

SAVO ISLAND

2345 9 August 1942

Background: On 7 August 1942, the Allies seized the initiative in the Pacific by landing on Guadalcanal Island. Their objective was a partially built airfield begun by the Japanese on the island's north coast. The first Japanese response was a series of air attacks on the invasion force, and the second was a surface strike by all available forces at the Japanese base at Rabaul. These came boiling down the "Slot" -- the passage down the Solomon Islands from Rabaul to Guadalcanal -- on the evening of 9 August. The Allied surface escort forces, exhausted after three straight days of hard combat, patrolled between the onrushing Japanese and the vulnerable transports of the invasion force.

Forces:

RAN and USN: (Rear Admiral V. A. C. Crutchley, RN)

North Force: Wilson (Benham)
 Helm (Bagley)
 Vincennes (New Orleans - flag)
 Astoria (New Orleans)
 Quincy (New Orleans)

South Force: Bagley (Bagley)
 Patterson (Bagley)
 Canberra (Canberra - flag)
 Chicago (Northampton)

Pickets Blue (Bagley)
 R. Talbot (Bagley)

IJN: (Vice Admiral Mikawa Gunichi)

Division 1: Chokai (Takao - flag)
 Aoba (Aoba)
 Kinugasa (Aoba)
 Furutaka (Furutaka)
 Kako (Furutaka)

Division 2: Tenryu (Tenryu - flag)
 Yubari (Yubari)
 Yunagi (Kamikaze)

Set-up:

N^

The playing surface is bounded by the coast of Guadalcanal on the south. The coast begins 60 inches from the north edge. It runs from the east edge west for 20 inches, then northwest at a 45 degree angle for 40 inches, then southwest for 20 inches, then due south. Savo Island is a 4 inch circle centered 25 inches from the north edge and 30 inches from the east edge. For playing surfaces less than 60 inches wide, include only that portion of Guadalcanal that would project onto the southern part of the playing surface.

The American friendly edge is the east edge. The Japanese friendly edge is the west edge.

The Northern Force is patrolling around a box in a clockwise direction, steaming on courses of 30, 120, 210 and 300 degrees successively. Each leg of the box is 10 inches long. The eastern corner of the box is 2 inches from the west edge and 24 inches from the north edge. The ships are steaming at 1.50 inches/turn, with the cruisers in line and a destroyer immediately ahead and 1 inch to each side of the lead cruiser. The Wilson is on the right side of the formation and the Helm is on the left. The destroyers are assumed to speed or slow as necessary to keep their stations as the formation turns.

The Southern Force is steaming on a patrol line with its northeastern terminus 19 inches from the east edge and 40 inches from the north edge. The line is 9 inches long, with the courses followed being 120 and 300 degrees. The ships are steaming at 1.50 inches/turn, with the cruisers in line and a destroyer immediately ahead and 3 inches to each side of the lead cruiser. The Bagley is on the south side of the formation and the Patterson is on the north. When the formation reaches the end of its patrol line, each destroyer and the cruiser line turn right 180 degrees and steams on the opposite course. The destroyers will turn first, so as to maintain their position in front of the cruisers.

The two picket destroyers are also steaming on patrol lines. The Ralph Talbot's line is 12 inches long. Its east end is 17 inches from the east edge and 4 inches from the north edge. The courses followed are 60 and 240 degrees. The Blue's patrol line is also 12 inches long. Its eastern end is 43 inches from the east edge and 21 inches from the north edge. Its courses are 30 and 210 degrees. Both picket destroyers are steaming at 1.50 inches/turn.

For ease of play, the Allied player should mark out the courses and turning points for these ships. None of these ships are subject to independent movement unless they deviate from their assigned courses and are not otherwise in a normal formation. The Allied player can start each ship or formation at any desired point in its patrol route.

The Japanese divisions are steaming in order in line. Chokai begins 54 inches from the east edge and 15 inches from the north edge. The line is on a course of 150 degrees.

Victory Conditions: Victory is decided on points:

- a) 2 per cruiser sunk;
- b) 1 per Japanese cruiser left dead in the water;
- c) 1 per destroyer sunk;
- d) 1 per Japanese cruiser exited off the east edge, returned on the east edge 4 turns later and exited off the west edge.

Special Rules.

