



ROYAL SOVEREIGN Class
BB GREAT BRITAIN

1940 to 1943

0683-4
Displacement 30,300 ts
Complement 910

SHIP LOG SHEET

Version AOTF2023A



Length 614 ft
Beam 102 ft
Draft 30 ft

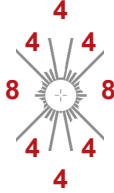


8 x 15"/42 Mk I

DIRECTORS

2

ARCS OF FIRE



Range

23,500 yds 47.0"

FC Radar

+ 0

None

77% PENETRATION TABLE

| APC | SHORT | | MEDIUM | LONG |
|------|-------|-------|--------|--------|
| YDS | 3,000 | 8,000 | 18,000 | 23,500 |
| ROF | 5 | 5 | 5 | 3 |
| HORZ | 1 | 2 | 3 | 5 |
| VERT | 24 | 19 | 13 | 8 |

GUNNERY (FCS)

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 2 | | |

| Searchlights | Port | Stbd |
|--------------|------|------|
| | | |

PROTECTION

ARMOR VALUE

HORIZONTAL 3

VERTICAL 9

HIT LOCATION

| RANGE | HORZ | VERT |
|-------|------|------|
|-------|------|------|

SHORT 01-05 06-00

MEDIUM 01-19 20-00

LONG 01-39 40-00

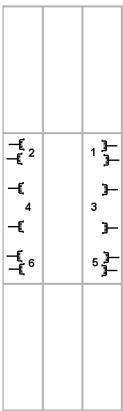
22 11 DAMAGE CONTROL (DCR)

FLAG COMMAND RATING (FCR)

W2-2A

DAMAGE DETERMINATION

| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
|-------|---------|---------|---------|
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

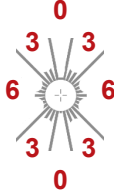


12 x 6"/45 BL Mk XII

DIRECTORS

2

ARCS OF FIRE



Range

15,500 yds 31.0"

FC Radar

+ 0

None

22% PENETRATION TABLE

| CPC | SHORT | | MEDIUM | LONG |
|------|-------|-------|--------|--------|
| YDS | 2,500 | 6,000 | 10,000 | 15,500 |
| ROF | 10 | 8 | 5 | 4 |
| HORZ | 0 | 0 | 1 | 1 |
| VERT | 5 | 3 | 2 | 2 |

GUNNERY (FCS)

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 15 | 10 | 11 | 8 | 10 | 6 |
| 10-18 | 11 | 7 | 9 | 6 | 7 | 5 |
| 19-26 | 10 | 6 | 7 | 5 | 6 | 4 |
| 27-32 | 8 | 6 | 6 | 4 | 5 | 4 |

KTS 22

TORPEDOES
TT 0 RL

PROPULSION / MANEUVER

| Engine Rm | 3 | 22 | 18 | 7 | 0 | 0 | 0 | Std Turn |
|------------|---|----|----|----|---|---|---|----------|
| Prop/Shaft | 4 | 22 | 19 | 11 | 3 | 0 | 0 | 45 |
| Boiler Rm | 3 | 22 | 18 | 8 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 60 |

| Speed Increase | 00-10 kt | 11-14 kt | 15+ kt |
|----------------|----------|----------|--------|
| | 3.0 | 2.0 | 1.0 |

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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
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Ships In Class

RAMILLIES, RESOLUTION, REVENGE, ROYAL OAK, ROYAL SOVEREIGN



KENT Class
CA GREAT BRITAIN

1938 to 1940

0799-1
Displacement 10,900 ts
Complement 784

SHIP LOG SHEET

Version AOTF2023A



Length 630 ft
Beam 68 ft
Draft 20.5 ft

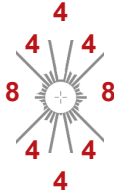


8 x 8"50 BL Mk VIII

DIRECTORS

1

ARCS OF FIRE



Range
30,500 yds 61.0"
FC Radar **+ 0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 23 16 | 18 13 | 15 11 |
| 10-18 | 18 12 | 14 10 | 12 8 |
| 19-26 | 15 11 | 12 8 | 10 7 |
| 27-32 | 13 9 | 10 7 | 9 6 |

| SAPC YDS | PENETRATION TABLE | | |
|----------|-------------------|----------|----------|
| | SHORT | MEDIUM | LONG |
| ROF | 9 | 7 | 5 |
| HORZ | 0 | 1 | 4 |
| VERT | 13 | 10 | 6 |

| | | |
|--------------|------|------|
| Targ Sz | Crew | Sea |
| 2 | | |
| Searchlights | Port | Stbd |

| PROTECTION | |
|-------------|----------|
| ARMOR VALUE | |
| HORIZONTAL | 1 |
| VERTICAL | 2 |

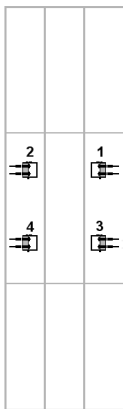
| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| | | | |
|-----------|----------|-----------------------------|--|
| 13 | 7 | DAMAGE CONTROL (DCR) | |
| | | | |

| | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|
| FLAG COMMAND RATING (FCR) | | | | | | | | | |
| | | | | | | | | | |

W2-2A

| DAMAGE DETERMINATION | | | |
|----------------------|---------|---------|---------|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

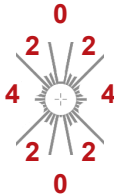


8 x 4"45 QF Mk XVI HA

DIRECTORS

2

ARCS OF FIRE



Range
20,000 yds 40.0"
FC Radar **+ 0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 16 11 | 13 9 | 11 7 |
| 10-18 | 12 8 | 10 6 | 8 5 |
| 19-26 | 11 7 | 8 6 | 7 5 |
| 27-32 | 9 6 | 7 5 | 6 4 |

| SAPBC YDS | PENETRATION TABLE | | |
|-----------|-------------------|----------|----------|
| | SHORT | MEDIUM | LONG |
| ROF | 10 | 7 | 3 |
| HORZ | 0 | 0 | 1 |
| VERT | 6 | 4 | 2 |

| | | | | | | | | | |
|-----|-----------|--|--|--|--|--|--|--|--|
| KTS | 31 | | | | | | | | |
|-----|-----------|--|--|--|--|--|--|--|--|

| | | |
|-----------|---|----|
| TORPEDOES | | |
| TT | 0 | RL |
| | 0 | 0 |

| | |
|--------------|--|
| None | |
| Damage Class | |
| Settings | |

| PROPULSION / MANEUVER | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|----------|
| Engine Rm | 3 | 31 | 25 | 10 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 4 | 31 | 27 | 16 | 4 | 0 | 0 | 0 | 45 |
| Boiler Rm | 4 | 31 | 28 | 19 | 7 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 60 |

| | | | | | | |
|----------------|----------|----------|----------|----------|----------|--------|
| Speed Increase | 00-06 kt | 07-16 kt | 17-20 kt | 21-23 kt | 24-25 kt | 26+ kt |
| | 7.0 | 5.0 | 4.0 | 3.0 | 2.0 | 1.0 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
AUSTRALIA, BERWICK, CANBERRA, CORNWALL, CUMBERLAND, KENT, SUFFOLK



RENOWN Class
CB GREAT BRITAIN

1939 to 1941

0685-3
Displacement 30,750 ts
Complement 1200

SHIP LOG SHEET

Version AOTF2023A

Length 788 ft
Beam 90 ft
Draft 26 ft
After refit completed in 1939.



