







Aoi  
DD JAPAN  
8090-1 MOMI Class

1938 to 1941

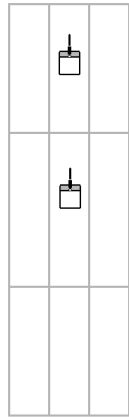
Displacement  
Complement  
Sunk 12/23/1941

935 ts | Length 280 ft | Kawasaki, Kobe  
110 | Beam 26 ft | Launched 11/09/1920  
Draft 8 ft | Completed 12/20/1920



SHIP LOG SHEET

Version 3/6/2009



2 x 12cm/45 11th Year

12

Max ROF		Range		Shell Size/Weight	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.
Fire Control		FC Radar	+ 0	AP	SAP
1	1S2	None		COM	HE
AA	1.7	Level	S	Ammunition	100 rpg 200

FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

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	4.2	3.5	2.9	2.1	1.8						
Rge	S	S	M	M	L	L	E	E						
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

Crew	Sea	BR	Targ Sz	Ops
			0	

Captain	
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AIRCRAFT

Aircraft	0	Catapult	0
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TORPEDOES

TT	0	Ammo	0
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None

Damage Class

Settings

MINES

0			
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RAPID FIRE BATTERIES

RF1	6	25mm/60 Type 96			
Max Rg	7,440	14.9"	7	5	
Eff Rg	3,348	6.7"	11	8	

RF	Port	3	2	2	1	0
5	Stbd	3	2	2	1	0

AA	Port	12	10	7	4	2
M	Stbd	12	10	7	4	2

RF2	None				
Max Rg					
Eff Rg					

RF	Port					
0	Stbd					

AA	Port					
	Stbd					

RF3	None				
Max Rg					
Eff Rg					

RF	Port					
	Stbd					

AA	Port					
	Stbd					

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	Search Radar		ASW MORTARS/ATW		DEPTH CHARGES		
Engines	GT			3000	15	None	2 K-Guns		Rack	2	
Boilers	2 Kampon					None	None		Ammo	60	









































































# Kuri

DD JAPAN  
1729-1 MOMI Class

1942 to 1945

Displacement  
Complement  
Sunk 10/08/1945

850 ts  
110

Length  
Beam  
Draft

280 ft  
26 ft  
8 ft

Kure Navy Yard  
Launched 03/19/1920  
Completed 04/30/1920

# SEEKRIEG 5

## SHIP LOG SHEET

Version 3/6/2009

2 x 12cm/45 11th Year

12

FIRE CONTROL TABLE								
T Kts	Short	Medium	Long	Extreme				
0 - 9	12	8	8	5	6	4	5	3
10 - 18	9	5	6	4	4	3	4	2
19 - 27	7	4	5	3	4	2	3	2
28 - 36	6	4	4	2	3	2	2	2
37 - 45	5	3	4	2	3	2	2	1

Max ROF		Range		Shell Size/Weight		
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.	
Fire Control		FC Radar		+ 0		
1	1S2	None		AP	SAP	
				COM	HE	
AA	1.7	Level	S	Ammunition	100 rpg	200

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	4.2	3.5	2.9	2.1	1.8							
Rge	S	S	M	M	L	L	E	E							
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5							
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1							

Crew	Sea	BR	Targ Sz	Ops
			0	

### AIRCRAFT

Aircraft	0	Catapult	0
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### TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
7,600/36			
11,000/32			
17,000/27			
MINES			
0			

1  
2

### RAPID FIRE BATTERIES

RF1	8	25mm/60 Type 96				
Max Rg	7,440	14.9"	7	5		
Eff Rg	3,348	6.7"	11	8		
RF	Port	4	3	2	1	1
	Stbd	4	3	2	1	1
AA	Port	16	13	9	5	2
	Stbd	16	13	9	5	2

RF2	None				
Max Rg					
Eff Rg					

RF	Port					
	Stbd					
AA	Port					
	Stbd					

RF3	None				
Max Rg					
Eff Rg					

RF	Port					
	Stbd					
AA	Port					
	Stbd					

Captain

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	Search Radar	ASW MORTARS/ATW	DEPTH CHARGES
Engines	GT			3000	15	None	Rack 2
Boilers	3 Kampon				None	None	Ammo 16

