

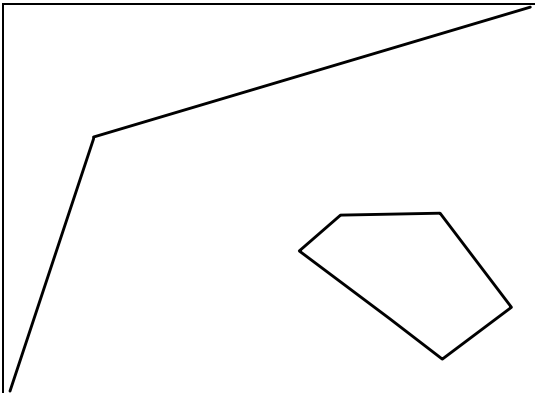
BADUNG STRAIT

2225 19 February 1942

Background: ABDA moved to attack the Japanese forces invading the island of Bali, aiming for a reprise of the Balikpapan strike at the Japanese transports. Because the ABDA forces had come from two different ports, they swept into the invasion area in two separate waves.

Forces:

ABDA Forces Rear Admiral Karel Doorman, K.K.M. FIRST WAVE	Division 1	De Ruyter Java	(De Ruyter -- flag) (Java)
	Division 2	Piet Hein	(Van Galen -- flag)
	Division 3	John D. Ford Pope	(Clemson -- flag) (Clemson)
ABDA Forces Commander T. H. Binford, U.S.N. SECOND WAVE Arrives 0210	Division 1	Stewart Parrott J. D. Edwards Pillsbury Tromp	(Clemson -- flag) (Clemson) (Clemson) (Clemson) (Tromp)
Nihon Kaigun	Division 1	Asashio Oshio	(Asashio -- flag) (Asashio)
	Division 2	Michishio Arashio	(Asashio -- flag) (Asashio)
	Convoy	Sasago Maru	(Large Merchant)



The battle is fought in two separate engagements, each lasting 20 turns. The Japanese ships (or their survivors) begin at the same positions in each engagement.

The playing area is a fixed area 40 inches from north to south and 54 inches from east to west. It includes the coast of Bali and the island of Nusa Besar. The Bali coast runs from a point 3 inches east on the south edge to a point 16 inches from the west edge and 12 inches from the north edge, and from there to a point on the north edge 3 inches from the east edge. Nusa Besar is an irregularly shaped pentagon beginning two inches from the south edge and 6 inches from the west edge. From its southernmost point, its shoreline runs 26 inches on a course of 300 degrees, then 10 inches on a course of 30 degrees, then 16 inches on a course of 90 degrees, then 16 inches on a course of 150 degrees, then back to the southernmost point.

For ABDA, both the south and east edges are friendly. For the Japanese, only the east edge is friendly.

Japanese Division 1 and the Sasago Maru begin 24 inches north of the south edge and 4 inches east of the coast of Bali. They can be in any formation or formation and on any heading or headings that the Japanese player elects.

The ABDA First Wave begins on a course of 30 degrees. It consists of three divisions, steaming in order, with 5 inches separating each division. The lead ship of Division 1 (the De Ruyter) is 9 inches from the south edge and 7 inches east of the Bali coast. The third division (the U.S. destroyers) has not yet entered.

The ABDA Second Wave begins in the same location, in a line ahead formation.

Victory Conditions:

- a) 2 points per transport or cruiser sunk,
- b) 1 point per cruiser left DIW,
- c) 1 point per destroyer sunk.

Special Rules:

1. The ABDA forces must plot a course from their point of starting to the east edge north of Nusa Besar. They must stay on or between courses of 300 and 90 degrees.