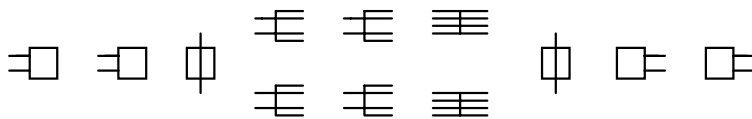
1. The Japanese may move freely from the first turn of the scenario.
2. The Japanese are alert.
3. The Blue and R. Talbot have SC radar and Mk 4 fire control radar.
4. Because their crews have been in combat continuously for three days, the Allied ships are subject to a **-2** sighting modifier.
5. Neither the Northern and Southern Forces may maneuver outside of their patrol lines, illuminate or fire weapons until (a) the force is fired on by the Japanese or (b) Japanese have fired guns in a previous turn and the force rolls a **1** on a six-sided die in the movement plotting phase.
6. The picket destroyers are subject to independent movement if they leave their patrol lines.
7. The visual sighting base is rerolled at the start of each turn on **1D6** and the visibility state is **-5** for the Japanese and **-10** for the Allies -- an overcast night with scattered rain squalls, and the Allied crews exhausted from continuous combat.
8. Optional: On a 2D6 roll of **2** the Australia (Australia class) steams in from the east edge on a course of 270 degrees, 50 inches from the north edge.

Outcome: The Japanese swept into Ironbottom Sound engaging first the south force, then the north force. The Allies were defeated in detail, losing Canberra, Quincy, Vincennes and Astoria. Although the Japanese had suffered negligible damage, its disorganization and the coming dawn persuaded Mikawa to retire without closing on the Allied transports.

Australia

<u>Navy Class</u>	Royal Australian Navy Heavy cruiser	<u>Date</u>	1942	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery:	8 inch guns in 4 twin turrets	29 inches	Fore and aft	
Secondary Battery:	4 inch guns in 4 twin mounts	16 inches	Aft	
Torpedoes:	21 inch torpedoes in 2 quadruple mounts 2 special hits	13 inches at 4.25" 16 inches at 2.75"	Port and starboard	
<u>Speed</u>	4.00"	8 boilers	4 engines	
<u>Flotation</u>	Total: 66	DIW: 33	Sinking: 44	
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2 24": ±3

Armament Arrangement

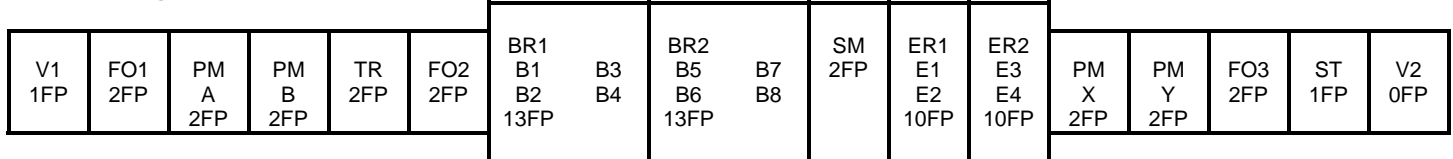


Notes

Hits

	Officers Berths	11-12	Void
	Fuel Oil 1	13-14	Void
	Main Magazine A	15-21	Main A
	Main Magazine B	22-24	Main B
	Transmitting	25	Bridge
	Fuel Oil 2	26	Bridge, Forward Main Director
	Boiler Room 1	31	Bridge
	Boiler Room 1	32	Search Radar, AAMGs
	Boiler Room 1	33	Funnel, Secondary 1 or 2
	Boiler Room 2	34	Torpedo 1 or 2
	Boiler Room 2	35	Funnel, Torpedo 1 or 2
	Boiler Room 2	36	Funnel, Secondary 3 or 4
	Secondary Magazine	41	Funnel
	Engine Room 1	42-43	Catapult, Aircraft
	Engine Room 1	44	Aircraft
	Engine Room 2	45	Secondary Director
	Engine Room 2	46	Searchlight A or B
	Engine Room 2	51	Aft Main Director
	Engine Room 2	52	Void
	Main Magazine X	53-55	Main X
	Main Magazine Y	56-62	Main Y
	Fuel Oil 3, Propshaft 1 or 2	63-64	Void
	Steering, Propshaft 3 or 4	65	Steering
	Void	66	Void

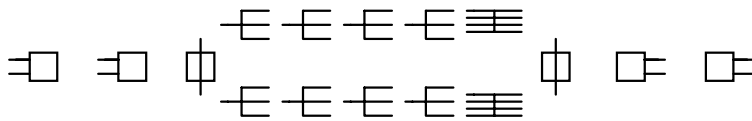
Internal Diagram



Canberra

<u>Navy Class</u>	Royal Australian Navy Heavy cruiser	<u>Date</u>	1942
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	8 inch guns in 4 twin turrets	29 inches	Fore and aft
Secondary Battery:	4 inch guns in 8 single mounts	16 inches	Aft
Torpedoes:	21 inch torpedoes in 2 quadruple mounts 2 special hits	13 inches at 4.25" 16 inches at 2.75"	Port and starboard
<u>Speed</u>	4.00"	8 boilers	4 engines
<u>Flotation</u>	Total: 66	DIW: 33	Sinking: 44
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±3

