

KOLOMBANGARA

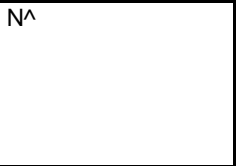
0100 13 July 1943

Background: Shortly after the battle of Kula Gulf, the Japanese mounted a supply operation to land troops on Kolombangara. Admiral Halsey reinforced "Tip" Ainsworth's task force and ordered him to derail the "Tokyo Express."

Forces:

United States Navy Rear Admiral Walden L. Ainsworth	Division 1:	Honolulu Leander St. Louis	(Brooklyn - flag) (Leander) (St. Louis)
	Division 2:	Nicholas O'Bannon Taylor Radford Jenkins	(Fletcher - flag) (Fletcher) (Fletcher) (Fletcher) (Fletcher)
	Division 3:	Ralph Talbot Buchanan Gwin Maury Woodworth	(Bagley - flag) (Bristol) (Livermore) (Gridley) (Benson)
Nihon Kaigun Rear Admiral Izaki Shunji	Division 1:	Mikazuki Jintsu Yukikaze Hamakaze Kiyonami Yugure	(Mutsuki) (Sendai - flag) (Kagero) (Kagero) (Yugumo) (Hatsuharu)

Set-up:



The Japanese are steaming in a line ahead formation with Mikazuki leading. They are on a course of 120 degrees. Mikazuki is 19 inches south of the north edge and 16 inches east of the west edge.

The Americans are in a line ahead formation in the following order of divisions: 2 - 1 - 3. Each division is led by its flagship. The formation is on a course of 270 degrees. Nicholas is 34 inches south of the north edge and 42 inches east of the west edge.

Victory Conditions: Victory is decided on points:

- a) 1 per Japanese destroyer or cruiser sunk;
- b) 2 per American destroyer sunk or American cruiser torpedoed but not sunk;
- c) 3 per American cruiser sunk.

Special Rules:

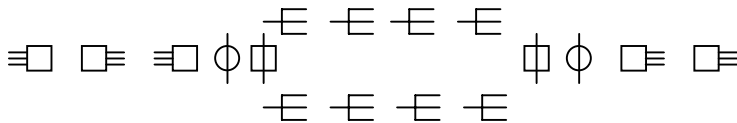
- 1. Both American cruisers have SG search radar, CICs and Mk 8 fire control radar. The Fletchers, Maury and Gwin have SG radars and CICs. All other American destroyers have SG radars. Leander has SG-type search radar and Mk 3-type fire control radar. Woodworth and Buchanan have SC radar. The Fletchers have Mk 12 fire control radar; all other American destroyers have Mk 4 fire control radar.
- 2. The Japanese are alert.
- 3. The night is open and shut, with the base visibility being rolled at the start of each turn (gunfire visibility factor of **-5**).

Outcome: American radar-controlled gunfire blotted out Jintsu, while Japanese torpedoes took Leander out of the battle. Ainsworth chased the retiring Japanese, but the American pursuit ended when the Japanese reloaded their torpedo tubes. The Japanese riposte sank Gwin and damaged both Honolulu and St. Louis.

Brooklyn

<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:	6 inch guns in 5 triple turrets	24 inches	Fore and aft		
Secondary Battery:	5 inch guns in 8 single mounts	15 inches	Fore and aft		
<u>Speed</u>	4.25"	12 boilers	4 engines		
<u>Flotation</u>	Total: 70	DIW: 35	Sinking: 48		
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±2	24": ±3

Armament Arrangement



Notes

- Heavy cruiser size, but light cruiser guns.
- Class included Brooklyn, Honolulu and Boise.

Hits

	Fuel Oil 1	11-15	Forward Void
	Main Magazine A	16-21	Main A
	Main Magazine B	22-24	Main B
	Main Magazine M	25-31	Main M
	Plot/CIC	32	Bridge, Forward Secondary Director, AAMGs
	Plot/CIC	33	Forward Primary Director, Secondary 1 or 2, Bridge, AAMGs
	Boiler Room 1	34	Search Radar
	Boiler Room 2	35	Funnel, Secondary 3 or 4
	Boiler Room 3	36	Searchlights 1 or 2
	Boiler Room 4	41	Secondary 5 or 6, Searchlights 3 or 4
	Boiler Room 4	42	Secondary 7 or 8, Funnel
	Engine Room 1	43-45	Void
	Engine Room 2	46	AAMGs, Aft Main Director
	Engine Room 2	51	AAMGs, Aft Secondary Director
	Main Magazine X	52-53	Main X
	Main Magazine Y	54-56	Main Y
	Fuel Oil 2, Propshafts 1 or 2	61	Catapult 1 or 2, Hanger
	Fuel Oil 2, Propshafts 3 or 4	62	Catapult 1 or 2, Hanger
	Steering	63-64	Catapult 1 or 2, Hanger
	Void	65-66	Hanger