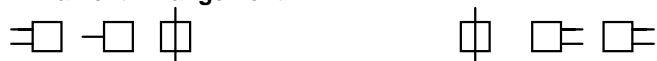
2. The Japanese forces are represented by blank ship bases until they are spotted. In addition, the Japanese receive six dummy blank ship bases. They move like ships (but their movements are not plotted) and begin stacked 2 per real ship. When they come within visual range of an ABDA ship, they are removed. Once removed, they can be placed (at the Japanese player's option) on any other blank Japanese ship base not within an ABDA ship's visual range.
3. The Japanese may receive reinforcements on any turn of either engagement. If the Japanese player rolls a **3** or less on 2D6 reinforcements arrive in the form of the Second Escort Division. (Historically, the reinforcements arrived only during the attack of the Second Wave. To simulate this, roll **1** on 1D6 for the reinforcements to arrive -- but only in the second engagement.)
4. The visibility base is **6** and the level is **-5**.
5. The American ships may not use starshell.
6. Optional: Kortenaer (Van Galen class) ran aground before the battle. Add her to Division 2 of the First Wave.

Outcome: The Japanese invasion fleet had mostly withdrawn before the strike went in -- the ABDA ships found only one transport and two escorting destroyers in the anchorage. The Japanese fought off both waves, sinking Piet Hein with a Long Lance and damaging Tromp and Stewart with gunfire. The ABDA ships managed only to damage destroyer Michishio when she tried to reinforce her beleaguered comrades.

De Ruyter

<u>Navy Class</u>	Royal Netherlands Navy Light cruiser	<u>Date</u>	1942
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	6 inch guns in 3 twin turrets and 1 single	19 inches	Fore and aft
<u>Speed</u>	4.00" 6 boilers 2 engines		
<u>Flotation</u>	Total: 59 DIW: 29 Sinking: 40		
		<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	15-22	Main A
	Main Magazine B	23-24	Main B
	Main Magazine B	25	Bridge
	Fuel Oil 2	26	Bridge, Main Director
	Boiler Room 1	31	Bridge, Searchlight 1 or 2
	Boiler Room 1	32	Void
	Boiler Room 1	33	Funnel
	Boiler Room 2	34	Funnel, Searchlight 3
	Boiler Room 2	35	Catapult
	Boiler Room 2	36	Aircraft, Catapult
	Boiler Room 3	41	Void
	Boiler Room 3	42-43	AAMGs
	Engine Room 1	44-45	Aft Main Director
	Engine Room 1	46	AAMGs
	Engine Room 2	51	AAMGs
	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	Void
	Fuel Oil 3, Propshaft 1 or 2	64	Void
	Steering	65	Steering
	Void	66	Void

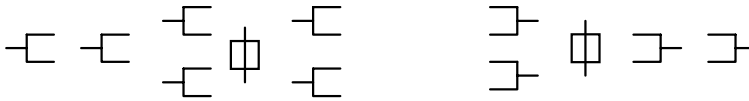
Internal Diagram

V1 1FP	FO1 2FP	FM A 2FP	FM B 2FP	FO2 2FP	BR1 B1 B2 7FP	BR2 B3 B4 7FP	BR3 B5 B6 7FP	ER1 E1 E2 11FP	ER2 E3 E4 11FP	AM X 2FP	AM Y 2FP	FO3 2FP	ST 1FP	V2 0FP
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Java

<u>Navy Class</u>	Royal Netherlands Navy Light cruiser	<u>Date</u>	1942
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	5.9 inch guns in 10 single mounts	23 inches	Fore and aft
<u>Speed</u>	3.75"	8 boilers	3 engines
<u>Flotation</u>	Total: 60	DIW: 30	Sinking: 40
		<u>Torpedo Hits</u>	17.7"-18": ±1 20.5"-22.5": ±2 24": ±4

Armament Arrangement



Notes

- Java class included Sumatra.