Armament Arrangement

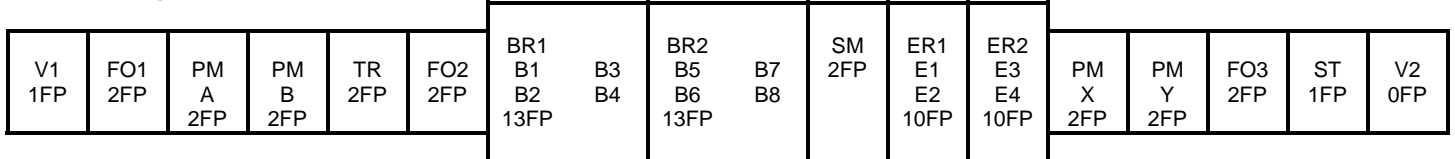


<u>Notes</u>

Hits

Officers Berths	11-12	Void
Fuel Oil 1	13-14	Void
Main Magazine A	15-21	Main A
Main Magazine B	22-24	Main B
Transmitting	25	Bridge
Fuel Oil 2	26	Bridge, Forward Main Director
Boiler Room 1	31	Bridge
Boiler Room 1	32	Search Radar, AAMGs
Boiler Room 1	33	Funnel, Secondary 1 or 2
Boiler Room 2	34	Torpedo 1 or 2, Secondary 3 or 4
Boiler Room 2	35	Funnel, Torpedo 1 or 2
Boiler Room 2	36	Funnel, Secondary 5 or 6
Secondary Magazine	41	Funnel, Secondary 7 or 8
Engine Room 1	42-43	Catapult, Aircraft
Engine Room 1	44	Aircraft
Engine Room 2	45	Secondary Director
Engine Room 2	46	Searchlight A or B
Engine Room 2	51	Aft Main Director
Engine Room 2	52	Void
Main Magazine X	53-55	Main X
Main Magazine Y	56-62	Main Y
Fuel Oil 3, Propshaft 1 or 2	63-64	Void
Steering, Propshaft 3 or 4	65	Steering
Void	66	Void

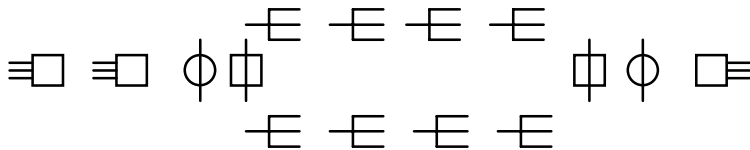
Internal Diagram



New Orleans

<u>Navy Class</u>	United States Navy Heavy cruiser	<u>Date</u>	1942		
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>		
Main Battery:	8 inch guns in 3 triple turrets	32 inches	Fore and aft		
Secondary Battery:	5 inch guns in 8 single mounts	14 inches	Fore and aft		
<u>Speed</u>	4.00"	8 boilers	4 engines		
<u>Flotation</u>	Total: 67	DIW: 34	Sinking: 44		
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2	24": ±3

Armament Arrangement



Notes

- Class included New Orleans, Astoria, Minneapolis, Tuscaloosa, San Francisco, Quincy and Vincennes.

Hits

Fuel Oil 1	11-14	Void
Aviation Gas	15	Void
Main Magazine A	16-22	Main A
Main Magazine B	23-25	Main B
Plot/CIC	26	Secondary 1 or 2, AAMGs, Bridge
Boiler Room 1	31	Forward Secondary Director, AAMGs, Bridge
Boiler Room 1	32	Forward Main Director, AAMGs, Bridge
Boiler Room 2	33	Secondary 3 or 4
Boiler Room 2	34	Funnel
Boiler Room 3	35	Secondary 5 or 6, Searchlight 1 or 2
Boiler Room 3	36	Funnel, Searchlight 3 or 4
Boiler Room 4	41	Secondary 7 or 8
Boiler Room 4	42	Aircraft, Catapult 1 or 2
Engine Room 1	43-45	Aircraft, Catapult 1 or 2
Engine Room 2	46	Aircraft, Catapult 1 or 2
Engine Room 2	51-52	Hanger, AAMGs
Fuel Oil 2	53	Aft Primary Director, AAMGs
Main Magazine X	54	Aft Secondary Director, AAMGs
Main Magazine X	55-56	Main X
Propshaft 1 or 2, Fuel Oil 3	61	Main X
Propshaft 3 or 4, Fuel Oil 3	62	Void
Fuel Oil 3	63-64	Void
Steering	65	Steering
Void	66	Void

