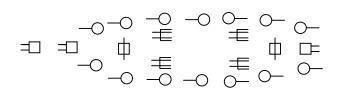
				Ko	ngo					
Navy Class		erial Japanes tlecruiser	e Navy		<u>Date</u>	1940				
Surface Arma Main Battery: Secondary Ba Anti-air Batter	14 attery: 6 ir	nch guns in 4 ch guns in 14 ch guns in 4 t	single caseme	ents	Ranges 38 inches 21 inches 14 inches		F P	pirectors ore and aft ort and stark ort and stark		
Gun: 14 inch twin 6 inch single 5 inch twin	5 A/ A/*	8 8/8 0 8/8	15" 6/8 3/5 2/2	20" 5/7 2/2 1/-2	25" 4/6 1/-1	30" 3/2	35" 2/0	38" 1/0	Power 7 5 4	Relia B B B
	3.75 inches  Total: 66	16 boilers DIW: 33	4 engine Sinking:		Torpedo Hits	<u> </u>	18": ±0	20.5"-22.5"	: ±1 24":	±3

#### **Armament Arrangement**



#### **Notes**

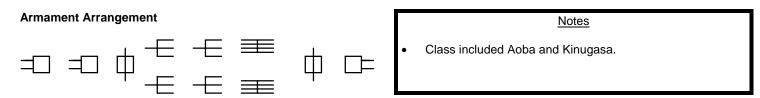
- Four ships in class, including Kongo, Hiei, Kirishima, Haruna
- Where the hit chart indicates that a location with secondary armament is armored, only the secondary armament is armored.

#### Hits

Fuel Oil 1	11-12	Void	
Fuel Oil 2	13-14	Void	
Main Magazine A	15-21	Main A	
Main Magazine B	22-24	Main B	
Secondary Magazine	25	Bridge, Secondary 1 or 2, Forward Primary Director	
Boiler Room 1 or 2	26	Bridge,	
Boiler Room 1 or 2	31	Bridge, Antiair 1or 2, Secondary 3 or 4	1
Boiler Room 3 or 4	32	Searchlight 1 or 2, Secondary 5 or 6	
Boiler Room 3 or 4	33	AAMGs, Funnel	
Boiler Room 5 or 6	34	Secondary 7 or 8	
Boiler Room 5 or 6	35	AAMGs	
Boiler Room 7 or 8	36	Catapult, Aircraft, Secondary 9 or 10	
Boiler Room 7 or 8	41	Funnel, Searchlight 3 or 4, AAMGs	
Primary Magazine X	42	Secondary 11 or 12, Anti-air 3 or 4	
Primary Magazine X	43-45	Main X	
Engine Room 1 or 2	46	Secondary 13 or 14	
Engine Room 1 or 2	51-52	AAMGs	
Engine Room 3 or 4	53-55	Void	
Main Magazine Y	56-62	Main Y	
Fuel Oil 3	63	Void	
Fuel Oil 3, Propshaft 1 or 2	64	Void	
Fuel Oil 4, Propshaft 3 or 4	65	AAMGs	
Steering	66	Steering	

					BR1 B1	BR3 B5	BR5 B9	BR7 B13		ER1	ER3				
FO1	FO2	PM	PM	SM	B3 3FP	B7 3FP	B11 3FP	B15 3FP	PM	E1 5FP	E3 5FP	PM	FO3	FO4	ST
1FP	2FP	A 2FP	B 2FP	2FP	BR2 B2	BR4 B6	BR6 B10	BR8 B14	X 2FP	ER2	ER4	Y 2FP	2FP	2FP	1FP
					B4 3FP	B8 3FP	B12 3FP	B16 3FP		E2 5FP	E4 5FP				

					Aoba					
Navy Class		Imperial Jap Heavy cruise		nvy	<u>Da</u>	<u>te</u> 1	941			
Surface Arr Main Batter Secondary Torpedoes:	ry: Battery:	8 inch guns 4.7 inch gun 24 inch torp 8 reloads 3 special hit	s in 4 sing edoes in 2		32 16 ints 22 35	nges inches inches inches at 6 inches at 4	5.00"	Directors Fore and a Port and s Port and s	tarboard	
Gun: 8 inch twin 4.7 inch sin	igle	5" A/10 A/9	10" 8/9 8/5	15" 6/7 2/2	20" 4/5 1/-2	25" 3/0	30" 2/0	32" 1/0	Power 6 4	Relia B B
Speed Flotation	4.25" Total: 63	12 boi		4 engines Sinking: 42	<u>Toi</u> Bul	pedo Hits ae	17.7"-18": ±1	20.5"-22		24": ±3
1 lotation	10.01.00	DIVV.	<i></i>	Officing. 42	Du	<u>gc</u>	i to torpedo i	into in way o	1 22 02	