TIER	DP	DP	530																	
1/70	53	KTS	33																	
2/80	106																			
3/75	159	Engine Rm	2	33	19	0	0	0	0	Standard Turn	Target Sz									
4/85	212	Prop/Shaft	2	33	17	0	0	0	0	90	0									
5/80	265	Boiler Rm	2	33	20	0	0	0	0	Emergency Turn	Searchlights									
6/90	313				0	0	0	0	0	120	Port   Stbd									
7/85	360	Speed	00-10 kt	11-17 kt	18-22 kt	23-25 kt	26+ kt				Crew									
8/95	408	Increase	11.0	8.0	5.0	3.0	1.0													
9/90	456																			
10	504	Bridge Command Rating								Flag Command Rating	Damage Control (DCR)									
10	535										1									

Fuel Code	DD4B				
<b>ARMOR</b>	<b>1.00</b>	<b>Actual</b>			
1H DECK	0.0	0.0			
2H TURRET	0.0	0.0			
3H SUPERSTR	0.0	0.0			
4V CON	0.0	0.0			
5V BELT MID	0.0	0.0			
6V BELT END	0.0	0.0			
7V BARBETTE	0.0	0.0			
8V TURRET	0.0	0.0			
9V SUPERSTR	0.0	0.0			

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
<b>COURSE AND SPEED</b>																						
																					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
<b>ILLUMINATION AND EVASION</b>																						
																					EX	Evasive action
																					KX	Lay smoke
																					IS ##	Illuminate using starshell
																					IL #	Illuminate using searchlight
<b>TORPEDO AND AIRCRAFT</b>																						
																					TR (X)	Prepare to launch torpedoes to (X)
																					TL (X)	Launch torpedoes to (X)
																					VL	Prepare to launch aircraft
																					VX	Launch aircraft
<b>PRIMARY BATTERY</b>																						
																					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
<b>RF BATTERY</b>																						
																					R5B	Barrage fire as range permits
																					R6B	Barrage fire as range permits
																					R7B	Barrage fire as range permits

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

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

T#	Fire	Current Severity	T#	Fire	Current Severity

NO DAMAGE CONTROL		DAMAGE CONTROL	
ROLL	EFFECT ON FIRE	ROLL	EFFECT ON FIRE
01-03	-20 from severity	01-05	Fire extinguished
04-12	-10 from severity	06-15	-30 from severity
13-50	No change	16-45	-20 from severity
51-85	+10 to severity	46-75	-10 from severity
86-95	+30 to severity	76-90	No change
96-00	+40 to severity	91-00	+10 to severity



**Momi**  
 DD JAPAN  
 8086-0 MOMI Class

1920 to 1932

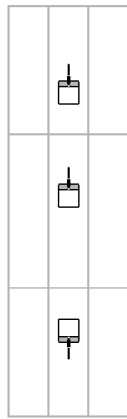
Displacement  
 Complement  
 Stricken 1932

850 ts | Length 280 ft | Yokosuka Navy Yard  
 110 | Beam 26 ft | Launched 06/10/1919  
 Draft 8 ft | Completed 12/27/1919



SHIP LOG SHEET

Version 3/6/2009



3 x 12cm/45 11th Year

12

Max ROF 5.0 sh/min		Range 16,400 yds 32.8"		Shell Size/Weight 4.7" 45.0 lbs.	
Fire Control 1 1S2		FC Radar None		AP COM	SAP HE
AA	1.7	Level	S	Ammunition	100 rpg 300

FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

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	4.2	3.5	2.9	2.1	1.8													
Rge	S	S	M	M	L	L	E	E													
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5													
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1													

Crew	Sea	BR	Targ Sz	Ops
			0	

AIRCRAFT

Aircraft	0	Catapult	0
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TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
	7,600/36		
	11,000/32		
	17,000/27		
MINES			
	0		

RAPID FIRE BATTERIES

<b>RF1</b>	None			
Max Rg				
Eff Rg				

<b>RF</b>	Port				
<b>0</b>	Stbd				
<b>AA</b>	Port				
	Stbd				

<b>RF2</b>	None			
Max Rg				
Eff Rg				

<b>RF</b>	Port				
<b>0</b>	Stbd				
<b>AA</b>	Port				
	Stbd				

<b>RF3</b>	None			
Max Rg				
Eff Rg				

<b>RF</b>	Port				
	Stbd				
<b>AA</b>	Port				
	Stbd				

Captain

T#	BTY	TARGET SHIP	SHELL	FCS	BR	H	RANGE	R	#RND	HITS

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	Search Radar				ASW MORTARS/ATW				DEPTH CHARGES			
Engines	GT			3000	15	None				0		Rack	0			
Boilers	3 Kampon					None				None		Ammo	0			















