Helena (CL 50)

CL UNITED STATES 1942 to 1943

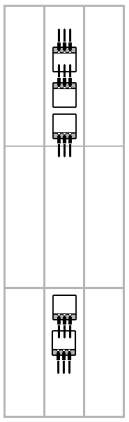
2293-1 BROOKLYN Class

Displacement	9,767 ts	*Length*	600 ft	New York Navy Yard	
Complement	868	*Beam*	62 ft	*Launched*	08/27/1938
Sunk 07/06/1943		*Draft*	22.8 ft	*Completed*	09/18/1939

SEEKRIEG 5

SHIP LOG SHEET

Version 12/9/2005



15 x 6"/47 Mk 16

18

Max ROF	Range	Shell Size/Weight
9.0 sh/min	25,688 yds 51.4"	6.0" 130.0 lbs.

Fire Control	FC Radar	+ 2	AP	SAP
2	Mark 3 (FC)		COM	HE
1A3				

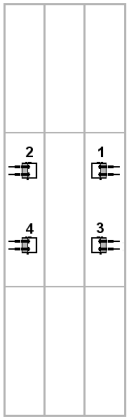
AA	3.8	Level	S	Ammunition	200 rpg	3000

FIRE CONTROL TABLE

T Kts	Short		Medium		Long		Extreme	
0 - 9	29	20	23	16	19	14	17	12
10 - 18	26	18	20	14	17	12	15	10
19 - 27	24	17	18	13	16	11	14	10
28 - 36	22	15	17	12	15	10	13	9
37 - 45	21	15	17	12	14	10	12	9

APCBC — PENETRATION TABLE

Yds	2,000	4,000	6,000	8,000	10,000	12,000	15,000	18,000	21,000	24,000	27,000	30,000	33,000	36,000
ROF	7.7	6.6	5.6	4.8	4.1	3.6	2.9	2.4	2.0	1.6	1.4			
Rge	S	S	S	S	M	M	L	L	E	E	E			
H	0.2	0.4	0.5	0.6	0.7	0.8	0.9	1.4	2.1	2.9	3.4			
V	10.6	9.2	7.9	6.8	5.7	4.8	3.9	3.3	2.9	2.4	1.8			



8 x 5"/38 Mk 12

13

Max ROF	Range	Shell Size/Weight
17.0 sh/min	18,101 yds 36.2"	5.0" 55.2 lbs.

Fire Control	FC Radar	+ 2	AP	SAP
2	Mark 4 (FD)		COM	HE
2F3				

AA	3.4	Level	V	Ammunition	360 rpg	2880

FIRE CONTROL TABLE

T Kts	Short		Medium		Long		Extreme	
0 - 9	18	13	14	10	12	8	11	7
10 - 18	14	10	11	7	9	6	8	6
19 - 27	12	8	9	6	8	5	7	5
28 - 36	10	7	8	6	7	5	6	4
37 - 45	10	7	7	5	6	4	6	4

COM — PENETRATION TABLE

Yds	2,000	4,000	6,000	8,000	10,000	12,000	15,000	18,000	21,000	24,000	27,000	30,000	33,000	36,000
ROF	7.7	6.4	5.2	4.3	3.5	2.9	2.2	1.6	1.5					
Rge	S	S	S	M	M	L	E	E	E					
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.9	2.1					
V	6.6	4.9	3.6	2.8	2.3	1.5	1.4	1.5	1.6					

Coal (ts)	0	Oil (ts)	1982
Engines	Parsons geared turbines		
Boilers	8 Babcock & Wilcox		

Radius (nm/kts)	
7260	15

Search Radar
SG
SC

ASW MORTARS/ATW			DEPTH CHARGES	
None			Rack	0
None			Ammo	0

Crew	Sea	BR	Targ Sz	Ops
			1	

AIRCRAFT

Aircraft	4			Catapult	2	
SOC-1/2/3 Seagull				1	1	25
143 kts	116 kts	14900 ft				

TORPEDOES

TT	0	Ammo	0

None

Damage Class

Settings

MINES

0			

RAPID FIRE BATTERIES

RF1 — 16 — 1.1"/75 Mk 1

Max Rg	7,400	14.8"	9	7	
Eff Rg	3,330	6.7"	13	10	

RF						
7	Port	8	6	4	3	1
	Stbd	8	6	4	3	1
AA	Port	49	39	27	16	7
M	Stbd	49	39	27	16	7

