit#: I:6 II:9 III:12 IV:15 V:18 IP: CV: Radar: Pen: 16 14 13 11 10 16 13 Yes

This is the Spotting Distance (SD) from the ship, based on its size. This varies between 2 Range Bands (RB) for destroyer types up to 5RB for battleships.

This ship has radar support for its 16" MAIN guns.

The Gunnery Modifier on a ship can be between -2 and +1, depending on the technology available. This gunnery modifier is applied at all times in gunnery using the MAIN and OTHER guns. It can be reduced due to damage.

The Crew Quality of a ship is determined at the start of a game, and will range between +2 and -2, depending on date and nationality. It can be reduced during the game, and this may also take it below -2.

The Fire Control value of a ship is a measure of how much damage its systems can withstand before it has to shift to using Local Control, with a worse chance of hitting the target.

TORPEDOES:

n/a

ARCS: GUNS TORPEDOES

Structure (S): 105

Fires:

Speed: 33

Other Equipment (delete when lost):

Searchlights

Special Effects:

This ship also has radar support for its OTHER guns. In this case the 5" guns. We will return to this point when we examine the weapons fit on a ship.

Finally, this ship also has radar support for its heavy AA guns. We will return to this point later as well.

Ships are also often equipped with Spotting Aircraft, which can be used to assist gunnery instead of radar. The number shown may be lower than the actual complement of aircraft carried by the ship.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1 07/01/2009



This section shows the hit distribution score on a d10. This determines where a Critical Damage Effect on Weapons will be applied.

This area covers the top two segments of the weapons data for the MAIN and OTHER guns. It shows the base "To Hit" score at the 5 Range bands (I to V) as an aid in play at the top. The range over which a gun can fire is indicated by the presence of a Penetration Value at the Range Band in question. A PEN of 0 means that the gun can reach to this range band, a dash indicates that the gun will not reach this far. The maximum gun range is never greater than the Ship's Spotting Distance (shown here to the left), though it can be less (as shown in the entry for OTHER guns, where the guns only reach to 2RB).

All weapons have an IP and CV. These are shown here.

If the ship carries gunnery radar, each gun battery that can use radar support shows 'Yes' in this field, otherwise this shows 'No'. You will note that there are no Radar remarks in the section above the thick dividing line on this ship, which has no radar support for its guns.

Spotting Distance: **4 RB**

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location #		WEAPONS														
MAIN guns:	#:	Cal:	Arcs:					Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:
1 - 3	2	6.00	Z:S1 OO					Pen:	6	4	2	1	—	3	3	No
OTHER guns:	#:	Cal:	Arcs:					Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:
4 - 8	8	4.00	B:S1 OO I:S1 OOO R:S1 OOO					Pen:	3	2	—	—	—	2	1	No
TORPEDOES:	#:	Cal:	Arcs:					Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:	
9 - 10	4	21.00	N:TT2 O P:TT2 O					Mod:	+0	-1	—	—	—	5	6	

CRF: **0** MRF: **2**  
 LRF: **0**



Here we have the number and calibre of weapons on the ship.

Special codes are shown in this area for AA and ASW weapons. In this case the ship has no ASW or AA weapons. We will show these on separate sheets, explaining how ASW and AA weapons are depicted on the card.

The Arcs show the following:

- A code for the firing arc on the ship
- The mount type
- The number of tubes in the mount.

This is followed by a circular symbol 'O' for each mount in that arc.

The mount symbols are grouped in 5's separated by '...'. If there are several mounts of different types in an arc, they are linked by the '+' sign.

If the mount is armoured it will be shown in [square], (round) or {pointed} brackets according to whether it is a [(Turret)] or {Casemate}.

The Armour Class for the mounts is shown higher up on the sheet as explained on previous pages.

In the case of torpedoes, these are either in

- Normal mounts, shown as 'TT'
- Fixed mounts 'TF' (these are not very common), or
- Reloadable mounts (Japanese only), appearing as 'TR'.

There is a reload symbol '@' which is crossed out when the tubes have been reloaded.

ASW weapons have special symbols, which will be explained on another sheet.

The Close, Medium, and Long Range Factors are shown here (CRF, MRF, LRF). All can be used as AA weapons. CRF and MRF can also be used against Small ships of Type "X" MRF can be used against unarmoured ships.

The third segment of the weapon data covers TORPEDOES. It shows the base "To Hit" score at each of the 5 Range Bands. (Note it is worse than the gun "To Hit" score.) The range over which a torpedo is effective is indicated by the presence of a "To Hit" modifier at the relevant range band. If there is a dash, then the torpedo cannot reach that range. The modifier is used as the Speed setting in the game, limiting the range over which the torpedo will run. This is explained in detail in the Torpedo Rules. Torpedo attacks are declared in the Movement Phase and resolved in the Action Phase. In some cases the torpedo can still be effective at a range greater than the ship's Spotting Distance. In this case the modifier is shown (in parenthesis). For details of how such "overshoots" are applied please refer to the rules. A Short Range Torpedo will have '\*' after the "To Hit" modifier and only has a range of 10cm.

To start the explanation of the Weapons area on the Ship Data Sheet, we will use this First World War light cruiser, which has weapons in the MAIN and OTHER guns, and the TORPEDOES Sections. There are several more pages following, which expand further aspects of the weapons area of the Ship Data Sheets.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Hit Location, Number and Calibre of weapons, Arcs and Weapon Mounts, 'To Hit' scores, Gun Penetration Values, Torpedo 'To Hit' Modifiers, IP and CV, Radar, CRF, MRF and LRF**



Ship name: **Caroline**

Recon values Day: 1 Night: 1

Caroline Class CL 1914 to 1916 Ship Cost with Crew Code D : 135 (Base Cost: 142) Dataset: 172

ARMOUR: Belt: 4 Deck: 1 CT: 6 Turrets #1: n/a Turrets #2: n/a Casemates: n/a

Size: -1 Target Type: A MSF: -1

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

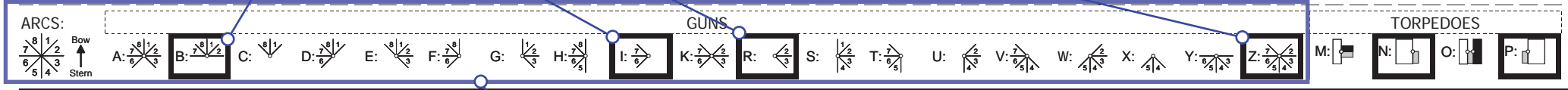
Saving Throw Modifier: n/a

Spotting Distance: 4 RB Fire Control Value: 2 Gunnery Modifier: +0

Crew Quality:

Spotting Aircraft:

Hit Location #				WEAPONS												
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:				
1 - 3	2	6.00	Z:S1 OO	Pen:	6	4	2	1	—	3	3	No				
If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.													CRF:	0	MRF:	2
OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:			
4 - 8	8	4.00	B:S1 OO I:S1 OOO R:S1 OOO	Pen:	3	2	—	—	—	2	1	No				
TORPEDOES:	#:	Cal:	Arcs:	Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:					
9 - 10	4	21.00	N:TT2 O P:TT2 O	Mod:	+0	-1	—	—	—	5	6					



Structure (S):	8	S/3:	3	Flotation (F):	6	F/3:	2
Fires:		(All Crew Tests are penalised if ship is on fire)				Damage Control Teams:	2
Speed:	29	MVR:	7	Steering #:	7	When Steering # reduced to 0 then the ship requires a Crew Test to turn	
Other Equipment	(delete when lost):	Changes to CRF or MRF:				None	
Searchlights	(Optional) Smokescreen	Remarks:				None	
Special Effects:		None					

This area shows all the Gun arcs of fire used in the rules. The arcs in use on the ship in question are marked with a heavy black outline.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Caroline**

Recon values Day: 1 Night: 1

Caroline Class CL 1914 to 1916 Ship Cost with Crew Code D : 135 (Base Cost: 142) Dataset: 172

ARMOUR: Belt: 4 Deck: 1 CT: 6 Turrets #1: n/a Turrets #2: n/a Casemates: n/a

Size: -1 Target Type: A MSF: -1

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

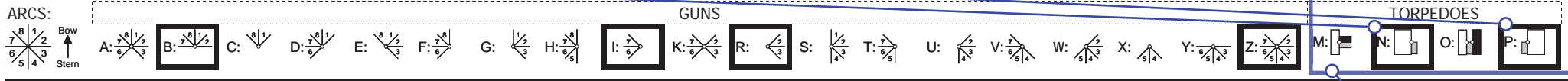
Saving Throw Modifier: n/a

Spotting Distance: 4 RB Fire Control Value: 2 Gunnery Modifier: +0

Crew Quality:

Spotting Aircraft:

Hit Location #				WEAPONS												
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:				
1 - 3	2	6.00	Z:S1 OO	Pen:	6	4	2	1	—	3	3	No	CRF:	0	MRF:	2
If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.																
OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:	0		
4 - 8	8	4.00	B:S1 OO I:S1 OOO R:S1 OOO	Pen:	3	2	—	—	—	2	1	No				
TORPEDOES:	#:	Cal:	Arcs:	Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:					
9 - 10	4	21.00	N:TT2 O P:TT2 O	Mod:	+0	-1	—	—	—	5	6					



Structure (S): 8 S/3: 3 Flotation (F): 6 F/3: 2

Fires: (All Crew Tests are penalised if ship is on fire) Damage Control Teams: 2

Speed: 29 MVR: 7 Steering #: 7

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost): Searchlights (Optional) Smokescreen; test at - 2

Changes to CRF or MRF: None

Remarks: None

This area shows all the Torpedo arcs of fire used in the rules. The arcs in use on the ship in question are marked with a heavy black outline. The same notation is used on the record sheets for Small ships of Type "X".