**Nire**  
DD JAPAN  
8089-1 MOMI Class

1940 to 1945

Displacement  
Complement  
Scrapped 1948

850 ts	Length	280 ft	Kure Navy Yard
110	Beam	26 ft	Launched
	Draft	8 ft	Completed
			12/22/1919
			03/31/1920



**SHIP LOG SHEET**

Version 3/6/2009


2 x 12cm/45 11th Year

12

<b>Max ROF</b>		<b>Range</b>		<b>Shell Size/Weight</b>	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.
<b>Fire Control</b>		<b>FC Radar</b>	<b>+ 0</b>		
1	1S2	None			
<b>AA</b>	1.7	<b>Level</b>	S	<b>Ammunition</b>	100 rpg 200

FIRE CONTROL TABLE						
T Kts	Short	Medium	Long	Extreme		
<b>0 - 9</b>	12	8	8	5	6	4 5 3
<b>10 - 18</b>	9	5	6	4	4	3 4 2
<b>19 - 27</b>	7	4	5	3	4	2 3 2
<b>28 - 36</b>	6	4	4	2	3	2 2 2
<b>37 - 45</b>	5	3	4	2	3	2 2 1

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
<b>ROF</b>	7.7	6.4	5.2	4.2	3.5	2.9	2.1	1.8						
<b>Rge</b>	S	S	M	M	L	L	E	E						
<b>H</b>	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
<b>V</b>	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

<b>Crew</b>	<b>Sea</b>	<b>BR</b>	<b>Targ Sz</b>	<b>Ops</b>
			0	

<b>AIRCRAFT</b>				
<b>Aircraft</b>	0		<b>Catapult</b>	0

	<b>TORPEDOES</b>		
	<b>TT</b>	2	<b>Ammo</b> 2
	53cm Type 6		
	<b>Damage Class</b>	E	
	<b>Settings</b>		
		7,600/36	
	11,000/32		
	17,000/27		
<b>MINES</b>			
	0		

**RAPID FIRE BATTERIES**

<b>RF1</b>	6	<b>25mm/60 Type 96</b>			
<b>Max Rg</b>	7,440	14.9"	7	5	
<b>Eff Rg</b>	3,348	6.7"	11	8	

<b>RF</b>	Port	3	2	2	1	0
5	Stbd	3	2	2	1	0

<b>AA</b>	Port	12	10	7	4	2
M	Stbd	12	10	7	4	2

<b>RF2</b>	None					
<b>Max Rg</b>						
<b>Eff Rg</b>						

<b>RF</b>	Port					
0	Stbd					

<b>AA</b>	Port					
	Stbd					

<b>RF3</b>	None					
<b>Max Rg</b>						
<b>Eff Rg</b>						

<b>RF</b>	Port					
0	Stbd					

<b>AA</b>	Port					
	Stbd					

Captain \_\_\_\_\_

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)		Search Radar		ASW MORTARS/ATW		DEPTH CHARGES	
Engines	GT			3000	15	None		2 K-Guns		Rack	2
Boilers	2 Kampon					None		None		Ammo	60



















# Susuki

DD JAPAN  
1725-1 MOMI Class

1938 to 1944

Displacement  
Complement  
Sunk 07/03/1944

935 ts  
110

Length  
Beam  
Draft

280 ft  
26 ft  
8 ft

Ishikawajima, Tokyo  
Launched 02/21/1921  
Completed 05/25/1921



## SHIP LOG SHEET

Version 3/6/2009

<input type="checkbox"/>
<input type="checkbox"/>

2 x 12cm/45 11th Year

**12**

FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

Max ROF 5.0 sh/min	Range 16,400 yds 32.8"	Shell Size/Weight 4.7" 45.0 lbs.
Fire Control 1 1S2	FC Radar None	AP SAP COM HE
AA 1.7 Level S	Ammunition 100 rpg	200

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	4.2	3.5	2.9	2.1	1.8						
Rge	S	S	M	M	L	L	E	E						
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

Crew	Sea	BR	Targ Sz	Ops
			0	

AIRCRAFT				
Aircraft	0		Catapult	0

TORPEDOES			
TT	0	Ammo	0

None

Damage Class	
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Settings

MINES			
	0		

RAPID FIRE BATTERIES						
<b>RF1</b>	6	25mm/60 Type 96				
Max Rg	7,440	14.9"	7	5		
Eff Rg	3,348	6.7"	11	8		
<b>RF</b>	Port	3	2	2	1	0
5	Stbd	3	2	2	1	0
<b>AA</b>	Port	12	10	7	4	2
M	Stbd	12	10	7	4	2