Hits Fuel Oil 1 11-14 Void 15-21 Main A Main Magazine A Main Magazine B 22-23 Main B 24 Boiler Room 1 Bridge, AAMGs Boiler Room 1 25 Secondary Director 1 or 2, Bridge Main Director, Bridge Boiler Room 1 26 Boiler Room 2 or 3 31 Torpedo Director, Bridge Secondary 1 or 2, Funnel, Searchlight 1 or 2 Boiler Room 2 or 3 32 Boiler Room 2 or 3 Funnel 33 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 Catapult, Aircraft 44-45 Engine Room 2 or 4 46 Catapult, Aircraft Engine Room 2 or 4 51-53 Void Main Magazine C 54-56 Main C

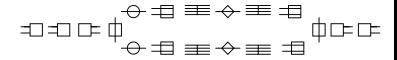
Fuel Oil 2, Propshaft 1 or 2) 61-62 Void
Fuel Oil 3, Propshaft 3 or 4) 63-64 Void
Steering 65 Steering

teering 65 Steering Void 66 Void

Internal Diagram and Torpedo Hits

								BR7	ER1	ER3					
			BR1	BR3	4FP	BR5	4FP	B11	E1	E3					
FO1	PM	PM	B1	В3	B5	B7	B9	2FP	6FP	6FP	PM	FO2	FO3	ST	V
3FP	Α	В	B2	BR2	4FP	BR4	4FP	BR6	ER2	ER4	Χ	2FP	2FP	1FP	1FP
	2FP	2FP	4FP	B4	B6	B8	B10	B12	E2	E4	2FP				
-								2FP	6FP	6FP					

				Cho	okai/M	aya				
Navy		Imperial Jap		avy	Date	1	941			
<u>Class</u>		Heavy cruis	er							
Surface Ar	mament				Ran	ges		Directors		
Main Batte	ry:	8 inch guns	in 5 twin	turrets	32 iı	ches		Fore and a	aft	
Secondary	Battery:	4.7 inch gur	ns in 4 sin	gle mounts	16 iı	nches		Port and s	tarboard	
Torpedoes	): :	24 inch torp	edoes in 4	4 twin mounts	22 iı	iches at 6	5.00"	Port and s	tarboard	
		8 reloads			35 iı	ches at 5	5.00"			
Maximum '	Value:	9			44 iı	ches at 4	.50"			
Gun:		5"	10"	15"	20"	25"	30"	32"	Power	Relia
8 inch twin		A/10	8/9	6/7	4/4	3/0	2/-1	1/-1	6	В
4.7 inch si	ngle	A/9	8/5	2/2	1/-2				4	В
<u>Speed</u>	4.25"	12 boi	ilers	4 engines	<u>Torp</u>	edo Hits	17.7"-18": ±1	20.5"-22	2.5": ±2	24": ±3
<u>Flotation</u>	Total: 66	DIW:	33	Sinking: 44	<u>Bulg</u>	<u>e</u>	-1 to torpedo h	nits in way o	f locations	21-54



#### <u>Notes</u>

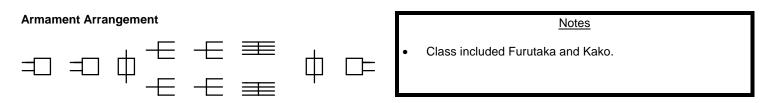
- Chokai and Maya were not refitted with their sisters.
  Takao had Chokai's secondary battery until April 1942, Atago until May 1942.

#### Hits

	Fuel Oil	11-15	Officers Berths	
	Main Magazine A	16-21	Main A	i
	Main Magazine B	22-23	Main B	
	Main Magazine M	24-25	Main M	į
	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,	
	Frains Bases 4 as 0	40.45	Secondary 3 or 4	
	Engine Room 1 or 2	43-45	. ,	
	Engine Room 3 or 4	46-51		
	Main Magazine X		Main X	i
	Main Magazine Y Fuel Oil 2	56-62	Main Y Crew Berths	!
	Fuel Oil 3, Propshaft 1 or 2	63		
	Fuel Oil 3, Propshaft 3 or 4	64	Crew Berths	
:	Steering	65	Steering	;
	Aft Void	66	Aft Void	