6 x 15"/42 Mk I

| DIRECTORS | |
|-----------|--|
| 2 | |

ARCS OF FIRE

Range: **32,000 yds** 64.0"

FC Radar: +0
None

GUNNERY (FCS)

| TARGET | SHORT | | MEDIUM | | LONG | |
|--------|-------|-----|--------|-----|------|-----|
| SPEED | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 23 | 16 | 18 | 13 | 15 | 11 |
| 10-18 | 18 | 12 | 14 | 10 | 12 | 8 |
| 19-26 | 15 | 11 | 12 | 8 | 10 | 7 |
| 27-32 | 13 | 9 | 10 | 7 | 9 | 6 |

77% PENETRATION TABLE

| APCBC | SHORT | | MEDIUM | LONG |
|-------|-------|-------|--------|--------|
| YDS | 3,000 | 8,000 | 18,000 | 32,000 |
| ROF | 5 | 5 | 4 | 2 |
| HORZ | 1 | 2 | 3 | 8 |
| VERT | 29 | 24 | 17 | 11 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 3 | | |

Searchlights Port Stbd

PROTECTION ARMOR VALUE

| | |
|------------|---|
| HORIZONTAL | 4 |
| VERTICAL | 7 |

HIT LOCATION

| | RANGE | HORZ | VERT |
|--------|-------|-------|------|
| SHORT | 01-05 | 06-00 | |
| MEDIUM | 01-19 | 20-00 | |
| LONG | 01-39 | 40-00 | |

DAMAGE CONTROL (DCR)

| | | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|
| 22 | 11 | | | | | | | | | | |
|----|----|--|--|--|--|--|--|--|--|--|--|

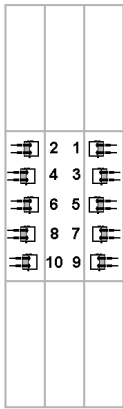
FLAG COMMAND RATING (FCR)

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|

W2-2A

DAMAGE DETERMINATION

| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
|-------|---------|---------|---------|
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |



20 x 4.5"/45 QF Mk I, III

| DIRECTORS | |
|-----------|--|
| 4 | |

ARCS OF FIRE

Range: **21,000 yds** 42.0"

FC Radar: +0
None

GUNNERY (FCS)

| TARGET | SHORT | | MEDIUM | | LONG | |
|--------|-------|-----|--------|-----|------|-----|
| SPEED | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 18 | 13 | 14 | 10 | 12 | 8 |
| 10-18 | 14 | 10 | 11 | 7 | 9 | 6 |
| 19-26 | 12 | 8 | 9 | 6 | 8 | 5 |
| 27-32 | 10 | 7 | 8 | 6 | 7 | 5 |

17% PENETRATION TABLE

| SAPC | SHORT | | MEDIUM | LONG |
|------|-------|-------|--------|--------|
| YDS | 2,000 | 6,000 | 10,000 | 21,000 |
| ROF | 10 | 7 | 5 | 2 |
| HORZ | 0 | 0 | 1 | 3 |
| VERT | 7 | 4 | 3 | 2 |

KTS 29

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|

PROPULSION / MANEUVER

| Engine Rm | 2 | 29 | 17 | 0 | 0 | 0 | 0 | Std Turn |
|------------|---|----|----|----|---|---|---|----------|
| Prop/Shaft | 4 | 29 | 25 | 15 | 4 | 0 | 0 | 30 |
| Boiler Rm | 4 | 29 | 26 | 18 | 7 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 45 |

TORPEDOES

| | | | |
|----|---|----|---|
| TT | 8 | RL | 9 |
|----|---|----|---|

21" Mk IX
Damage Class C
Settings: 10,500/36, 13,500/30

| Speed Increase | 00-04 kt | 05-15 kt | 16-18 kt | 19-22 kt | 23+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 5.0 | 4.0 | 3.0 | 2.0 | 1.0 |

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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| | | | | | |
| | | | | | |

| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
RENOWN, REPULSE



GLOUCESTER Class
CL GREAT BRITAIN

1937 to 1941

6327-0
Displacement 9,400 ts
Complement 748

SHIP LOG SHEET

Version AOTF2023A



Radar Type 286 fitted in November 1940.

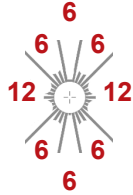
Length 590 ft
Beam 62 ft
Draft 20 ft



12 x 6"/50 BL Mk XXIII

DIRECTORS
2

ARCS OF FIRE



Range
25,500 yds 51.0"

FC Radar **+0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 23 16 | 18 13 | 15 11 |
| 10-18 | 18 12 | 14 10 | 12 8 |
| 19-26 | 15 11 | 12 8 | 10 7 |
| 27-32 | 13 9 | 10 7 | 9 6 |

| CPCBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|--------|------|---|
| | SHORT | MEDIUM | LONG | |
| ROF | 9 | 7 | 5 | 2 |
| HORZ | 0 | 0 | 1 | 3 |
| VERT | 9 | 6 | 4 | 2 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 1 | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 2 |
| VERTICAL | 2 |

| HIT LOCATION | RANGE | HORZ | VERT |
|--------------|-------|-------|-------|
| | SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 | |
| LONG | 01-39 | 40-00 | |

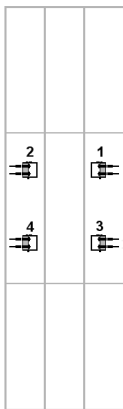
| 12 | 6 | DAMAGE CONTROL (DCR) | | | | | | | | | | | | |
|----|---|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |

FLAG COMMAND RATING (FCR)

| | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

W2-2A

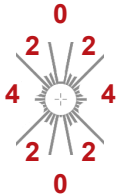
| DAMAGE DETERMINATION | | | |
|----------------------|---------|---------|---------|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |



8 x 4"/45 QF MkXVI HA

DIRECTORS
3

ARCS OF FIRE



Range
20,000 yds 40.0"

FC Radar **+0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 18 13 | 14 10 | 12 8 |
| 10-18 | 14 10 | 11 7 | 9 6 |
| 19-26 | 12 8 | 9 6 | 8 5 |
| 27-32 | 10 7 | 8 6 | 7 5 |

| SAPBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|--------|------|---|
| | SHORT | MEDIUM | LONG | |
| ROF | 10 | 7 | 5 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 4 | 2 | 2 |

KTS **32**

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

| PROPULSION / MANEUVER | | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|----------|--|--|--|
| Engine Rm | 2 | 32 | 18 | 0 | 0 | 0 | 0 | Std Turn | | | |
| Prop/Shaft | 4 | 32 | 28 | 16 | 4 | 0 | 0 | 45 | | | |
| Boiler Rm | 3 | 32 | 26 | 11 | 0 | 0 | 0 | Emg Turn | | | |
| | | | 0 | 0 | 0 | 0 | 0 | 60 | | | |

| TORPEDOES | |
|--------------|----|
| TT | 6 |
| RL | 12 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| 10,500/36 | |
| 13,500/30 | |

| 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 |

| LOSS OF SPEED DURING TURNS | | | | | | | | | | | | | | | |
|----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| KTS | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 |
| STD | 3 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class

GLOUCESTER, LIVERPOOL, MANCHESTER



CONTE DI CAVOUR Class
BB ITALY

1940 to 1941

1412-4
Displacement 26,140 ts
Complement 1236

SHIP LOG SHEET

Version AOTF2023A



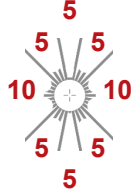
Length 611 ft
Beam 93 ft
Draft 30 ft
4 aircraft plus 2 catapults were planned but no catapults retained after trials.



10 x 320mm/43.8 M1934

DIRECTORS
2

ARCS OF FIRE



Range
31,000 yds 62.0"
FC Radar **+ 0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 23 16 | 18 13 | 15 11 |
| 10-18 | 18 12 | 14 10 | 12 8 |
| 19-26 | 15 11 | 12 8 | 10 7 |
| 27-32 | 13 9 | 10 7 | 9 6 |

| APCBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|----------|----------|----------|
| | SHORT | MEDIUM | LONG | |
| ROF | 6 | 6 | 4 | 2 |
| HORZ | 1 | 2 | 3 | 6 |
| VERT | 25 | 18 | 12 | 8 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 2 | | |

| PROTECTION | |
|-------------|----------|
| ARMOR VALUE | |
| HORIZONTAL | 4 |
| VERTICAL | 9 |

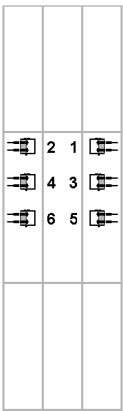
| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| 21 | 11 | DAMAGE CONTROL (DCR) | | | | |
|----|----|----------------------|--|--|--|--|
| | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |

W2-2A

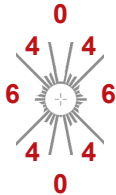
| DAMAGE DETERMINATION | | | |
|----------------------|---------|---------|---------|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |



12 x 120mm/50 M1933

DIRECTORS
2

ARCS OF FIRE



Range
21,000 yds 42.0"
FC Radar **+ 0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 18 13 | 14 10 | 12 8 |
| 10-18 | 14 10 | 11 7 | 9 6 |
| 19-26 | 12 8 | 9 6 | 8 5 |
| 27-32 | 10 7 | 8 6 | 7 5 |

| SAPBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|----------|----------|----------|
| | SHORT | MEDIUM | LONG | |
| ROF | 10 | 8 | 6 | 2 |
| HORZ | 0 | 0 | 0 | 2 |
| VERT | 7 | 4 | 2 | 1 |

| KTS | 27 | | | | | | | |
|-----|----|--|--|--|--|--|--|--|
| | | | | | | | | |

| TORPEDOES | | |
|-----------|---|----|
| TT | 0 | RL |
| | 0 | 0 |

| |
|--------------|
| None |
| Damage Class |
| Settings |
| |
| |
| |

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|----|----|----|--|----------|----|
| Engine Rm | 2 | 27 | 16 | 0 | 0 | 0 | 0 | | Std Turn | |
| Prop/Shaft | 2 | 27 | 14 | 0 | 0 | 0 | 0 | | 45 | |
| Boiler Rm | 8 | 27 | 26 | 24 | 21 | 17 | 11 | | Emg Turn | 60 |
| | | | 6 | 2 | 0 | 0 | 0 | | | |

| Speed Increase | 00-23 kt | 24+ kt | | | | |
|----------------|----------|--------|-----|--|--|--|
| | | 4.0 | 1.0 | | | |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|--|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
CONTE DI CAVOUR, GUILIO CESARE, LEONARDO DA VINCI



LITTORIO Class
BB ITALY

1940 to 1942

1418-0
Displacement 40,517 ts
Complement 1900

SHIP LOG SHEET

Version AOTF2023A

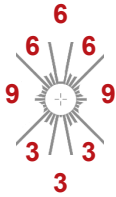
Four old 4.7" guns provided for starshell illumination.