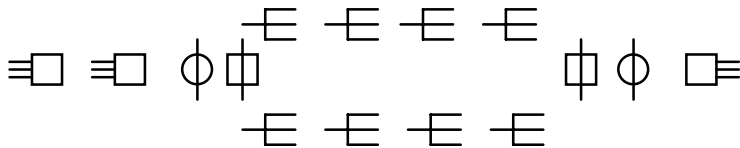
Internal Diagram

FO1 2FP	AG 1FP	AM 3FP	BM 3FP	PLT 2FP	BR1 B1 B2 7FP	BR2 B3 B4 7FP	BR3 B5 B6 7FP	BR4 B7 B8 7FP	ER1 E1 E2 10FP	ER2 E3 E4 10FP	FO2 2FP	YM 3FP	FO3 2FP	ST 1FP	V 0FP
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Northampton

<u>Navy Class</u>	United States Navy Heavy cruiser	<u>Date</u>	1942	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery:	8 inch guns in 3 triple turrets	32 inches	Fore and aft	
Secondary Battery:	5 inch guns in 8 single mounts	14 inches	Fore and aft	
<u>Speed</u>	4.00"	8 boilers	4 engines	
<u>Flotation</u>	Total: 61	DIW: 31	Sinking: 40	
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2 24": ±3

Armament Arrangement



Notes

- Class of 6 included Northampton, Houston and Chicago.

Hits

Fuel Oil	11-13	Void
Aviation Fuel	14	Void
Fuel Oil	15	Void
Main Magazine A	16-22	Main A
Main Magazine B	23-25	Main B
Plot/CIC	26	Secondary Director, Bridge
Boiler Room 1	31	Forward Main Director, AAMGs, Bridge
Boiler Room 1	32	Bridge
Boiler Room 1	33-34	Funnel
Engine Room 1	35-41	Aircraft, Catapult 1 or 2
Engine Room 1	42	AAMGs, Hanger
Boiler Room 2	43-44	AAMGs, Funnel
Boiler Room 2	45	Secondary 1 or 2
Boiler Room 2	46	Secondary 3 or 4
Engine Room 2	51	Secondary 5 or 6
Engine Room 2	52	Secondary 7 or 8
Engine Room 2	53	Void
Engine Room 2	54	Aft Secondary Director, AAMGs, Searchlight 1 or 2
Main Magazine X	55	Aft Main Director, AAMGs, Searchlight 3 or 4
Main Magazine X	56-61	Main X
Fuel Oil 3, Propshaft 1 or 2	62	Main X
Fuel Oil 3, Propshaft 3 or 4	63	Void
Steering	64-65	Steering
Void	66	Void

Internal Diagram

FO1 2FP	AG 1FP	FO2 1FP	AM 3FP	BM 3FP	PLT 2FP	BR1 B1 B2 12FP	ER1 E1 E2 10FP	BR2 B3 B4 12FP	ER2 E3 E4 10FP	YM 2FP	FO3 2FP	ST 1FP	V 0FP
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Bagley/Gridley

<u>Navy Class</u>	United States Navy Destroyer	<u>Date</u>	1942
		<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	5 inch guns in 4 single mounts	18 inches	Fore
Torpedoes:	21 inch torpedoes in 4 quadruple mounts 2 special hits	6 inches at 5.50" 10 inches at 3.25"	Port and starboard
<u>Speed</u>	4.50	4 boilers	2 engines
<u>Flotation</u>	Total: 27	DIW: 14	Sinking: 18
<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±3	24": ±5

Armament Arrangement



Notes

- Twelve ships in both classes.

Hits

	Fuel Oil 1	11-14	Forward Void
	Fuel Oil 1	15	Main A
Forward Main Magazine		16-21	Main A
Forward Main Magazine		22-23	Main B
	Fuel Oil 2	24	Main B
	Fuel Oil 2	25	AAMGs, Bridge
	Fuel Oil 2	26	Main Director, Bridge
	Fuel Oil 2	31	Bridge
	Boiler Room 1	32	Void
	Boiler Room 1	33	Search Radar
	Boiler Room 1	34	Funnel
	Boiler Room 2	35-36	Funnel
	Boiler Room 2	41	AAMGs
	Engine Room	42-44	Torpedo 1 or 2
	Engine Room	45-51	Torpedo 3 or 4
	Aft Main Magazine	52	Searchlight
	Aft Main Magazine	53	AAMGs
	Aft Main Magazine	54-55	Main X
	Fuel Oil 3	56	Main X
Fuel Oil 3, Propshaft 1 or 2		61-63	Main Y
Void, Propshaft 1 or 2		64	Void
	Steering	65-66	Steering