									BK5	BK/	BK9	ERT	ER3						
						BR1	BR2	BR3	В7	В9	B11	E1	E3						
F	FO1	MM	MM	MM	SM	B1	В3	B5	2FP	2FP	2FP	6FP	6FP	MM	MM	FO2	FO3	ST	V
1 :	2FP	Α	В	М	1FP	B2	B4	В6	BR4	BR6	B8	ER2	ER4	Χ	Υ	2FP	2FP	1FP	0FP
		2FP	2FP	2FP		4FP	4FP	4FP	В8	B10	B12	E2	E4	2FP	2FP				1
									2FP	2FP	2FP	6FP	6FP						

	Furutaka												
Navy Class				vy	<u>Dat</u>	<u>e</u> 1	941						
Class     Heavy cruiser       Surface Armament Main Battery: 8 inch guns in 3 twin turrets 32 inches       Secondary Battery: 4.7 inch guns in 4 single mounts Torpedoes: 24 inch torpedoes in 2 quadruple mounts 8 reloads 35 inches at 5.00     22 inches at 6.00       Maximum Value: 9     44 inches at 4.50       Gun: 5"     5"     10"     15"     20"     25"							5.00"	Directors Fore and a Port and s Port and s	starboard				
Gun: 8 inch twin 4.7 inch sing	gle	5" A/10 A/9	10" 8/9 8/5	15" 6/7 2/2	20" 4/5 1/-2	25" 3/0	30" 2/0	32" 1/0	Power 6 4	Relia B B			
<u>Speed</u>	4.25"	12 boi	lers	4 engines	<u>Tor</u>	oedo Hits	17.7"-18": ±1	20.5"-22	2.5": ±2	24": ±3			
<u>Flotation</u>	Total: 63	DIW: 3	32	Sinking: 42	Bul	<u>je</u>	-1 to torpedo h	nits in way o	of 22 -52				



Hits Fuel Oil 1 11-14 Void Main Magazine A 15-21 Main A Main Magazine B 22-23 Main B 24 Fuel Oil 2 Bridge, AAMGs Boiler Room 1 25 Secondary Director 1 or 2, Bridge Main Director, Bridge Boiler Room 1 26 Boiler Room 1 31 Torpedo Director, Bridge Boiler Room 2 or 3 Secondary 1 or 2, Funnel, Searchlight 1 or 2 32 Boiler Room 2 or 3 Funnel 33 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

63-64

65

66

**Internal Diagram and Torpedo Hits** 

Fuel Oil 4, Propshaft 3 or 4)

Steering

Void

_										ER1	ER3					
Ī					BR1	BR3	4FP	BR5	4FP	E1	E3					
	FO1	PM	PM	FO2	B1	В3	B5	B7	B9	6FP	6FP	PM	FO3	FO4	ST	V
	3FP	Α	В	4FP	B2	BR2	4FP	BR4	4FP	ER2	ER4	Χ	2FP	2FP	1FP	1FP
		2FP	2FP		4FP	B4	B6	B8	B10	E2	E4	2FP				
										6FP	6FP					

Void

Void

Steering

				N	logan	i				
<u>Navy</u>		Imperial Jap	anese Na	avy	Date	<u> </u>	940, as reconst	ructed		
<u>Class</u>		Heavy cruis	er							
Surface Arr	<u>nament</u>				Ran	<u>ges</u>		Directors		
Main Batter	y:	8 inch guns	in 5 twin t	turrets	32 i	nches		Fore and	aft	
Secondary	Battery:	5 inch guns	in 4 twin	mounts	15 i	nches		Port and s	starboard	
Torpedoes:		24 inch torp	edoes in 4	4 triple mounts	22 inches at 6.00" Port and starboard					
	6 rel				35 i	nches at 5	.00"			
Maximum V	/alue:	9			44 i	nches at 4	.50"			
Gun:		5"	10"	15"	20"	25"	30"	32"	Power	Relia
8 inch twin		A/10	8/9	6/7	4/5	3/0	2/0	1/0	6	В
5 inch twin		A/12	8/8	2/4	1/0				4	В
<u>Speed</u>	4.25"	10 boi	ilers	4 engines	<u>Tor</u>	edo Hits	17.7"-18": ±1	20.5"-2	2.5": ±2	24": ±3
Flotation	Total: 62	DIW:	31	Sinking: 42	<u>Bulç</u>	<u>e</u>	-1 to torpedo l	nits in way c	of locations	21-54

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Notes Class included Mogami and Mikuma.

