

Wasp

Navy Class

United States Navy
Aircraft carrier

Date

1942

Surface Armament

Secondary Battery: 5 inch guns in 8 single mounts

Ranges

18 inches

Directors

Fore and Aft

Speed

3.50"

6 boilers

4 engines

Flotation

Total: 71

DIW: 36

Sinking: 48

Torpedo Hits

17.7"-18": +1

20.5"-22.5": ±1

24": ±2

Armament Arrangement



Notes

- Wasp was only ship in class.
- Could operate air group of 74 planes.

Hits

	Void 1	11-13	1	2-5	6
	Fuel Oil 1	14	Hanger	Hanger	Hanger
	Fuel Oil 1	15-16	Hanger	Hanger	Hanger
	Aviation Gas 1	21-22	Secondary 2	Elevator 1	Secondary 1
	Aviation Gas 1	23	Secondary 4	Elevator 1	Secondary 3
	Aviation Gas 2	24-25	AAMGs	Hanger	AAMGs
	Forward Magazine and Plot	26	AAMGs	Hanger	AAMGs
	Void 2	31	Hanger	Hanger	AAMGs
	Turbo-generators 1	32	Hanger	Hanger	Bridge
	Boiler Room 1	33	Hanger	Hanger	Fwd Director, Bridge
	Boiler Room 1	34	Hanger	Hanger	AAMGs, Bridge
	Boiler Room 2	35-36	Hanger	Hanger	Search Radar
	Boiler Room 3	41	Hanger	Hanger	Funnel
	Boiler Room 3	42	Hanger	Hanger	Funnel
	Engine Room 1 or 2	43-44	Hanger	Elevator 2	Aft Director
	Engine Room 1 or 2	45	Hanger	Elevator 2	AAMGs
	Engine Room 3 or 4	46-52	AAMGs	Elevator 2	AAMGs
	Turbo-generator 2	53	AAMGs	Hanger	AAMGs
	Aft Magazine and Bomb Magazine,	54-55	Hanger	Hanger	Hanger
	Propshaft 1 or 2				
	Fuel Oil 2, Propshaft 3 or 4	56-61	Secondary 6	Elevator 3	Secondary 5
	Fuel Oil 2	62	Secondary 8	Elevator 3	Secondary 7
	Steering	63-64	Secondary 8	Elevator 3	Secondary 7
	Void 3	65-66	Void 3	Void 3	Void 3

Internal Diagram

V1 1FP	Plot 2FP	FM 2FP	AG1 2FP	AG2 2FP	AG3 2FP	BM 2FP	ER1 6FP	BR1 3FP	BO1 2FP	BR4 3FP	ER3 6FP	BM 1FP	AM 2FP	FO2 2FP	ST 2FP	V3 1FP
							ER2 6FP	BR2 3FP	BO2 2FP	BR5 3FP	ER4 6FP					
								BR3 3FP	BO3 2FP	BR6 3FP						

Yorktown

Navy
Class

United States Navy
Aircraft carrier

Date

1942

Surface Armament

Secondary Battery: 5 inch guns in 8 single mounts

Ranges

18 inches

Directors

Fore and Aft

Speed

4.00 inches

9 boilers

4 engines

Flotation

Total: 71

DIW: 36

Sinking: 48

Bulge

-1 to torpedo hits in way of locations 21-55

Torpedo Hits

17.7"-18": +1

20.5"-22.5": ±1

24": ±2

Armament Arrangement



Notes

- Three ships in class: Yorktown, Hornet and Enterprise.
- Could operate air group of 90 planes.