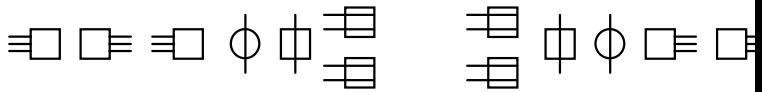
Internal Diagram

FO1 4FP	PM A 2FP	PM B 2FP	PM M 2FP	PL 2FP	BR1 B1 B2 7FP	BR2 B3 B4 7FP	BR3 B5 B6 7FP	BR4 B7 B8 7FP	ER1 E1 E2 11FP	ER2 E3 E4 11FP	PM X 2FP	PM Y 2FP	FO2 2FP	ST 1FP	V 1FP
------------	----------------	----------------	----------------	-----------	------------------------	------------------------	------------------------	------------------------	-------------------------	-------------------------	----------------	----------------	------------	-----------	----------

St. Louis

<u>Navy Class</u>	United States Navy Heavy cruiser	<u>Date</u>	1942
		<u>Armor</u>	no modifier
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	6 inch guns in 5 triple turrets	24 inches	Fore and aft
Secondary Battery:	5 inch guns in 4 twin mounts	18 inches	Fore and aft
<u>Speed</u>	4.25"	12 boilers	4 engines
<u>Flotation</u>	Total: 70	DIW: 35	Sinking: 48
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±3

Armament Arrangement



Notes

- Variant of the *Brooklyn* class, with 5 inch 38 caliber guns in twin mounts and a revised internal arrangement.
- In class: St. Louis, Helena.

Hits

Fuel Oil 1	11-15	Forward Void
Main Magazine A	16-21	Main A
Main Magazine B	22-24	Main B
Main Magazine M	25-31	Main M
Plot/CIC	32	Bridge, Forward Secondary Director, AAMGs
Boiler Room 1	33	Forward Primary Director, Bridge, AAMGs
Boiler Operating Station 1	34	Search Radar, Secondary 1 or 2
Boiler Room 2	35	Funnel, Secondary 1 or 2
Engine Room 1	36	Searchlights 1 or 2
Engine Room 1	41	AAMGs, Searchlights 3 or 4
Boiler Room 3	42	AAMGs, Funnel
Boiler Operating Station 2	43	Void
Boiler Room 4	44	Void
Engine Room 2	45	Secondary 3 or 4
Engine Room 2	46	AAMGs, Aft Main Director
Secondary Magazine	51	AAMGs, Aft Secondary Director
Main Magazine X	52-53	Main X
Main Magazine Y,	54-56	Main Y
Fuel Oil 2, Propshaft 1 or 2	61	Catapult 1 or 2, Hanger
Fuel Oil 2, Propshaft 3 or 4	62	Catapult 1 or 2, Hanger
Steering	63-64	Catapult 1 or 2, Hanger
Void	65-66	Hanger

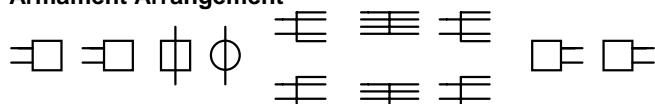
Internal Diagram

FO1 4FP	PM A 2FP	PM B 2FP	PM M 2FP	PL 2FP	BR1 B1 B2 5FP	BOS 1 4FP	BR2 B3 B4 5FP	ER1 E1 E2 11FP	BR3 B5 B6 5FP	BOS 2 4FP	BR4 B7 B8 5FP	ER2 E3 E4 11FP	PM X 2FP	PM Y 2FP	FO2 2FP	ST 1FP	V 1FP
------------	----------------	----------------	----------------	-----------	------------------------	-----------------	------------------------	-------------------------	------------------------	-----------------	------------------------	-------------------------	----------------	----------------	------------	-----------	----------

Leander

<u>Navy</u>	Royal Navy, Royal Australian Navy, Royal New Zealand Navy	<u>Date</u>	1941
<u>Class</u>	Light cruiser		
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	6 inch guns in 4 twin turrets	25 inches	Fore
Secondary Battery:	4 inch guns in 4 twin mounts	16 inches	Fore
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"	6 boilers	4 engines
<u>Flotation</u>	Total: 58	DIW: 29	Sinking: 39
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±3

Armament Arrangement



Notes

- Five ships in class: Leander, Neptune, Orion, Achilles (RNZN), Ajax
- Sydney, Perth and Hobart were similar, but with unit machinery arrangements