9 x 381mm/50 M1934

DIRECTORS
2

ARCS OF FIRE



Range
36,000 yds 72.0"
FC Radar **+0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 25 17 | 20 14 | 16 12 |
| 10-18 | 20 14 | 16 11 | 13 9 |
| 19-26 | 18 13 | 14 10 | 12 8 |
| 27-32 | 16 11 | 13 9 | 11 8 |

| APCBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|--------|------|----|
| | SHORT | MEDIUM | LONG | |
| ROF | 4 | 4 | 4 | 3 |
| HORZ | 1 | 3 | 4 | 6 |
| VERT | 34 | 27 | 19 | 14 |

| | | |
|--------------|------|------|
| Targ Sz | Crew | Sea |
| 3 | | |
| Searchlights | Port | Stbd |

| PROTECTION | |
|-------------|----|
| ARMOR VALUE | |
| HORIZONTAL | 6 |
| VERTICAL | 11 |

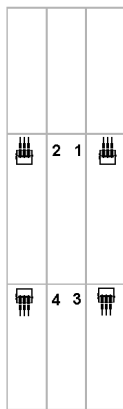
| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| | | | | | | | | | | | |
|----|----|----------------------|--|--|--|--|--|--|--|--|--|
| 26 | 13 | DAMAGE CONTROL (DCR) | | | | | | | | | |
|----|----|----------------------|--|--|--|--|--|--|--|--|--|

| | | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|--|
| FLAG COMMAND RATING (FCR) | | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|--|

W2-2A

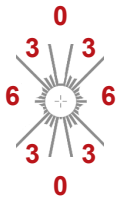
| DAMAGE DETERMINATION | | | |
|----------------------|---------|---------|---------|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 104 | 200 | 306 |
| 14-16 | 106 | 204 | - |
| 17-19 | 107 | 206 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 114 | 211 | - |
| 26-28 | 111 | 213 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 150 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | - |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | - |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 146 | 227 | - |
| 65-67 | 133 | 229 | 318 |
| 68-70 | 126 | 230 | - |
| 71-73 | 118 | 231 | 305 |
| 74-76 | 116 | 237 | - |
| 77-79 | 115 | 238 | - |
| 80-83 | 108 | 208 | 319 |
| 84-87 | 113 | 212 | - |
| 88-91 | 129 | 248 | 307 |
| 92-95 | 151 | 244 | 308 |
| 96-98 | 152 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |



12 x 152mm/55 M1936

DIRECTORS
2

ARCS OF FIRE



Range
28,000 yds 56.0"
FC Radar **+0**
None

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 18 13 | 14 10 | 12 8 |
| 10-18 | 14 10 | 11 7 | 9 6 |
| 19-26 | 12 8 | 9 6 | 8 5 |
| 27-32 | 10 7 | 8 6 | 7 5 |

| APCBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|--------|------|---|
| | SHORT | MEDIUM | LONG | |
| ROF | 10 | 7 | 4 | 2 |
| HORZ | 0 | 0 | 1 | 3 |
| VERT | 12 | 8 | 4 | 1 |

| | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|
| KTS | 30 | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|

| TORPEDOES | |
|-----------|--------|
| TT | 0 RL 0 |

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|---|----------|
| Engine Rm | 2 | 30 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 4 | 30 | 26 | 15 | 4 | 0 | 0 | 0 | 0 | 30 |
| Boiler Rm | 4 | 30 | 27 | 18 | 7 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |

| | |
|--------------|--|
| None | |
| Damage Class | |
| Settings | |

| Speed Increase | 00-08 kt | 09-24 kt | 25-28 kt | 29+ kt |
|----------------|----------|----------|----------|--------|
| | 5.0 | 4.0 | 2.0 | 1.0 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |

| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
IMPERO, LITTORIO (ITALIA), ROMA, VITTORIO VENETO



TRENTO Class
CA ITALY

1939 to 1942

0189-2
Displacement 10,511 ts
Complement 723

SHIP LOG SHEET

Version AOTF2023A



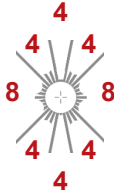
Length 635 ft
Beam 68 ft
Draft 22.3 ft



8 x 203mm/50 M1924

DIRECTORS 2

ARCS OF FIRE



Range
30,500 yds 61.0"

FC Radar +0
None

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

34% PENETRATION TABLE

| APCBC | SHORT | | MEDIUM | LONG |
|-------|----------|----------|----------|----------|
| YDS | 3,000 | 8,000 | 15,000 | 30,500 |
| ROF | 9 | 8 | 5 | 2 |
| HORZ | 0 | 1 | 1 | 4 |
| VERT | 15 | 11 | 6 | 2 |

| | | |
|----------|------|-----|
| Targ Sz | Crew | Sea |
| 2 | | |

PROTECTION

ARMOR VALUE

| | |
|------------|----------|
| HORIZONTAL | 2 |
| VERTICAL | 3 |

HIT LOCATION

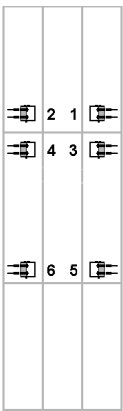
| | RANGE | HORZ | VERT |
|--------|-------|-------|------|
| SHORT | 01-05 | 06-00 | |
| MEDIUM | 01-19 | 20-00 | |
| LONG | 01-39 | 40-00 | |

| | | |
|--------------|----------|------|
| Searchlights | Port | Stbd |
| 13 | 7 | |

DAMAGE CONTROL (DCR)

FLAG COMMAND RATING (FCR)

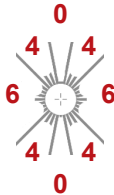
W2-2A



12 x 100mm/47 AA

DIRECTORS 2

ARCS OF FIRE



Range
16,500 yds 33.0"

FC Radar +0
None

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 16 | 11 | 13 | 9 | 11 | 7 |
| 10-18 | 12 | 8 | 10 | 6 | 8 | 5 |
| 19-26 | 11 | 7 | 8 | 6 | 7 | 5 |
| 27-32 | 9 | 6 | 7 | 5 | 6 | 4 |

14% PENETRATION TABLE

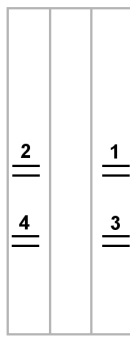
| HE | SHORT | | MEDIUM | LONG |
|------|-----------|----------|----------|----------|
| YDS | 2,000 | 4,000 | 8,000 | 16,500 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 5 | 3 | 2 | 1 |

KTS **35**

PROPULSION / MANEUVER

| | | | | | | | | |
|------------|---|----|----|----|---|---|---|----------|
| Engine Rm | 2 | 35 | 20 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 4 | 35 | 30 | 18 | 5 | 0 | 0 | 45 |
| Boiler Rm | 3 | 35 | 29 | 13 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 60 |

| | | | | | | |
|----------------|----------|----------|----------|----------|----------|--------|
| Speed Increase | 00-06 kt | 07-18 kt | 19-22 kt | 23-26 kt | 27-28 kt | 29+ kt |
| | 7.0 | 6.0 | 4.0 | 3.0 | 2.0 | 1.0 |



TORPEDOES

| | | | |
|----|---|----|----|
| TT | 8 | RL | 12 |
|----|---|----|----|

53cm S1270M

Damage Class D

Settings

4,400/46
8,750/35
13,100/29

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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
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| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
TRENTO, TRIESTE



ZARA Class
CA ITALY

1938 to 1941

1439-1
Displacement 11,326 ts
Complement 841

SHIP LOG SHEET

Version AOTF2023A

Length 548 ft
Beam 63 ft
Draft 20.3 ft
Two 120mm/15 star shell guns added c.1940.

