Players should use the basic naval rules until they are thoroughly familiar with the core ground rules (Rules 1-16) and the advanced air rules (Rules 17-25). Once those rules are assimilated, the advanced naval rules should be used instead. If these basic naval rules are used, do not use Rules 27-35 (the advanced naval rules).

When using these rules, the Entente player (only) will have limited use of his naval units. The Central Powers player merely ignores all reference to naval units in his OB.

Naval units that are in play may be used for naval transport and to provide naval gunfire support as detailed below. Note that naval combat cannot occur and amphibious landings may not be made when the basic naval rules are used.

A. Naval Units.

Only type GB and MT taskforce (TF), and type LC, NT, and RT transport naval units are used with these rules; ignore all mention of other naval units in the OBs. (The various naval unit types are shown on the Unit Identification Chart.)

TFs are also artillery units: type GB are field artillery (Rule 12B1), and type MT are heavy artillery (Rule 12B2).

B. Naval Transport.

A player may use naval transport during his movement and exploitation phases, moving cargo between friendly-owned ports and/or beaches. Note that naval transport cannot be used during the reaction movement phase.

Transports carry cargo using these rules as water-only restricted movement units (Rule 14B2), with the following changes:

- They have a movement allowance of 120 MPs.
- They may enter all-sea hexes and coastal hexsides (only) and spend 1 MP per hex or hexside to do so. Exception: Type RT naval units may not enter all-sea hexes.
- They cannot enter restricted waters hexes.
- They have a combat strength equal to their gunnery strength. Note that type LC, NT, and RT naval units have no gunnery strength and thus are zero-strength units (Rule 9G).
- They cannot enter a hex or blockade box containing enemy mine points.

TFs are also artillery units: type GB are field artillery (Rule 12B1), and type MT are heavy artillery (Rule 12B2).

Transport naval units have a cargo capacity printed on their counter. The number on the counter is the number of REs of cargo (ground units, logistics items, and manpower/equipment points, only) the transport may carry during naval transport. (Note that the RE size of c/m and artillery units with heavy equipment is doubled for naval transport purposes per Rule 3A3.)
If a transport is eliminated, its cargo is eliminated as well.

A transport may embark cargo from, or disembark cargo into, hexes adjacent to the coastal hexside (see Rule 14B2) the transport occupies (only).

A transport must spend MPs to embark or disembark cargo as follows: 30 MPs to embark or disembark cargo at a port, and 60 MPs to embark or disembark cargo at a friendly-owned beach. These MP costs must be paid both when the cargo is embarked and when the cargo is disembarked. A transport may move both prior to and after transporting cargo if it has the MPs to do so.

A ground unit must spend MPs to be transported: All 40 hexes of its rail movement allowance for a rail-only unit (Rule 13B1), 4 MPs for a c/m or artillery unit, and 2 MPs for any other type of unit. Exception: If the unit disembarks at a beach, it must spend all its MPs to do so. A unit may move both before and after its transport if it has the MPs to do so.

1. Ports. Each city or fortress with a port symbol (see the Master Terrain Key) is a port. Each port has an RE capacity, which is the number of REs of cargo that may embark/disembark at the port in a player turn. (The capacities of ports are listed on the Port Summary.)

Port may be damaged due to bombing (Rules 20G1b and 20G2f) or demolition (Rule 13A2). Each hit of damage on a port reduces its capacity by 1 RE. Further, each hit of damage reduces the number of REs which may trace a naval element of a supply line (Rule 11B3) through the port by 3 REs.

A player may use a port in a turn only if he owns it at the start of his initial phase.

2. Beaches. A coastal hex of any terrain type except mountain or prohibited terrain is a beach. (A coastal hex is any hex containing both land and sea.) A beach has an unlimited capacity of REs of cargo that may embark/disembark there in a player turn. Some hexes contain a port and a beach, both of which may be used.

Transports of any type may embark cargo at a beach. However, only type LC transports may embark cargo with heavy equipment from a beach. Only type LC and RT transports may disembark cargo at a beach.

A transport may not embark or disembark cargo at a beach during stormy or typhoon sea conditions. (See conditions are covered in Rule 36C.)

C. Naval Gunfire Support.

TFs may support friendly ground units in combat through naval gunfire support (NGS).

To provide NGS for friendly units, the hex being attacked (or under attack) must be adjacent to the all-sea hex or coastal hexside the TF occupies.

A TF has an NGS strength equal to its gunnery strength. Halve the NGS strength of a TF in rough sea conditions, quarter it in stormy sea conditions, and reduce it to zero in typhoon sea conditions. (Round fractions down.)

TFs may fire NGS only in support of attacking or defending ground units. NGS strength is ignored when calculating losses due to ground combat, and a TF providing NGS is not affected by ground combat results.

