WAR DEPARTMENT

BASIC FIELD MANUAL

MILITARY INTELLIGENCE

IDENTIFICATION OF
GERMAN NAVAL SHIPS

June 19, 1941
FM 30–55

BASIC FIELD MANUAL

MILITARY INTELLIGENCE

IDENTIFICATION OF GERMAN NAVAL SHIPS

Prepared under direction of the Chief of Staff

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1941
WAR DEPARTMENT,
WASHINGTON, June 19, 1941.

FM 30-55, Military Intelligence, Identification of German Naval Ships, is published for the information and guidance of all concerned.

[A. G. 062.11 (5-2-41).]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

E. S. ADAMS,
Major General,
The Adjutant General.

DISTRIBUTION:

(For explanation of symbols, see FM 21-6.)

R and H 1 (10), 4 (3); I Bn 1 (15); IC and H 4 (5).
BASIC FIELD MANUAL

MILITARY INTELLIGENCE

IDENTIFICATION OF GERMAN NAVAL SHIPS

The material contained in this manual has been secured from many sources. It is the best material available, but may be incomplete and, in some respects, inaccurate.

This manual, containing illustrations with explanatory data relative to German naval ships, is published for limited distribution. It will be used for instruction of officers and men in the appearance and general characteristics of German naval vessels and will be safeguarded as prescribed in AR 380–5.
UNIFORMS

Insignia of rank on sleeves

Grossadmiral
Admiral
Vizeadmiral
Konteradmiral
Kapitäns zur See
Kapitäns zur See (Commander)
Kapitänsleutnant
Oberleutn. 2. See
Leutnant See
(Kapitänsleutnant)
(Lieut.-Com.)
(Senior)

Note.—In above sketch, a star should replace devices which appear in the 5 junior ranks.

Uniforms and distinguishing marks of rank are the same for officers of all branches of the service; but in place of the star on the sleeve, which distinguishes the military branch, there is worn by:

- Engineer Officers, a pinion wheel
- Medical Officers, the rod of Æsculapius
- Accountant Officers, the winged staff of Hermes

As in sketches above.

The difference between a Kapitän zur See and a Fregattenkapitän is indicated by stars on the shoulder straps.

Kommodores wear the same sleeve stripes as a Kapitän zur See, but with the cords and shoulder bands of a Flag Officer.
## NAVAL GUNS

<table>
<thead>
<tr>
<th>Calibre</th>
<th>Usual Naval Designation</th>
<th>Length in cal.</th>
<th>Date of Model</th>
<th>Weight of Gun</th>
<th>Weight of A.P. Shot</th>
<th>Initial Velocity</th>
<th>Maximum penetration, direct impact, against K. O. at</th>
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<td></td>
<td>9000 yds.</td>
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<td>c/m.</td>
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<td>lbs.</td>
<td>foot-secs.</td>
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<td>15</td>
<td>38.1</td>
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<td>.36</td>
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<td>11</td>
<td>28</td>
<td>40</td>
<td>.01</td>
<td>661.4</td>
<td>2756</td>
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<td>15</td>
<td>50</td>
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<td>3084</td>
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</tbody>
</table>

Brass cartridge cases to all guns
11 inch, 40 cal., M. '01 in Schlesien and Schleswig-Holstein.
Lesser guns: 3.4 inch (85 m/m) firing 22 lb. projectiles in modern and 15 lb. in old models.
A.A. guns: 4.1 inch, 3.5 inch on H. A. mounts ("Flak").
Projectiles: Guns of 11 inch and over fire A. P., Ersatz A. P., H. E., and common shell.
All models have the recoil utilized to return the gun to firing position for pieces over 5.9 inch. In 5.9 in. springs are employed. German guns have a lower muzzle pressure than normally obtains.
BISMARCK

This illustration is from a magazine
IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIPS
BISMARCK–TIRPITZ CLASS

BISMARCK–TIRPITZ CLASS

BISMARCK
TIRPITZ

Description: 35,000 tons.
798 feet (over-all) by 118 feet by 26 feet draft.
30 knots (?).

Guns: 8-15 inch, estimated 50/52 caliber.
12-5.9 inch.
16-4.1 inch.

Torpedo tubes: None.

IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIPS
BISMARCK–TIRPITZ CLASS
IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIPS
SCHARNHORST CLASS

COMPARISON
SCHARNHORST CLASS

SCHARNHORST
GNEISENAU

Description: 26,000 tons.
742 feet (water-line) by 99 feet by 25 feet draft.
30 knots (?).

Guns: 9-11 inch.
12-5.9 inch.
14-4.1 inch.
16-37-mm AA.
Various smaller.

Torpedo tubes: None.


Remarks: Changes suspected but none confirmed. Gneisenau
has higher slanting stack cap than Scharnhorst.
Changes suspected but none confirmed.
BATTLESHIP
GNEISENAU

45°.

135°. Depression angle 15°.