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( )) 01/10/2008  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Torpedo Arcs of Fire

Ship name: Hatsuharu (Type 93 torpedoes) Class DD 1935 to 1937 Ship Cost with Crew Code A : 406 (Base Cost: 369)

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns,

This shows the effects of torpedoes with long ranges. In the case of this ship, it can see 3 RB (its Spotting Distance), and can therefore declare a torpedo attack on a target up to that range. In the case of this torpedo, it reaches to 5 RB with the same "to hit" modifier. Torpedoes which can run further than the ship can see indicate this by showing the modifier (in brackets). This means that torpedoes that miss targets in the initial 3 RB will continue to run to 5 RB and attacks must be resolved any targets (both enemy and friendly) they encounter in the extended beaten zone.

These tubes are identified as being 'TR' so they have a reload potential shown by '@'. In this case there are two mounts each with 3 torpedoes. When the mount has been fired the first time, the symbol is crossed out. In a subsequent turn, if the ship moves Slowly in the Movement Phase, and does not declare any Torpedo Attacks, the crew can attempt to reload the mount during the Action Phase. If the crew pass their reload test, the '@' is crossed out and the second mount box can then be fired in a subsequent turn.

Spotting Distance:	3 RB	Fire Control Value:	1	Cumulative Modifier:	1	Hit#: I:6	II:9	III:12	IV:15	V:18	IP: CV:	Radar:	CRF: 0	MRF: 0
Hit Location #														
MAIN guns: #:	4	Cal: 5.00	Arcs: AA	A:T2	6		3	2	—	—	2	2	No	
1 - 6				K:T1			3	2	—	—	2	2	No	
OTHER guns: #:	7	Cal: ASW	Arcs: Z: DC Ω (10cm)											

TORPEDOES: #:	6	Cal: 24.00	Arcs:	Hit#: I:14	II:17	III:19	IV:20	V:21	IP: CV:
8 - 10			[∞] O:TR3 O@O@O@O				(+2)	(+2)	7 9
Mod:				+2	+2	+2			

ARCS:

GUNS:

TORPEDOES:

Structure (S): 3 S/3:  Flotation (F): 3 F/3:

Fires: (All C) MVR:

Speed: 33

Other Equipment (delete when lost): Searchlights Smokescreen; test at + 0

Special Effects: • Mixed Battery Rules apply to the 5" guns.

Damage Control Teams: 1

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Changes to CRF or MRF: None

Remarks: • Carries Type 93 "Long Lance" torpedo

The destroyer is carrying Long Lance Torpedoes (indicated by '[∞]' in front of the mounts), and therefore subject to special damage effects if a Critical Hit affects the Torpedo area. These are described in the rules.

**NOTE: Vessel is subject to special critical hit effects if a torpedo mount is lost which is still loaded.**

Ships in class: Yugure, Ariake

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Japanese "Long Lance" Torpedoes, Japanese Torpedo Reloads, Long Range Torpedoes**

Ship name: **Scharnhorst**

Recon values Day: 0 Night: 0

Scharnhorst Class AC 1907 to 1914 Ship Cost with Crew Code B : 438 (Base Cost: 417) Dataset: 8

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:

Size:  Target Type:  MSF:

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier:

Spotting Distance:  Fire Control Value:  Gunnery Modifier:

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS									
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
<b>1 - 6</b>	4	8.20	A:[T2] O Z:[T2] O	Pen:	7	5	4	2	—	4	4	No	
	4	8.20	F:{C1} O G:{C1} O T:{C1} O U:{C1} O	Pen:	7	5	4	—	—	4	4	No	

If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.

CRF:  MRF:

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
<b>7 - 10</b>	6	5.90	I:{C1} OOO R:{C1} OOO	Pen:	5	3	2	—	—	2	2	No	<input type="text" value="0"/>

TORPEDOES:

n/a



The mixed Battery Rule applies here to the 8.2" guns.  
 In accordance with the rules, when fired these must be combined into a single salvo of against a single target.  
 A broadside from the Scharnhorst would be made up of the two Turrets in arcs A and Z, plus two Casemate guns in either arcs F and T or G and U.  
 As can be seen above a broadside of 6 guns is only possible up to 3RB, the Turrets being able to reach to 4RB while the Casemates cannot.  
 When applying the effects of a hit from Mixed Batteries, the following restrictions apply:  
 • Use the worst IP if there is a choice  
 • Use the best CV  
 • Use the worst penetration  
 (In this case there are no differences)  
 If the MAIN guns were hit as a result of Critical Damage then one of the twin turrets would be lost before a single gun in a Casemate. The decision sequence here is:  
 1) protection (all have Armour Class 6)  
 2) calibre (all are 8.2")  
 3) number of guns ... the twin turrets are lost before a single Casemate.

Structure (S):  S/3:  Flotation (F):   
 Fires: \_\_\_\_\_ (All Crew Tests are penalised if ship is on fire)  
 Speed:  MVR:  Steering #:

Other Equipment (delete when lost):  
 Searchlights \_\_\_\_\_ (Optional) Smokescreen; test at - 2

Special Effects: • **Mixed Gun Battery Rules apply to the 8.2" guns.** • **Poor Underwater Protection**

Sunk in 1914

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: Espora Class TB 1890 to 1905 Ship Cost with Crew Code D : 32 (Base Cost: 34) Dataset: 1128 Recon values Day: 0 Night: 0

ARMOUR: Belt: 0 Deck: 0 CT: 0 Turrets #1: n/a Turrets #2: n/a Casemates: n/a Size: -3 Target Type: A% MSF: n/a Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze Saving Throw Modifier: +0

Spotting Distance: 2 RB Fire Control Value: 1 Gunnery Modifier: -1 Crew Quality: Spotting Aircraft:

Hit Location # WEAPONS

MAIN guns:

n/a

If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.

CRF: 0 MRF: 2

OTHER guns:

LRF: 0

1 - 2

TORPEDOES: #: 3-10 Cal: 5 18.00 Arcs: M:TF1 O:TT2 OO Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: Mod: -2\* - - - - 2 3

ARCS: GUNS TORPEDOES

Structure (S): 2 S/3: 1 Flotation (F): 2 F/3: 1 Fires: (All Crew Tests are penalised if ship is on fire) Damage Control Teams: 1 Speed: 19 MVR: 3 Steering #: 3 When Steering # reduced to 0 then the ship requires a Crew Test to turn Other Equipment (delete when lost): Changes to CRF or MRF:

Searchlights (from 1905) (Optional) Smokescreen; test at +0 (- 1 if action set before 1905) None

Special Effects: • Short range torpedoes • Poor Underwater Protection Remarks: None

Ships in class: Espora, Rosales

From 1905 all ships are treated as being equipped with effective searchlights, to be used in night actions. The remark "(from 1905)" only appears on sheets with a date range which includes a date prior to 1905.

The ability to make smoke has been extended to cover a wider range of vessels than Destroyers, though this is also optional so the players should agree if they wish to allow this. If a ship can make smoke it is shown here, as well as if the ability is optional. To make smoke requires a successful Crew Test in all cases. Vessels other than destroyers have a penalty when attempting to make smoke, depending on their size. In addition if the action is set on a date before 1905, all vessels which may make smoke incur an additional -1 penalty, as shown here. The additional penalty is only shown if the ship data sheet is valid for a date earlier than 1905 (as in this case)

Gun n... points with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.2 08/04/2015

Ship name: \_\_\_\_\_ Recon values Day: 1 Night: 1

V and W (L/R escorts) Class DD 1943 to 1943 Ship Cost with Crew Code B : 98 (Base Cost: 93) Dataset: 2044

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:  Ship has Search Radar

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze Saving Throw Modifier:

Spotting Distance:  Fire Control Value:  Gunnery Modifier:  Crew Quality: \_\_\_\_\_




Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS										
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:		
1 - 5	2	4.00	A:S1 O Z:S1 O	Pen:	3	2	1	—	—	2	1	No		

If a weapon 'Crit' lands in this section lose 1 ASW or CR factor for each 2 CV or part thereof. Lose factors in order: ASW then CRF CRF:  MRF:

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:	<input type="text" value="0"/>
6 - 10			ASW A: ATW $\Delta$ (5cm; +1 to hit; S/T -1) Z: DC $\Omega$ $\Omega$ $\Omega$ (10cm; +1 to hit)											

TORPEDOES:

ARCS:  GUNS:  TORPEDOES: 

Anti-Submarine weapons always appear in the 'OTHER' weapons group on the ship card, and have the indicator ASW to the left.