Hits

Void 1 11-15 Void 1

Fuel Oil 1 13 Officers Quarters

Main Magazine A 16-21 Main A Main Magazine B Main M 22-23 Main Magazine M Main B 24-25 Secondary Magazine/Plot **AAMGs** 26 Boiler Room 1 31

Bridge, Forward Main Director Boiler Room 2 32 Port of Starboard Secondary Director, Bridge Boiler Room 3 33 Funnel, Torpedo Director

Boiler Room 4 or 5 34 Secondary 1 or 2, Searchlight 1 or 2, Funnel

Boiler Room 6 or 7 35 **AAMGs** 

Boiler Room 6 or 7 36 Funnel Engine Room 1 or 2 41 Secondary 3, Searchlight 3 or 4, AAMGs

Engine Room 1 or 2 42 Torpedo 1 or 2

Engine Room 1 or 2 43

Aft Main Director, Port or Starboard Catapult, Aircraft

Engine Room 1 or 2 44 Port or Starboard Catapult, Aircraft

Engine Room 3 or 4 45 Port or Starboard Catapult, Aircraft, Torpedo 3 or 4

Engine Room 3 or 4 46 Aircraft Engine Room 3 or 4 Aircraft 51

Main Magazine X 52-53 Main X Main Magazine Y Main Y 54-55

Fuel Oil 2 56-62 Crew Berths Fuel Oil 2, Propshaft 1 or 2 Crew Berths 63 Fuel Oil 2, Propshaft 3 or 4 64 Crew Berths

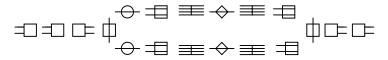
Steering 65 Steering Void 2 Void 2 66

V1	FO1	MM	MM	MM	SM	BR1 B1
2FP	2FP	A 2FP	M 2FP	B 2FP	PL 1FP	B2 4FP

BR3	BR5	BR7	BR9	ER1	ER3
В3	B5	B7	B9	E1	E3
2FP	2FP	2FP	2FP	6FP	6FP
BR2	BR4	BR6	BR8	ER2	ER4
BR2 B4	BR4 B6	BR6 B8	BR8 B10	ER2 E2	ER4 E4

MM MM Y 2FP 2FP	FO2	ST	V2
	2FP	1FP	0FP

					Myok	0				
Navy Class		Imperial Jap Heavy cruise		vy	Da	<u>ate</u> 1	940, as reconst	ructed		
Surface Arma Main Battery: Secondary Ba Torpedoes: Maximum Val	attery:	8 inch guns 5 inch guns 24 inch torpo 8 reloads 9	in 4 twin r		32 15 ints 22 35	anges inches inches inches at 6 inches at 5 inches at 4	.00"	Directors Fore and s Port and s Port and s	starboard	
Gun: 8 inch twin 5 inch twin		5" A/10 A/12	10" 8/9 8/8	15" 6/7 2/4	20" 4/5 1/0	25" 3/0	30" 2/0	32" 1/0	Power 6 4	Relia B B
<u>Speed</u>	4.25"	12 boi	lers	4 engines	<u>To</u>	rpedo Hits	17.7"-18": ±1	20.5"-22	2.5": ±2	24": ±3
Flotation	Total: 66	DIW:	33	Sinking: 44	<u>Bu</u>	<u>ilge</u>	-1 to torpedo h	nits in way o	of locations	21-54



#### **Notes**

• Class included Myoko, Nachi, Haguro and Ashigara.

#### Hits

пиз				
	Fuel Oil 1	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	Bridge	H
	Boiler Room 1	31	Bridge, Port or Starboard Secondary Director, AAMGs,	
	Boiler Room 2	32	Forward Main Director, Funnel, Bridge	
	Boiler Room 3	33	Secondary 1 or 2, Searchlight 1 or 2, Torpedo Director	
	Boiler Room 4 or 5	34	Funnel	
	Boiler Room 6 or 7	35	AAMGs	
	Boiler Room 6 or 7	36	Searchlight 3 or 4	
	Boiler Room 8 or 9	41	Secondary 3 or 4, Funnel	
	Boiler Room 8 or 9	42	AAMGs	
	Engine Room 1 or 2	43	Torpedo 1 or 2, Aft Main Director	
	Engine Room 1 or 2	44	Port or Starboard CatapultAircraft	
	Engine Room 1 or 2	45	Port or Starboard Catapult, Aircraft	
	Engine Room 3 or 4	46	Torpedo 3 or 4	
	Engine Room 3 or 4	51	Aircraft	
	Main Magazine X	52-53	Main X	
	Main Magazine Y		Main Y	
	Fuel Oil 2	56-62	Crew Berths	
	Fuel Oil 3. Propshaft 1 or 2	63	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