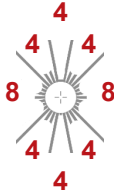


8 x 203mm/53 M1927

DIRECTORS

2

ARCS OF FIRE



| | |
|-------------|-------|
| Range | |
| 34,500 yds | 69.0" |
| FC Radar +0 | |
| None | |

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 21 14 | 16 11 | 14 9 |
| 10-18 | 16 11 | 12 8 | 11 7 |
| 19-26 | 14 9 | 11 7 | 9 6 |
| 27-32 | 12 8 | 9 6 | 8 5 |

| APCBC YDS | PENETRATION TABLE | | |
|-----------|-------------------|--------|------|
| | SHORT | MEDIUM | LONG |
| ROF | 9 | 6 | 4 |
| HORZ | 0 | 1 | 5 |
| VERT | 17 | 10 | 6 |

| | | |
|---------|------|-----|
| Targ Sz | Crew | Sea |
| 1 | | |

| | | |
|--------------|------|------|
| Searchlights | Port | Stbd |
| | | |

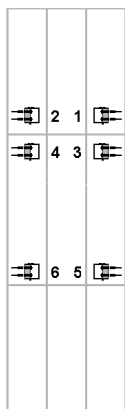
| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 3 |
| VERTICAL | 5 |

| RANGE | HIT LOCATION | |
|--------|--------------|-------|
| | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| | | | | | | | | | | | |
|----|---|----------------------|--|--|--|--|--|--|--|--|--|
| 14 | 7 | DAMAGE CONTROL (DCR) | | | | | | | | | |
| | | | | | | | | | | | |

| | | | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|
| FLAG COMMAND RATING (FCR) | | | | | | | | | | | |
| | | | | | | | | | | | |

W2-1

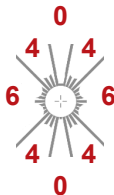


12 x 100mm/47 AA

DIRECTORS

2

ARCS OF FIRE



| | |
|-------------|-------|
| Range | |
| 16,500 yds | 33.0" |
| FC Radar +0 | |
| None | |

| TARGET SPEED | GUNNERY (FCS) | | |
|--------------|---------------|----------------|--------------|
| | SHORT BRD NAR | MEDIUM BRD NAR | LONG BRD NAR |
| 0-9 | 16 11 | 13 9 | 11 7 |
| 10-18 | 12 8 | 10 6 | 8 5 |
| 19-26 | 11 7 | 8 6 | 7 5 |
| 27-32 | 9 6 | 7 5 | 6 4 |

| HE YDS | PENETRATION TABLE | | |
|--------|-------------------|--------|------|
| | SHORT | MEDIUM | LONG |
| ROF | 10 | 9 | 6 |
| HORZ | 0 | 0 | 1 |
| VERT | 5 | 3 | 2 |

| DAMAGE DETERMINATION | | | |
|----------------------|---------|---------|---------|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 111 | 200 | 306 |
| 14-16 | 117 | 200 | - |
| 17-19 | 107 | 250 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 120 | 207 | 311 |
| 26-28 | 112 | 225 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 122 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | 318 |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | 316 |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 141 | 227 | 317 |
| 65-67 | 133 | 229 | - |
| 68-70 | 126 | 230 | 318 |
| 71-73 | 118 | 231 | - |
| 74-76 | 130 | 237 | - |
| 77-79 | 115 | 237 | - |
| 80-83 | 131 | 248 | 307 |
| 84-87 | 136 | 231 | 308 |
| 88-91 | 111 | 248 | 310 |
| 92-95 | 148 | 244 | 311 |
| 96-98 | 167 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

| | | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|
| KTS | 32 | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|

| | | |
|-----------|---|----|
| TORPEDOES | | |
| TT | 0 | RL |

| | |
|--------------|--|
| None | |
| Damage Class | |
| Settings | |

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|----|---|---|----------|--|--|
| Engine Rm | 2 | 32 | 18 | 0 | 0 | 0 | 0 | Std Turn | | |
| Prop/Shaft | 2 | 32 | 16 | 0 | 0 | 0 | 0 | 45 | | |
| Boiler Rm | 5 | 32 | 30 | 24 | 15 | 5 | 0 | Emg Turn | | |
| | | | 0 | 0 | 0 | 0 | 0 | 60 | | |

| Speed Increase | 00-05 kt | 06-15 kt | 16-19 kt | 20-21 kt | 22-23 kt | 24+ kt |
|----------------|----------|----------|----------|----------|----------|--------|
| | 6.0 | 5.0 | 4.0 | 3.0 | 2.0 | 1.0 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|--|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H | |
| | | | | | | | | | | | | |
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| | | | | | | | |
|----|-------|--------|-------|-------|-----|----------|--------|
| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
FIUME, GORIZIA, POLA, ZARA



BOLZANO Class
CA ITALY

1938 to 1941

2691-1
Displacement 10,890 ts
Complement 725

SHIP LOG SHEET

Version AOTF2023A

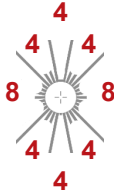


8 x 203mm/53 M1927

DIRECTORS

2

ARCS OF FIRE



| Range | |
|------------|-------|
| 34,500 yds | 69.0" |
| FC Radar | + 0 |
| None | |

| TARGET | GUNNERY (FCS) | | | | | |
|--------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| SPEED | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| 35% PENETRATION TABLE | | | | |
|-----------------------|-------|--------|--------|--------|
| APCBC | SHORT | | MEDIUM | LONG |
| YDS | 4,000 | 10,000 | 18,000 | 34,500 |
| ROF | 9 | 6 | 4 | 2 |
| HORZ | 0 | 1 | 1 | 5 |
| VERT | 17 | 10 | 6 | 3 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 2 | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 2 |
| VERTICAL | 2 |

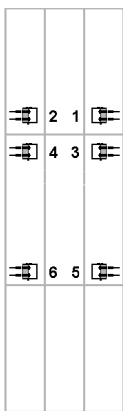
| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| Searchlights | Port | Stbd |
|--------------|------|------|
|--------------|------|------|

| 13 | 7 | DAMAGE CONTROL (DCR) | | | | | | | | | |
|----|---|----------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |

W2-2A

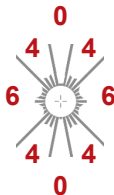


12 x 100mm/47 AA

DIRECTORS

2

ARCS OF FIRE



| Range | |
|------------|-------|
| 16,500 yds | 33.0" |
| FC Radar | + 0 |
| None | |

| TARGET | GUNNERY (FCS) | | | | | |
|--------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| SPEED | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 16 | 11 | 13 | 9 | 11 | 7 |
| 10-18 | 12 | 8 | 10 | 6 | 8 | 5 |
| 19-26 | 11 | 7 | 8 | 6 | 7 | 5 |
| 27-32 | 9 | 6 | 7 | 5 | 6 | 4 |

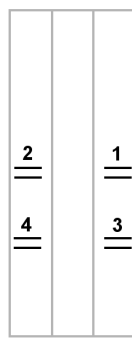
| 14% PENETRATION TABLE | | | | |
|-----------------------|-------|-------|--------|--------|
| HE | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 16,500 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 5 | 3 | 2 | 1 |