Description: 26,000 tons.
742 feet (water-line) by 99 feet by 25 feet draft.
30 knots (?)..

Guns: 9-11 inch.
14-4.1 inch.
12-5.9 inch.
16-37-mm AA.
Plus various smaller.

Torpedo tubes: None.

Airplanes: 4.

320175°—41—3 15
Description: 26,000 tons.
             742 feet (water-line) by 99 feet by 25 feet draft.
             30 knots (?).

Guns: 9-11 inch.
       14-4.1 inch.
       12-5.9 inch.
       16-37-mm AA.
       Plus various smaller.

Torpedo tubes: None.

Airplanes: 4.
IDENTIFICATION OF GERMAN NAVAL SHIPS

HEAVY CRUISERS
HIPPER CLASS

COMPARISON
HIPPER CLASS (CA)

HIPPER
PRINZ EUGEN
SEYDLITZ

Description: 10,000 tons.
Hipper: 640 feet by 70 feet by 16 feet draft.
Others: 655 feet by 71 feet by 15 feet draft.
33 knots.

Guns: 8–8 inch.
12–4.1 inch.
12–37-mm AA.
Various smaller.

Torpedo tubes: 12.

Airplanes: 3.

Remarks: HIPPER—Clipper bow, slanting stack added.
PRINZ EUGEN—Same as HIPPER, save first pair of
AA directors moved aft and on stack platform.
SEYDLITZ—May be similar to above, but not con-

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HEAVY CRUISER
ADMIRAL HIPPER

45°.

135°. Depression angle 15°.

Description: 10,000 tons. 640 feet by 70 feet by 16 feet draft. 30 knots.

Guns: 8–8 inch. 12–4.1 inch. 12–37-mm AA. Various smaller.

Torpedo tubes: 12.

Airplanes: 3.
COMPARISON
POCKET BATTLESHIP CLASS

ADMIRAL SCHEER
LUETZOW

Description: 10,000 tons.
610 feet (over-all) by 70 feet by 22 feet draft.
26 knots.

Guns: 6–11 inch.
8–5.9 inch.
6–4.1 inch.
8–3 pound AA.
10–machine guns.

Torpedo tubes: 8.

Airplanes: 2.

Remarks: ADMIRAL SCHEER—Report addition of clipper bow,
slanting stack cap, and short mainmast.
LUETZOW—No reported changes but some sus-
pected.
POCKET BATTLESHIPS
ADmiral Scheer

45°.

135°. Depression angle 15°.

Description: 10,000 tons,
26 knots.

Guns: 6–11 inch.
6–4.1 inch.
8–5.9 inch.
8–3 pound AA.
10–machine guns.

Torpedo tubes: 8.

Airplanes: 2.

Remarks: Report addition of clipper bow, slanting stack cap,
and short mainmast.
POCKET BATTLESHIPS

LUETZOW

45°.

135°. Depression angle 15°.

Description: 10,000 tons.
             26 knots.

Guns: 6-11 inch.
       6-4.1 inch.
       8-5.9 inch.
       8-3 pound AA.
       10—machine guns.

Torpedo tubes: 8.

Airplanes: 2.

Remarks: No reported changes but some suspected.
GERMAN NAVY

90° KÖLN
135°. Depression angle 15°.

Description: 6,000 tons.
570 feet by 50 feet by 18 feet draft.
32 knots.

Guns: 9-5.9 inch, .50 caliber.
8-3 pound AA.
6-3.5 inch AA.
4-machine guns.

Torpedo tubes: 12.

Airplanes: 2.
MILITARY INTELLIGENCE

GERMAN NAVY
CRUISER
KÖLN
NÜRNBERG
No reported changes.
CRUISER
NÜRNBERG

Description: 6,000 tons.
558 feet (plimsoll point) by 54 feet by 15 feet draft.
32 knots.

Guns: 9-5.9 inch.
8-3.5 inch.
8-3 pound AA.
4-machine guns.

Torpedo tubes: 12.

Airplanes: 2.
This ship may have been sunk December 13, 1939.
CRUISER
LEIPZIG

45°.

135°. Depression angle 15°.

Description: 6,000 tons.
580 feet (over-all) by 54 feet by 16 feet draft
32 knots.

Guns: 9-5.9 inch .50 caliber.
8-3 pound AA.
4-machine guns.
6-3.5 inch AA.

Torpedo tubes: 12.

Airplanes: 2.
CRUISER LEIPZIG
CRUISER
EMDEN

Description:  5,400 tons.
509 feet (over-all) by
47 feet by 18 feet
draft.
29 knots.

Guns:        8-5.9 inch, .45 caliber.
3-3.5 inch AA.
4-machine guns.

Torpedo tubes: 4.

Airplanes:   None.
DIETHER VON ROEDER

KARL GALSTER

Description: 1,811 tons. 384 feet by 39 feet by (?), 36 knots.

Guns: 5-5 inch. 4-20-mm AA. 4-37-mm AA.