These weapons have a special form of attack within the rules, and do not have any details in the right hand side of the area on the sheet.

There are two symbols in use to depict the number of factors available:

- ' $\Delta$ ' is used to show factors for Ahead Throwing Weapons (Hedgehog and Mousetrap). This is always just one.
- ' $\Omega$ ' is used to show Depth Charge factors. These will be one or more.

The information shows the ranges at which they may be used, attack modifiers, and saving throw modifiers. These are the same as those in the tables in the rules.

Structure (S):  S/3:  Flotatid \_\_\_\_\_

Fires: \_\_\_\_\_ (All Crew Tests are per \_\_\_\_\_)

Speed:  MVR:  Steering \_\_\_\_\_

Other Equipment (delete when lost): \_\_\_\_\_

Searchlights \_\_\_\_\_ Smokescreen; test at + 0 \_\_\_\_\_

Special Effects: \_\_\_\_\_

Ships in class: Vanoc, Vanquisher, Velox, Versatile, Vesper, Vidette, Walker, Warwick, Wrestler

Damage Control Teams:  # reduced to 0 then the ship requires a Crew Test to turn MRF: \_\_\_\_\_

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Anti-Submarine Weapons

Ship name: \_\_\_\_\_ Recon values Day: 1 Night: 1  
 Hatsuharu (Type 93 torpedoes) Class DD 1935 to 1937 Ship Cost with Crew Code **A** : 406 (Base Cost: 369) Dataset: 357  
 ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:   
*Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze* Saving Throw Modifier:

Spotting Distance:  Fire Control Value:  Gunnery Modifier:  Crew Quality: \_\_\_\_\_  
 Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS										
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:		
<b>1 - 6</b>	4	5.00	AA	A:T2 O Z:T2 O	Pen:	5	3	2	—	—	2	2	No	
	1	5.00	AA	K:T1 O	Pen:	5	3	2	—	—	2	2	No	

If a weapon 'Crit' lands in this section lose 1 ASW factor for each 2 CV or part thereof. CRF:  MRF:

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
<b>7</b>			ASW Z: DC Ω (10cm)										<input type="text" value="4"/>

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:	#:	Cal:	Arcs:	Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:
<b>8 - 10</b>	6	24.00	[∞] O:TR3 O@O O@O	Mod:	+2	+2	+2	(+2)	(+2)	7	9

ARCS: 

GUNS: 

TORPEDOES: 

Structure (S):  S/3:  Flotation (F):  F/3:

Fires: \_\_\_\_\_ (All Crew Tests are penalised if ship is on fire) Damage Control Teams:

Speed:  #:  When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost) Searchlights \_\_\_\_\_ Changes to CRF or MRF: \_\_\_\_\_

Special Effects: 

- Mixed B
- NOTE: V still loaded

 Remarks: \_\_\_\_\_

Ships in class: Yugure, Ariake \_\_\_\_\_

When a Critical Hit result indicates that the main weapons on the ship are to be affected, a d10 is rolled to determine whether the damage is incurred in the MAIN, OTHER or TORPEDO sections of the form.  
 Some ships may have the remark "n/a" in one of the sections, in cases where there are no weapons that can be affected.  
 There are cases where the OTHER section has no significant weapons, however Incidental Damage can be inflicted that will reduce the factors of ASW, MRF or CRF.  
 Merchant vessels will have the remark "Special" in this area, referring to the fact that they have a special critical damage result in the table.

torpedo mount is lost which is

• Carries Type 93 "Long Lance" torpedo

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.4  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( )) 27/09/2015  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Critical Hit Damage Distribution if the Weapons are hit**

Ship name: **Duguay-Trouin**

Recon values Day: 1 Night: 1

Duguay-Trouin Class CL 1943 to 1945 Ship Cost with Crew Code C : 235 (Base Cost: 235) Dataset: 1615 See below for changes to CRF/MRF

Ship has Search Radar

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:

Size:  Target Type:  MSF:

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier:

Spotting Distance:  Fire Control Value:  Gunnery Modifier:

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS									
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
1 - 7	8	6.10	A:[T2] OO Z:[T2] OO	Pen:	6	4	3	2	—	2	3	No	

If a weapon 'Crit' lands in this section lose 1 MR or CR factor for each 2 CV or part thereof. Lose factors in order: MRF then CRF

CRF:  MRF:

OTHER guns:

LRF:

8 -10

TORPEDOES:

n/a

ARCS: 

Structure (S):

Fires: \_\_\_\_\_

Speed:

Other Equipment (delete when lost):

Searchlights (Optional) Smokescreens

Special Effects: \_\_\_\_\_

If the Critical Hit damage to weapons is determined as affecting those in the OTHER guns section of the sheet this will cause INCIDENTAL damage to the following weapons on a ship:

- ASW factors
- Medium Range factors (MRF)
- Close Range factors (CRF)

The text at the top of the section will show firstly the systems affected, and only shows those on the ship concerned. It then lists the order in which the factors must be lost.

For every 2 CV that has "landed" in the section one factor is lost. As this is INCIDENTAL damage it does not spend any of the CV in the terms of how CV is used in the application of Critical Damage.

In this case, where there are no significant OTHER weapons, after the MRF and/or CRF have been reduced by an appropriate amount, the whole of the value of the CV that would have been applied is treated as "result that CANNOT be applied", as described in the rules.

F/3:

Damage Control Teams:

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Changes to CRF or MRF:

- CRF increased to 6 in 1944
- (Revised ship cost with crew = 239 [Base cost = 239])

Remarks:

None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.



Ship name: **Rodney**

Recon values Day: 1 Night: 0

Nelson Class BB 1942 to 1942 Ship Cost with Crew Code C : 2405 (Base Cost: 2405) Dataset: 3332 See below for changes to CRF/MRF

Ship has Search Radar

ARMOUR: Belt: 11 Deck: 6 CT: 11 Turrets #1: [11] Turrets #2: (2) Casemates: n/a

Size: +2 Target Type: A MSF: +0

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: +0

Crew Quality:

RADAR: Radar for MAIN Guns

DPAARadar: +1 to hit

Spotting Aircraft: 1

Hit Location #				WEAPONS										Radar:							
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Pen:	14	13	11	10	9	7	11	Yes	
1 - 5	9	16.00	A:[T3] OO K:[T3] O																		

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Pen:	6	4	3	1	1	3	2	No	
6 - 10	12	6.00	I:(T2) OOO R:(T2) OOO																		
	6	4.70	AA I:01 OOO R:01 OOO																		

CRF: 8 MRF: 0

LRF: 5

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:

n/a



Structure (S): 90

S/3: 30 Flotation (F): 27

F/3: 12

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 6

Speed: 23 R: 11 Steering #: 11

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete w

Changes to CRF or MRF:

- CRF increased to 9 from May 1942
- (Revised ship cost with crew = 2408 [Base cost = 2408])

Remarks:

None

You can see that this ship has radar support for its 16" main guns (indicated by "Yes" next to that battery) but not for the 6" or 4.7" AA guns.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Nelson**

Recon values Day: 0 Night: 0

Nelson Class BB 1940 to 1942 Ship Cost with Crew Code C : 2373 (Base Cost: 2373) Dataset: 1866 See below for changes to CRF/MRF

Ship has Search Radar

ARMOUR: Belt: 11 Deck: 6 CT: 11 Turrets #1: [11] Turrets #2: (2) Casemates: n/a

Size: +2 Target Type: A MSF: +0

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: +0

Crew Quality:

RADAR: Radar for MAIN Guns Radar for OTHER Guns

Spotting Aircraft:

Hit Location #				WEAPONS										Radar:	
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:				
1 - 5	9	16.00	A:[T3] OO K:[T3] O	Pen:	14	13	11	10	9	7	11	Yes			
If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.															
OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:			
6 - 10	12	6.00	I:(T2) OOO R:(T2) OOO	Pen:	6	4	3	1	1	3	2	Yes			
	6	4.70	AA I:S1 OOO R:S1 OOO	Pen:	4	2	1	—	—	2	2	Yes			

This ship is better equipped and has radar support for all its surface guns, as indicated by "Yes" beside each battery.