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|--|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | 304 | |
| 03-04 | 128 | 201 | 302 | |
| 05-06 | 102 | 203 | 303 | |
| 07-08 | 103 | 205 | 301 | |
| 09-10 | 109 | 210 | 305 | |
| 11-13 | 104 | 200 | 306 | |
| 14-16 | 106 | 204 | - | |
| 17-19 | 107 | 206 | - | |
| 20-22 | 105 | 207 | 310 | |
| 23-25 | 114 | 211 | - | |
| 26-28 | 111 | 213 | 312 | |
| 29-31 | 121 | 214 | 313 | |
| 32-34 | 144 | 215 | 314 | |
| 35-37 | 171 | 217 | 315 | |
| 38-40 | 150 | 218 | - | |
| 41-43 | 135 | 219 | 317 | |
| 44-46 | 132 | 220 | - | |
| 47-49 | 145 | 221 | - | |
| 50-52 | 123 | 222 | - | |
| 53-55 | 124 | 223 | - | |
| 56-58 | 125 | 224 | - | |
| 59-61 | 127 | 226 | - | |
| 62-64 | 146 | 227 | - | |
| 65-67 | 133 | 229 | 318 | |
| 68-70 | 126 | 230 | - | |
| 71-73 | 118 | 231 | 305 | |
| 74-76 | 116 | 237 | - | |
| 77-79 | 115 | 238 | - | |
| 80-83 | 108 | 208 | 319 | |
| 84-87 | 113 | 212 | - | |
| 88-91 | 129 | 248 | 307 | |
| 92-95 | 151 | 244 | 308 | |
| 96-98 | 152 | 242 | 310 | |
| 99-00 | 101 | 241 | 316 | |

| KTS | 35 | | | | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|--|--|--|
|-----|----|--|--|--|--|--|--|--|--|--|--|--|--|

| PROPULSION / MANEUVER | | | | | | | | | | | | | |
|-----------------------|---|----|----|----|----|---|---|----------|--|--|--|--|--|
| Engine Rm | 2 | 35 | 20 | 0 | 0 | 0 | 0 | Std Turn | | | | | |
| Prop/Shaft | 4 | 35 | 30 | 18 | 5 | 0 | 0 | 45 | | | | | |
| Boiler Rm | 5 | 35 | 33 | 26 | 16 | 6 | 0 | Emg Turn | | | | | |
| | | | 0 | 0 | 0 | 0 | 0 | 60 | | | | | |

| Speed | 00-08 kt | 09-14 kt | 15-21 kt | 22-26 kt | 27-29 kt | 30+ kt |
|----------|----------|----------|----------|----------|----------|--------|
| Increase | 9.0 | 7.0 | 6.0 | 4.0 | 2.0 | 1.0 |



| TORPEDOES | | | |
|--------------|---|----|----|
| TT | 8 | RL | 12 |
| 53cm Si270M | | | |
| Damage Class | D | | |
| Settings | | | |
| 4,400/46 | | | |
| 8,750/35 | | | |
| 13,100/29 | | | |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | |
|----------------|-------|--------|------|-----|---|--|
| T# | RANGE | TARGET | RNDS | TBL | H | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
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Ships In Class
BOLZANO



E Class
DD GREAT BRITAIN

1934 to 1940

1230-0
Displacement 1,405 ts
Complement 145

SHIP LOG SHEET

Version AOTF2023A



Length 326 ft
Beam 33 ft
Draft 12.5 ft

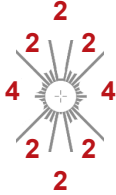


4 x 4.7"/45 QF Mk IX

DIRECTORS

1

ARCS OF FIRE



Range
17,000 yds 34.0"
FC Radar +0
None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPC | PENETRATION TABLE | | | |
|------|-------------------|-------|--------|--------|
| | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 17,000 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 5 | 3 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| 5 | 2 | DAMAGE CONTROL (DCR) | | | | | | | | | |
|---|---|----------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |

W2-1

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|--|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | 304 | |
| 03-04 | 128 | 201 | 302 | |
| 05-06 | 102 | 203 | 303 | |
| 07-08 | 103 | 205 | 301 | |
| 09-10 | 109 | 210 | 305 | |
| 11-13 | 111 | 200 | 306 | |
| 14-16 | 117 | 200 | - | |
| 17-19 | 107 | 250 | - | |
| 20-22 | 105 | 207 | 310 | |
| 23-25 | 120 | 207 | 311 | |
| 26-28 | 112 | 225 | 312 | |
| 29-31 | 121 | 214 | 313 | |
| 32-34 | 144 | 215 | 314 | |
| 35-37 | 171 | 217 | 315 | |
| 38-40 | 122 | 218 | - | |
| 41-43 | 135 | 219 | 317 | |
| 44-46 | 132 | 220 | 318 | |
| 47-49 | 145 | 221 | - | |
| 50-52 | 123 | 222 | - | |
| 53-55 | 124 | 223 | 316 | |
| 56-58 | 125 | 224 | - | |
| 59-61 | 127 | 226 | - | |
| 62-64 | 141 | 227 | 317 | |
| 65-67 | 133 | 229 | - | |
| 68-70 | 126 | 230 | 318 | |
| 71-73 | 118 | 231 | - | |
| 74-76 | 130 | 237 | - | |
| 77-79 | 115 | 237 | - | |
| 80-83 | 131 | 248 | 307 | |
| 84-87 | 136 | 231 | 308 | |
| 88-91 | 111 | 248 | 310 | |
| 92-95 | 148 | 244 | 311 | |
| 96-98 | 167 | 242 | 310 | |
| 99-00 | 101 | 241 | 316 | |

KTS 36

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|---|----------|
| Engine Rm | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 2 | 36 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Boiler Rm | 3 | 36 | 30 | 13 | 0 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |

| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

| TORPEDOES | |
|--------------|-----------|
| TT | 8 |
| RL | 8 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| | 10,500/36 |
| | 13,500/30 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
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Ships In Class
ECHO, ECLIPSE, ELECTRA, ENCOUNTER, ESCAPE, ESCORT, ESK, EXPRESS



E/F LEADERS Class
DD GREAT BRITAIN

1935 to 1940

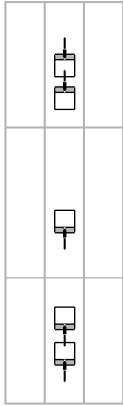
2833-0
Displacement 1,495 ts
Complement 175

SHIP LOG SHEET

Version AOTF2023A



Length 340 ft
Beam 34 ft
Draft 12.5 ft

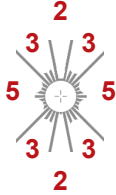


5 x 4.7"/45 QF Mk IX

DIRECTORS

1

ARCS OF FIRE



Range
17,000 yds 34.0"
FC Radar +0
None

| TARGET | GUNNERY (FCS) | | | | | |
|--------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| SPEED | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPC | PENETRATION TABLE | | | |
|------|-------------------|-------|--------|--------|
| | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 17,000 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 5 | 3 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| Searchlights | Port | Stbd |
|--------------|------|------|
| | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| DAMAGE CONTROL (DCR) | | | | | | | | | |
|----------------------|---|--|--|--|--|--|--|--|--|
| 5 | 3 | | | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |

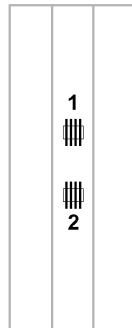
W2-1

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|-----|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | | 304 |
| 03-04 | 128 | 201 | | 302 |
| 05-06 | 102 | 203 | | 303 |
| 07-08 | 103 | 205 | | 301 |
| 09-10 | 109 | 210 | | 305 |
| 11-13 | 111 | 200 | | 306 |
| 14-16 | 117 | 200 | | - |
| 17-19 | 107 | 250 | | - |
| 20-22 | 105 | 207 | | 310 |
| 23-25 | 120 | 207 | | 311 |
| 26-28 | 112 | 225 | | 312 |
| 29-31 | 121 | 214 | | 313 |
| 32-34 | 144 | 215 | | 314 |
| 35-37 | 171 | 217 | | 315 |
| 38-40 | 122 | 218 | | - |
| 41-43 | 135 | 219 | | 317 |
| 44-46 | 132 | 220 | | 318 |
| 47-49 | 145 | 221 | | - |
| 50-52 | 123 | 222 | | - |
| 53-55 | 124 | 223 | | 316 |
| 56-58 | 125 | 224 | | - |
| 59-61 | 127 | 226 | | - |
| 62-64 | 141 | 227 | | 317 |
| 65-67 | 133 | 229 | | - |
| 68-70 | 126 | 230 | | 318 |
| 71-73 | 118 | 231 | | - |
| 74-76 | 130 | 237 | | - |
| 77-79 | 115 | 237 | | - |
| 80-83 | 131 | 248 | | 307 |
| 84-87 | 136 | 231 | | 308 |
| 88-91 | 111 | 248 | | 310 |
| 92-95 | 148 | 244 | | 311 |
| 96-98 | 167 | 242 | | 310 |
| 99-00 | 101 | 241 | | 316 |

KTS 36

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|---|----------|
| Engine Rm | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 2 | 36 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Boiler Rm | 3 | 36 | 30 | 13 | 0 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |

| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |



| TORPEDOES | |
|--------------|-----------|
| TT | 8 |
| RL | 8 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| | 10,500/36 |
| | 13,500/30 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
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Ships In Class
EXMOUTH, FAULKNOR