In each combat or reaction combat phase, after DAS and GS is allocated, but before any ground combat is resolved, the defender must allocate his NGS to specific hexes. NGS allocated to a specific hex may not be switched to another hex that phase, even if its assigned hex is not attacked. There is no similar requirement for the attacker to allocate NGS; the attacker decides on and announces the amount of NGS in an attack only when he resolves the attack.

Rule 27 — Advanced Naval Rules

Introduction

If the advanced naval rules (Rules 27-35) are used, do not use Rule 26 (Basic Naval Rules).

A. Naval Units.

Naval units are shown on the Unit Identification Chart.

1. Types. There are two basic categories of naval units: taskforces and transports. Each category contains several specific naval unit types, as shown on the UIC. For example, the transport category contains naval transports (type NT), river transports (type RT), and landing craft (type LC).

Unless otherwise noted in the rules, rules about "task-forces" and "transports" pertain to all naval unit types with-in their respective categories. For example, a rule describing the abilities of transports applies to all transport types.

2. Strengths. Each naval unit has one or more strengths printed on the counter.

- Gunnery Strength. This is the naval unit's gunnery strength for naval combat, its naval gunfire support strength for ground combat, and its bombardment strength for naval bombardment.

- Torpedo Strength. This is the naval unit's torpedo strength and strong for naval combat. (The notation "T" is a reminder that this is "torpedo only>.)

- Cargo Capacity. This is the naval unit's cargo capacity. (The notation "C" is a reminder that this is "cargo only").

- Antiaircraft (AA) Strength. This is the naval unit's strength for AA purposes (see Rule 22). All AA of naval units is light AA.

A taskforce (TF) always has a gunnery strength, may have a torpedo strength and/or antiaircraft (AA) strength, but never has a cargo capacity. A transport always has a cargo capacity, and may have an AA strength, but never has a gunnery or torpedo strength.

A naval unit's defense strength is the measure of its ability to withstand damage; it is equal to its gunnery strength (if it is a TF), or to its cargo capacity (if it is a transport). Exceptions: 1) A TF with a printed gunnery strength of 0 has a defense strength of 1; and 2) A TF with a printed gunnery strength of 1 and a reduced strength side with a gunnery strength of 0 has a defense strength of 2. Example: An 8-point TF, a 0-3T TF, a 1-6T TF (reduced strength side of 0-3T), and a C3 transport have defense strengths of 8, 1, 2, and 3 respectively.

3. Codes. Naval units may have one or more codes, as listed on the UIC. Codes define certain specific or special capabilities of naval units. For example, a type DD with a code M is a destroyer that can carry mine points.

4. Stacking. Any number of friendly naval units may be in a coastal or all-sea hex, or along a riverine hexside. (A coastal hex is any hex containing both land and sea. A riverine hexside is any minor canal, canal, river, major river, great river, or all-lake
Naval Rules

5. Damage. Each bombing or gunfire hit on a naval unit does one hit of damage to the naval unit. Each torpedo or mine strike on a naval unit does a variable number of hits of damage to the naval unit as shown on the Torpedo/Mine Strike Damage Table. Use hit markers to denote damage to naval units. Note: Most naval units have reduced strength sides; when such a naval unit takes damage equal to half or more its defense strength, flip it over to its reduced strength side and adjust the hit markers accordingly. Damage affects naval units as follows:

- Each hit of damage on a taskforce (TF) reduces its gunnery strength by 1, and reduces its torpedo strength by a variable number determined by dividing the TF's torpedo strength by 2 (or by the TF’s gunnery strength if it is more than 2), rounding all fractions up. For example, a 3-10T TF which takes a hit of damage would have its gunnery strength reduced to 2 and would have its torpedo strength reduced to 6 (as 10 divided by 3 is 3.3 which rounds to 4, and 4 from 10 is 6).
- Each hit of damage on a transport reduces its cargo capacity by 1.
- Damage has no effect on a naval unit's AA strength until the naval unit takes sufficient damage to cause it to flip to its reduced strength (and reduced AA) side. For example, a 9-point TF (AA=2) with 4 hits of damage would still have an AA strength of 2, but a 5th hit would flip it to its 4-point (AA=1) side, from which point the TF would have an AA strength of 1.
- A naval unit is sunk when it takes hits at least equal to its defense strength. When sunk, remove the naval unit from play and place it in the replacement pool of the theater it is in.