Internal Diagram

FO1	FM	FO2	BR1	BR2	ER	AM	FO3	ST
1FP	A&B	3FP	B1	B3	E1	X&Y	1FP	1FP
	1FP		B2	B4	E2	1FP		
			5FP	5FP	9FP			

Benham

<u>Navy Class</u>	United States Navy Destroyer	<u>Date</u>	1942, as refit	
		<u>Armor</u>	None	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery: 5 inch guns in 4 single mounts		18 inches	Fore	
Torpedoes: 21 inch torpedoes in 2 quadruple mounts 2 special hits		6 inches at 5.50" 10 inches at 3.25"	Port and starboard	
<u>Speed</u>	4.50	4 boilers	2 engines	
<u>Flotation</u>	Total: 28	DIW: 14	Sinking: 18	
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- 10 ships in class.
- Shown with the after 2 torpedo mounts removed in favor of added AAMGs. All except Benham and Ellet were modified in this way.

Hits

Fuel Oil 1	11-14	Forward Void
Fuel Oil 1	15	Main A
Forward Main Magazine	16-21	Main A
Forward Main Magazine	22-23	Main B
Fuel Oil 2	24	Main B
Fuel Oil 2	25	AAMGs, Bridge
Fuel Oil 2	26	Main Director, Bridge
Boiler Room 1	31	Bridge
Boiler Room 1	32	Void
Boiler Room 1	33	Search Radar
Boiler Room 1	34	Funnel
Boiler Room 2	35-36	Funnel
Boiler Room 2	41	AAMGs
Engine Room 1	42-44	Torpedo 1 or 2
Engine Room 2	45-51	AAMGs [Torpedo 3 or 4]
Aft Main Magazine	52	Searchlight
Aft Main Magazine	53	AAMGs
Aft Main Magazine	54-55	Main X
Fuel Oil 3	56	Main X
Void	61-62	Main Y
Void, Propshaft 1 or 2	63-64	Void
Steering	65-66	Steering

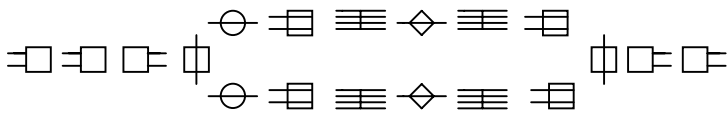
Internal Diagram

FO1 1FP	FM A&B 1FP	FO2 3FP	BR1 B1 B2 6FP	BR2 B3 3FP	ER1 E1 5FP	ER2 E2 5FP	AM X&Y 1FP	FO3 1FP	V 1FP	ST 1FP
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Takao

<u>Navy Class</u>	Imperial Japanese Navy Heavy cruiser	<u>Date</u>	1942, as reconstructed			
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>			
Main Battery:	8 inch guns in 5 twin turrets	32 inches	Fore and aft			
Secondary Battery:	5 inch guns in 4 twin mounts	15 inches	Port and starboard			
Torpedoes:	24 inch torpedoes in 4 quadruple mounts 8 reloads 3 special hits	22 inches at 6.00" 35 inches at 5.00" 44 inches at 4.50"	Port and starboard			
<u>Speed</u>	4.25"	12 boilers	4 engines			
<u>Flotation</u>	Total: 66	DIW: 33	Sinking: 44			
<u>Bulge</u>	-1 to torpedo hits in way of locations 21-54		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2	24": ±3

Armament Arrangement



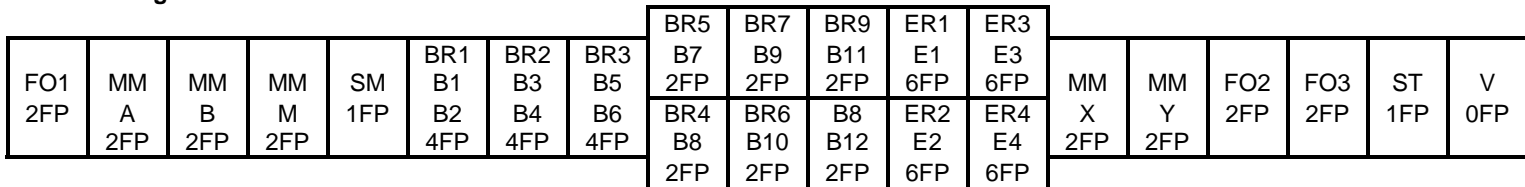
Notes

- Class included Chokai, Takao, Atago and Maya.
- Chokai and Maya were not refitted with their sisters. They retained a secondary battery of 4.7 inch guns in four single mounts (range 16 inches) and four twin 24 inch torpedo tubes. They also retained short rangefinders. These give a -1 modifier to main battery fire at ranges beyond 15 inches.
- Takao had Chokai's secondary battery until April 1942, Atago until May 1942.