F Class
DD GREAT BRITAIN

1935 to 1940

6349-0
Displacement 1,405 ts
Complement 145

SHIP LOG SHEET

Version AOTF2023A



Length 326 ft
Beam 33 ft
Draft 12.5 ft

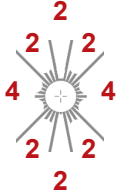


4 x 4.7"/45 QF Mk IX

DIRECTORS

1

ARCS OF FIRE



Range
17,000 yds 34.0"
FC Radar +0
None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPC | PENETRATION TABLE | | | |
|------|-------------------|-------|--------|--------|
| | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 17,000 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 5 | 3 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| Searchlights | Port | Stbd |
|--------------|------|------|
| 5 | 2 | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

FLAG COMMAND RATING (FCR)

| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

W2-1

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|-----|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | | 304 |
| 03-04 | 128 | 201 | | 302 |
| 05-06 | 102 | 203 | | 303 |
| 07-08 | 103 | 205 | | 301 |
| 09-10 | 109 | 210 | | 305 |
| 11-13 | 111 | 200 | | 306 |
| 14-16 | 117 | 200 | | - |
| 17-19 | 107 | 250 | | - |
| 20-22 | 105 | 207 | | 310 |
| 23-25 | 120 | 207 | | 311 |
| 26-28 | 112 | 225 | | 312 |
| 29-31 | 121 | 214 | | 313 |
| 32-34 | 144 | 215 | | 314 |
| 35-37 | 171 | 217 | | 315 |
| 38-40 | 122 | 218 | | - |
| 41-43 | 135 | 219 | | 317 |
| 44-46 | 132 | 220 | | 318 |
| 47-49 | 145 | 221 | | - |
| 50-52 | 123 | 222 | | - |
| 53-55 | 124 | 223 | | 316 |
| 56-58 | 125 | 224 | | - |
| 59-61 | 127 | 226 | | - |
| 62-64 | 141 | 227 | | 317 |
| 65-67 | 133 | 229 | | - |
| 68-70 | 126 | 230 | | 318 |
| 71-73 | 118 | 231 | | - |
| 74-76 | 130 | 237 | | - |
| 77-79 | 115 | 237 | | - |
| 80-83 | 131 | 248 | | 307 |
| 84-87 | 136 | 231 | | 308 |
| 88-91 | 111 | 248 | | 310 |
| 92-95 | 148 | 244 | | 311 |
| 96-98 | 167 | 242 | | 310 |
| 99-00 | 101 | 241 | | 316 |

KTS 36

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|---|----------|
| Engine Rm | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 2 | 36 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Boiler Rm | 3 | 36 | 30 | 13 | 0 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |

| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

| TORPEDOES | |
|--------------|---|
| TT | 8 |
| RL | 8 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| 10,500/36 | |
| 13,500/30 | |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
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Ships In Class
FAME, FEARLESS, FIREDRAKE, FORESIGHT, FORESTER, FORTUNE, FOXHOUND, FURY



G Class
DD GREAT BRITAIN

1936 to 1940

1238-0
Displacement 1,350 ts
Complement 145

SHIP LOG SHEET

Version AOTF2023A



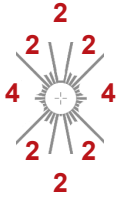
Length 320 ft
Beam 33 ft
Draft 12.4 ft



4 x 4.7"/45 QF Mk IX

DIRECTORS
1

ARCS OF FIRE



Range
17,000 yds 34.0"
FC Radar +0
None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPC | PENETRATION TABLE | | | |
|------|-------------------|-------|--------|--------|
| | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 17,000 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 5 | 3 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| Searchlights | Port | Stbd |
|--------------|------|------|
| | | |

| DAMAGE CONTROL (DCR) | | | | | | | | | |
|----------------------|---|--|--|--|--|--|--|--|--|
| 5 | 2 | | | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |

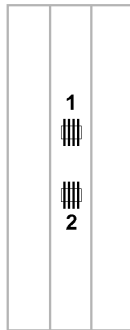
W2-1

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|--|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | 304 | |
| 03-04 | 128 | 201 | 302 | |
| 05-06 | 102 | 203 | 303 | |
| 07-08 | 103 | 205 | 301 | |
| 09-10 | 109 | 210 | 305 | |
| 11-13 | 111 | 200 | 306 | |
| 14-16 | 117 | 200 | - | |
| 17-19 | 107 | 250 | - | |
| 20-22 | 105 | 207 | 310 | |
| 23-25 | 120 | 207 | 311 | |
| 26-28 | 112 | 225 | 312 | |
| 29-31 | 121 | 214 | 313 | |
| 32-34 | 144 | 215 | 314 | |
| 35-37 | 171 | 217 | 315 | |
| 38-40 | 122 | 218 | - | |
| 41-43 | 135 | 219 | 317 | |
| 44-46 | 132 | 220 | 318 | |
| 47-49 | 145 | 221 | - | |
| 50-52 | 123 | 222 | - | |
| 53-55 | 124 | 223 | 316 | |
| 56-58 | 125 | 224 | - | |
| 59-61 | 127 | 226 | - | |
| 62-64 | 141 | 227 | 317 | |
| 65-67 | 133 | 229 | - | |
| 68-70 | 126 | 230 | 318 | |
| 71-73 | 118 | 231 | - | |
| 74-76 | 130 | 237 | - | |
| 77-79 | 115 | 237 | - | |
| 80-83 | 131 | 248 | 307 | |
| 84-87 | 136 | 231 | 308 | |
| 88-91 | 111 | 248 | 310 | |
| 92-95 | 148 | 244 | 311 | |
| 96-98 | 167 | 242 | 310 | |
| 99-00 | 101 | 241 | 316 | |

KTS 36

| PROPULSION / MANEUVER | | | | | | | | | |
|-----------------------|---|----|----|---|---|---|---|---|---|
| Engine Rm | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prop/Shaft | 2 | 36 | 18 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boiler Rm | 2 | 36 | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |



| TORPEDOES | |
|--------------|-----------|
| TT | 8 |
| RL | 8 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| | 10,500/36 |
| | 13,500/30 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
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Ships In Class
GALLANT, GARLAND, GIPSY, GLOWWORM, GRAFTON, GRENADE, GREYHOUND, GRIFFIN



H Class
DD GREAT BRITAIN

1936 to 1940

6355-0
Displacement 1,340 ts
Complement 145

SHIP LOG SHEET

Version AOTF2023A



Length 320 ft
Beam 33 ft
Draft 12.4 ft

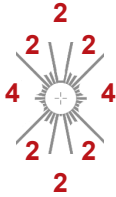


4 x 4.7"/45 QF Mk IX

DIRECTORS

1

ARCS OF FIRE



Range
17,000 yds 34.0"
FC Radar +0
None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPC | PENETRATION TABLE | | | |
|------|-------------------|-------|--------|--------|
| | SHORT | | MEDIUM | LONG |
| YDS | 2,000 | 4,000 | 8,000 | 17,000 |
| ROF | 10 | 9 | 6 | 3 |
| HORZ | 0 | 0 | 0 | 1 |
| VERT | 6 | 5 | 3 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| Searchlights | Port | Stbd |
|--------------|------|------|
| 5 | 2 | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

5 2 DAMAGE CONTROL (DCR)

FLAG COMMAND RATING (FCR)

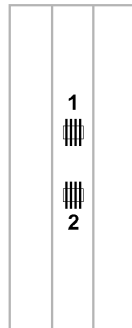
W2-1

| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|-----|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | | 304 |
| 03-04 | 128 | 201 | | 302 |
| 05-06 | 102 | 203 | | 303 |
| 07-08 | 103 | 205 | | 301 |
| 09-10 | 109 | 210 | | 305 |
| 11-13 | 111 | 200 | | 306 |
| 14-16 | 117 | 200 | | - |
| 17-19 | 107 | 250 | | - |
| 20-22 | 105 | 207 | | 310 |
| 23-25 | 120 | 207 | | 311 |
| 26-28 | 112 | 225 | | 312 |
| 29-31 | 121 | 214 | | 313 |
| 32-34 | 144 | 215 | | 314 |
| 35-37 | 171 | 217 | | 315 |
| 38-40 | 122 | 218 | | - |
| 41-43 | 135 | 219 | | 317 |
| 44-46 | 132 | 220 | | 318 |
| 47-49 | 145 | 221 | | - |
| 50-52 | 123 | 222 | | - |
| 53-55 | 124 | 223 | | 316 |
| 56-58 | 125 | 224 | | - |
| 59-61 | 127 | 226 | | - |
| 62-64 | 141 | 227 | | 317 |
| 65-67 | 133 | 229 | | - |
| 68-70 | 126 | 230 | | 318 |
| 71-73 | 118 | 231 | | - |
| 74-76 | 130 | 237 | | - |
| 77-79 | 115 | 237 | | - |
| 80-83 | 131 | 248 | | 307 |
| 84-87 | 136 | 231 | | 308 |
| 88-91 | 111 | 248 | | 310 |
| 92-95 | 148 | 244 | | 311 |
| 96-98 | 167 | 242 | | 310 |
| 99-00 | 101 | 241 | | 316 |