The bombing mission rules describe how air units achieve hits against naval units in port or at sea (Rules 20G2g and h). When naval units take bombing hits in an air operation, distribute the damage according to naval units in port or at sea (Rules 20G2g and h). When naval units take bombing hits in an air operation, distribute the damage according to naval units in port or at sea (Rules 20G2g and h). When naval units take bombing hits in an air operation, distribute the damage accordingly. Damage affects naval units as follows:

- Each hit of damage on a taskforce (TF) reduces its gunnery strength by 1, and reduces its torpedo strength by a variable number determined by dividing the TF’s torpedo strength by 2 (or by the TF’s gunnery strength if it is more than 2), rounding all fractions up. For example, a 3-10T TF which takes a hit of damage would have its gunnery strength reduced to 2 and would have its torpedo strength reduced to 6 (as 10 divided by 3 is 3.3 which rounds to 4, and 4 from 10 is 6).
- Each hit of damage on a transport reduces its cargo capacity by 1.
- Damage has no effect on a naval unit's AA strength until the naval unit takes sufficient damage to cause it to flip to its reduced strength (and reduced AA) side. For example, a 9-point TF (AA=2) with 4 hits of damage would still have an AA strength of 2, but a 5th hit would flip it to its 4-point (AA=1) side, from which point the TF would have an AA strength of 1.
- A naval unit is sunk when it takes hits at least equal to its defense strength. When sunk, remove the naval unit from play and place it in the replacement pool of the theater it is in.

The bombing mission rules describe how air units achieve hits against naval units in port or at sea (Rules 20G2g and h). When naval units take bombing hits in an air operation, distribute the hits among the target naval units as follows:

1) For each category of naval units present, allocate one hit to each category in the following order: taskforce, transport.
2) Apply the allocated hits. For each category, choose a naval unit at random and apply the hit against it.
3) If any hits remain unallocated, repeat the above procedure. Continue repeating steps 1 and 2 until all hits are allocated and applied.

6. Assembly/Breakdown of Transports. Subject to the limits of the counter mix, transport naval units of the same type in a hex may assemble and break down at any time during a turn. For example, a C6 NT could break down into any combination of C1, C2, and C3 NTs so long as the total cargo capacity of the broken down NTs equals 6.

7. Carriers and Carrier Aircraft. Code C air units (only) may base at type CV taskforces. Code F air units (only) may base at type CS taskforces. An undamaged CV or CS has an airbase capacity of 1; one hit of damage on a CV or CS eliminates its capacity as an airbase. When a CV or CS is sunk, also eliminate any air unit based there. Unlike land airbases, the capacity of a CV or CS also limits the number of air units which may base at the CV or CS at any moment. Further, it limits the number of air units which may fly missions from the CV or CS in a player turn. During each friendly and enemy initial phase, air units based on a CV or CS are automatically assigned to the naval patrol bombing mission. Such an air unit may, however, abandon this mission at any point during the player turn prior to actually flying it, and thus regain eligibility to fly another air mission during the player turn.

B. Concepts.

1. Sea Zones. There are several sea zones in The Great War. The sea zones in play, and the territory which comprises each sea zone are listed in Rule 42B (scenarios). The concept of sea zones is used in various naval rules.

2. Naval Group (NG). A naval group (NG) consist of one or more friendly naval units at sea. All naval units in an NG move together. There are three types of NGs:
   - A combat NG consists only of TFs.
   - A cargo NG consists only of transports.
   - A mixed NG consists of any combination of TFs and transports.

3. Cargo. Transports (but not TFs) may transport ground units, logistics items (Rule 11H), and manpower/equipment points. Cargo is carried based on its RE size; the RE size of c/m and artillery units with heavy equipment is doubled for naval transport purposes.

4. In Port/At Sea. An NG will either be in port or at sea. An NG may be in port when in the hex of a friendly-owned port (of any size). Note: 1) An NG can be at sea in a port hex, and 2) An NG on a riverine hexside is considered to be "at sea".

5. Adjacent. For naval purposes:
   - Sea hexes are adjacent if they share a common all-sea or partial-sea hexside. (A sea hex is any all-sea or coastal hex.) For example, GW2:5008 is adjacent to 4909 and 5108, but is not adjacent to 5007, due to the land hexside between 5008 and 5007.
   - Riverine hexsides are adjacent if they are contiguous. For example, GW2:4510/4511 is adjacent to 4510/4511 and 4410/4511, but is not adjacent to 4609/4610.
   - Riverine hexsides and sea hexes are adjacent if they share a common hexside. For example, GW2:4609/4610 is adjacent to 4609 and 4610, but is not adjacent to 4710.

6. Blockades. If a combat or mixed NG is in the hex of an enemy-owned port, the port and all naval units in port there are blockaded.

7. Amphibious Ability. The following units are amphibious:
   - Marine units (Rule 141).
   - Any non-motorized unit without heavy equipment that is embarking, disembarking, or being transport-ed by a type LC or RT transport.

C. Naval Activities Phasing.

Naval activities occur in each player turn, as follows:

1. Initial Phase. The phasing player performs all naval
replacement actions: taskforce consolidation, withdrawals, reinforcements, and replacements (see Rule 35).