Hits

	Void 1	11-13	1	2-5	6
	Fuel Oil 1	14	Hanger	Hanger	Hanger
	Fuel Oil 1	15-16	Hanger	Hanger	Hanger
	Aviation Gas 1	21-22	Secondary 2	Elevator 1	Secondary 1
	Aviation Gas 1	23	Secondary 4	Elevator 1	Secondary 3
	Aviation Gas 2	24-25	AAMGs	Hanger	AAMGs
	Forward Magazine and Plot	26	AAMGs	Hanger	AAMGs
	Void 2	31	Hanger	Hanger	AAMGs
	Turbo-generators 1	32	Hanger	Hanger	Bridge
	Boiler Room 1	33	Hanger	Hanger	Fwd Director, Bridge
	Boiler Room 1	34	Hanger	Hanger	AAMGs, Bridge
	Boiler Room 2	35-36	Hanger	Hanger	Search Radar
	Boiler Room 3	41	Hanger	Hanger	Funnel
	Boiler Room 3	42	Hanger	Hanger	Funnel
	Engine Room 1 or 2	43-44	Hanger	Elevator 2	Aft Director
	Engine Room 1 or 2	45	Hanger	Elevator 2	AAMGs
	Engine Room 3 or 4	46-52	AAMGs	Elevator 2	AAMGs
	Turbo-generator 2	53	AAMGs	Hanger	AAMGs
	Aft Magazine and Bomb Magazine,	54-55	Hanger	Hanger	Hanger
	Propshaft 1 or 2				
	Fuel Oil 2, Propshaft 3 or 4	56-61	Secondary 6	Elevator 3	Secondary 5
	Fuel Oil 2	62	Secondary 8	Elevator 3	Secondary 7
	Steering	63-64	Secondary 8	Elevator 3	Secondary 7
	Void 3	65-66	Void 3	Void 3	Void 3

Internal Diagram

V1 1FP	FO1 2FP	AG1 2FP	AG2 2FP	FM/ Plot 2FP	V2 2FP	TG1 2FP	BR1 3FP	BR2 3FP	BR3 3FP	ER1 6FP	ER3 6FP	TG2 2FP	AM/ BM 2FP	FO2 2FP	ST 2FP	V3 1FP
							BR2 3FP	BR5 3FP	BR6 3FP	ER2 6FP	ER4 6FP					
							BR3 3FP	BR6 3FP	BR9 3FP							

Lexington									
<u>Navy</u>	United States Navy				<u>Date</u>	1942			
<u>Class</u>	Aircraft carrier								
<u>Surface Armament</u>					<u>Ranges</u>		<u>Directors</u>		
Main Battery	8 inch guns in 4 twin turrets				32 inches		Fore and Aft		
Secondary Battery:	5 inch guns in 12 single mounts				14 inches		Port and Starboard		
<u>Gun:</u>	5"	10"	15"	20"	25"	30"	32"	Power	Relia
8 inch twin	A/9	8/8	6/6	4/4	3/0	2/-1	1/-2	6	B
5 inch single	A/10	8/6	2/1					4	B
<u>Speed</u>	4.25 inches	16 boilers	4 engines	<u>Flotation</u>		Total: 92	DIW: 46	Sinking: 61	
<u>Torpedo Hits</u>	17.7"-18": +1	20.5"-22.5": ±1	24": ±2	<u>Bulge</u>		-1 for torpedo hits in way of locations 23-51			

- Two ships in class: Lexington and Saratoga.
- Could operate air group of 78 planes.
- Complicated propulsion arrangement: engine room turbines drove generators that drove electric engines in motor rooms. Losing a power room is the equivalent of losing 2 engine rooms. Losing a motor room is like losing an engine room, with Motor Room 3 containing the motors for shafts 3 and 4.
- Main armament of 8 inch guns removed early in 1942.