Hits

	Fuel Oil	11-15	Officers Berths
	Main Magazine A	16-21	Main A
	Main Magazine B	22-23	Main B
	Main Magazine M	24-25	Main M
	Secondary Magazine	26	Officers Berths
	Boiler Room 1	31	Bridge, AAMGs
	Boiler Room 2	32	Forward Main Director, Funnel, Bridge
	Boiler Room 3	33	Port or Starboard Secondary Director, Torpedo 1 or 2, Torpedo Director
	Boiler Room 4 or 5	34	Secondary 1 or 2, AAMGs
	Boiler Room 6 or 7	35	Port or Starboard Reloads, Searchlight 1 or 2
	Boiler Room 6 or 7	36	Void
	Boiler Room 8 or 9	41	AAMGs, Torpedo 3 or 4
	Boiler Room 8 or 9	42	Aft Main Director, Searchlight 3 or 4, Secondary 3 or 4
	Engine Room 1 or 2	43-45	Port or Starboard Catapult, Aircraft
	Engine Room 3 or 4	46-51	Aircraft
	Main Magazine X	52-53	Main X
	Main Magazine Y	54-55	Main Y
	Fuel Oil 2	56-62	Crew Berths
	Fuel Oil 3, Propshaft 1 or 2	63	Crew Berths
	Fuel Oil 3, Propshaft 3 or 4	64	Crew Berths
	Steering	65	Steering
	Aft Void	66	Aft Void

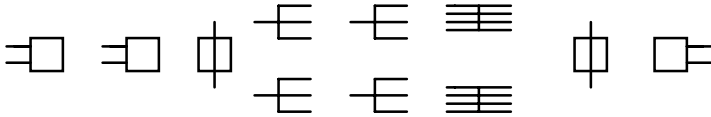
Internal Diagram



Aoba

<u>Navy</u>	Imperial Japanese Navy	<u>Date</u>	1941
<u>Class</u>	Heavy cruiser		
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	8 inch guns in 3 twin turrets	32 inches	Fore and aft
Secondary Battery:	4.7 inch guns in 4 single mounts	16 inches	Port and starboard
Torpedoes:	24 inch torpedoes in 2 quadruple mounts	22 inches at 6.00"	Port and starboard
	8 reloads	35 inches at 5.00"	
	3 special hits	44 inches at 4.50"	
<u>Speed</u>	4.25"	12 boilers	4 engines
<u>Flotation</u>	Total: 63	DIW: 32	Sinking: 42
<u>Bulge</u>	-1 to torpedo hits in way of 22 -52	<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±3

Armament Arrangement



Notes

- Class included Aoba and Kinugasa.

Hits

	Fuel Oil 1	11-14	Void
	Main Magazine A	15-21	Main A
	Main Magazine B	22-23	Main B
	Boiler Room 1	24	Bridge, AAMGs
	Boiler Room 1	25	Secondary Director 1 or 2, Bridge
	Boiler Room 1	26	Main Director, Bridge
	Boiler Room 2 or 3	31	Torpedo Director, Bridge
	Boiler Room 2 or 3	32	Secondary 1 or 2, Funnel, Searchlight 1 or 2
	Boiler Room 2 or 3	33	Funnel
	Boiler Room 4 or 5	34	Funnel
	Boiler Room 4 or 5	35	Secondary 3 or 4
	Boiler Room 4 or 5	36	Funnel
	Boiler Room 6 or 7	41	AAMGs
	Engine Room 1 or 3	42	Aft Main Director
	Engine Room 1 or 3	43	Torpedo 1 or 2
	Engine Room 1 or 3	44-45	Catapult, Aircraft
	Engine Room 2 or 4	46	Catapult, Aircraft
	Engine Room 2 or 4	51-53	Void
	Main Magazine C	54-56	Main C
	Fuel Oil 2, Propshaft 1 or 2)	61-62	Void
	Fuel Oil 3, Propshaft 3 or 4)	63-64	Void
	Steering	65	Steering
	Void	66	Void

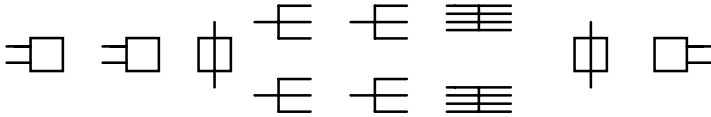
Internal Diagram and Torpedo Hits

FO1	PM	PM	BR1	BR3	4FP	BR5	4FP	BR7	ER1	ER3	PM	FO2	FO3	ST	V
3FP	A	B	B1	B3	B5	B7	B9	B11	E1	E3	X	2FP	2FP	1FP	1FP
	2FP	2FP	B2	BR2	4FP	BR4	4FP	BR6	ER2	ER4	2FP				
			4FP	B4	B6	B8	B10	B12	E2	E4					
								2FP	6FP	6FP					