2. Movement Phase. The movement phase is divided into two sub-phases:

- **Naval Movement Sub-Phase.** This sub-phase consists of a series of 5 identical naval movement steps (1st Naval Movement Step, 2nd Naval Movement Step, etc). During a step, the phasing player may move his NGs, embark/disembark cargo, make amphibious landings, conduct naval bombardments of enemy facilities, and replenish naval units. The non-phasing player may move his NGs in naval reaction movement. Both players may initiate air ops (per the air rules).

- **Ground Movement Sub-Phase.** The phasing player moves his ground units, including those units which underwent naval transport and have movement points remaining. Both players may initiate air ops.

3. Combat Phase. Both players may conduct naval bombardments of enemy ground units and may allocate naval gunfire support.

4. Reaction Movement Phase. The movement phase is divided into two sub-phases:

- **Naval Movement Sub-Phase.** This sub-phase consists of a series of 5 identical naval movement steps. During a step, the non-phasing player may move his NGs, conduct naval bombardments of enemy facilities, and replenish naval units. Note that cargo cannot be embarked or disembarked and amphibious landings cannot be made. The phasing player may move his NGs in naval reaction movement. Both players may initiate air ops.

- **Ground Movement Sub-Phase.** The non-phasing player moves his eligible ground units, including those units which underwent naval transport and have movement points remaining. Both players may initiate air ops.

5. Reaction Combat Phase. Both players may allocate naval gunfire support. Note that neither player may conduct naval bombardments of enemy ground units.

6. Exploitation Phase. The exploitation phase is divided into two sub-phases:

- **Naval Movement Sub-Phase.** This sub-phase consists of a series of 5 identical naval movement steps. These steps are the same as those in the movement phase, except amphibious landings may not be made.

- **Ground Exploitation Sub-Phase.** The phasing player moves his eligible units, including those units which underwent naval transport and have movement points remaining. The phasing player lands units allocated to the follow-up wave. Both players may initiate air ops.

7. End of Player-Turn. The phasing player checks the supply status of his naval units.

D. Naval Movement Sequence.

During each naval movement step, the following actions may take place. If more than one of these actions occurs at the same time, resolve them in the following sequence:

1) Mine attacks against naval units.
2) Bombing attacks on naval units by air units.
3) Naval reaction movement by the opposing player.

4) Naval Combat.
5) Naval Bombardment.

When a player disembarks cargo during a step, the following landing sequence is followed:

1) Resolve any coastal raids against enemy coast defenses (see Rule 14I1).
2) Resolve any naval combat between naval units and enemy coast defenses.
3) Disembark cargo.
4) If the cargo was disembarked at a beach by landing craft (LC), the owning player checks for LC wastage.
5) If the cargo was disembarked in an enemy-owned hex, the enemy player resolves any attempts by his ground units to respond to the amphibious landing.

Rule 28 — Movement of Naval Units

Naval units move in naval groups (NGs).

A player moves his NGs during friendly naval movement steps. A player cannot move his naval units during enemy naval movement steps, except for naval reaction movement. (Friendly naval movement steps are those that occur during movement and exploitation phases of friendly player turns and during reaction movement phases of enemy player turns. Enemy naval movement steps are those that occur during movement and exploitation phases of enemy player turns and during reaction movement phases of friendly player turns.)

NGs move through the expenditure of movement points (MPs). An NG has a movement allowance of 30 MPs per friendly naval movement step. Enemy NGs using naval reaction movement have a movement allowance of 15 MPs per naval movement step.

NGs spend MPs to enter adjacent hexes or hexsides, to embark and disembark cargo, to conduct naval bombardment, to provide naval gunfire support, to replenish, and to lay and sweep mines as detailed on the Naval MP Cost Summary.

At any point when moving in a friendly naval movement step, two or more friendly NGs in the same hex may combine into one NG. When NGs combine, the combined NG assumes the movement allowance of the NG that has spent the most MPs. Example: An NG spends 6 MPs to move to a hex containing another NG which has already spent 20 MPs. The NGs combine, and the combined NG has spent 20 MPs, having 10 remaining for the step.

At any point when moving in a naval movement step, a single NG may split into two or more NGs. Separate the naval units into their new NGs. Each NG assumes the movement allowance of the original NG. Example: An NG of three naval units spends 14 MPs to move to a hex. There, the NG splits into three NGs, each of which has spent 14 MPs, having 16 remaining for the step.

An NG at sea ignores the presence of enemy NGs in port. The moving NG may move adjacent to the port containing the enemy NG; it may even enter the port’s hex.

NGs are restricted as follows:

- They must move along an all-water route and may not cross land at any time. Examples: An NG in M:0207 cannot move directly to 0307, due to the intervening land hexside between the two hexes. Similarly, an NG in
M: 0207 cannot move 0207-0308-0407, due to the land in 0308. Note: If an NG stops or pauses in a hex which blocks its naval movement in certain directions, keep track of "which side" of the hex the group is in.