<b>RF2</b>	None					
Max Rg						
Eff Rg						

<b>RF</b>	Port					
0	Stbd					
<b>AA</b>	Port					
	Stbd					

<b>RF3</b>	None					
Max Rg						
Eff Rg						

<b>RF</b>	Port					
	Stbd					
<b>AA</b>	Port					
	Stbd					

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	3000 15	Search Radar	None	ASW MORTARS/ATW	2 K-Guns	Rack	2	DEPTH CHARGES	
Engines	GT					None				Ammo	60		
Boilers	2 Kampon					None							















# Take

DD JAPAN  
1735-0 MOMI Class

1920 to 1939

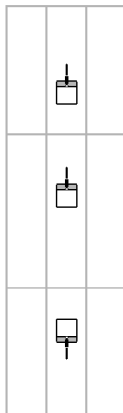
Displacement  
Complement  
Scrapped 1947

850 ts Length 280 ft  
110 Beam 26 ft  
Draft 8 ft  
Kawasaki, Kobe  
Launched 08/26/1919  
Completed 12/25/1919



## SHIP LOG SHEET

Version 3/6/2009



3 x 12cm/45 11th Year

12

Max ROF		Range		Shell Size/Weight	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.

Fire Control		FC Radar	+ 0	AP	SAP
1	1S2	None			HE

AA	1.7	Level	S	Ammunition	100 rpg 300
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FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

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	4.2	3.5	2.9	2.1	1.8						
Rge	S	S	M	M	L	L	E	E						
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

Crew	Sea	BR	Targ Sz	Ops
			0	

### AIRCRAFT

Aircraft	0	Catapult	0
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### TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
	7,600/36		
	11,000/32		
	17,000/27		
MINES			
	0		

### RAPID FIRE BATTERIES

RF1	None				
Max Rg					
Eff Rg					

RF	Port				
0	Stbd				

AA	Port				
	Stbd				

RF2	None				
Max Rg					
Eff Rg					

RF	Port				
0	Stbd				

AA	Port				
	Stbd				

RF3	None				
Max Rg					
Eff Rg					

RF	Port				
	Stbd				

AA	Port				
	Stbd				

Captain

T#	BTY	TARGET SHIP	SHELL	FCS	BR	H	RANGE	R	#RND	HITS

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	3000 15	Search Radar	None	ASW MORTARS/ATW	0	DEPTH CHARGES	Rack 0
Engines	GT					None				Ammo 0	
Boilers	3 Kampon					None					

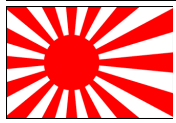












Tsuga

DD JAPAN

1734-1 MOMI Class

1942 to 1945

Displacement  
Complement  
Sunk 01/15/1945

850 ts Length 280 ft  
110 Beam 26 ft  
Draft 8 ft  
Ishikawajima, Tokyo  
Launched 04/17/1920  
Completed 07/20/1920



SHIP LOG SHEET

Version 3/6/2009

Vertical grid area for ship identification or notes.

2 x 12cm/45 11th Year

12

Max ROF: 5.0 sh/min; Range: 16,400 yds 32.8"; Shell Size/Weight: 4.7" 45.0 lbs.; Fire Control: 1 1S2; FC Radar: None; AA: 1.7 Level S; Ammunition: 100 rpg 200

FIRE CONTROL TABLE with columns for T Kts (0-9, 10-18, 19-27, 28-36, 37-45) and ranges (Short, Medium, Long, Extreme).

COM and PENETRATION TABLE with columns for Yds (2,000 to 36,000) and values for ROF, Rge, H, V.

Crew, Sea, BR, Targ Sz, Ops table.

AIRCRAFT section with Aircraft and Catapult counts.

TORPEDOES section for 53cm Type 6, including TT, Ammo, Damage Class, and Settings.

RAPID FIRE BATTERIES

RF1 8 25mm/60 Type 96 with Max Rg, Eff Rg, and Port/Stbd counts.

RF2 section with Max Rg and Eff Rg.

RF 0 and AA section with Port/Stbd counts.

RF3 section with Max Rg and Eff Rg.

RF and AA section with Port/Stbd counts.