Hits

	Fuel Oil 1	11-12	Void
	Forward Main Magazine A, B, 1, 2	13-14	Main A
	Forward Main Magazine A, B, 1, 2	15-16	Main B
	Forward Main Magazine A, B, 1, 2	21	Bridge
	Fuel Oil 2	22	Bridge
	Fuel Oil 2	23	Bridge, Forward Main Director
	Fuel Oil 3	24	Main 1 or 2, Funnel
	Fuel Oil 3	25	Main 1 or 2, Funnel
	Boiler Room 1	26	Aircraft
	Boiler Room 1	31	Aircraft
	Boiler Room 1	32	Main 3 or 4, Funnel
	Boiler Room 2	33	Main 3 or 4, Funnel
	Boiler Room 2	34	Searchlight 1 or 2
	Boiler Room 2	35	Void
	Midships Main Magazine 3, 4, 5, 6	36	Searchlight 3 or 4
	Midships Main Magazine 3, 4, 5, 6	41	Void
	Midships Main Magazine 3, 4, 5, 6	42	Void
	Engine Room 1	43	Void
	Engine Room 1	44	Main 5 or 6, Aft Main Director
	Engine Room 2	45	Main 5 or 6
	Engine Room 2	46	AAMGs
	Engine Room 3	46	AAMGs
	Engine Room 3	51	AAMGs
	Aft Main Magazine	52-53	Main X
	Aft Main Magazine	54-55	Main Y
	Fuel Oil 4	56-61	Void
	Fuel Oil 4	62	Void
	Fuel Oil 4, Propshaft 1 or 2	63	Void
	Fuel Oil 4, Propshaft M	64	Void
	Steering	65	Steering

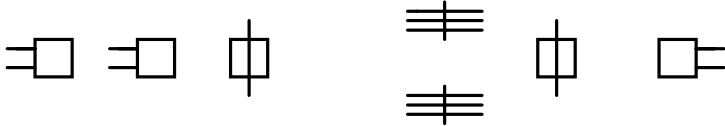
Internal Diagram

FO1 2FP	PM A,B 1,2 4FP	FO2 2FP	FO3 2FP	BR1 B1,2 B3,4 10FP	BR2 B5,6 B7,8 10FP	PM 3,4 5,6 4FP	ER1 E1 7FP	ER2 E2 7FP	ER3 E3 7FP	PM XY 2FP	FO4 2FP	ST 1FP
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Tromp

<u>Navy Class</u>	Royal Netherlands Navy Light cruiser	<u>Date</u>	1942	
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>	
Main Battery:	6 inch guns in 3 twin turrets	24 inches	Forward and aft	
Torpedoes:	21 inch torpedoes in 2 triple mounts 2 special hits	13 inches at 4.25" 16 inches at 2.75"	Aft	
<u>Speed</u>	4.00"	4 boilers	2 engines	
<u>Flotation</u>	Total: 64	DIW: 32	Sinking: 43	
		<u>Torpedo Hits</u>	17.7"-18": ±1	20.5"-22.5": ±3 24": ±4

Armament Arrangement



Notes

Hits

Fuel Oil 1	11-12	Void
Main Magazine A	13-14	Void
Main Magazine A	15-21	Main A
Main Magazine B	22-24	Main B
Main Magazine B	25	Bridge
Main Magazine B	26	Bridge, Main Director
Fuel Oil 2	31	Bridge
Fuel Oil 2	32	Bridge
Boiler Room 1	33	Funnel
Boiler Room 1	34	Funnel
Boiler Room 1	35	Funnel, Searchlight 1 or 2
Boiler Room 1	36	Void
Boiler Room 2	41	Void
Boiler Room 2	42	Torpedo 1 or 2, Aircraft
Boiler Room 2	43	Torpedo 1 or 2, Aircraft
Boiler Room 2	44	Torpedo Director
Engine Room 1	45	Torpedo Director
Engine Room 1	46	AAMGs
Engine Room 1	51	AAMGs
Engine Room 2	52	Aft Primary Director
Engine Room 2	53	Aft Primary Director
Engine Room 2	54	AAMGs
Main Magazine Y	55	AAMGs
Main Magazine Y	56-62	Main Y
Fuel Oil 2, Propshaft 1 or 2	63	Void
Fuel Oil 2, Propshaft 1 or 2	64	Void
Steering	65	Steering
Void	66	Void