		_		_	_	_	=	_	BR5	BR7	BR9	ER1	ER3		=				_
I						BR1	BR2	BR3	B7	B9	B11	E1	E3						
	FO1	MM	MM	MM	SM	B1	В3	B5	2FP	2FP	2FP	6FP	6FP	MM	MM	FO2	FO3	ST	V
	2FP	Α	В	М	1FP	B2	В4	B6	BR4	BR6	B8	ER2	ER4	Χ	Υ	2FP	2FP	1FP	0FP
		2FP	2FP	2FP		4FP	4FP	4FP	B8	B10	B12	E2	E4	2FP	2FP				
									2FP	2FP	2FP	6FP	6FP						

				5	Suzuya	a				
Navy Class		Imperial Jap Heavy cruise		ivy	Date	<u>ə</u> 1	940, as reconst	ructed		
Surface Arr Main Batter Secondary Torpedoes:	ry: Battery:	6 reloads	in 4 twin r		32 i 15 i 22 i 35 i	nches nches nches nches at 6 nches at 5	5.00"	Directors Fore and Port and s Port and s	starboard	
Maximum \	/alue:	9			44 ו	nches at 4	1.50"			
Gun: 8 inch twin 5 inch twin		5" A/10 A/12	10" 8/9 8/8	15" 6/7 2/4	20" 4/5 1/0	25" 3/0	30" 2/0	32" 1/0	Power 6 4	Relia B B
<u>Speed</u>	4.25"	8 boile	ers	4 engines	Tor	edo Hits	17.7"-18": ±1	20.5"-2	2.5": ±2	24": ±3
<u>Flotation</u>	DIW:	31	Sinking: 42	<u>Bulç</u>	<u>je</u>	-1 to torpedo	hits in way o	of locations	21-54	

Notes

Class included Suzuya and Kumano.

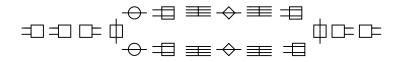
Hits

11-15 Void 1 Void 1 Fuel Oil 1 Officers Quarters 13 Main Magazine A 16-21 Main A Main Magazine B Main M 22-23 Main Magazine M Main B 24-25 Secondary Magazine AAMGs 26 31 Bridge, Forward Main Director Boiler Room 1 or 2 32 Port of Starboard Secondary Director, Bridge Boiler Room 3 or 4 33 Funnel, Torpedo Director Boiler Room 3 or 4 Secondary 1 or 2, Searchlight 1 or 2, Funnel 34 Boiler Room 5 or 6 35 **AAMGs** Boiler Room 7 or 8 36 Funnel Engine Room 1 or 2 41 Secondary 3, Searchlight 3 or 4, AAMGs Engine Room 1 or 2 42 Torpedo 1 or 2 Aft Main Director, Port or Starboard Catapult, Aircraft Engine Room 1 or 2 43 Engine Room 1 or 2 44 Port or Starboard Catapult, Aircraft Engine Room 3 or 4 45 Port or Starboard Catapult, Aircraft, Torpedo 3 or 4 Engine Room 3 or 4 46 Aircraft Engine Room 3 or 4 Aircraft 51 Main Magazine X 52-53 Main X Main Magazine Y 54-55 Main Y

Fuel Oil 2 56-62 Crew Berths
Fuel Oil 2, Propshaft 1 or 2 63 Crew Berths
Fuel Oil 2, Propshaft 3 or 4 64 Crew Berths
Steering 65 Steering
Void 2 66 Void 2

								BR1	BR3	BR5	BR7	ER1	ER3					
Ī								B1	B3	B5	B7	E1	E3					
	V1	FO1	MM	MM	MM	SM	PL	2FP	2FP	2FP	2FP	6FP	6FP	MM	MM	FO2	ST	V2
	2FP	2FP	Α	М	В	2FP	1FP	BR2	BR4	BR6	BR8	ER2	ER4	Χ	Υ	2FP	1FP	0FP
			2FP	2FP	2FP			B2	B4	B6	B8	E2	E4	2FP	2FP			
_								2FP	2FP	2FP	2FP	6FP	6FP					