Captain

Main SHIP LOG SHEET grid with columns for T#, BTTY, TARGET SHIP, SHELL, FCS, BR, H, RANGE, R, #RND, HITS.

Summary table for Coal (ts), Oil (ts), Radius (nm/kts), Search Radar, ASW MORTARS/ATW, DEPTH CHARGES.







# Tsuta (Tsuru)

DD JAPAN

8095-0 MOMI Class

1921 to 1937

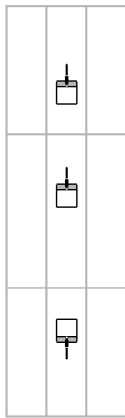
Displacement  
Complement  
Sunk 09/02/1943

850 ts    Length 280 ft    Kawasaki, Kobe  
110      Beam 26 ft      Launched 05/09/1921  
          Draft 8 ft       Completed 06/30/1921



## SHIP LOG SHEET

Version 3/6/2009



3 x 12cm/45 11th Year

12

Max ROF		Range		Shell Size/Weight	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.

Fire Control		FC Radar	+ 0	AP	SAP
1	1S2	None		COM	HE

AA	1.7	Level	S	Ammunition	100 rpg	300
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FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

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	4.2	3.5	2.9	2.1	1.8						
Rge	S	S	M	M	L	L	E	E						
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

Crew	Sea	BR	Targ Sz	Ops
			0	

### AIRCRAFT

Aircraft	0	Catapult	0
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### TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
7,600/36			
11,000/32			
17,000/27			
MINES			
0			

### RAPID FIRE BATTERIES

RF1	None			
Max Rg				
Eff Rg				

RF	Port				
0	Stbd				
AA	Port				
	Stbd				

RF2	None			
Max Rg				
Eff Rg				

RF	Port				
0	Stbd				
AA	Port				
	Stbd				

RF3	None			
Max Rg				
Eff Rg				

RF	Port				
	Stbd				
AA	Port				
	Stbd				

Captain \_\_\_\_\_

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)	Search Radar	ASW MORTARS/ATW	DEPTH CHARGES
Engines	GT		3000	15	None	0	Rack 0
Boilers	3 Kampon				None	None	Ammo 0





# Tsuta (Tsuru)

DD JAPAN 1942 to 1943  
8095-1 MOMI Class

Displacement  
Complement  
Sunk 09/02/1943

850 ts | Length 280 ft | Kawasaki, Kobe  
110 | Beam 26 ft | Launched 05/09/1921  
Draft 8 ft | Completed 06/30/1921



SHIP LOG SHEET  
Version 3/6/2009

2 x 12cm/45 11th Year

12

Max ROF		Range		Shell Size/Weight	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.
Fire Control		FC Radar	+ 0	AP	SAP
1	1S2	None		COM	HE
AA	1.7	Level	S	Ammunition	100 rpg 200

FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

Crew	Sea	BR	Targ Sz	Ops
			0	

Captain \_\_\_\_\_

### AIRCRAFT

Aircraft	0	Catapult	0
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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	4.2	3.5	2.9	2.1	1.8																
Rge	S	S	M	M	L	L	E	E																
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5																
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1																

### TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
	7,600/36		
	11,000/32		
	17,000/27		

### MINES

0				
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### RAPID FIRE BATTERIES

RF1	8	25mm/60 Type 96				
Max Rg	7,440	14.9"	7	5		
Eff Rg	3,348	6.7"	11	8		
RF	Port	4	3	2	1	1
5	Stbd	4	3	2	1	1
AA	Port	16	13	9	5	2
M	Stbd	16	13	9	5	2

RF2	None					
Max Rg						
Eff Rg						
RF	Port					
0	Stbd					
AA	Port					
	Stbd					

RF3	None					
Max Rg						
Eff Rg						
RF	Port					
	Stbd					
AA	Port					
	Stbd					

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/kts)		Search Radar		ASW MORTARS/ATW		DEPTH CHARGES	
Engines	GT			3000	15	None		0		Rack	2
Boilers	3 Kampon					None		None		Ammo	16

TIER	DP	DP	530												
1/70	53	KTS	33												
2/80	106	Engine Rm		2	33	19	0	0	0	0	Standard Turn	Target Sz			
3/75	159	Prop/Shaft		2	33	17	0	0	0	0	90	0			
4/85	212	Boiler Rm		2	33	20	0	0	0	0	Emergency Turn	Searchlights			
5/80	265										120	Port   Stbd			
6/90	313														
7/85	360	Speed		00-10 kt	11-17 kt	18-22 kt	23-25 kt	26+ kt			Crew				
8/95	408	Increase		11.0	8.0	5.0	3.0	1.0							
9/90	456														
10	504	Bridge Command Rating			Flag Command Rating			Damage Control (DCR)							
10	535							1							