NOTE that it is possible that a ship may only have radar support for some of its OTHER guns and not all.

Also, in this case, there is no radar support for AA fire.

TORPEDOES:

n/a

ARCS: 

GUNS: 

TORPEDOES: 

Structure (S): 90 S/3: 30 Flotation (F): 37 F/3: 12

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 6

Speed: 23 MVR: 11 Steering #: 11

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):

Changes to CRF or MRF:

Searchlights (Optional) Smokescreen; test at - 3

- Nelson: CRF increased to 10 in September 1941
- (Revised ship cost with crew = 2377 [Base cost = 2377])

Special Effects:

Remarks:

None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( )) 01/10/2008  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Rodney**

Recon values Day: 1 Night: 0

Nelson Class BB 1942 to 1942 Ship Cost with Crew Code C : 2405 (Base Cost: 2405) Dataset: 3332 See below for changes to CRF/MRF

Ship has Search Radar

ARMOUR: Belt: 11 Deck: 6 CT: 11 Turrets #1: [11] Turrets #2: (2) Casemates: n/a

Size: +2 Target Type: A MSF: +0

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: +0

Crew Quality:

RADAR: Radar for MAIN Guns

DPAARadar: +1 to hit

Spotting Aircraft: 1

Hit Location #				WEAPONS									
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
1 - 5	9	16.00	A:[T3] OO K:[T3] O	Pen:	14	13	11	10	9	7	11	Yes	

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns:				#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
6 - 10	12	6.00	I:(T2) OOO R:(T2) OOO	Pen:	6	4	3	1	1	3	2	No	5			
	6	4.70	AA I:01 OOO R:01 OOO	Pen:	4	2	1	—	—	2	2	No				

CRF: 8 MRF: 0

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:

n/a

ARCS: 

GUNS: 

TORPEDOES: 

Structure (S): 90 S/3: 30 Flotation (F): 37 F/3: 12

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 6

Speed: 23 MVR: 11 Steering #: 11

Other Equipment (delete when lost):

Searchlights (Optional) Smokescreen; test at - 3

Special Effects:

This ship has radar support for its Heavy AA guns, giving a "to hit" bonus of +1 when it uses its LR factors to attack an aircraft. However, the 4.7" gun does NOT get this bonus if attacking a ship, because this ship does not have radar support for OTHER guns. Note in addition that the radar bonus is NOT applied to the Close Range factors (CRF) when used against aircraft.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1 01/10/2008

Ship name: **Radetzky**

Recon values Day: 0 Night: 0

Radetzky Class SD 1910 to 1915 Ship Cost with Crew Code D : 749 (Base Cost: 788) Dataset: 645

ARMOUR: Belt: **7** Deck: **2** CT: **8** Turrets #1: **[8]** Turrets #2: **(7)** Casemates: **{5}**

Size: **+ 0** Target Type: **A** MSF: **- 1**

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: **n/a**

Spotting Distance: **4 RB** Fire Control Value: **5** Gunnery Modifier: **+ 0**

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS											
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:			
1 - 3	4	12.00	A:[T2] O Z:[T2] O	Pen:	12	9	8	6	—	8	8	No	CRF:	0	
If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.														MRF:	1
OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:		
4 - 10	8	9.40	I:(T2) OO R:(T2) OO	Pen:	7	5	4	2	—	4	5	No			
	20	3.90	I:{C1} OOOOO...OOOOO R:{C1} OOOOO...OOOOO	Pen:	4	2	1	—	—	1	1	No			

TORPEDOES:

n/a



Structure (S): 5  
 Fires: \_\_\_\_\_  
 Speed: 2  
 Other Equipment (d): \_\_\_\_\_  
 Searchlights \_\_\_\_\_  
 Special Effects: \_\_\_\_\_

In this case the gun mounts are all armoured in both the MAIN and OTHER Weapons sections.

The MAIN 12" turrets are in [square brackets] and have AC 8 in accordance with the Armour details for Turrets #1 above.

The OTHER 9.4" turrets are in (round brackets) and have an AC of 7 as shown in Turrets #2.

The 3.9" guns in Casemates are shown with {pointed brackets} and have AC 5 as shown under Casemates.

Any hits on weapon mounts weapon mount would have to penetrate the appropriate armour class in order to have any effect at all. If they do not penetrate the armour then this would normally mean that the Critical Damage effect is stopped.

If the armour is penetrated the effects are resolved as follows:

- MAIN gun hits eliminate ONE gun mount, and after this the ship must test for its Magazine.
- OTHER guns are lost by "spending" points of CV as shown below. In this case a 9.4" mount in an armoured turret is eliminated for every 4 points of CV (or part thereof), while the 3.9" in armoured casemates cost 3 points of CV.

If the hit on the weapon was the result of a "Flashover Critical" where a re-roll was required to apply residual unspent CV, then armour penetration is not required.

- When eliminating mounts, you look first at the worst protected, so in this case, if the hit landed in the OTHER guns section, the 3.9" casemate guns would be selected before the 9.4" turrets. However, if they had the same armour class then the 9.4" turrets would be struck first because the larger calibre mounts are lost first. If the ship had a mix of twin and single mounts, then the twin mounts would be lost before single guns.

Damage Control Teams: **4**

to 0 then the ship requires a Crew Test to turn

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Minas Gerais**

Recon values Day: 0 Night: 0

Minas Gerais Class BB 1910 to 1918 Ship Cost with Crew Code D : 1047 (Base Cost: 1102) Dataset: 1221

ARMOUR: Belt: **8** Deck: **3** CT: **9** Turrets #1: **[9]** Turrets #2: **n/a** Casemates: **{8}**

Size: **+ 1** Target Type: **A** MSF: **- 1**

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: **n/a**

Spotting Distance: **5 RB** Fire Control Value: **6** Gunnery Modifier: **+ 0**

Crew Quality:

Spotting Aircraft:

Hit Location #				WEAPON
MAIN guns:	#:	Cal:	Arcs:	Hit#:
1 - 6	12	12.00	A:[T2] OO H:[T2] O S:[T2] O Z:[T2] OO	Pen:
If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.				
OTHER guns:	#:	Cal:	Arcs:	Hit#:
7 - 10	22	4.70	I:{C1} OOOOO...OO +S1 OOOO R:{C1} OOOOO...OO +S1 OOOO	Pen:

TORPEDOES:

n/a



Structure (S): **68** S/3: **23** Flotation (F): **27**  
 Fires: (All Crew Tests are penalised if ship is on fire)  
 Speed: **21** MVR: **8** Steering #: **8**  
 Other Equipment (delete when lost):  
 Searchlights (Optional) Smokescreen; test at - 3  
 Special Effects: **• Poor Underwater Protection**

Here the gun mounts are armoured in the MAIN sections, but in the OTHER section there are both armoured and unarmoured mounts.

The MAIN 12" guns are in [Turrets] and have AC 9 in accordance with the Armour details for Turrets #1 above.

The OTHER 4.7" guns are in {Casemates} with AC 8, and in single Shielded mounts, which are not protected by armour.

Hits on the MAIN weapons are treated as described on the previous sheet.  
 Hits on the OTHER weapons are resolved as follows:

- Shielded mounts (shown as 'S1') are lost first at a cost of 2 CV or part thereof for each mount lost, until there are only casemate mounts left.
- The casemate mounts will only be eliminated if the shell will penetrate the Armour Class (in this case AC 8), and then at a cost of 3CV or part thereof for each mount lost.

As mentioned before, if the hit on the weapon was the result of a "Flashover Critical" where a re-roll was required to apply residual unspent CV, then armour penetration is not required (assuming that the only mounts left that should be hit are behind armour). The mounts are still lost by removing any remaining shielded guns before losing casemate guns.

The tariff is shown at the foot of each Ship Data Sheet.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • (T) (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Armour Protection on Weapons #2**

Ship name: **Caroline**

Recon values Day: 1 Night: 1

Caroline Class CL 1914 to 1916 Ship Cost

ARMOUR: Belt: 4 Deck: 1 CT: 6 Turrets #

Size: -1 Target Type: A MSF: -1 Saving Throw Modifier: n/a

Spotting Distance: 4 RB Fire Control Value: 2

Crew Quality: Spotting Aircraft:

If a critical hit is applied in this section, in addition to applying damage to gun mounts (here the 4" guns) any of the weapons on the ship that use factors will be lost to incidental damage. These are lost in the order:
• ASW
• MRF
• CRF
If we assume that an CV of 3 landed here, this would eliminate both points of MRF.