KTS 36

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|---|---|---|---|---|---|----------|
| Engine Rm | 1 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 2 | 36 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Boiler Rm | 2 | 36 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |

| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------------|----------|----------|----------|----------|--------|
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |



| TORPEDOES | |
|--------------|-----------|
| TT | 8 |
| RL | 8 |
| 21" Mk IX | |
| Damage Class | C |
| Settings | |
| | 10,500/36 |
| | 13,500/30 |

| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | | | | | | | |
|----------------|-------|--------|------|-----|---|----|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H | T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | | | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
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Ships In Class
HASTY, HAVOCK, HEReward, HERO, HOSTILE, HOTSPUR, HUNTER, HYPERION



DARDO Class
DD ITALY

1935 to 1940

1581-1
Displacement 1,205 ts
Complement 185

SHIP LOG SHEET

Version AOTF2023A



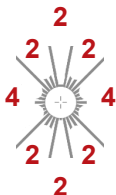
Length 308 ft
Beam 32 ft
Draft 10.3 ft



4 x 120mm/50 M1926

DIRECTORS
2

ARCS OF FIRE



Range
21,500 yds 43.0"

FC Radar +0
None

GUNNERY (FCS)

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 13 | 15 | 10 | 12 | 8 |
| 10-18 | 15 | 9 | 11 | 7 | 9 | 5 |
| 19-26 | 12 | 8 | 9 | 6 | 7 | 4 |
| 27-32 | 10 | 7 | 7 | 5 | 6 | 4 |

17% PENETRATION TABLE

| SAPBC | SHORT | | MEDIUM | LONG |
|-------|-------|-------|--------|--------|
| YDS | 2,000 | 6,000 | 10,000 | 21,500 |
| ROF | 10 | 8 | 6 | 2 |
| HORZ | 0 | 0 | 0 | 2 |
| VERT | 7 | 4 | 2 | 1 |

| | | |
|---------|------|-----|
| Targ Sz | Crew | Sea |
| 0 | | |

| | | |
|--------------|------|------|
| Searchlights | Port | Stbd |
| | | |

PROTECTION

ARMOR VALUE

| | |
|------------|---|
| HORIZONTAL | 0 |
| VERTICAL | 0 |

HIT LOCATION

| RANGE | HORZ | VERT |
|-------|------|------|
|-------|------|------|

| | | |
|--------|-------|-------|
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

4 2 DAMAGE CONTROL (DCR)

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

FLAG COMMAND RATING (FCR)

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

W2-1

DAMAGE DETERMINATION

| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
|-------|---------|---------|---------|
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 111 | 200 | 306 |
| 14-16 | 117 | 200 | - |
| 17-19 | 107 | 250 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 120 | 207 | 311 |
| 26-28 | 112 | 225 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 122 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | 318 |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | 316 |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 141 | 227 | 317 |
| 65-67 | 133 | 229 | - |
| 68-70 | 126 | 230 | 318 |
| 71-73 | 118 | 231 | - |
| 74-76 | 130 | 237 | - |
| 77-79 | 115 | 237 | - |
| 80-83 | 131 | 248 | 307 |
| 84-87 | 136 | 231 | 308 |
| 88-91 | 111 | 248 | 310 |
| 92-95 | 148 | 244 | 311 |
| 96-98 | 167 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

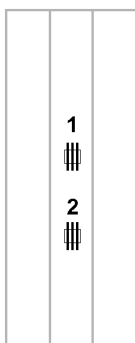
KTS 37

PROPULSION / MANEUVER

| | | | | | | | | |
|------------|---|----|----|----|---|---|---|----------|
| Engine Rm | 2 | 37 | 21 | 0 | 0 | 0 | 0 | Std Turn |
| Prop/Shaft | 2 | 37 | 19 | 0 | 0 | 0 | 0 | 45 |
| Boiler Rm | 3 | 37 | 31 | 13 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 60 |

TORPEDOES

| | | | |
|----------------|---|----|---|
| TT | 6 | RL | 6 |
| 53cm SI250/270 | | | |
| Damage Class | D | | |
| Settings | | | |
| 3,300/40 | | | |
| 13,100/26 | | | |



| | | | | | |
|----------|----------|----------|----------|----------|--------|
| Speed | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
| Increase | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| | | | | | |
| | | | | | |

| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
DARDO, FRECCIA, SAETTA, STRALE



ORIANI Class
DD ITALY

1940 to 1942
1596-1
Displacement 1,559 ts
Complement 207

SHIP LOG SHEET

Version AOTF2023A

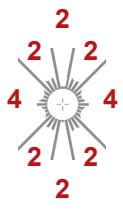


Length 344 ft
Beam 34 ft
Draft 11.1 ft



4 x 120mm/50 M1936

ARCS OF FIRE



DIRECTORS
1

Range
20,500 yds 41.0"

FC Radar **+0**
None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPBC | PENETRATION TABLE | | | |
|-------------|-------------------|----------|----------|----------|
| | SHORT | MEDIUM | LONG | |
| YDS | 2,000 | 6,000 | 10,000 | 20,500 |
| ROF | 10 | 8 | 6 | 2 |
| HORZ | 0 | 0 | 0 | 2 |
| VERT | 7 | 4 | 2 | 1 |

| | | |
|----------|------|-----|
| Targ Sz | Crew | Sea |
| 0 | | |

| PROTECTION | |
|-------------|----------|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | RANGE | HORZ | VERT |
|---------------|--------------|-------|-------|
| | SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 | |
| LONG | 01-39 | 40-00 | |

| | | |
|--------------|----------|------|
| Searchlights | Port | Stbd |
| 5 | 3 | |

DAMAGE CONTROL (DCR)

| | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|
| FLAG COMMAND RATING (FCR) | | | | | | | | | |
| | | | | | | | | | |

DAMAGE DETERMINATION

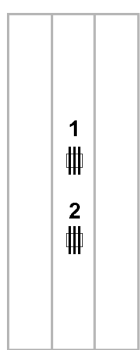
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
|-------|---------|---------|---------|
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 111 | 200 | 306 |
| 14-16 | 117 | 200 | - |
| 17-19 | 107 | 250 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 120 | 207 | 311 |
| 26-28 | 112 | 225 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 122 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | 318 |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | 316 |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 141 | 227 | 317 |
| 65-67 | 133 | 229 | - |
| 68-70 | 126 | 230 | 318 |
| 71-73 | 118 | 231 | - |
| 74-76 | 130 | 237 | - |
| 77-79 | 115 | 237 | - |
| 80-83 | 131 | 248 | 307 |
| 84-87 | 136 | 231 | 308 |
| 88-91 | 111 | 248 | 310 |
| 92-95 | 148 | 244 | 311 |
| 96-98 | 167 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

KTS 38

| PROPULSION / MANEUVER | | | | | | | | | | |
|-----------------------|---|----|----|----|---|---|---|---|---|---|
| Engine Rm | 2 | 38 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prop/Shaft | 2 | 38 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Boiler Rm | 3 | 38 | 31 | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Speed | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------|----------|----------|----------|----------|--------|
| Increase | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

| TORPEDOES | |
|--------------|-----------|
| TT | 6 |
| RL | 6 |
| 53cm S1270M | |
| Damage Class | D |
| Settings | |
| | 4,400/46 |
| | 8,750/35 |
| | 13,100/29 |



| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
ORIANI, CARDUCCI, GIOBERTI, ALFIERI



SOLDATI 1 Class
DD ITALY

1939 to 1941

1603-0
Displacement 1,720 ts
Complement 206

SHIP LOG SHEET

Version AOTF2023A

Length 344 ft 1 x 4.7"/15 Lightning Howitzer as starshell gun.