		Tal	kao/At	ago				
<u>Navy</u>	Imperial Japanese N	lavy	<u>Da</u>	<u>te</u> 1	942, as reconst	ructed		
<u>Class</u>	Heavy cruiser							
Surface Armament				nges		Directors		
Main Battery:	8 inch guns in 5 twin		_	32 inches Fore and aft				
Secondary Battery:			_	15 inches Port and starboa				
Torpedoes:	24 inch torpedoes in	4 quadruple mo						
	8 reloads		35	35 inches at 5.00"				
Maximum Value:	9		44	inches at 4	1.50"			
Gun:	5" 10"	15"	20"	25"	30"	32"	Power	Relia
8 inch twin	A/10 8/9	6/7	4/5	3/0	2/0	1/0	6	В
5 inch twin	A/12 8/8	2/4	1/0				4	В
<u>Speed</u> 4.25"	12 boilers	4 engines	<u>Tor</u>	pedo Hits	17.7"-18": ±1	20.5"-22	2.5": ±2	24": ±3
Flotation Total:	66 DIW: 33	Sinking: 44	<u>Bul</u>	<u>ge</u>	-1 to torpedo l	nits in way c	of locations	21-54



#### **Notes**

 Takao had Chokai's secondary battery until April 1942, Atago until May 1942: 4.7 inch guns in 4 single mounts, range 16 inches (A/9, 8/5, 2/2, 1/-2, Power 4, Reliability B).

#### Hits

Fuel Oil	11-15 Officers Berths
Main Magazine 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	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Boiler Room 3	33 Port or Starboard Secondary Director,
	Torpedo 1 or 2, Torpedo Director
Boiler Room 4 or 5	
Boiler Room 6 or 7	3
Boiler Room 6 or 7	36 Void
Boiler Room 8 or 9	
Boiler Room 8 or 9	3 ,
	Secondary 3 or 4
Engine Room 1 or 2	
Engine Room 3 or 4	
Main Magazine X	
Main Magazine Y	
Fuel Oil 2	
Fuel Oil 3, Propshaft 1 or 2	
Fuel Oil 3, Propshaft 3 or 4	
Steering	
Aft Void	66 Aft Void

								BR5	BR7	BR9	ER1	ER3						
					BR1	BR2	BR3	В7	В9	B11	E1	E3						
FO <sup>-</sup>	MM	MM	MM	SM	B1	B3	B5	2FP	2FP	2FP	6FP	6FP	MM	MM	FO2	FO3	ST	V
2FF	Α	В	М	1FP	B2	B4	В6	BR4	BR6	B8	ER2	ER4	Χ	Υ	2FP	2FP	1FP	0FP
	2FP	2FP	2FP		4FP	4FP	4FP	B8	B10	B12	E2	E4	2FP	2FP				
		•					•	2FP	2FP	2FP	6FP	6FP		•	•			

					Tone					
Navy Class		Imperial Jap Heavy cruis		avy	<u>Dat</u>	<u>e</u> 1	939			
Surface Ar Main Batte Secondary Torpedoes	ry: Battery: :	8 inch guns 5 inch guns 24 inch torp 12 reloads 9	in 4 twin r		32 i 15 i 22 i 35 i	nges nches nches nches at 6 nches at 5 nches at 4	.00"	Directors Fore and Port and s Port and s	starboard	
Gun: 8 inch twin 5 inch twin		5" A/10 A/12	10" 8/9 8/8	15" 6/7 2/4	20" 4/5 1/0	25" 3/0	30" 2/0	32" 1/0	Power 6 4	Relia B B
Speed Flotation	4.25" Total: 61	8 boile		4 engines Sinking: 40	<u>Tor</u>	oedo Hits	17.7"-18": ±1	20.5"-2	2.5": ±2	24": ±3

Notes

ST

1FP

V2

0FP

· Class included Tone and Chikuma.

Hits

Void 1 11-15 Void 1 Fuel Oil 1 Officers Quarters 13 Main Magazine A Main A 16-21 Main Magazine B Main B 22-23 Main Magazine M1 Main M1 24

Main Magazine M2 25-26 Main M2 Plot 31 **AAMGS** Bridge, Forward Main Director, Port of Starboard Boiler Room 1 or 2 32

Secondary Director Boiler Room 3 or 4 33 **Funnel** Boiler Room 3 or 4 Secondary 1 or 2, Searchlight 1 or 2, Funnel 34

Boiler Room 5 or 6 35 Boiler Room 7 or 8 36

Secondary 3 or 4, Searchlight 3, AAMGs Engine Room 1 or 2 41 Aft Main Director

Torpedo 1 or 2, Torpedo Director, AAMGs Engine Room 1 or 2 42

Engine Room 1 or 2 43-44 Port or Starboard Catapult, Aircraft Port or Starboard Catapult, Aircraft, Torpedo 3 or 4