Furutaka

<u>Navy Class</u>	Imperial Japanese Navy Heavy cruiser	<u>Date</u>	1941	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery:	8 inch guns in 3 twin turrets	32 inches	Fore and aft	
Secondary Battery:	4.7 inch guns in 4 single mounts	16 inches	Port and starboard	
Torpedoes:	24 inch torpedoes in 2 quadruple mounts	22 inches at 6.00"	Port and starboard	
	8 reloads	35 inches at 5.00"		
	3 special hits	44 inches at 4.50"		
<u>Speed</u>	4.25"	12 boilers	4 engines	
<u>Flotation</u>	Total: 63	DIW: 32	Sinking: 42	
<u>Bulge</u>	-1 to torpedo hits in way of 22 -52		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±3

Armament Arrangement



Notes

- Class included Furutaka and Kako.

Hits

	Fuel Oil 1	11-14	Void		
	Main Magazine A	15-21	Main A		
	Main Magazine B	22-23	Main B		
	Fuel Oil 2	24	Bridge, AAMGs		
	Boiler Room 1	25	Secondary Director 1 or 2, Bridge		
	Boiler Room 1	26	Main Director, Bridge		
	Boiler Room 1	31	Torpedo Director, Bridge		
	Boiler Room 2 or 3	32	Secondary 1 or 2, Funnel, Searchlight 1 or 2		
	Boiler Room 2 or 3	33	Funnel		
	Boiler Room 2 or 3	34	Funnel		
	Boiler Room 4 or 5	35	Secondary 3 or 4		
	Boiler Room 4 or 5	36	Funnel		
	Boiler Room 4 or 5	41	AAMGs		
	Engine Room 1 or 3	42	Aft Main Director		
	Engine Room 1 or 3	43	Torpedo 1 or 2		
	Engine Room 1 or 3	44-45	Catapult, Aircraft		
	Engine Room 2 or 4	46	Catapult, Aircraft		
	Engine Room 2 or 4	51-53	Void		
	Main Magazine C	54-56	Main X		
	Fuel Oil 3, Propshaft 1 or 2)	61-62	Void		
	Fuel Oil 4, Propshaft 3 or 4)	63-64	Void		
	Steering	65	Steering		
	Void	66	Void		

Internal Diagram and Torpedo Hits

FO1	PM	PM	FO2	BR1	BR3	4FP	BR5	4FP	ER1	ER3	PM	FO3	FO4	ST	V
3FP	A	B	4FP	B1	B3	B5	B7	B9	E1	E3	X	2FP	2FP	1FP	1FP
	2FP	2FP		B2	BR2	4FP	BR4	4FP	E2	ER4					
				4FP	B4	B6	B8	B10	6FP	6FP					

Tenryu

<u>Navy Class</u>	Imperial Japanese Navy Light cruiser			<u>Date</u>	1940		
<u>Surface Armament</u>				<u>Ranges</u>	<u>Directors</u>		
Main Battery:	5.5 inch guns in 4 single mounts			20 inches	Fore		
Torpedoes:	21 inch torpedoes in 2 triple mounts no reloads			8 inches at 4.25" 16 inches at 3.75"	Port and starboard		
<u>Speed</u>	4.00"	8 boilers	3 engines				
<u>Flotation</u>	Total: 44	DIW: 22	Sinking: 30	<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2	24": ±4

Armament Arrangement



Notes

Class included Tenryu and Tatsuta.

Hits

Void 1	11-13	Void
Forward Magazine	14-15	Main A
Forward Magazine	16	Bridge
Forward Magazine	21	Bridge, Main Director
Fuel Oil 1	22-23	Main 1
Boiler Room 1	24	Torpedo A
Boiler Room 2	25-26	Torpedo A
Boiler Room 2	31-32	Funnel
Boiler Room 3	33	Void
Boiler Room 3	34-35	Funnel
Boiler Room 3	36	Void
Engine Room 1	41-42	Funnel
Engine Room 1	43	Void
Engine Room 1	44	Torpedo B
Engine Room 2	45-46	Torpedo B
Engine Room 2	51	Torpedo Director
Engine Room 2	52	Main 2
Aft Magazine	53	Main 2
Aft Magazine	54	Searchlight
Aft Magazine	55-56	Main X
Fuel Oil 2	61-62	AAMGs
Fuel Oil 2, Propshaft 1 or 2	63	AAMGs
Void 2, Propshaft 3	64	Void
Steering	65-66	Steering