- They cannot enter restricted waters hexes.
- They cannot move through a narrow straits or enter a riverine hexside if the straits or hexside is enemy-interdicted. (A narrow straits or riverine hexside is enemy-interdicted if a supported enemy unit occupies the hex on either side of the straits or hex-side. Disrupted units do not count for this purpose. A narrow straits or riverine hexside is automatically enemy-interdicted if the hexes on both sides of the straits or hexside are enemy-owned.) For example, if either GW2: 0320 or 0420 is occupied by an undisrupted supported enemy unit, an NG in 0220 cannot move 0321-0420-0520 as the narrow straits at 0320/0420 are enemy-interdicted.
- Only NGs consisting solely of types GB, MT, MW, TB, LC, and RT may enter riverine hexsides. 

Exception: Types DD and NT may comprise part of such NGs when moving along riverine hexsides between the coast and inland ports. (Inland ports are covered in Rule 30A6.) An NG containing DDs and/or NTs may move no further upriver than the first hexside adjacent to the inland port.
- In general, an NG may not enter a hex or hexside containing an enemy combat or mixed NG at sea. 

Exception: An NG blockaded in port (per Rule 27B6) may leave port and put to sea in the hex or hexside containing the enemy NG. (This will initiate naval combat, per Rule 28C below.)

NGs (and their cargo) may end their movement at sea. An NG which ends its movement in a hex containing a friendly-owned port may enter the port or remain at sea in the port's hex. An NG which ends its movement on a riverine hexside adjoining a hex containing a port may enter the port or remain at sea on the riverine hexside.

A. Naval Reaction Movement.

When a friendly naval group (NG) moves within 15 MPs (traced through sea hexes and riverine hexsides) of an enemy NG during a friendly naval movement step, the enemy player may attempt to have his NG react. Note: For purposes of naval reaction movement, an NG is considered moving if it is spending MPs (for any purpose).

An enemy NG may attempt naval reaction movement only once per naval movement step. It may attempt to react at any time while an opposing NG is moving within 15 MPs. When the enemy NG attempts to react, the movement of the other NG is temporarily suspended. For the naval reaction movement attempt, the enemy player rolls one die, applies all appropriate die roll modifiers, and consults the Naval Success Table. Results are:

- Success: The naval reaction movement attempt succeeds. The enemy NG may immediately move, with a maximum movement allowance of 15 MPs. The enemy player moves the NG per the naval movement rules (such as moving to the safety of a friendly port, or moving adjacent to the opposing naval group to force naval combat). MPs may be spent only for movement and for no other purpose (such as disembarking cargo or laying mines). At any time during naval reaction movement, the moving NG may split into two or more NGs, all of which continue naval reaction movement. A reacting NG must end its naval reaction movement when it has spent 15 MPs or when it initiates naval combat.
- Failure: The attempt fails. The NG may not move, nor may it attempt to react again during the current naval movement step.

Only one enemy NG may attempt to react at a time. After the NG has reacted (or if its naval reaction movement attempt fails), the enemy player may attempt to have another eligible NG react. Once the enemy player is finished with all naval reaction, the other player resumes naval movement.

Designers' Note: The Brits get a +1 for naval reaction from 1915 on, as they were routinely reading the German naval codes by then.

1. Dedicated Reaction.

A player may assign friendly combat NGs in port (only) to dedicated reaction at the beginning of any friendly movement, exploitation, or reaction movement phase. Note that cargo/mixed NGs and NGs at sea may not be assigned to dedicated reaction. (Place a dedicated reaction marker on the NG to show this assignment.) An NG may not spend MPs for any purpose during the phase in which it is assigned to dedicated reaction, but in the naval movement steps of the next enemy movement, exploitation or reaction movement phase (as appropriate) it has its naval reaction movement abilities enhanced:

- It may attempt to react when an opposing NG is within 30 MPs (vice the normal 15 MPs). Note that even though the NG may react in response to an opposing NG up to 30 MPs away, it still has a movement allowance of but 15 MPs if the attempt is successful.
- The die roll for any naval reaction movement attempts it makes is modified by +2.

Note that a naval unit assigned to dedicated reaction retains the above benefits throughout the entire movement, exploitation, or reaction movement phase (as appropriate), even through multiple reaction attempts.

Remove all dedicated reaction markers from friendly NGs at the end of each enemy movement, exploitation, or reaction movement phase.

Designers' Note: Dedicated reaction represents holding your fleet in readiness to act upon intelligence provided by picket ships, naval air reconnaissance, etc. In effect you trade off your ability to do something with your navy in your part of the turn in return for increasing the possibility of responding to your opponent's naval moves in his part of the turn. Historically, the British Grand Fleet spent most of the war on dedicated reaction.