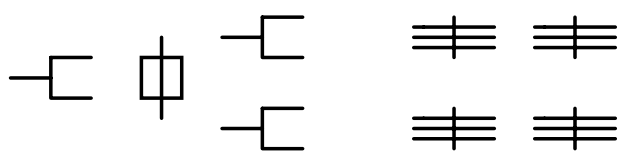
Internal Diagram

V1 1FP	FO1 2FP	FM A 2FP	FM B 2FP	FO2 1FP	BR1 B1 B2 14FP	BR2 B3 B4 14FP	ER1 E1 11FP	ER2 E2 11FP	AM Y 2FP	FO3 2FP	ST 2FP	V2 0FP
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Clemson/Wickes

<u>Navy Class</u>	United States Navy Destroyer	<u>Date</u>	1941	<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>		<u>Directors</u>	
Main Battery:	4 inch guns in 4 single mounts	14 inches		Fore	
Torpedoes:	21 inch torpedoes in 4 triple mounts 2 special hits	6 inches at 5.50" 10 inches at 3.25"		Port and starboard	
<u>Speed</u>	3.75	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": ±4	24": ±6

Armament Arrangement



Notes

- Built in the late teens and early 20s, but still serving in the US Asiatic Fleet in 1941.

Hits

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

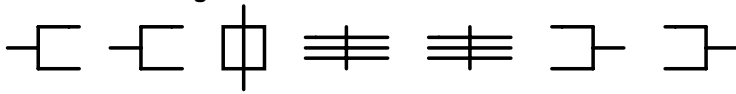
Internal Diagram

FO1 1FP	FM A,1,2 1FP	FO2 3FP	BR1 B1 B2 4FP	BR2 B3 B4 4FP	ER1 E1 4FP	ER2 E2 4FP	FO3 1FP	AM X 1FP	FO4 1FP	ST 1FP
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Van Galen/Van Ghent Classes

<u>Navy Class</u>	Royal Netherlands Navy Destroyer	<u>Date</u>	1942
		<u>Armor</u>	None
<u>Surface Armament</u>		<u>Ranges</u>	<u>Directors</u>
Main Battery:	4.7 inch guns in 4 single mounts	16 inches	Fore
Torpedoes:	21 inch torpedoes in 2 triple mounts 2 special hits	13 inches at 4.25" 16 inches at 2.75"	Port and starboard
<u>Speed</u>	4.50	3 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
<u>Torpedo Size:</u>			

Armament Arrangement



Notes

- Based on classic British inter-war destroyer design.
- Four Van Galens and four similar Van Ghents were build.

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
	Fuel Oil 2	26	Bridge
	Fuel Oil 2	31	Bridge
	Boiler Room 1	32	Main Director
	Boiler Room 1	33	AAMGs
	Boiler Room 1	34	Funnel
	Boiler Room 2	35-36	AAMGs
	Boiler Room 2	41	Funnel
	Engine Room	42-44	Torpedo A
	Engine Room	45	AAMGs, Searchlight
	Engine Room	51	Torpedo B
Aft Main Magazine		52	Torpedo B
Aft Main Magazine		53	Torpedo B
Aft Main Magazine		54-55	Main X
	Fuel Oil 3	56	Main X
	Fuel Oil 3	61-62	Main Y
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 4FP	ER E1 E2 9FP	AM X&Y 1FP	FO3 1FP	ST 1FP
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Asashio/Kagero/Yugumo

<u>Navy Class</u>	Imperial Japanese Navy Destroyer	<u>Date</u>	1942
		<u>Armor</u>	None