		1-5	6-10
Void 1	11-13	Void	Void
Fuel Oil 1	14	AAMGs	AAMGs
Fuel Oil 1	15-16	AAMGs	AAMGs
Aviation Gas 1	21	Void	Secondary 1
Aviation Gas 1	22	Secondary 2	Secondary 3
Bomb Magazine	23	Secondary 4	Secondary 5
Aviation Gas 2	24	Secondary 6	AAMGs [Main A]
Aviation Gas 2	25	Void	AAMGs [Main B]
Forward Magazine/Bomb Magazine	26	Void	Bridge
Forward Magazine/Plot	31	Hanger	Elevator 1 Bridge, [Forward Main Director]
Boiler Room 1 or Engine Room 1 or Boiler Room 2	32	Hanger	Elevator 1 P/S Director, Bridge
Boiler Room 3 or Engine Room 1 or Boiler Room 4	33	Hanger	Hanger Search Radar
Boiler Room 5 or Power Room 1 or Boiler Room 6	34	Hanger	Hanger Funnel, AAMGs
Boiler Room 7 or Engine Room 2 or Boiler Room 8	35	Hanger	Hanger Funnel, AAMGs
Boiler Room 9 or Engine Room 3 or Boiler Room 10	36	Hanger	Hanger Funnel, AAMGs
Boiler Room 11 or Eng. Room 3 or Boiler Room 12	41	Hanger	Hanger P/S Director
Boiler Room 13 or Power Room 2 or Boiler Room 14	42	Hanger	Hanger AAMGs [Aft Main Director]
Boiler Room 15 or Eng. Room 4 or Boiler Room 16	43	AAMGs	Elevator 2 AAMGs [Main X]
Motor Room 1 or Aft Mag/Bm Mag or Motor Room 2	44	AAMGs	Elevator 2 AAMGs [Main Y]
Motor Room 1 or Aft Mag/Bm Mag or Motor Room 2	45	Hanger	Hanger Hanger
Motor Room 1 or Aft Mag/Bm Mag or Motor Room 2	46	Hanger	Hanger Hanger
Motor Room 1 or Aft Mag/Bm Mag or Motor Room 2	51	Hanger	Hanger AAMGs
Motor Room 3	52	Hanger	Hanger AAMGs
Motor Room 3	53	Hanger	Hanger Hanger
Motor Room 3	54	Secondary 8	Hanger Secondary 7
Motor Room 3	55	Secondary 10	Hanger Secondary 9
Fuel Oil 2, Propshaft 1 or 2	56	Secondary 12	Hanger Secondary 11
Fuel Oil 2	61-62	Hanger	Hanger Hanger
Steering, Propshaft 3 or 4	63-64	Hanger	Hanger Hanger
Void 3	65-66	Void 3	Void 3 Void 3

V1 FO1 BM AG1 AG2 FM/ BM							BR1 2FP	BR3 2FP	BR5 2FP	BR7 2FP	BR9 2FP	B11 2FP	B13 2FP	B15 2FP	M1 3FP	M3 FO2 ST V3
							ER1	PR1	ER2	ER3		PR2	ER4		AM/ BM	
							6FP	3FP	6FP	6FP		3FP	6FP		2FP	
							BR2 2FP	BR4 2FP	BR6 2FP	BR8 2FP	B10 2FP	B12 2FP	B14 2FP	B16 2FP	M2 3FP	

Shokaku

Navy
Class

Nihon Kaigun
Aircraft carrier

Date

1942

Surface Armament

Secondary Battery: 5 inch guns in 8 twin mounts

Ranges

18 inches

Directors

Port and starboard

Speed

4.25"

8 boilers

4 engines

Flotation

Total: 79

DIW: 40

Sinking: 52

Bulge

-1 fof torpedo hits in way of locations 23-55

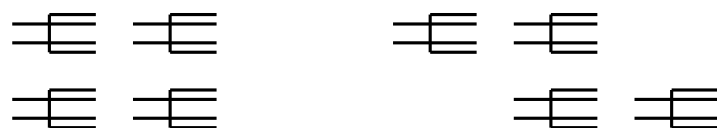
Torpedo Hits

17.7"-18": ±0

20.5"-22.5": ±1

24": ±2

Armament Arrangement



Notes

- Two ships in class: Shokaku and Zuikaku.
- Could operate air group of 84 planes.
- No flight deck in locations 11-12 and 66.
- Excellent design: fast, spacious and tough.