B. Combat Zones.

Various naval groups (NGs) and all coast defenses (CDs) have combat zones. A combat or mixed NG at sea has a combat zone consisting of the sea hex (or riverine hexside) it occupies and all adjacent (per Rule 27B5) sea hexes and riverine hexsides. A cargo NG has a combat zone consisting of the sea hex (or riverine hexside) it occupies (only). Any NG in port does not have a combat zone.
CDs have a combat zone consisting of the hex they occupy and all adjacent (per Rule 27B5) riverine hexsides. Special: If the CD has an attack range of 2 (per Rule 12B7), its combat zone also includes all adjacent sea hexes; if the CD has an attack range of 3, its combat zone also includes every sea hex within 2 hexes of the hex it occupies. (CDs are covered in Rule 33B.)

C. Movement and Combat.

Naval combat occurs during naval movement steps. Naval combat is initiated when:

- A naval group (NG) enters (or puts to sea in) a hex or hexside in the combat zone of an enemy NG or coast defenses (CDs).
- A naval group starts a friendly naval movement step in a hex (or hexside) in the combat zone of an enemy NG or CDs, and the group spends any MPs in its hex without leaving the hex (or hexside).

Exception: Nothing initiates naval combat during typhoon sea conditions (see Rule 36E6).

When naval combat is initiated, naval movement is temporarily suspended while the combat is resolved. Once combat is over, naval movement resumes.

A cargo NG ignores the presence of enemy cargo NGs for all purposes. A cargo NG can move adjacent to or even enter the hex (or hexside) of an enemy cargo NG, and doing this does not initiate naval combat.

Rule 29 — Naval Combat

Naval combat occurs between a naval group and enemy naval groups (NGs) or coast defenses (CDs), as described in Rule 28C. Once naval combat begins, all other naval activities cease until the naval combat is resolved. If an NG initiates more than one naval combat at the same time, resolve all initiated naval combat in the following order:

1) Between the moving NG and any enemy NG in the moving NG’s hex (or hexside).
2) Between the moving NG and any enemy NG (moving player’s choice) in any one adjacent hex or hexside. Repeat this step until all naval combat with adjacent enemy NGs is resolved.
3) Between the moving NG and any enemy CDs in the moving NG’s hex (or hexside).
4) Between the moving NG and any enemy CDs (moving player’s choice) in any one adjacent hex or hexside. Repeat this step until all naval combat with adjacent CDs is resolved.

A. Preparation.

For each player with a naval group in combat, the player separates that group’s naval units into two groupings:

- The Main Body: The player must place all trans-ports in the main body. He may (but is not required to) place taskforces (TFs) in the main body.
- The Screen: The player may (but is not required to) place TFs in the screen. (Each TF must be placed in either the main body or the screen, owning player’s choice.)

B. Resolution.

In naval combat, naval units and coast defenses (CDs) use their gunnery and torpedo strengths to fire upon enemy naval units and CDs.

Naval units have gunnery and torpedo strengths per Rule 27A2. These gunnery and torpedo strengths are halved in rough sea conditions and quartered in stormy sea conditions. (Round fractions down.)

A CD has a gunnery strength as listed on the Coast Defenses Summary. Sea conditions do not affect CDs’ gunnery strengths.

Naval combat takes place at one of four ranges; from farthest to closest, these are: long, medium, short, and torpedo. Range affects the ability of naval units and CDs to use their gunnery and torpedo strengths as follows:

- At long range, only type BB, BC, and PD naval units, and CDs with a fire range of "BB" (per the Coast Defenses Summary), may fire their gunnery strengths. PDs which fire at this range have their gunnery strengths halved.
- At medium range, only type BB, BC, PD, CL, CA, CD, and MT naval units, and CDs with a fire range of "BB" or "CA", may fire their gunnery strengths.
- At short range, all naval units and CDs may fire their gunnery strengths. All naval units may fire their torpedo strengths at short range (although less effectively than at torpedo range).
- At torpedo range, only type CC, CS, CV, DD, GB, MW, and TB naval units may fire their gunnery strengths. All naval units may fire their torpedo strengths at torpedo range without penalty.

A naval unit or CD that may fire its gunnery or torpedo strength in naval combat is not required to do so. In each round, the owning player decides if it will fire or not. If a naval unit or CD does not fire, its gunnery or torpedo strength (as appropriate) is ignored for the round.

1. Combat between Naval Units. Combat between naval units is resolved in a series of rounds. A TF may fire its gunnery or torpedo strength no more than once per round. (Note that transports have no gunnery or torpedo strengths.) Follow these steps to resolve the combat.

a. Range Step. Determine the range at which the current round of naval combat takes place.

If it is the first round of naval combat, the range is automatically:

- Long: If all naval units in the combat are in all-sea hexes.
- Medium: If one or more of the naval units in the combat is in a coastal hex (but none of them are on riverine hexsides).
- Short: If any of the naval units in the combat are on riverine hexsides.

Special: If the combat takes place at night or during rough or stormy sea conditions (see Rule 36C), the range for the first round closes one category. For example, a naval combat which would normally begin at long range, would start at medium range instead if the combat took place at night or during rough or stormy seas.