Hits

Officers Berths	11-12	Void
Fuel Oil 1	13-14	Void
Main Magazine A	15-22	Main A
Main Magazine B	23-24	Main B
Secondary Magazine	25	Bridge
Transmitting Room	26	Bridge, Main Director
Boiler Room 1	31	Bridge, Secondary Director
Boiler Room 1	32	Search Radar, Secondary 1 or 2
Boiler Room 1	33	Funnel, Searchlight 1 or 2
Boiler Room 2	34	Funnel, Secondary 3 or 4
Boiler Room 2	35	Torpedo 1 or 2
Boiler Room 2	36	AAMGs
Boiler Room 3	41	Void
Boiler Room 3	42-43	Catapult, Aircraft
Engine Room 1	44-45	Catapult, Aircraft
Engine Room 1	46	AAMGs
Engine Room 2	51	Searchlight 3
Engine Room 2	52	AAMGs
Main Magazine X	53-55	Main X
Main Magazine Y	56-62	Main Y
Fuel Oil 2, Propshaft 1 or 2	63	Void
Fuel Oil 2, Propshaft 3 or 4	64	Void
Steering	65	Steering
Void	66	Void

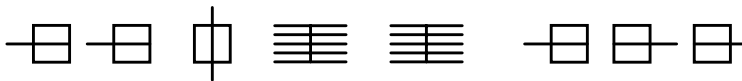
Internal Diagram

V1	FO1	FM	FM	SM	TR	BR1	BR2	BR3	ER1	ER3	AM	AM	FO2	ST	V2
1FP	2FP	A	B	2FP	1FP	B1	B3	B5	E1	E3	X	Y	2FP	1FP	0FP
		2FP	2FP			7FP	7FP	7FP	11FP	11FP	2FP	2FP			

Fletcher

<u>Navy</u>	United States Navy	<u>Date</u>	1942
<u>Class</u>	Destroyer	<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	5 inch guns in 5 single mounts	18 inches	Fore
Torpedoes:	21 inch torpedoes in 2 quintuple mount 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: 30	DIW: 15	Sinking: 20
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- Most numerous class of USN fleet destroyers, with 175 ships in the class.
- Most early units built with twin 40mm mounts on the after pilothouse and the fantail. Some of the earliest (*viz* Fletcher) had one 1.1 inch mount on the pilothouse instead.

Hits

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

Internal Diagram

FO1	PM	FO2	FO3	BR1	ER1	BR2	ER2	PM	FO4	V	ST
1FP	A&B	FO	FO	B1	E1	B3	E2	MX	3FP	1FP	1FP
	1FP	2FP	2FP	B2	4FP	B4	4FP	1FP			
				5FP		5FP					

Bagley/Gridley

<u>Navy</u>	United States Navy	<u>Date</u>	1942
<u>Class</u>	Destroyer	<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
Torpedoes:	21 inch torpedoes in 4 quadruple mounts 2 special hits	6 inches at 5.50" 10 inches at 3.25"
		Fore Port and starboard

Speed 4.50 4 boilers 2 engines

Flotation Total: 27 DIW: 14 Sinking: 18

Torpedo Hits 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

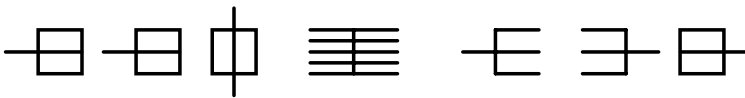
Internal Diagram

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

Benson/Gleaves

<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 5 single mounts	18 inches	Fore
Torpedoes:	21 inch torpedoes in 1 quintuple mount 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>Fires</u>	Mount: 4 AAMGs: 3
			Magazine: 6 Fuel Oil: 4
<u>Flotation</u>	Total: 27	DIW: 14	Sinking: 18
		<u>Explosions</u>	Mount: 3 Magazine: 4
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- 9 ships in class, including Benson, Gleaves, Lansdale and Plunkett (DD 421-428 and 431).
- Class built with had 5 guns and 10 tubes, but sacrificed one torpedo mount for increased AAMG armament. By 1944, all had had the torpedo mount restored and Main M removed.