Hits

		1	2-5	6
	Void 1	Void	Void	Void
	Fuel Oil 1	Void	Void	Void
	Aviation Gas 1	Hanger	Hanger	Hanger
	Aviation Gas 1	Secondary 2	Hanger	Secondary 1
	Aviation Gas 2	Secondary 2	Hanger	Secondary 1
	Forward Magazine	Hanger	Hanger	Hanger
	Forward Magazine	Secondary 4	Hanger	Secondary 3
	Bomb Magazine	Secondary 4	Hanger	Secondary 3
	Bomb Magazine	Hanger	Elevator 1	Bridge, Starboard
				Director 1
	Plot	Hanger	Elevator 1	Bridge
	Boiler Room 1 or 2	Port Director 1	Elevator 1	Bridge, Starboard
				Director 2
	Boiler Room 3 or 4	Hanger	Hanger	AAMGs
	Boiler Room 3 or 4	Port Director 2	Hanger	AAMGs
	Boiler Room 5 or 6		Hanger	Funnel
	Boiler Room 7 or 8	AAMGs	Hanger	Funnel
	Engine Room 1 or 2	AAMGs	Elevator 2	Hanger
	Engine Room 1 or 2	AAMGs	Elevator 2	Hanger
	Engine Room 1 or 2	Hanger	Hanger	Hanger
	Engine Room 3 or 4	AAMGs	Hanger	Secondary 5
	Engine Room 3 or 4	AAMGs	Hanger	Hanger
	Aft Magazine	Secondary 6	Hanger	Secondary 7
	Bomb Magazine,	Secondary 8	Hanger	AAMGs
	Propshaft 1 or 2			
	Fuel Oil 2, Propshaft 3 or 4	Hanger	Elevator 3	AAMGs
	Fuel Oil 2	Hanger	Elevator 3	AAMGs
	Steering	AAMGs	Void	AAMGs
	Void 2	Void	AAMGs	Void

Internal Diagram

V1 1FP	FO1 2FP	AG1 2FP	AG2 2FP	FM 2FP	BM 2FP	PL 1FP	BR1 3FP	BR3 3FP	BR5 3FP	BR7 3FP	ER1 6FP	ER3 6FP	AM 2FP	BM 2FP	FO2 2FP	ST 2FP	V2 1FP
							BR2 3FP	BR4 3FP	BR6 3FP	BR8 3FP	ER2 6FP	ER4 6FP					

Junyo

Navy
Class

Nihon Kaigun
Light aircraft carrier

Date

1942

Surface Armament

Secondary Battery: 5 inch guns in 4 twin mounts

Ranges

18 inches

Directors

Port and starboard

Speed

2.75"

6 boilers

2 engines

Flotation

Total: 57

DIW: 29

Sinking: 38

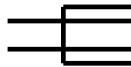
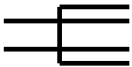
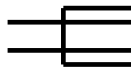
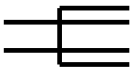
Torpedo Hits

17.7"-18": ±1

20.5"-22.5": ±2

24": ±3

Armament Arrangement



Notes

- Two ships in class: Junyo and Hiyo.
- Could operate air group of 54 planes.
- No flight deck in locations 11-12 and 66.
- Building as liners, but completed as carriers. Poor engines gave unsatisfactory performance.