At the start of the range step of each subsequent round of naval combat, both players state if they wish to maintain, open, or close range. If both players are in agreement on this issue, the
range remains the same, or opens or closes one category per their agreement. For example, if the range in the preceding round was medium and both players agree to open range, the range for the new round will be long. If the players cannot agree, both roll a die (rerolling any ties), and the will of the high roller prevails. For example, if the range in the preceding round was medium, and the Central Powers player wants to close range, but the Entente player wants to open range, both must roll a die to decide the issue; as the Central Powers player rolls a 6 and the Entente player rolls a 4, the range for the new round will be short.

When range is closed or opened, all naval units are at the new range; none are left behind. If naval units already at long range further open range, they automatically disengage per Rule 29C.

b. Screen Allocation Step. Both players simultaneously allocate the TFs in their screen into two groupings: those (the engaging group) that will attack the enemy screen and those (the bypassing group) that will attempt to bypass the enemy screen and attack the enemy main body. (TFs in the main body are ignored.) Special: If the range for the current round is long or medium, all TFs in a player's screen must be assigned to the engaging group; TFs may not attempt to bypass the enemy screen to attack the enemy main body unless the range for the current round is short or torpedo.

Compare the number of TFs allocated to each engaging group. If a player has more TFs allocated to this task than his opponent, the player may (but is not required to) allocate the excess TFs against the enemy bypassing group. All other TFs of each engaging group fire on the enemy engaging group.

c. Engaging Group Firing Step. Each player attacks the enemy engaging group with the TFs he allocated to his engaging group. Each TF may fire its gunnery or torpedo strength (but not both) once during this step. The target of each fire is a TF in the enemy engaging group. Both players designate which of their TFs are firing and their targets before any gunfire or torpedo attack is resolved. The gunnery or torpedo strength of a TF may fire upon a single target in a combat round; the strength may not be split to fire at two or more targets. Exception: A TF with a torpedo strength of 5 or more may split its fire between a maximum of two targets. TFs may not combine their gunnery or torpedo strengths to make a single attack on a target, although each TF may fire at the target individually.

For each gunfire attack, consult the Naval Gunnery Table. Cross-index the target's protection rating with the gunnery strength of the firing TF to determine the hit number of the fire (a dash indicates no hit is possible). Modify the hit number so obtained in accordance with the list of hit modifiers printed underneath the Naval Gunnery Table. (Note that a modified hit number of 7 or more indicates that no hit is possible.) The firing player rolls one die; if the number rolled is equal to or greater than the modified hit number, the target has taken one hit of damage; otherwise the fire has no effect. If a TF takes a hit from a gunfire attack, the owning player must check for additional damage (due to possible magazine explosion, etc.). Exception: German type BB and BC naval units are never checked for additional damage. Roll a die and consult the Additional Damage Table. If the modified die roll is 6 or greater, the TF takes a second hit of damage; any other result is no effect.

Example: The German BB-3 taskforce (gunnery strength of 18, protection rating of 4) and the British BC-3 taskforce (gunnery strength of 9, protection rating of 3) exchange fire during daylight and calm seas in 1916. The Naval Gunnery Table is consulted. The German player cross-indexes his gunnery strength of 18 (which uses the 15+ line) with the BC-3's protection rating of 3, yielding a hit number of 3. This hit number is then modified by -1, to 2, to account for the superior German optics and fire control (per the modifier list at the bottom of the Naval Gunnery Table). The German player rolls a 4, and the BC-3 taskforce takes one hit of damage. The British player cross-indexes his gunnery strength of 9 with the BB-3's protection rating of 4, yielding a hit number of 5. The British player rolls a 4, for no effect. As the BC-3 taskforce has taken a hit, it is checked for further damage using the Additional Damage Table. The British player rolls a 4, modifies this by +2, to 6 (as the unit in question is a British type BC during 1912-16), which results in an additional hit of damage being applied to the BC-3 taskforce.

For each torpedo attack, consult the Torpedo Attack Table. Cross-index the target's protection rating with the torpedo strength of the firing TF to determine the strike number of the attack. Modify the strike number so obtained in accordance with the list of strike modifiers printed underneath the Torpedo Attack Table. (Note that a modified strike number of 7 or more indicates that no strike is possible.) The firing player rolls one die; if the number rolled is equal to or greater than the modified strike number, the target has been struck once. To determine the damage to a target struck by torpedoes, roll one die and consult the Torpedo/Mine Damage Table.

Example: The German DD-4 taskforce (torpedo strength of 8), makes a torpedo attack during daylight and calm seas at short range, against the British CA-5 taskforce. The Torpedo Attack Table is consulted. The German player cross-indexes his torpedo strength of 8 (which uses the 6-8 line) with the CA-5's protection rating of 2 (which uses the 1-2 line), yielding a strike number of 2. This strike number is modified by +1, to 3, as the attack is made at short range (per the modifier list at the bottom of the Torpedo Attack Table). The German player rolls a 3, which means the CA-5 has been struck by his torpedo attack. The Torpedo/Mine Damage Table is now consulted. The German player rolls a 4, which results in 2 hits of damage being applied to the British CA-5 taskforce.