Beam 34 ft
Draft 11.5 ft

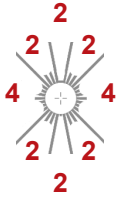


4 x 120mm/50 M1937

DIRECTORS

2

ARCS OF FIRE



Range
21,000 yds 42.0"
FC Radar +0
None

GUNNERY (FCS)

| TARGET SPEED | SHORT | | MEDIUM | | LONG | |
|--------------|-------|-----|--------|-----|------|-----|
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

17% PENETRATION TABLE

| SAPBC | SHORT | MEDIUM | LONG | |
|-------|-------|--------|--------|--------|
| YDS | 2,000 | 6,000 | 10,000 | 21,000 |
| ROF | 10 | 8 | 6 | 2 |
| HORZ | 0 | 0 | 0 | 2 |
| VERT | 7 | 4 | 2 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

Searchlights Port Stbd

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

5 3 DAMAGE CONTROL (DCR)

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

FLAG COMMAND RATING (FCR)

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

W2-1

DAMAGE DETERMINATION

| ROLL | CLASS 1 | CLASS 2 | CLASS 3 |
|-------|---------|---------|---------|
| 01-02 | 100 | 202 | 304 |
| 03-04 | 128 | 201 | 302 |
| 05-06 | 102 | 203 | 303 |
| 07-08 | 103 | 205 | 301 |
| 09-10 | 109 | 210 | 305 |
| 11-13 | 111 | 200 | 306 |
| 14-16 | 117 | 200 | - |
| 17-19 | 107 | 250 | - |
| 20-22 | 105 | 207 | 310 |
| 23-25 | 120 | 207 | 311 |
| 26-28 | 112 | 225 | 312 |
| 29-31 | 121 | 214 | 313 |
| 32-34 | 144 | 215 | 314 |
| 35-37 | 171 | 217 | 315 |
| 38-40 | 122 | 218 | - |
| 41-43 | 135 | 219 | 317 |
| 44-46 | 132 | 220 | 318 |
| 47-49 | 145 | 221 | - |
| 50-52 | 123 | 222 | - |
| 53-55 | 124 | 223 | 316 |
| 56-58 | 125 | 224 | - |
| 59-61 | 127 | 226 | - |
| 62-64 | 141 | 227 | 317 |
| 65-67 | 133 | 229 | - |
| 68-70 | 126 | 230 | 318 |
| 71-73 | 118 | 231 | - |
| 74-76 | 130 | 237 | - |
| 77-79 | 115 | 237 | - |
| 80-83 | 131 | 248 | 307 |
| 84-87 | 136 | 231 | 308 |
| 88-91 | 111 | 248 | 310 |
| 92-95 | 148 | 244 | 311 |
| 96-98 | 167 | 242 | 310 |
| 99-00 | 101 | 241 | 316 |

KTS 38

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

PROPULSION / MANEUVER

| Engine Rm | 1 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn |
|------------|---|----|----|---|---|---|---|---|---|----------|
| Prop/Shaft | 2 | 38 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| Boiler Rm | 2 | 38 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | Emg Turn |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |

Speed Increase

| 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
|----------|----------|----------|----------|--------|
| 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

TORPEDOES

| TT | 6 | RL | 6 |
|--------------|---|----|---|
| 53cm S1270M | | | |
| Damage Class | D | | |
| Settings | | | |
| 4,400/46 | | | |
| 8,750/35 | | | |
| 13,100/29 | | | |

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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

GUNNERY RECORD

| T# | RANGE | TARGET | RNDS | TBL | H |
|----|-------|--------|------|-----|---|
| | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
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| | | | | | | | |

Ships In Class
ALPINO, ARTIGLIERI, ASCARI, AVIERE, BERSAGLIERE, CORAZZIERE, FUCILIERE, GRANATIERE



CAMICIA NERA Class
DD ITALY

1938 to 1941

1612-0
Displacement 1,750 ts
Complement 206

SHIP LOG SHEET

Version AOTF2023A



Length 344 ft
Beam 34 ft
Draft 11.5 ft

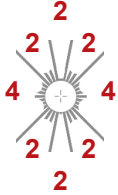


4 x 120mm/50 M1937

DIRECTORS

2

ARCS OF FIRE



Range

21,000 yds 42.0"

FC Radar +0

None

| TARGET SPEED | GUNNERY (FCS) | | | | | |
|--------------|---------------|-----|--------|-----|------|-----|
| | SHORT | | MEDIUM | | LONG | |
| | BRD | NAR | BRD | NAR | BRD | NAR |
| 0-9 | 21 | 14 | 16 | 11 | 14 | 9 |
| 10-18 | 16 | 11 | 12 | 8 | 11 | 7 |
| 19-26 | 14 | 9 | 11 | 7 | 9 | 6 |
| 27-32 | 12 | 8 | 9 | 6 | 8 | 5 |

| SAPBC YDS | PENETRATION TABLE | | | |
|-----------|-------------------|--------|------|---|
| | SHORT | MEDIUM | LONG | |
| ROF | 10 | 8 | 6 | 2 |
| HORZ | 0 | 0 | 0 | 2 |
| VERT | 7 | 4 | 2 | 1 |

| Targ Sz | Crew | Sea |
|---------|------|-----|
| 0 | | |

| Searchlights | Port | Stbd |
|--------------|------|------|
| | | |

| PROTECTION | |
|-------------|---|
| ARMOR VALUE | |
| HORIZONTAL | 0 |
| VERTICAL | 0 |

| HIT LOCATION | | |
|--------------|-------|-------|
| RANGE | HORZ | VERT |
| SHORT | 01-05 | 06-00 |
| MEDIUM | 01-19 | 20-00 |
| LONG | 01-39 | 40-00 |

| 5 3 | | DAMAGE CONTROL (DCR) | | | | | | | | | | | | |
|-----|--|----------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | |

| FLAG COMMAND RATING (FCR) | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | |

W2-1

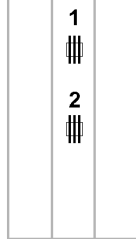
| DAMAGE DETERMINATION | | | | |
|----------------------|---------|---------|---------|-----|
| ROLL | CLASS 1 | CLASS 2 | CLASS 3 | |
| 01-02 | 100 | 202 | | 304 |
| 03-04 | 128 | 201 | | 302 |
| 05-06 | 102 | 203 | | 303 |
| 07-08 | 103 | 205 | | 301 |
| 09-10 | 109 | 210 | | 305 |
| 11-13 | 111 | 200 | | 306 |
| 14-16 | 117 | 200 | | - |
| 17-19 | 107 | 250 | | - |
| 20-22 | 105 | 207 | | 310 |
| 23-25 | 120 | 207 | | 311 |
| 26-28 | 112 | 225 | | 312 |
| 29-31 | 121 | 214 | | 313 |
| 32-34 | 144 | 215 | | 314 |
| 35-37 | 171 | 217 | | 315 |
| 38-40 | 122 | 218 | | - |
| 41-43 | 135 | 219 | | 317 |
| 44-46 | 132 | 220 | | 318 |
| 47-49 | 145 | 221 | | - |
| 50-52 | 123 | 222 | | - |
| 53-55 | 124 | 223 | | 316 |
| 56-58 | 125 | 224 | | - |
| 59-61 | 127 | 226 | | - |
| 62-64 | 141 | 227 | | 317 |
| 65-67 | 133 | 229 | | - |
| 68-70 | 126 | 230 | | 318 |
| 71-73 | 118 | 231 | | - |
| 74-76 | 130 | 237 | | - |
| 77-79 | 115 | 237 | | - |
| 80-83 | 131 | 248 | | 307 |
| 84-87 | 136 | 231 | | 308 |
| 88-91 | 111 | 248 | | 310 |
| 92-95 | 148 | 244 | | 311 |
| 96-98 | 167 | 242 | | 310 |
| 99-00 | 101 | 241 | | 316 |

| | | | | | | | | | | | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| KTS | 38 | | | | | | | | | | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| PROPULSION / MANEUVER | | | | | | | | | | | |
|-----------------------|---|----|----|---|---|---|---|---|---|----------|--|
| Engine Rm | 1 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Std Turn | |
| Prop/Shaft | 2 | 38 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | |
| Boiler Rm | 2 | 38 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | Emg Turn | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | |

| | | | | | |
|----------------|----------|----------|----------|----------|--------|
| Speed Increase | 00-12 kt | 13-21 kt | 22-27 kt | 28-30 kt | 31+ kt |
| | 13.0 | 9.0 | 6.0 | 3.0 | 1.0 |

| TORPEDOES | |
|--------------|-----------|
| TT | 6 |
| RL | 6 |
| 53cm S1270M | |
| Damage Class | D |
| Settings | |
| | 4,400/46 |
| | 8,750/35 |
| | 13,100/29 |



| 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 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 28 | 30 |
| EMG | NA | NA | NA | NA | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |

| GUNNERY RECORD | | | | | |
|----------------|-------|--------|------|-----|---|
| T# | RANGE | TARGET | RNDS | TBL | H |
| | | | | | |
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| T# | RANGE | TARGET | SETNG | TORPS | ANG | TGT MOVE | ARRIVE |
|----|-------|--------|-------|-------|-----|----------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Ships In Class
CAMICIA NERA, CARABINIERE, GENIERE, LANCIERE