Hit Location #	WEAPONS											
MAIN guns: #:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
1 - 3	2	6.00	Z:S1 OO	Pen:	6	4	2	1	—	3	3	No

If a weapon 'Crit' lands in this section lose 1 MR factor for each 2 CV or part thereof.

OTHER guns: #:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	CRF:	MRF:	
4 - 8	8	4.00	B:S1 OO I:S1 OOO R:S1 OOO	Pen:	3	2	—	—	—	2	1	No	0	2

Taking the same hit with a CV of 3 as shown above, this would eliminate two shielded gun mounts on the engaged side of the ship (these cost 2 CV per mount or part thereof as shown at the foot of the page).

TORPEDOES: #:	Cal:	Arcs:	Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:	
9 - 10	4	21.00	N:TT2 O P:TT2 O	Mod:	+0	-1	—	—	—	5	6



Weapons are lost on the engaged side of the ship. In this case the engaged side would involve either arc I if on the Port side, or R if Starboard, in both cases arc B, which is to the front of the ship. If raked from the bow, all the 4" guns are at risk because, in addition to arc B, both arcs I and R can be hit. If raked from the stern, arc B could not be hit.

Torpedo tubes are lost in similar fashion. In this case a hit with a CV of 1 or 2 landing here will destroy one mount, and a hit with a CV of more than 2 could destroy two mounts if the shot was raking, which can hit either side of the ship. The nominal cost in CV to lose a torpedo mount is 1 per tube in the mount, as shown at the bottom of the page.

The order in which mounts are lost, as well as the cost in CV for OTHER and TORPEDO mounts is shown at the foot of every sheet.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Loss of OTHER guns and TORPEDOES, Incidental damage

Ship name: Exeter

Exeter Class

ARMOUR: Belt: 4 Deck: Crit. table: Normal; Can be attacked

Spotting Distance: 4 RB

Hit Location #

MAIN guns: #: 6 Cal: 8.00 Arcs: A:[T2] OO Z:[T2] O

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns: #: 4 Cal: 4.00 Arcs: AA I:S1 OO R:S1 OO

TORPEDOES: #: 6 Cal: 21.00 Arcs: N:TT3 O P:TT3 O

ARCS:



Structure (S): 16

Fires:

Speed: 32

Other Equipment (delete when lost):

Searchlights

(Optional) Smokescreen; test at - 2

Special Effects:

S/3:

(All Cr

MVR:

8

Steering #: 8

F/3:

4

Damage Control Teams: 3

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Changes to CRF or MRF:

None

Remarks:

None

This shows that the gun is also an AA gun, and can be fired either at a ship or at an aircraft target. The code here could show the following:
• 'AA' for a basic heavy AA gun
• 'AA+' for an Allied late-war AA gun with VT fuses
• 'IS' for a Japanese gun equipped with Incendiary Shrapnel
• 'RP' for a Japanese Rocket Projector
Examples are shown on following pages.

This ship has an LRF (AA) factor of 3

Grey shaded areas (on the left) and text (on the right) link features applicable to the heavy AA weapons on a ship.

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

If it loses any of these mounts, the LRF will be reduced by 1 for each mount lost. You will see in this case that there are 4 mounts but only 3 LRF. In some cases there is a higher LRF value than the number of mounts, and in such cases, when the last mount is eliminated, the LRF is reduced immediately to 0.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Rodney**

Recon values Day: 1 Night: 0

Nelson Class BB 1942 to 1942 Ship Cost with Crew Code C : 2405 (Base Cost: 2405) Dataset: 3332 See below for changes to CRF/MRF

Ship has Search Radar

ARMOUR: Belt: 11 Deck: 6 CT: 11 Turrets #1: [11] Turrets #2: (2) Casemates: n/a

Size: +2 Target Type: A MSF: +0

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: +0

Crew Quality:

RADAR: Radar for MAIN Guns

DPAARadar: +1 to hit

Spotting Aircraft: 1

Hit Location #

WEAPONS

MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:
1 - 5	9	16.00	A:[T3] OO K:[T3] O	Pen:	14	13	11	10	9	7	11	Yes

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof

OTHER guns:	#:	Cal:	Arcs:	IP:	CV:	Radar:	CRF:	MRF:
6 - 10	12	6.00	L:(T2) OOO R:(T2) OOO	3	2	No	8	0
	6	4.70	AA OOO R:01 OOO	2	2	No	5	

CRF: 8 MRF: 0

Radar: LRF: 5

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

This ship has radar support for its AA guns, giving +1 to hit.  
 This means that each LRF factor will get this 'to hit' bonus.  
 However, the 4.7" gun does NOT get this bonus if attacking a ship, because this ship does not have radar support for OTHER guns.

TORPEDOES:

n/a

ARCS:

GUNS

TORPEDOES



Structure (S): 90

S/3: 30 Flotation (F): 37

F/3: 12

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 6

Speed: 23 MVR: 11 Steering #: 11

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):

Changes to CRF or MRF:

Searchlights (Optional) Smokescreen; test at - 3

- CRF increased to 9 from May 1942
- (Revised ship cost with crew = 2408 [Base cost = 2408])

Special Effects:

Remarks:

None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Heavy AA Guns #2 - Anti-aircraft Radar



Ship name: **Nelson**

Recon values Day: 0 Night: 0

Nelson Class BB 1943 to 1945 Ship Cost with Crew Code **B** : 2623 (Base Cost: 2498) Dataset: 1894 See below for changes to CRF/MRF **Ship has Search Radar**

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:

*Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze* Saving Throw Modifier:

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: + 0 Crew Quality: \_\_\_\_\_

RADAR: Radar for MAIN Guns Radar for OTHER Guns **DPAAR Radar: +1 to hit** Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS											
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:			
1 - 5	9	16.00	A:[T3] OO K:[T3] O	Pen:	14	13	11	10	9	7	11	Yes			

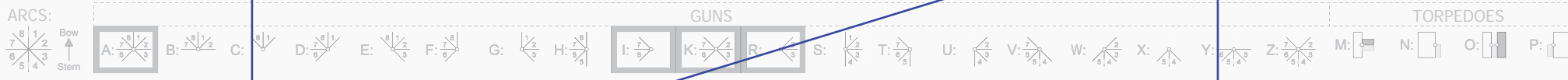
If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	CRF:	MRF:
6 - 10	12	6.00	I:(T2) OOO R:(T2) OOO	Pen:	5	5	5	5	5	5	5	Yes	10	0
	6	4.70	<b>AA+</b> I:S1 OOO R:S1 OOO	Pen:	4	2	1	—	—	2	2	Yes	5	0

**Aircraft save at -2**

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES: n/a



The code 'AA+' indicates that this weapon has VT fuses for its heavy AA guns, which gives a target aircraft a modifier of -2 when its rolls its saving throw. NOTE that you may find ships which have VT fuses but do NOT have radar support for their AA guns. In this case, the 4.7" guns also have radar support when used against surface vessels.

Structure (S): \_\_\_\_\_ Rotation (F):  F/3:

Fires: \_\_\_\_\_ (penalised if ship is on fire)

Speed: \_\_\_\_\_ Steering #:  When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment Searchlights (Optional) Smokescreen; test at - 3

Changes to CRF or MRF:

- CRF increased 13 in January 1945
- (Revised ship cost with crew = 2631 [Base cost = 2506])

Remarks: None

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)

• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))

Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Dataset v.1 01/10/2008

**Heavy AA Guns #3 - VT Fuses**

Ship name: **Ryuhō**

From June 1944; IS option

Recon values Day: 3 Night: 2

Ryuhō Class CV 1944 to 1944 Ship Cost with Crew Code D : 547 (Base Cost: 576) Dataset: 3701

Ship has Search Radar

ARMOUR: Belt: 0 Deck: 0 CT: 0 Turrets #1: n/a Turrets #2: n/a Casemates: n/a

Size: +0 Target Type: C% MSF: +0

Crit. table: Carrier; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze

Saving Throw Modifier: +0

Spotting Distance: 4 RB Fire Control Value: 2 Gunnery Modifier: +1

Many Japanese guns (up to 18.1" !) were equipped with an Incendiary Shrapnel round. These may appear in both MAIN and/or OTHER weapon sections on a wide variety of ships. Here they appear in the MAIN section. An Incendiary Shrapnel (IS) weapon can be used once in a game for each Ø symbol in the mounts area. Each symbol is crossed out when used and provides 3 factors (dice). It can only be fired into the arc concerned (here Port (I) and Starboard (R)). If an AA mount is lost, then the IS attack is lost with it. These mounts are (separately) also providing LRF factors. In this case there are 4 mounts and 6 factors. When the 4th mount is lost to damage, ALL remaining LRF is lost at once. You cannot use both the Incendiary Shrapnel and also fire the guns as AA weapons with their LRF in the same turn.