Fuel Code	DD4B			
<b>ARMOR</b>	1.00	Actual		
1H DECK	0.0	0.0		
2H TURRET	0.0	0.0		
3H SUPERSTR	0.0	0.0		
4V CON	0.0	0.0		
5V BELT MID	0.0	0.0		
6V BELT END	0.0	0.0		
7V BARBETTE	0.0	0.0		
8V TURRET	0.0	0.0		
9V SUPERSTR	0.0	0.0		

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
<b>COURSE AND SPEED</b>																						
																					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
<b>ILLUMINATION AND EVASION</b>																						
																					EX	Evasive action
																					KX	Lay smoke
																					IS ##	Illuminate using starshell
																					IL #	Illuminate using searchlight
<b>TORPEDO AND AIRCRAFT</b>																						
																					TR (X)	Prepare to launch torpedoes to (X)
																					TL (X)	Launch torpedoes to (X)
																					VL	Prepare to launch aircraft
																					VX	Launch aircraft
<b>PRIMARY BATTERY</b>																						
																					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
<b>RF BATTERY</b>																						
																					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		DAMAGE CONTROL	
ROLL	EFFECT ON FIRE	ROLL	EFFECT ON FIRE
01-03	-20 from severity	01-05	Fire extinguished
04-12	-10 from severity	06-15	-30 from severity
13-50	No change	16-45	-20 from severity
51-85	+10 to severity	46-75	-10 from severity
86-95	+30 to severity	76-90	No change
96-00	+40 to severity	91-00	+10 to severity



# Warabi (Toko)

DD JAPAN

8093-0 MOMI Class

1921 to 1927

Displacement  
Complement  
Lost 08/24/1927

850 ts  
110

Length  
Beam  
Draft

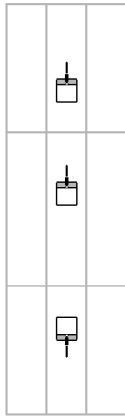
280 ft  
26 ft  
8 ft

Fujinagata, Osaka  
Launched 09/28/1921  
Completed 12/19/1921



## SHIP LOG SHEET

Version 3/6/2009



3 x 12cm/45 11th Year

12

Max ROF		Range		Shell Size/Weight	
5.0	sh/min	16,400 yds	32.8"	4.7"	45.0 lbs.
Fire Control		FC Radar	+ 0	AP	SAP
1	1S2	None		COM	HE
AA	1.7	Level	S	Ammunition	100 rpg 300

FIRE CONTROL TABLE									
T Kts	Short	Medium	Long	Extreme					
0 - 9	12	8	8	5	6	4	5	3	
10 - 18	9	5	6	4	4	3	4	2	
19 - 27	7	4	5	3	4	2	3	2	
28 - 36	6	4	4	2	3	2	2	2	
37 - 45	5	3	4	2	3	2	2	1	

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	4.2	3.5	2.9	2.1	1.8						
Rge	S	S	M	M	L	L	E	E						
H	0.1	0.2	0.3	0.4	0.5	0.7	1.3	1.5						
V	3.6	2.6	1.9	1.5	1.3	1.1	1.0	1.1						

Crew	Sea	BR	Targ Sz	Ops
			0	

### AIRCRAFT

Aircraft	0	Catapult	0
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### TORPEDOES

TT	4	Ammo	4
53cm Type 6			
Damage Class	E		
Settings			
	7,600/36		
	11,000/32		
	17,000/27		
MINES			
	0		

### RAPID FIRE BATTERIES

RF1	None			
Max Rg				
Eff Rg				
RF	Port			
0	Stbd			
AA	Port			
	Stbd			
RF2	None			
Max Rg				
Eff Rg				
RF	Port			
0	Stbd			
AA	Port			
	Stbd			
RF3	None			
Max Rg				
Eff Rg				
RF	Port			
	Stbd			
AA	Port			
	Stbd			

Captain \_\_\_\_\_

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

Coal (ts)	0	Oil (ts)	240	Radius (nm/mts)	Search Radar		ASW MORTARS/ATW		DEPTH CHARGES		
Engines	GT			3000	15	None		0	Rack	0	
Boilers	3 Kampon					None		None	Ammo	0	