RF2 — 12 — 20mm/70 Mks 1-4

Max Rg	4,800	9.6"	9	7	
Eff Rg	2,160	4.3"	13	10	

RF						
4	Port	6	5	3	2	1
	Stbd	6	5	3	2	1
AA	Port	46	36	25	15	7
L	Stbd	46	36	25	15	7

RF3 — None

Max Rg		
Eff Rg		

RF						
	Port					
	Stbd					
AA	Port					
	Stbd					

Captain

T#	BTTY	TARGET SHIP	SHELL	FCS	BR	H	RANGE	R	#RNDS	HITS

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Helena (CL 50)

TIER	DP
1/70	180
2/80	359
3/75	539
4/85	718
5/80	898
6/90	1059
7/85	1221
8/95	1382
9/90	1544
10	1705
10	1813

DP	1795
KTS	32

Engine Rm	2	32	18	0	0	0	0
Prop/Shaft	4	32	28	16	4	0	0
Boiler Rm	4	32	29	20	7	0	0
			0	0	0	0	0

Standard Turn	
45	
Emergency Turn	
90	

Target Sz	
1	
Searchlights	
Port	Stbd

Speed Increase	00-09 kt	10-17 kt	18-22 kt	23-24 kt	25-26 kt	27+ kt
	10.0	8.0	4.0	3.0	2.0	1.0

Crew

Bridge Command Rating	Flag Command Rating	Damage Control (DCR)
		4

Fuel Code	CL3D

ARMOR	1.00	Actual
1H DECK	2.0	2.0
2H TURRET	2.0	2.0
3H SUPERSTR	1.7	1.7
4V CON	5.0	5.0
5V BELT MID	5.3	5.3
6V BELT END	5.3	5.3
7V BARBETTE	6.0	6.0
8V TURRET	6.5	6.5
9V SUPERSTR	2.8	2.8

T#	DE #	SEVERITY	DESCRIPTION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	CODE	ORDER
																				AF	Obey signals from Flagship
																				AI	Independent Action
																				AX	Battle Stations!
																				AA	Abandon ship!
																				AZ	Strike colors
COURSE AND SPEED																					
																				CA	Midships steady
																				CP #	Alter course to PORT
																				CS #	Alter course to STARBOARD
																				SF	Ahead full
																				SR#	Revolutions for # knots
																				SA	Full astern
																				SS	All stop
ILLUMINATION AND EVASION																					
																				EX	Evasive action
																				KX	Lay smoke
																				IS #/#	Illuminate using starshell
																				IL #	Illuminate using searchlight
TORPEDO AND AIRCRAFT																					
																				TR (X)	Prepare to launch torpedoes to (X)
																				TL (X)	Launch torpedoes to (X)
																				VL	Prepare to launch aircraft
																				VX	Launch aircraft
PRIMARY BATTERY																					
																				B1D	Directed fire as range permits
																				B1V	Coordinated fire
																				B1L	Local control as range permits
																				B1P	Split fire
																				B1C	Change target
																				B1B	Barrage fire as range permits
SECONDARY BATTERY																					
																				B2D	Directed fire as range permits
																				B2L	Local control as range permits
																				B2P	Split fire
																				B2C	Change target
																				B2B	Barrage fire as range permits
RF BATTERY																					
																				R5B	Barrage fire as range permits
																				R6B	Barrage fire as range permits
																				R7B	Barrage fire as range permits

LOSS OF SPEED DURING TURNS

KTS	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
STD	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0
E/EA	NA	NA	NA	NA	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0

TURNING SEGMENTS

DEG OF TURN	SEGMENTS
TO 15	2 Segments*
16 TO 45	2 Segments
46 TO 90	3 Segments
91 TO 135	4 Segments
136 TO 180	5 Segments

SHIPBOARD FIRE TRACKING

T#	Fire	Current Severity	T#	Fire	Current Severity

FIGHTING SHIPBOARD FIRES

NO DAMAGE CONTROL	
ROLL	EFECT ON FIRE
01-03	-20 from severity
04-12	-10 from severity
13-50	No change
51-85	+10 to severity
86-95	+30 to severity
96-00	+40 to severity

DAMAGE CONTROL	
ROLL	EFECT ON FIRE
01-05	Fire extinguished
06-15	-30 from severity
16-45	-20 from severity
46-75	-10 from severity
76-90	No change
91-00	+10 to severity