Hits

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

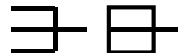
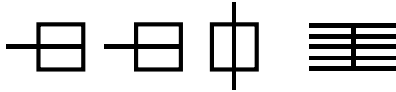
Internal Diagram

FO1	MM	FO2	BR1	ER1	BR2	ER2	MM	FO3	ST
1FP	A&B	3FP	B1	E1	B3	E2	XY	2FP	1FP
	1FP		B2	4FP	B4	4FP	1FP		
			5FP		5FP				

Bristol

<u>Navy</u>	United States Navy	<u>Date</u>	1942
<u>Class</u>	Destroyer	<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 1 quintuple mount 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

- Many ships in this class.
- Bristols (DD453 and up) built with 4 guns and 10 tubes, but modified to 4 guns and 5 tubes before they saw war service.

Hits

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

Internal Diagram

FO1	MM	FO2	BR1	ER1	BR2	ER2	MM	FO3	ST
1FP	A&B	3FP	B1	E1	B3	E2	XY	2FP	1FP
	1FP		B2	4FP	B4	4FP	1FP		
			5FP		5FP				

Livermore

<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 2 quintuple 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>Fires</u>	Mount: 4 AAMGs: 4
			Magazine: 6 Fuel Oil: 4
<u>Flotation</u>	Total: 27	DIW: 14	Sinking: 18
		<u>Explosions</u>	Mount: 3 Magazine: 4
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±3 24": ±5

Armament Arrangement



Notes

- 15 ships in class, including Livermore, Gwin, Meredith, Grayson, Monssen and Nicholson (DD 429-430, 432-444).
- Class built with had 5 guns and 10 tubes, but sacrificed one gun mount for increased AAMG armament.

Hits

	Fuel Oil 1	11-13	Forward Void
	Fuel Oil 1	14	Main A
Forward Main Magazine		15-16	Main A
Forward Main Magazine		21-22	Main B
	Fuel Oil 2	23	Main B
	Fuel Oil 2	24	AAMGs
	Fuel Oil 2	25	Bridge
	Fuel Oil 2	26	Main Director (1-3), Bridge (4-6)
	Boiler Room 1	31	Search Radar
	Boiler Room 1	32-33	Funnel
	Boiler Room 1	34	Torpedo A
	Engine Room 1	35-36	Torpedo A
	Boiler Room 2	41-42	Funnel (1-3), AAMGs (4-6)
	Boiler Room 2	43	Torpedo B
	Boiler Room 2	44	Torpedo B
	Engine Room 2	45	Torpedo B (1-3), Searchlight (4-6)
	Engine Room 2	46-51	AAMGs
	Aft Main Magazine	52	AAMGs
	Aft Main Magazine	53-55	Main X
Fuel Oil 3 (1-3), Propshaft 1 or 2 (4-6)		56-62	Main Y
Fuel Oil 3 (1-3), Propshaft 1 or 2 (4-6)		63-64	Void
	Steering	65-66	Steering

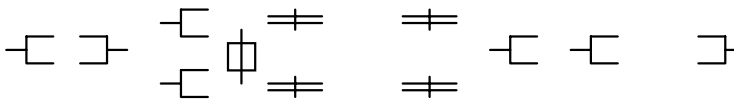
Internal Diagram

FO1	MM	FO2	BR1	ER1	BR2	ER2	MM	FO3	ST
1FP	A&B	3FP	B1	E1	B3	E2	XY	2FP	1FP
	1FP		B2	4FP	B4	4FP	1FP		
			5FP		5FP				

Sendai

<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 7 single mounts	20 inches	Fore		
Torpedoes:	24 inch torpedoes in 4 twin mounts no reloads	22 inches at 6.00" 35 inches at 5.00" 44 inches at 4.50"	Port and starboard		
<u>Speed</u>	4.00"	10 boilers	4 engines		
<u>Flotation</u>	Total: 55	DIW: 28	Sinking: 36	<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±4

Armament Arrangement



Notes

- Sendai class included Sendai, Jintsu and Naka.
- In June 1943, Sendai traded her M2 gun for AAMGs.
- In April 1943, Naka traded her M2 gun for AAMGs and a twin 5" mount (range 15 inches).
- Naka and Jintsu had 2 quadruple torpedo mounts aft and none forward.

Hits

Void 1	11-12	Void
Forward Magazine	13-14	Main A
Forward Magazine	15-16	Main M1
Plot	21	AAMGs
Fuel Oil 1	22	Bridge
Fuel Oil 1	23	Bridge, Main Director, Main 1 or 2
Fuel Oil 1	24	Main 1 or 2, Searchlight 1 or 2
Boiler Room 1	25	Void
Boiler Room 2	26	Funnel
Boiler Room 3	31-32	Torpedo 1 or 2
Boiler Room 3	33	Funnel, AAMGs
Boiler Room 3	34	AAMGs
Boiler Room 3	35-36	Funnel
Boiler Room 4	41	Torpedo Director
Boiler Room 4	42	Funnel
Boiler Room 4	43	Torpedo 3 or 4
Engine Room 1	44	Torpedo 3 or 4
Engine Room 1	45	Main M2
Engine Room 2	46	Main M2
Engine Room 2	51	Searchlight 3
Aft Main Magazine	52-53	Main M3
Aft Main Magazine	54-55	Aircraft, Catapult
Void 2	56-61	Aircraft, Catapult
Void 2	62	Main X
Void 2, Propshaft 1 or 2	63	Main X
Void 2, Propshaft 3 or 4	64	Void
Steering	65	Steering
Void	66	Void