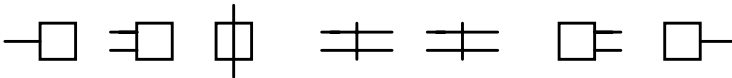
Internal Diagram

V1 2FP	FM 2FP	FO1 4FP	BR1 B1 2FP	BR2 B2,3 4 6FP	BR3 B5,6 7,8 8FP	ER1 E1,2 7FP	ER2 E3 6FP	AM 2FP	FO2 2FP	V2 2FP	ST 1FP
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Yubari

<u>Navy Class</u>	Imperial Japanese Navy Light cruiser	<u>Date</u>	1942, as modified	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery:	5.5 inch guns in 2 single and 2 twin mounts	20 inches	Fore	
Torpedoes:	24 inch torpedoes in 2 twin mounts no reloads	22 inches at 6.00" 35 inches at 5.00" 44 inches at 4.50"	Aft	
<u>Speed</u>	4.00"	7 boilers	3 engines	
<u>Flotation</u>	Total: 42	DIW: 21	Sinking: 28	
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- Experimental design mounting a heavy armament on a light displacement.

Hits

	Fuel Oil 1	11-14	Void	
	Forward Main Magazine	15-16	Main A	
	Forward Main Magazine	21-22	Main B	⋮
	Fuel Oil 2	23	Bridge, Forward Searchlight	
	Boiler Room 1	24	Bridge, Main Director	
	Boiler Room 1	25	Funnel	
	Boiler Room 2	26-32	Funnel	
	Boiler Room 2	33	Searchlight	
	Boiler Room 2	34-36	Torpedo A	
	Boiler Room 3	41-42	AAMGs	
	Boiler Room 3	43-45	Torpedo B	
	Engine Room 1	46	Torpedo Director	
	Engine Room 1	51	Void	
	Engine Room 2	52-53	Void	
	Aft Main Magazine	54-55	Main X	⋮
	Aft Main Magazine	55-56	Main Y	
	Fuel Oil 2, Propshaft 1 or 2	61-62	Void	
	Fuel Oil 2, Propshaft 3	63-64	Void	
	Steering	65	Steering	
	Void	66	Void	

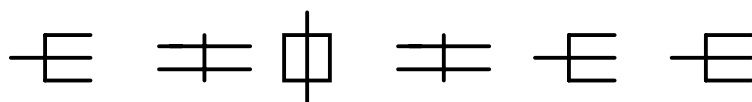
Internal Diagram

V1 1FP	FM 3FP	FO 4FP	BR1 B1 2FP	BR2 B2,3 B4,5 6FP	BR3 B5 B6 4FP	ER1 E1 E2 8FP	ER2 E3 8FP	AM 3FP	FO2 2FP	ST 1FP	V 0FP
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Kamikaze

<u>Navy Class</u>	Imperial Japanese Navy Destroyer-transport	<u>Date</u>	1942, as converted
		<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	4.7 inch guns in 3 single mounts	18 inches	Fore
Torpedoes:	21 inch torpedoes in 2 twin mounts No reloads 2 special hits	8 inches at 4.25" 16 inches at 3.25"	Aft
<u>Speed</u>	4.25	4 boilers	2 engines
<u>Flotation</u>	Total: 27	DIW: 14	Sinking: 18
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- Nine Kamikazes were converted to this role.

Hits

Fuel Oil 1	11-13	Forward Void
Forward Magazine	14-16	Mount A
Crew Spaces	21-23	Torpedo A
Fuel Oil 2	24	Bridge
Boiler Room 1	25	Bridge, Main Director
Boiler Room 1	26-31	Funnel
Boiler Room 1	32	AAMGs, Supply Area
Boiler Room 2	33-35	AAMGs, Supply Area
Boiler Room 2	36	Funnel
Engine Room 1	41	Searchlight
Engine Room 1	42-44	AAMGs, Supply Area
Engine Room 2	45	AAMGs, Supply Area
Engine Room 2	46-52	Torpedo B
Aft Magazine	53-54	Main M
Aft Magazine	55-56	Main X
Fuel Oil 3, Propshaft 1 or 2	61-64	Aft Void
Steering	65-66	Steering

Internal Diagram

FO1 1FP	PM A 1FP	V 2FP	FO2 FO 2FP	BR1 B1 B2 4FP	BR2 B3 B4 4FP	ER2 E1 4FP	ER2 E2 4FP	PM MY 2FP	FO3 2FP	ST 1FP
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