Torpedo tubes: 8.

Airplanes: None.
IDENTIFICATION OF GERMAN NAVAL SHIPS

DESTROYER
LEBERECHT MAASS
BEITZEN CLASS

GEORGE THIELE
RICHARD BEITZEN
PAUL JACOBI
THEODOR RIEDEL
HERMAN SCHOENAN

BRUNO HEINEMAN
HANS LODY
FRIEDRICH IHN
ERICH STEINBRINCK
FRIEDRICH ECKOLDT

45°.

135°. Depression angle 15°.

Description: 1,625 tons.
374 feet by 37 feet by (?).
36 knots.

Guns: 5-5 inch.
4-20-mm AA.
4-37-mm AA.

Torpedo tubes: 8.
Airplanes: None.
Remarks: Funnels should be higher and have more prominent stack caps.
IDENTIFICATION OF GERMAN NAVAL SHIPS

DESTROYER
BEITZEN CLASS

THEODOR RIEDEL
MOEWE CLASS

MOEWE

Description:

MOEWE: 800 tons.
292 feet by 27 feet by (?).
34 knots.

Guns: 3-4.1 inch, .50 caliber.
2-1 pound AA.

Remarks: MOEWE class has stack casings carried higher and has slanting tops (at right angles to longitudinal axis of stack); shorter slanting stack caps with first stack closer to foremast.
GERMAN NAVY

MOEWE
IDENTIFICATION OF GERMAN NAVAL SHIPS

TORPEDO BOATS

MOEWE
ALBATROS

GREIF
SEEADLER

FALKE
KONDOR

135°. Depression angle 15°.

Description: 800 tons.
292 feet by 27 feet by (?).
34 knots.

Guns: 3-4.1 inch, .50 caliber.
2-1 pound AA.

Torpedo tubes: 2 triple.
IDENTIFICATION OF GERMAN NAVAL SHIPS

TORPEDO BOATS
ILTIS CLASS

ILTIS  LEOPARD
WOLF   LUCHS
JAGUAR TIGER

Similar in appearance to Moewe class—see Moewe class for silhouettes.

Description:  800 tons.
               304 feet by 28 feet by 9 feet draft.
               34 knots.

Guns:        3-4.1 inch (on Leopard, Luchs, 5 inches).
             2-1 pound AA.

Torpedo tubes: 2 triple.
GRAF ZEPPELIN CLASS

GRAF ZEPPELIN
DEUTSCHLAND

Description: 19,250 tons.
821 feet by 89 feet by (?).
32 knots.

Guns: 16-5.9 inch.
10-4.1 inch.
22-37-mm AA.

Torpedo tubes: None.

Airplanes: 40.
MINESVEEPEER
"M" BOAT

"M" BOAT CLASS

Description: 600 tons.
17 knots.

Guns: 2–4.1 inch.
2–37-mm.

Remarks: Do not confuse with "T" boats. Note marked similarity.
"T" BOAT CLASS

"T" BOATS

Description: 600 tons.
267 feet by 29 feet by (?).
36 knots.

Guns: 1-4.1 inch.
6-37-mm.

Torpedo tubes: 6.

Remarks: Do not confuse with "M" boats, which class type resembles closely.
IDENTIFICATION OF GERMAN NAVAL SHIPS

ESCORT BOAT
"F" BOAT

"F" BOAT CLASS

F 1  Hai
F 2  F 7
Koenigin Luise  F 8
F 4  F 9
F 5  F 10

Description: 600 tons.
250 feet (over-all) by 29 feet by (?).
28 knots.

Guns: 2–4.1 inch, .50 caliber.
2–1 pound AA.
4–37-mm AA.

OUTPOST PATROL BOATS

Description: 496 tons.
125 feet by 23 feet by (?).
10 knots.

Guns: 1-3.5 inch.
3-1 pound AA.

Remarks: These are converted fishing trawlers and will vary in size and silhouettes.
COASTAL MINE TRANSPORT
AND LAYER

Description: 1,253 tons.
10 knots.
New type motor torpedo boat
"S" boat (German designation)
"E" boat (British designation)
IDENTIFICATION OF GERMAN NAVAL SHIPS

NEW TYPE
MOTOR TORPEDO BOAT

MOTOR TORPEDO BOAT CLASS

S 6 TO 37
S 38 TO 57

Description:
S 6 to 37: 62 tons.
93 feet.
30-36 knots.

S 38 to 57: 86 tons.
105 feet.

Guns:
S 6 to 37: 2–1 pound AA.
1–20-mm AA.

S 38 to 57: 2–47-mm AA.

Torpedo tubes: 2.

Remarks: Vary in size and silhouettes.
Motorboats, minesweepers, and subchasers—
"R" boat
“R” BOAT CLASS

“R” BOAT

Description: 90 tons.
18 knots.

Guns: 2–1 pound AA.

Torpedo tubes: None.