Hits

		1	2-5	6
Void 1	11-12	AAMGs	AAMGs	AAMGs
Fuel Oil 1	13-14	Void	Void	Void
Fuel Oil 1	15	AAMGs	Hanger	AAMGs
Aviation Gas 1	16	AAMGs	Hanger	AAMGs
Aviation Gas 1	21	Hanger	Hanger	Hanger
Aviation Gas 2	22	Secondary 2	Hanger	Secondary 1
Forward Magazine	23	Secondary 2	Hanger	Secondary 1
Forward Magazine	24	Hanger	Elevator 1	AAMGs
Bomb Magazine	25	Hanger	Elevator 1	Starboard Director
Bomb Magazine	26	Secondary 4	Elevator 1	AAMGs
Plot	31	Secondary 4	Hanger	AAMGs
Boiler Room 1	32-33	Hanger	Hanger	Bridge
Boiler Room 2	34-35	AAMGs	Hanger	Funnel
Boiler Room 3	36-41	Hanger	Hanger	AAMGs
Engine Room 1	42-43	AAMGs	Hanger	Secondary 3
Engine Room 1	44	AAMGs	Hanger	Hanger
Engine Room 2	45	Hanger	Hanger	Secondary 5
Engine Room 2	46	Port Director	Hanger	Secondary 5
Engine Room 2	51	Secondary 6	Hanger	Hanger
Aft Magazine	52	Secondary 6	Elevator 2	AAMGs
Aft Magazine	53	Hanger	Elevator 2	AAMGs
Bomb Magazine, Propshaft 1 or 2	54	Hanger	Elevator 2	AAMGs
Bomb Magazine, Propshaft 1 or 2	55	Hanger	Hanger	Hanger
Fuel Oil 2, Propshaft 3 or 4	56	Hanger	Hanger	Hanger
Fuel Oil 2, Propshaft 3 or 4	61	Hanger	Hanger	AAMGs
Fuel Oil 2	62	Hanger	Hanger	AAMGs
Steering	63-64	Void	Void	Void
Void 2	65-66	AAMGs	AAMGs	AAMGs

Internal Diagram

V1 1FP	FO1 2FP	AG1 2FP	AG2 2FP	FM 1FP	BM 1FP	PL 1FP	BR1 8FP	BR2 8FP	BR3 8FP	ER1 12FP	ER2 12FP	AM 1FP	BM 1FP	FO2 2FP	ST 2FP	V2 1FP
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Zuiho

Navy
Class

Nihon Kaigun
Light aircraft carrier

Date

1942

Surface Armament

Secondary Battery: 5 inch guns in 4 twin mounts

Ranges

18 inches

Directors

Port and starboard

Speed

3.50 inches

4 boilers

2 engines

Flotation

Total: 57

DIW: 29

Sinking: 38

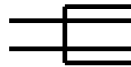
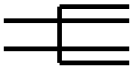
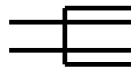
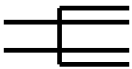
Torpedo Hits

17.7"-18": ±1

20.5"-22.5": ±2

24": ±3

Armament Arrangement



Notes

- Two ships in class: Zuiho and Shoho.
- Could operate air group of 30 planes.
- No flight deck in locations 11-12 and 66.
- Originally designed as submarine depot ships.

Hits

		1	2-5	6
Void 1	11-12	Void	Void	Void
Fuel Oil 1	13-14	Void	Void	Void
Fuel Oil 1	15	AAMGs	Void	AAMGs
Aviation Gas 1	16	AAMGs	Void	AAMGs
Aviation Gas 1	21	Bridge	Bridge	Bridge
Aviation Gas 2	22	Bridge	Bridge	Bridge
Forward Magazine	23	Hanger	Hanger	Hanger
Forward Magazine	24	AAMGs	Hanger	AAMGs
Bomb Magazine	25	AAMGs	Hanger	AAMGs
Bomb Magazine	26	Port Director	Hanger	Starboard Director
Plot	31	Hanger	Hanger	Hanger
Boiler Room 1 or 2	32-34	Secondary 1	Elevator 1	Secondary 2
Boiler Room 3 or 4	35	Hanger	Hanger	Hanger
Boiler Room 3 or 4	36-41	Hanger	Hanger	Funnel
Engine Room 1	42-44	AAMGs	Hanger	AAMGs
Engine Room 2	45-51	Hanger	Hanger	AAMGs
Aft Magazine	52-53	Hanger	Elevator 2	Hanger
Bomb Magazine, Propshaft 1 or 2	54	Secondary 3	Elevator 2	Secondary 4
Bomb Magazine, Propshaft 1 or 2	55	Secondary 3	Hanger	Secondary 4
Fuel Oil 2, Propshaft 3 or 4	56	Secondary 3	Hanger	Secondary 4
Fuel Oil 2, Propshaft 3 or 4	61	Hanger	Hanger	Hanger
Fuel Oil 2	62	Void	Void	Void
Steering	63-64	Void	Void	Void
Void 2	65-66	AAMGs	AAMGs	AAMGs