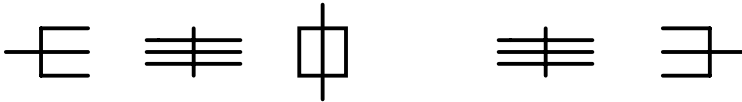
Internal Diagram

V1	FM	PL	FO1	BR1	BR2	BR3	BR4	ER1	ER2	AM	V2	ST	V3
2FP	4FP	1FP	4FP	B1 2FP	B2 2FP	B3,4 5,6 8FP	B8,9 9,10 8FP	E1,2 8FP	E1,2 8FP	4FP	2FP	1FP	1FP

Mutsuki

<u>Navy</u>	Imperial Japanese Navy			<u>Date</u>	1942, as converted
<u>Class</u>	Destroyer-transport			<u>Armor</u>	None
<u>Surface Armament</u>			<u>Ranges</u>	<u>Directors</u>	
Main Battery:	4.7 inch guns in 2 single mounts			18 inches	Fore
Torpedoes:	24 inch torpedoes in 2 triple mounts			8 inches at 5.50"	Aft
	No reloads			16 inches at 4.50"	
	3 special hits				
<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

- Twelve Mutsukis were converted to this role.
- These were the first destroyers to carry a 24 inch torpedo. They carried an early model of the torpedo, which was also found occasionally in Fubukis and light cruisers.

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	AAMGs, Supply Area
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
------------	----------------	----------	------------------	------------------------	------------------------	------------------	------------------	-----------------	------------	-----------

Asashio/Kagero/Yugumo

<u>Navy</u>	Imperial Japanese Navy	<u>Date</u>	1942
<u>Class</u>	Destroyer	<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	5 inch guns in 3 twin mounts	18 inches	Fore
Torpedoes:	24 inch torpedoes in 2 quadruple mounts	22 inches at 6.00"	Aft
	8 reloads	35 inches at 5.00"	
	3 special hits	44 inches at 4.50"	
<u>Speed</u>	4.50	3 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

- All three classes were similar in game terms.
- Ten Asashios, 18 Kageros and 20 Yugumos were built.
- Use cruiser turn radius for Asashio class.

Hits

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

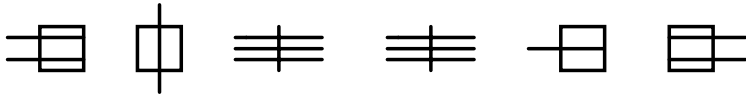
Internal Diagram

FO1 1FP	PM A 1FP	FO2 FO 4FP	BR1 B1 3FP	BR2 B2 3FP	BR3 B3 3FP	ER E1,E2 6FP	V 2FP	PM Y 2FP	FO3 2FP	ST 1FP
------------	----------------	------------------	------------------	------------------	------------------	--------------------	----------	----------------	------------	-----------

Hatsuharu/Shiratsuyu

<u>Navy Class</u>	Imperial Japanese Navy Destroyer			<u>Date</u>	1940
				<u>Armor</u>	None
<u>Surface Armament</u>				<u>Ranges</u>	<u>Directors</u>
Main Battery:	5 inch guns in 2 twin mounts and 1 single mount			18 inches	Fore
Torpedoes:	24 inch torpedoes in 2 triple mounts 6 reloads 3 special hits			22 inches at 6.00" 35 inches at 5.00" 44 inches at 4.50"	Aft
<u>Speed</u>	4.25	3 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

- Successor classes to the Fubukis and Akatsukis, extensively modified after the original design proved to be unstable.
- Shiratsuyus were similar, with quadruple torpedo mounts vice the triples, and 8 reloads rather than 6.

Hits

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

Internal Diagram

FO1 1FP	PM A 1FP	FO2 FO 3FP	BR1 B1 B2 6FP	BR2 B3 3FP	ER2 E1 4FP	ER2 E2 4FP	PM MY 2FP	FO3 2FP	ST 1FP
------------	----------------	------------------	------------------------	------------------	------------------	------------------	-----------------	------------	-----------