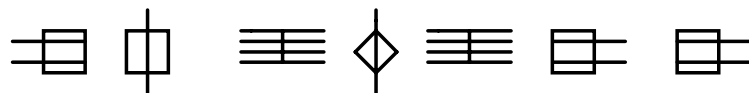
<u>Surface Armament</u>	<u>Ranges</u>	<u>Directors</u>
Main Battery:	5 inch guns in 3 twin mounts	18 inches
Torpedoes:	24 inch torpedoes in 2 quadruple mounts	22 inches at 6.00"
	8 reloads	35 inches at 5.00"
	3 special hits	44 inches at 4.50"

Speed 4.50 3 boilers 2 engines

Flotation Total: 28 DIW: 14 Sinking: 18

Torpedo Hits 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	ER2 E1,E2 6FP	V 2FP	PM Y 2FP	FO3 2FP	ST 1FP
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Merchantman (engine amidships)

<u>Navy Class</u>	Merchantman Engine amidships			<u>Date</u>	1942		
				<u>Armor</u>	None		
<u>Speed</u>	1.00"-2.00"	2 boilers	1 engine	<u>Torpedo Hits</u>	17.7"-18":	20.5"-22.5":	24":
				<u>Small</u>	±3	±6	±9
				<u>Medium</u>	±2	±4	±6
<u>Flotation</u>	Total:	DIW:	Sinking:	<u>Large</u>	±1	±3	±5
<u>Small</u>	29	15	20				
<u>Medium</u>	38	19	25				
<u>Large</u>	43	22	28				

Notes

- Models merchantment with boilers and engine situated amidships rather than aft.
- Small merchantmen equate to a displacement of 1000 to 3000 tons, medium merchantmen to 3000-7000 tons and large merchantmen to 7000-15000 tons.

Hits

	Small	Medium	Large		Small	Medium	Large
	Bow	Bow	Bow	11-13	Bow	Bow	Bow
	Hold 1	Hold 1	Hold 1	14-15	Hold 1	Hold 1	Hold 1
	Hold 1	Hold 1	Hold 1	16-21	Hold 1	Hold 1	Hold 1
	Hold 1	Hold 1	Hold 2	22-23	Hold 1	Hold 2	Hold 2
	Hold 1	Hold 2	Hold 2	24-25	Hold 1	Hold 2	Hold 2
	Hold 1	Hold 2	Hold 2	26	Bridge	Bridge	Bridge
	Hold 1	Hold 2	Hold 3	31-32	Bridge	Bridge	Bridge
	Hold 1	Hold 2	Hold 3	33-34	Hold 1	Hold 2	Hold 3
	Engine	Engine	Engine	35-42	Engine	Engine	Engine
	Hold 2	Hold 3	Hold 4	43-44	Hold 2	Hold 3	Hold 4
	Hold 2	Hold 3	Hold 4	45-46	Hold 2	Hold 3	Hold 4
	Hold 2	Hold 3	Hold 4	51	Hold 2	Hold 3	Hold 4
	Hold 2	Hold 3	Hold 5	52-53	Hold 2	Hold 3	Hold 5
	Hold 2	Hold 4	Hold 5	54-55	Hold 2	Hold 4	Hold 5
	Hold 2	Hold 4	Hold 6	56-61	Hold 2	Hold 4	Hold 6
	Hold 2	Hold 4	Hold 6	62-63	Hold 2	Hold 4	Hold 6
	Hold 2	Hold 4	Hold 6	64	Hold 2	Hold 4	Hold 6
	Steering	Steering	Steering	65-66	Steering	Steering	Steering

Internal Diagram -- Small

BOW 1FP	H1 FP 12FP	ER B1,E1 3FP	H2 FP 12FP	ST 1FP
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Internal Diagram -- Medium

BOW 1FP	H1 8FP	H2 8FP	ER B1,E1 4FP	H3 8FP	H4 8FP	ST 1FP
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Internal Diagram -- Large

BOW 1FP	H1 6FP	H2 6FP	H3 6FP	ER B1,E1 5FP	H4 6FP	H5 6FP	H6 6FP	ST 1FP
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