Engine Room 3 or 4 45 Engine Room 3 or 4 46-51 Aircraft Aviation Gas 1 Aircraft 52-54 Aviation Gas 2 55-62 Aircraft

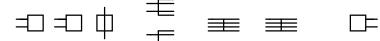
Fuel Oil 2, Propshaft 1 or 2 Aircraft 63 Fuel Oil 2, Propshaft 3 or 4 64 Aircraft

Steering Steering 65 Void 2 66 Void 2

				_	=		_	BR1	BR3	BR5	BR7	ER1	ER3		=	
	V1	FO1	MM	MM	MM	MM	PL	B1 2FP	B3 2FP	B5 2FP	B7 2FP	E1 6FP	E3 6FP	AV1	AV2	FO2
	2FP	2FP	A 2FP	B 2FP	M1 2FP	M2 2FP	1FP	BR2 B2	BR4 B4	BR6 B6	BR8 B8	ER2 E2	ER4 E4	2FP	2FP	2FP
•								2FP	2FP	2FP	2FP	6FP	6FP			

**Agano** Imperial Japanese Navy 1942 **Date** <u>Navy</u> Class Light cruiser Surface Armament Ranges Directors Main Battery: 6.1 inch guns in 3 twin turrets 26 inches Fore Torpedoes: 24 inch torpedoes in 2 quadruple mounts 22 inches at 6.00" Aft Maximum Value: 35 inches at 5.00" 44 inches at 4.50" Gun: 5" 10" 15" 20" 25" 26" Power Relia 6.1 inch twin A/12 8/10 3/8 2/6 1/3 1/-2 В 5 4.25" 6 boilers 4 engines **Speed** Torpedo Hits 17.7"-18": ±1 20.5"-22.5": ±2 24": ±4 Total: 66 DIW: 33 Sinking: 44 **Flotation** 

#### **Armament Arrangement**



#### Notes

- Class included Agano, Noshiro, Sakawa and Yahagi.
- AA guns cannot engage surface targets. They count as AAMGs.

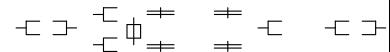
#### HIts

HITS				
_	Fuel Oil 1	11-15	Void	
:	Main Magazine A	16-21	Main A	į
	Main Magazine B	22-23	Main B	
	Fuel Oil 2	24-26	AAMGs	
:	Fuel Oil 3	31	Bridge, Torpedo Director	
į	Fuel Oil 3, Plotting Room	32	Forward Main Director, Bridge	
	Boiler Room 1	33	Secondary 1 or 2, Bridge	
	Boiler Room 1	34	Searchlight 1 or 2, Secondary Director 1 or 2	
	Boiler Room 1	35	Funnel	
	Boiler Room 2 or 3	36	AAMGs	
	Boiler Room 2 or 3	41-42	Torpedo A	
	Boiler Room 4 or 5	43-44	Aircraft	
	Boiler Room 4 or 5	45	Catapult	
	Engine Room 1 or 2	46	Torpedo B	
	Engine Room 1 or 2	51	Aircraft, Catapult	
	Engine Room 3	52	Aircraft, Catapult	
	Engine Room 3	53	AAMGs	
	Engine Room 3	54	AAMGs	
	Main Magazine Y:	55-56	Main Y	:
	Fuel Oil 4	61	Void	
	Fuel Oil 4	62	AAMGs	
	Fuel Oil 5, Propshaft 1 or 2	63	Void	
	Fuel Oil 5, Propshaft 3 or 4	64	Void	
	Steering	65	Steering	į
	Void	66	Void	

					BR1	BR3	BR5	ER1	ER3					
FO1	FM	FM	FO2	FO3	B1	4FP	4FP	6FP	E3,4	AM	FO4	FO5	ST	V
1FP	Α	В	2FP	2FP	B2	BR2	BR3	ER2	11	Υ	2FP	2FP	1VP	1VP
	2FP	2FP			9FP	4FP	4FP	6FP	FP	2FP				

#### Nagara/Kuma Imperial Japanese Navy Date 1942, as modified Navy Class Light cruiser Surface Armament Ranges **Directors** Main Battery: 5.5 inch guns in 7 single mounts 20 inches Fore 24 inch torpedoes in 4 twin mounts Torpedoes: 22 inches at 6.00" Port and starboard 35 inches at 5.00" no reloads 44 inches at 4.50" 5" 10" 15" 20" Power Relia Gun: 5.5 inch single A/10 8/8 3/5 2/3 5 В Speed 4.00" 12 boilers 4 engines Torpedo Hits 17.7"-18": ±1 24": ±4 20.5"-22.5": ±2 Flotation Total: 53 DIW: 27 Sinking: 36

#### **Armament Arrangement**



#### Notes

- Nagara class included Abukuma, Isuzu, Kinu, Nagara, Natori and Yura.
- Kuma class included Kiso, Kitakami, Kuma, Oi and Tama.
- In 1943, many in both classes had their M2 guns replaced with AAMGs, while some also replaced their X guns with a twin 5" mount. 5 inch twin: A/12, 8/8, 2/4, range 15 inches, power 4, reliability B.
- Abukuma had 2 quadruple 24inch torpedo tubes aft <u>vice</u> four twin mounts.