Hit Location #				WEAPONS				
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	
1 - 4	8	5.00	AA	I:S2 OØOØ R:S2 OØOØ	Pen:	4	2	1
	4	5.00	IS	3 AA factors are provided by each mount above, fired into its arc. These can be used once only. Cross off 'Ø' boxes above when used. Special AA rules apply if target is hit.				




If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
5 - 10	6	4.70	RP	Each mount box provides 3 AA factors, against target stands in contact. Cross off boxes when used or lost to damage. Special AA rules apply if target is hit. ...OOOOO...O									6

LRF loses 1 factor for each MAIN or OTHER gun lost or 'AA+' that is lost. When all are lost the LRF is reduced to 0.

TORPEDOES: n/a

The Rocket Projector (RP) weapon shown under OTHER guns provides 3 factors (dice) for each mount. These can be used as the player wishes against an aircraft stand or stands in contact with the ship. When used one of the mount symbols is crossed out.

ARCS:  GUNS:  TORPEDOES: 

CV Handling (H):	8	CV RRR limit:	6	FD Catapults:	0	Aircraft Capacity at start:	31		
Structure (S):	13	S/3:	4	Flotation (F):	13	F/3:	4		
Fires:		(All Crew Tests are penalised if ship is on fire)				Damage Control Teams:		4	
Speed:	27	MVR:	10	Steering #:	10	When Steering # reduced to 0 then the ship requires a Crew Test to turn			
Other Equipment	(delete when lost):							Changes to CRF or MRF:	None
Searchlights	(Optional) Smokescreen; test at - 3							Remarks:	<ul style="list-style-type: none"> <li>From June 1944</li> <li>IS option</li> </ul>
Special Effects:	• Poor Underwater Protection • Poor Carrier Safety								

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown) Dataset v.1 08/11/2008  
 • O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
 Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

**Heavy AA Guns #4 - Japanese Special AA weapons**

Ship name: **Victorious**

Recon values Day: 4 Night: 2

Illustrious Class CV 1944 to 1945 Ship Cost with Crew Code **B** : 1286 (Base Cost: 1225) Dataset: 3451 See below for changes to CRF/MRF **Ship has Search Radar**

ARMOUR: Belt:  Deck:  CT:  Turrets #1:  Turrets #2:  Casemates:  Size:  Target Type:  MSF:

*Crit. table: Carrier; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze* Saving Throw Modifier:

Spotting Distance:  Fire Control Value:  Gunnery Modifier:  Crew Quality: \_\_\_\_\_

RADAR:  DPAA Radar:  Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS										
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:		
1 - 6	16	4.50	AA+ I:T2 OOOO R:T2 OOOO	Pen:	4	3	2	1	—	3	2	Yes		



If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

OTHER guns:  CRF:  MRF:

LRF:  Aircraft save at -2

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:

ARCS:  TORPEDOES: 

Aircraft carriers have a number of game functions that are only available to them. These appear here on the Ship Data Card, and the area is blank on non-carriers.

CV Handling (H):  CV RRR limit:  FD Catapults:  Aircraft Capacity at start:

Structure (S):  S/3:  Flotation (F):  F/3:  Damage Control Teams:

Fires: \_\_\_\_\_ (All Crew Tests are penalised if ship is on fire)

Speed:  Steering #:  Crew Test to turn \_\_\_\_\_

The value for Carrier Handling (H) is a limit on the number of handling actions that can be carried out by a carrier in one game turn. Some actions use more than 1 point of H.

Many (but not all) carriers have one or more catapults on the Flight Deck. These provide a modifier when launching aircraft stands during the game.

As mentioned on another sheet, there are a number of Special Effects which are applied to various types of ship in the game. This one is only available on some carriers.

The RRR limit shows the maximum number of points of H that can be "spent" in the hangar in one game turn in order to:

- Refuel a stand (1H)
- Re-arm a stand (1H)
- Replace lost aircraft (1 or more H)

Where we have found the information about the typical or designed complement of aircraft we show it here.

The aircraft capacity is the designed capacity of the carrier and shows the maximum number of aircraft that can be on the carrier at the start of the game.

Special Effects: **• Armoured Flight Deck**

Remarks: **• Designed complement 30 torpedo bombers and 6 fighters/bombers.**

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)

• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ) )

Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Dataset v.1 01/10/2008

Ship name: Yamato

Recon values Day: 3 Night: 0

Yamato Class BB 1938 to 1942 Ship Cost with Crew Code A : 5889 (Base Cost: 5354) Dataset: 502  
ARMOUR: Belt: 11 Deck: 8 CT: 13 Turrets #1: [15] Turrets #2: (3) Casemates: n/a • 5" turrets: AC 0  
Crit. table: Normal; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Size: +3 Target Type: A MSF: +0  
Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 10 Gunnery Modifier: +1

Crew Quality: \_\_\_\_\_  
Spotting Aircraft: 3

Hit Location #	WEAPONS									
MAIN guns: #:	Cal:	Arcs:	IP:	CV:	Radar:	LI:	IV:	V:	VI:	VII:
1 - 6	9	18.10	A:[T3] OO Z:[T3] O	12	15	18	19	15	No	

Ships have a Structural value for the hull (S), which is reduced by the damage inflicted by the IP when they are hit. It may also be reduced by the effects of Critical Damage. Use this field to mark the progressive reduction in the value of S due to damage.

All ships have this common data on their Record Sheets  
Similarly ships have a Flotation value for the hull (F), which is reduced by the damage inflicted by the IP from Torpedo hits, collisions and going aground. F is also reduced when the ship's structure (S) has been reduced to 0. It may also be damaged by the effects of Critical Damage. Use this field to mark the progressive reduction in the value of F due to damage.

This field shows the number of Damage Control teams on your ship. Use the field to mark the reduction in teams if they are affected by Critical Damage.

If the Structural value goes to 1/3rd or below, a Morale Check is required. This field shows this threshold. A further Morale Check is required if the value of S reaches 0.

If the Flotation value goes to 1/3rd or below, a Morale Check is required. This field shows this threshold. A further Morale Check is required if the value of F reaches 0. In addition, when the Flotation value reaches 0 a WRECK test is also required.

Structure (S): 141 S/3: 47 Flotation (F): 55 F/3: 18  
Fires: \_\_\_\_\_ (All Crew Tests are penalised if ship is on fire)  
Speed: 27 MVR: 13 Steering #: 13  
Damage Control Teams: 8  
When Steering # reduced to 0 then the ship requires a Crew Test to turn

This area is used to record the number of fires on the ship. The number can go up and down as you deal with them using Damage Control Teams. You will find that in the end there are never enough Damage Control teams.

This is where the current speed of the ship is shown. This can be reduced by damage. Use this field to record the progressive reduction in speed. Note that a ship is regarded as moving Slowly if it moves at a speed up to and including its MVR rating during the turn, and must be marked accordingly.

This field shows the Manoeuvre Rating (MVR) of the ship. A ship must move forwards this distance after making a turn.

Progressive damage to the steering is recorded here. The value starts equal to a ship's MVR. Ships take steering damage as part of the Critical Damage effects. When this value reaches 0, the ship is subject to restrictions to its manoeuvre, described in the rules, and summarised on the right.

All datasets have a version number and creation date. These are shown here. A number greater than 1 means that some part of the dataset has been modified since its initial creation. For those interested, a copy of the change log is available from the publishers on request.

Gun mounts are lost starting with the mounts with least protection in the order of priority shown below, followed by the largest calibre, then by highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.)  
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Casemate) 3CV • T (Unarmoured Turret) 4CV • {C} (Armoured Casemate)\* 3CV • {T} (Armoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( ))  
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **Shinano**

Recon values Day: 5 Night: 2

Shinano Class CV 1944 to 1944 Ship Cost with Crew Code D : 1055 (Base Cost: 1110) Dataset: 505

ARMOUR: Belt: 7 Deck: 4 CT: 0 Turrets #1: n/a Turrets #2: n/a Casemates: n/a

Size: +3 Target Type: C MSF: +0

Crit. table: Carrier; Can be attacked by: Guns, Torpedoes, Bombs, Standoff Weapons, Rockets, Kamikaze

Saving Throw Modifier: n/a

Spotting Distance: 5 RB Fire Control Value: 7 Gunnery Modifier: +1

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location #				WEAPONS									
MAIN guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	
1 - 4	16	5.00	AA I:S2 OOOO R:S2 OOOO	Pen:	4	2	1	—	—	2	2	No	

If a weapon 'Crit' lands in this section lose 1 CR factor for each 2 CV or part thereof.