Internal Diagram

V1 1FP	FO1 2FP	AG1 2FP	AG2 2FP	FM 1FP	BM 1FP	PL 1FP	BR1 5FP	BR3 5FP	ER1 10FP	ER2 10FP	AM 1FP	BM 1FP	FO2 2FP	ST 2FP	V2 1FP
							BR2 5FP	BR4 5FP							

Illustrious			
<u>Navy Class</u>	Royal Navy Aircraft carrier		<u>Date</u> 1941
<u>Surface Armament</u>	<u>Ranges</u>		<u>Directors</u>
Secondary Battery:	4.5 inch guns in 8 twin mounts		18 inches Four corners
<u>Speed</u>	3.75 inches	6 boilers	3 engines
<u>Flotation</u>	Total: 83	DIW: 42	Sinking: 55
<u>Torpedo Hits</u>	17.7"-18": ±0	20.5"-22.5": ±1	24": ±2

Notes

- Three ships in class: Illustrious, Victorious and Formidable. Indomitable, Implacable and Indefatigable were similar.
- Could operate air group of 36 planes.
- Note: Forward Aviation Gas space is actually a paint, dope and acetone store.
- Note: Use armor on left to determine penetration of a hit affecting both high and low locations.

			1	2-5	6
	Void 1	11-13	Void	Void	Void
	Void 1	14	Void	Void	Void
	AvGas 1	15-16	Secondary 2	Elevator 1	Secondary 1
	Void 2	21-22	Secondary 4	Elevator 1	Secondary 3
	Void 2	23-24	Hanger	Hanger	Hanger
	Fuel Oil 1	25	Hanger	Hanger	AAMGs
	Fuel Oil 1	26	Director 2	Hanger	AAMGs
Forward and Bomb Magazine 1, 2 or 3		31	Hanger	Hanger	Bridge
Forward and Bomb Magazine 1, 2 or 3		32	Hanger	Hanger	Director 1, Bridge
Boiler Room		33	AAMGs	Hanger	Search Radar, Bridge
Boiler Room		34-35	Hanger	Hanger	Funnel
Boiler Room		36	AAMGs	Hanger	Hanger
AvGas and AAMG Magazine 1 or 2 or AvGas and Bomb Magazine		41	Hanger	Hanger	AAMGs
Engine Room 1, 2 or 3		42	Hanger	Hanger	Hanger
Engine Room 1, 2 or 3		43-44	Hanger	Hanger	Hanger
Engine Room 1, 2 or 3		45	Hanger	Hanger	Hanger
Fuel Oil 2		46	AAMGs	Hanger	Hanger
Fuel Oil 2		51	Hanger	Hanger	Hanger
Fuel Oil 2		52	Director 4	Hanger	Director 3
Fuel Oil 3		53	Hanger	Hanger	Hanger
Fuel Oil 3, Propshaft 1 or 2		54-55	Hanger	Hanger	Hanger
Void 3		56	Hanger	Hanger	Hanger
Void 3, Propshaft 3		61-62	Secondary 6	Elevator 2	Secondary 5
Steering		63-64	Secondary 8	Elevator 2	Secondary 7
		65-66	Void 3	Void 3	Void 3

V1 1FP	AG1 2FP	V2 3FP	FO1 2FP	FM/BM1 2FP	BR1 8FP	AG/MGM1 2FP	ER1 8FP	AM1 2FP	FO2 2FP	FO3 2FP	V3 2FP	ST 2FP	V4 1FP
				FM/BM2 2FP	BR2 8FP	AG/BM 2FP	ER2 8FP	AM2 2FP					
				FM/BM3 2FP	BR3 8FP	AG/MGM2 2FP	ER3 8FP	AM3 2FP					