#### Hits

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

BR1

B1

2FP

BR2

B2.3

4FP

BR3

B4,5,

6,7

8FP

BR4

B8,9

4FP

ER1

E1.2

8FP

ER2

E1,2

8FP

AM

4FP

V2

2FP

ST

1FP

V3

1FP

FΜ

4FP

PL

1FP

FO<sub>1</sub>

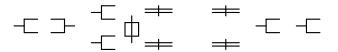
4FP

V1

2FP

Sendai Imperial Japanese Navy Date 1942, as modified Navy Class Light cruiser Surface Armament Ranges **Directors** Main Battery: 5.5 inch guns in 7 single mounts 20 inches Fore Torpedoes: 24 inch torpedoes in 4 twin mounts 22 inches at 6.00" Port and starboard no reloads 35 inches at 5.00" 44 inches at 4.50" 5" 10" 15" 20" Power Relia Gun: 2/3 5.5 inch single A/10 8/8 3/5 5 В 4.00" 10 boilers 4 engines Torpedo Hits Speed 17.7"-18": ±1 20.5"-22.5": ±2 24": ±4 Flotation Total: 55 DIW: 28 Sinking: 36

#### **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. 5 inch twin: A/12, 8/8, 2/4, range 15 inches, power 4, reliability B.
- Naka and Jintsu had 2 quadruple torpedo mounts aft and none forward.

#### Hits

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

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

	Tenryu													
Navy Class		Imperial Japa Light cruiser	anese Na	ivy	<u>Dat</u>	<u>e</u> 19	940							
Surface Arn Main Batter Torpedoes:	y:	5.5 inch guns in 4 single mounts 21 inch torpedoes in 2 triple mounts			20 i 8 in	nges nches ches at 4.2 nches at 3.	-	<u>Directors</u> Fore Port and starboard						
Gun: 5.5 inch sin	gle	5" A/10	10" 8/8	15" 3/5	20" 2/3	Power 5	Relia B							
Speed	4.00"	8 boile	rs	3 engines	<u>Tor</u>	pedo Hits	17.7"-18": ±1	20.5"-22.5": ±2	24": ±4					
<u>Flotation</u>	Total: 44	DIW: 2	2	Sinking: 30										

# 

Hits Void 1 11-13 Void Forward Magazine 14-15 Main A Forward Magazine Bridge 16 Bridge, Main Director Forward Magazine 21 Main 1 Fuel Oil 1 22-23 Boiler Room 1 24 Torpedo A Torpedo A Boiler Room 2 25-26 Boiler Room 2 31-32 Funnel Boiler Room 3 Void 33 Boiler Room 3 Boiler Room 3 34-35 Funnel 36 Void Engine Room 1 41-42 Funnel Engine Room 1 43 Void Engine Room 1 Torpedo B 44 Engine Room 2 Torpedo B 45-46 Engine Room 2 51 Torpedo Director Engine Room 2 52 Main 2 Aft Magazine 53 Main 2 Aft Magazine Searchlight 54 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

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

	Yubari												
Navy		Imperial Jap		vy	Dat	<u>te</u> 19	942, as modifie	d					
Class		Light cruiser											
Surface Ar						nges		<u>Directors</u>					
Main Battery: 5.5 inch guns in 2 sing mounts			gle and 2 twin	20	inches	Fore							
Torpedoes				2 twin mounts	35	inches at 6. inches at 5. inches at 4.	.00"	Aft					
Gun:		5"	10"	15"	20"	Power	Relia						
5.5 inch sir	ngle	A/10	8/8	3/5	2/3	5	В						
5.5 inch tw	in	A/12	8/10	3/7	2/5	5	В						
<u>Speed</u>	4.00"	7 boile	ers	3 engines	<u>Tor</u>	pedo Hits	17.7"-18": ±1	20.5"-22.5": ±3	24": ±5				
<u>Flotation</u>	Total: 42	DIW: :	21	Sinking: 28									

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

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