CRF: 9 MRF: 0

OTHER guns:	#:	Cal:	Arcs:	Hit#:	I:6	II:9	III:12	IV:15	V:18	IP:	CV:	Radar:	LRF:
5 - 10	12	4.70	RP Each mount box provides 3 AA factors, against target stands in contact. Cross off boxes when used or lost to damage. Special AA rules apply. ...OOOOO...OOOO										9

LRF loses 1 factor for each MAIN or OTHER gun mount marked 'AA' or 'AA+' that is lost. When all such mounts are lost the LRF is reduced to 0.

TORPEDOES:

n/a

ARCS:



**SPECIAL EFFECTS**  
 These appear in the rules and many are mentioned in this document. Those marked \* below are for information in the game.

- Armoured Flight Deck
- Double Deck Turrets
- Dual Torpedo Mounts
- Hazard when carrying Japanese Long Lance torpedoes
- Hits on Merchant ships
- Limitations on recovery of aircraft with Japanese Hybrid carriers
- Mixed batteries
- Poor Carrier Safety
- Poor Underwater Protection
- \*Restricted gun arcs (this explains the absence of stern arcs on some British destroyers)
- \*Short Range Torpedoes (this is to remind players that the torpedo has a range of only 10cm)



CV Handling (H): 12

Aircraft Capacity at start: 47

Structure (S): 85

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 8

Speed: 27 MVR: 13 Steering #: 13

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):

Changes to CRF or MRF:

Searchlights (Optional) Smokescreen; test at - 3

None

Special Effects: • Poor Underwater Protection • Poor Carrier Safety • Armoured Flight Deck

Remarks:

None

Sunk in 1944

This is a common trait on many ships. Ships have Poor Underwater Protection for the following reasons:

- due to a design flaw (as here)
- because of date they were built (before better hull sub-division was introduced)
- because they are based on a merchant hull.

Vessels with Poor Underwater Protection that are subject to a test to see if they suffer Underwater Critical Damage re-roll such tests if they "fail". It also causes a negative modifier in wreck tests (for example).

This is a very common trait on Japanese carriers, and present on some others. It is caused by a lack of proper safety measures to prevent fuel explosions. This also acts as another negative modifier for some tests that a carrier may have to take in the game.

Special Effects

Ship name: **Vettor Pisani**

Recon values Day: 0 Night: 0

Vettor Pisani Class: MC 1900 to 1945 Ship Cost with Crew Code E : 32 (Base Cost: 35) Dataset: 3899

ARMOUR: Belt: 0 Deck: 0 CT: 0 Turrets #1: n/a Turrets #2: n/a Casemates: n/a

Size: +0 Target Type: A‰ MSF: n/a

Crit. table: Normal; Can be attacked by: Guns, Torpedoes, MRF (s/t applies), Bombs, Standoff Weapons, Rockets, A/s Guns, Kamikaze

Saving Throw Modifier: +0

Spotting Distance: 4 RB Fire Control Value: 0 Gunnery Modifier: n/a

Crew Quality: \_\_\_\_\_

Spotting Aircraft: \_\_\_\_\_

Hit Location # WEAPONS

MAIN guns:

Special

OTHER guns:

Special

CRF: 0 MRF: 0

LRF: 0

TORPEDOES:

Special

We have mentioned elsewhere the hit location system for weapon hits. On a merchant ship, there is a special section on the Structural Critical Damage table, which shows what happens if you the cargo area on the ship.

ARCS:



GUNS



TORPEDOES

Structure (S): 11

S/3: 4 Flotation (F): 11

F/3: 4

Fires: (All Crew Tests are penalised if ship is on fire)

Damage Control Teams: 0

Speed: 14 MVR: 8 Steering #: 8

When Steering # reduced to 0 then the ship requires a Crew Test to turn

Other Equipment (delete when lost):

Changes to CRF or MRF:

None

Special Effects: • Poor Underwater Protection • Vessel takes 2xIP damage and rolls for one additional Crit. when hit

Remarks:

None

All merchant ships suffer from Poor Underwater Protection, which has been mentioned on an earlier sheet. More damage will be inflicted on merchant ships if hit, and they are more vulnerable to critical damage. They always roll for one additional Critical Damage Effect over and above the number otherwise required for the hit inflicted. This would mean that every gun hit requires one additional roll (the number of rolls varies according to the number of guns fired), and each torpedo hit would cause two rolls. As they also have poor underwater protection, if an Underwater Critical Damage effect has to be rolled for, each such test is re-rolled if it "failed". Armed Merchant Cruisers also suffer from these effects as they converted from non-naval vessels.

Gun mounts are lost starting with the mounts with the highest number of guns in the mount. (OTHER guns are eliminated at the CV cost shown.) Dataset v.1  
• O (Open) 1CV • S (Shielded) 2CV • C (Unarmoured Turret)\* 4CV (\* If armour is penetrated in case of mount marked { } or ( )) 13/01/2013  
Torpedoes are lost starting with the mount with the largest calibre (if there is a choice) followed by the mount with the greatest number of tubes. The cost in CV is equal to the number of tubes.

Ship name: **LEAVE THIS BLANK**

Armed for close attack

Recon values Day: 0 Night: 0

MAS501 Class MTB 1937 to 1941 Ship Cost with Crew Code D : 62.3 (Base Cost: 65.6) Dataset: 1435

Crit. table: Not used; Can be attacked by: Guns 3.9in. to 6.1in. , CRF, MRF, Rockets, A/s Guns, Strafing - (s/t applies in all cases)

Size:  Target Type:  Saving Throw Modifier:

Spotting Distance:  Speed:  MVR:

Crew Quality: \_\_\_\_\_

Special Effects: • Short range torpedoes

Remarks: • Armed for close attack

WEAPONS

CRF:  MRF:  Changes to CRF or MRF: None

TORPEDOES: #: 2 Cal: 17.70 Arcs: M:TF1 OO Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: Mod: +2\* - - - - 4 5

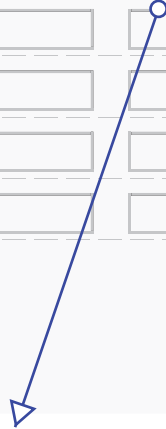
ARCS:  TORPEDOES:  M:  N:  O:  P:

FORMATIONS

Squadron #: Stand #: # of craft in stand: Torpedoes: Cross off as used: Notes:

Squadron #:	Stand #:	# of craft in stand:	Torpedoes: Cross off as used:	Notes:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	

In the case of ships that are categorised as Type "X" the card is laid out differently. The header row shows the same data as for a normal vessel. The difference is that the Ship Name will usually be blank. It is not necessary to fill in the name of a ship, because in play these types of vessel are operated in multiple as part of a "stand", which will be referred to later. The data sheet still shows the names of all the ships in the class, in the same way as destroyers etc.



Ships in class: MAS501 to 525

When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3. The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled. When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.

Ship name: *Armed for close attack* Recon values Day: 0 Night: 0  
 MAS501 Class MTB 1937 to 1941 Ship Cost with Crew Code D : 62.3 (Base Cost: 65.6) Dataset: 1435

Crit. table: Not used; Can be attacked by: Guns 3.9in. to 6.1in. , CRF, MRF, Rockets, A/s Guns, Strafing - (s/t applies in all cases)

Size:  Target Type:  Saving Throw Modifier:

Spotting Dist:  Speed:  MVR:

Special Effects: • Short range torpedoes

Remarks: • Armed for close attack

WEAPONS

CRF:  MRF:  Changes to CRF or MRF: None

TORPEDOES: #: Cal: Arcs: Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: Mod: +2\* - - - - 4 5

ARCS:  TORPEDOES: 

FORMATIONS

Squadron #: Stand #: # of craft in stand: Torpedoes: Cross off as used

Squadron #	Stand #	# of craft in stand	Torpedoes
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO

This field shows, firstly, that Critical hit tables are not used when attacking small vessels. This is followed by a list of the attack types that can be used against the vessel type concerned. Type "X" vessels can be attacked by what we term 'normal' guns up to 6.1" calibre, and these are going to destroy most targets if they hit. Bear in mind that not all attacks are going to be appropriate in some eras.

This is the Target Size of the ship, which is used when the ship is being attacked. It is also used as a modifier for some tests.

The Target Type of the ship is used to define which weapons may be able to attack it  
 • X is a type used to classify ships of small size such as early predreadnought torpedo craft, and Motor Torpedo Boats as found in the Second World War. All ships of Type "X" use this form of Record Sheet.

All ships of Type "X" have a Saving Throw Modifier. As shown above on the left they can be attacked by a specific range of weapons, and the saving throw applies in all cases. A saving throw is made for each hit on a stand. Each failed test on a stand means that one craft is eliminated.

Ships in class: MAS501 to 525

When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3.

The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled.

When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.



Ship name: *Armed for close attack* Recon values Day: 0 Night: 0  
 MAS501 Class MTB 1937 to 1941 Ship Cost with Crew Code D : 62.3 (Base Cost: 65.6) Dataset: 1435  
 Crit. table: Not used; Can be attacked by: Guns 3.9in. to 6.1in. , CRF, MRF, Rockets, A/s Guns, Strafing - (s/t applies in all cases) Size:  Target Type:  Saving Throw Modifier:

Spotting Distance:  Speed:  MVR:  Crew Quality:   
 Special Effects: • Short range torpedoes Remarks: • Armed for close attack

**WEAPONS**

CRF:  MRF:  Changes to CRF or MRF: None

TORPEDOES: #: 2 Cal: 17.70 Arcs: M:TF1 OO Hit#: I:14 II:17 III:19 IV:20 V:2 IP: CV: 4 5 ARCS: TORPEDOES

**FORM**

Squadron #:	Stand:	Torpedoes: Cross off as used	Notes:
<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	M:TF1 OO	

The speed of the craft is shown here. The speed of Type "X" vessels is not reduced due to the effects of Critical Damage.

The Manoeuvre Rating (MVR) of the craft is shown here. In addition, a ship is regarded as moving Slowly if it moves no faster than this figure.

On Type "X" vessels there are a very limited number of Special effects that can apply. In this case this is a reminder that the torpedoes only have a range of 10cm.

This is the Spotting Distance (SD) from the ship, based on its size. On small ships this will tend to be lower than other ships.

The Crew Quality of a ship is determined at the start of a game, and will range between +2 and -2, depending on date and nationality. As Type "X" vessels do not suffer from Critical Hits, the value will not be reduced during a game.

Some vessels carry a remark which is usually something specifically linked to the ship type concerned. Remarks are for information.

Ships in class: MAS501 to 525

When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3. The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled. When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.

**Spotting Distance, Speed, Manoeuvre, Special Effects, Crew Quality and Remarks on Vessels of Type "X"**

Ship name: \_\_\_\_\_ Recon values Day: 0 Night: 0  
 Mackenzie Class TB2 1898 to 1908 Ship Cost with Crew Code B : 16.7 (Base Cost: 15.9) Dataset: 1322  
*Crit. table: Not used; Can be attacked by: Guns 3.9in. to 6.1in. , CRF, MRF, Rockets, A/s Guns, Strafing - (s/t applies in all cases)* Size:  Target Type:  Saving Throw Modifier:   
 Spotting Distance:  Speed:  MVR:  Crew Quality: \_\_\_\_\_  
 Special Effects: • Short range torpedoes Remarks: None

*Due to low volume of fire a Crew Test is required to use the CR factor below*

**WEAPONS**

CRF:  MRF:  Changes to CRF or MRF: None

TORPEDOES:	#:	Cal:	Arcs:	Hit#:	I:14	II:17	III:19	IV:20	V:21	IP:	CV:	ARCS:	TORPEDOES			
	2	18.00	0:TT1 OO	Mod:	+0*	-	-	-	-	2	2		M:	N:	O:	P:

**FORMATIONS**

Squadron #:	Stand #:	# of craft in stand:	Torpedoes: Cross off as used	Notes:
<input type="text"/>	<input type="text"/>	<input type="text"/>	0:TT1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	0:TT1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	0:TT1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	0:TT1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	0:TT1 OO	

Small Craft of Type "X" are generally armed with a few small calibre weapons, which may provide 1 or 2 Close Range or Medium Range Factors (CRF or MRF). We have chosen this vessel to illustrate a further aspect of small craft, which is that a few were armed with very poor guns, with a low rate of fire, providing a CR Factor of less than 1 (but more than 0). This means that a Stand of such vessels has to pass a Crew Test in order to make use of its CRF of 1. In such cases the italicised remark appears above the factors.

Some vessels may have changes to their armament in the time period covered by the data sheet. If so, this would be shown here.

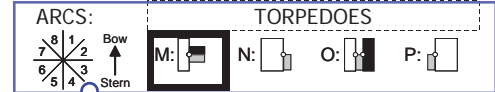
When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3. The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled. When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.

Ship name: *Armed for close attack* Recon values Day: 0 Night: 0  
 MAS501 Class MTB 1937 to 1941 Ship Cost with Crew Code **D** : 62.3 (Base Cost: 65.6) Dataset: 1435  
*Crit. table: Not used; Can be attacked by: Guns 3.9in. to 6.1in. , CRF, MRF, Rockets, A/s Guns, Strafing - (s/t applies in all cases)* Size:  Target Type:  Saving Throw Modifier:   
 Spotting Distance:  Speed:  MVR:  Crew Quality: \_\_\_\_\_  
 Special Effects: • Short range torpedoes Remarks: • Armed for close attack

WEAPONS

CRF:  MRF:  Changes to CRF or MRF: None

TORPEDOES: #: 2 Cal: 17.70 Arcs: M:TF1 OO Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: Mod: +2\* - - - - 4 5



FORMATIONS

Squadron #:	Stand #:	# of craft in stand:	Torpedoes: Cross off as used	Notes:
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>		
<input type="text"/>	<input type="text"/>	<input type="text"/>		

Craft of Type "X" nearly all have a main armament of TORPEDOES. Their annotation is the same as for other ships, and has been explained on an earlier sheet in this document.  
 On the left appear the number and calibre of the torpedo, followed by the arc into which it can be fired and the mount symbol we described elsewhere.  
 To the right are the "To Hit" scores, above a "To Hit" Modifier, which indicates that the weapon can be fired to the range shown above. In this case, the symbol '\*', which appears by the '+2,' indicates the use of a short range torpedo, which only has a range of 10cm in the game. Finally, there are the IP and CV for the weapon.

On the Type "X" sheets the arc of fire for the weapons is shown here. The use of arcs of fire is explained in detail in the rules. The record sheets show all the arcs of fire available for guns (which are not used in this case), and torpedoes (which are). The arcs of fire which are applicable to the vessel have a heavy black outline. In this case Arc 'M' is that out of the front of the stand of MTBs, which have fixed tubes ('TF').

Ships in class: MAS501 to 525

When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3. The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled. When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.

Ship name: *Armed for close attack*

62.3 (Base Cost: 65)

62.3 (Base Cost: 65) Strafing - (s/t applies in

Recon values Day: 0 Night: 0

- 4 Target Type:  Saving Throw Modifier: - 1



Crew Quality: \_\_\_\_\_

Remarks: • Armed for close attack

WEAPONS

TORPEDOES: #: Cal: Arcs: Hit#: I:14 II:17 III:19 IV:20 V:21 IP: CV: ARCS: TORPEDOES

2 17.70 M:TF1 OO Mod: +2\* — — — — 4 5

ARC:  TORPEDOES: 

Squadron #:	Stand #:	# of craft in stand:	Torpedoes: Cross off as used	Notes:
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	
<input type="text"/>	<input type="text"/>	<input type="text"/>	M:TF1 OO	

Ships in class: MAS501 to 525

When a stand of Type "X" vessels makes an attack with torpedoes, the number of tubes being fired is recorded here by crossing out the mount symbol.

When an attack is made, all surviving craft are regarded as firing. As shown on the footer, the number of surviving craft provides a base number, which is then multiplied by the number of tubes being fired to give you the # of attack dice that are rolled.

This method of determining the number of attack dice is also used when firing CRF or MRF.

When a stand of Type "X" vessels is hit, a saving throw must be rolled (per hit). The saving throw is modified by using the modifier shown on the top right of the sheet. It is also modified by factors linked to the type of attack. Small weapons will give a positive modifier, while larger calibre guns up to 6.1" will be more hazardous to small vessels and the saving throw incurs a penalty. Rockets, Anti-Shipping Guns and Strafing all provide similar modifiers.

You may wish to make some notes about your units; you can write them here.

Small ships of Type "X" operate in formations with a number of stands, each containing a number of identical vessels. The record sheet is designed so that you can operate up to 6 squadrons of identical vessels on each sheet.

Each stand you are using in the game can be either a simple card counter, or a small stand with a single model on it. In either case, the front of the stand should be marked, and it should carry a unique number, which you enter here.

In this box you should enter the number of vessels that are operating in the stand concerned. Use the box to record the progressive reduction in numbers as the craft are eliminated.

When attacking, small ships of this type ("X") determine a base number depending on the surviving number craft in the stand: 1 or 2 gives a base of 1, 3 to 6 a base of 2, 7 to 12 a base of 3. The CR or MR factors, or # of torpedo tubes being fired is multiplied by the base number, to give the number of attack dice rolled. When attacked, these vessels must roll a saving throw for each hit. A base modifier for the ship itself (shown above) is further modified by the attack type (please refer to the rules here). When a saving throw is failed one craft is lost.

Combat effects when using Vessels of Type "X"