After both players have completed all their attacks in this step, implement the results.

d. Bypassing Firing Step. If a player allocated TFs against an enemy bypassing group in step b, those TFs now fire on the TFs in the bypassing group. TFs of the bypassing group cannot fire in this step.

Resolve the fire and implement the results as in step c, except that each TF may fire its gunnery or torpedo strength twice during this step.

e. Main Body Firing Step. TFs allocated to a bypassing group that survived step d may fire on the naval units in the enemy main body. TFs in the main body may fire on the enemy bypassing group.
Resolve the fire and implement the results as in step c, except that a TF may fire its gunnery or torpedo strength twice during this step if both of its fires are targeted against transports.

b. Final Step. If either player has no forces remaining in naval combat (such as having all the naval units of his naval group sunk), then naval combat ends. If both players have forces remaining, check for disengagement (per Rule 29C below). If disengagement does not occur, begin another round of naval combat, per step a.

Designers' Note: The naval combat procedure was designed to give the 'feel' of tactical naval combat without getting bogged down in the details of individual ships. We feel this is particularly appropriate for WW I as most naval forces of the period maneuvered and fought in squadron groupings which are close in size to the TFs in the game. The exception to the normal combat rule which allows TFs with torpedo strengths of 5 or more to split their torpedo fire, reflects the fact TFs of this type represent (on average) two complete flotillas of destroyers, each of which would normally maneuver and attack separately.

The hit number modifiers listed on the Naval Gunnery Table cover the following conditions: #1) the small-caliber guns mounted on light naval forces (CC, CS, CV, etc.) have a hard time penetrating the armor on heavy naval units (PR of 1+), #2) heavy naval forces (BB, BC, PD) have a hard time hitting the faster moving light forces (PR of F-A), #3) bad weather and night make it harder to see your target and may negatively affect the stability of your firing platform, #4) two or more naval units firing on the same target makes it harder to adjust your fall of shot as your shell splashes often become confused with those of the other firing naval unit, #5) German optics and fire control were generally superior to those of other nations throughout the WW I period, and #6) CDs historically almost always got the best of any exchange of fire with naval units (as most CDs were tied into a surveyed grid and had preregistered targets within their area of coastline, they could effectively target a naval unit much faster than the naval unit could target them).

The Additional Damage Table covers the historical propensity of many ships of this period to take further damage from secondary magazine or boiler explosions or to break up due to poor armor layout/compartmentalization. The vulnerability of the British BCs, as dramatically pointed out at Jutland, is well known. Not so well known is that the British admiralty investigation into this issue revealed that their BBs were almost as vulnerable to magazine explosions as their BCs (until the fleet-wide correction measures carried out in the winter of 1916-17). The exemption of German BBs and BCs from additional damage reflects their superior damage control measures.

2. Combat between Naval Units and CDs. Combat between naval units and coast defenses (CDs) is resolved in a single round (unlike combat between naval units which can last for several rounds). Follow the steps listed below to resolve the combat between the naval player (the player with the naval units) and the CD player (the player with the coast defenses).

The range at which this round of naval combat takes place is as follows:

- **Long:** If the naval units are 2 hexes away from the hex containing the CDs.
- **Medium:** If the naval units are in a hex adjacent (per Rule 27B5) to the hex containing the CDs.
- **Short:** If the naval units are in the same hex as the CDs, or are on a riverine hexside adjacent to the CDs hex.

a. **CD Gunnery Allocation Step.** The CD player allocates his CD units into two groups: the general group and the reserve group.

b. **Screen versus CD Firing Step.** The CD player fires on the enemy screen with the gunnery strength of the CD units of his general group; its targets are any CDs in the enemy screen. The gunnery strength of the reserve group does not fire in this step. The naval player fires on the enemy CDs with the gunnery strengths of the TFs in his screen; its targets are any CDs in the hex. (Note that the naval player is not required to fire on the CD units of the general group, but may instead fire on non-firing CD units of the reserve group, but with an adverse modifier as given on the Naval Gunnery Table.)

Resolve the fire and implement the results as in Rule 29B1c, except that:

- CDs may split their fire between two or more targets so long as each target is attacked by at least 1 point of gunnery strength. (Note that CDs have no torpedo strengths and that TFs may not fire their torpedo strengths at CDs.) For example, a CD unit with a gunnery strength of 5 could make one attack with a gunnery strength of 5, or five attacks with a gunnery strength of 1, or any combination of 1, 2, 3, and 4 gunnery strength attacks so long as the total gunnery strength fired does not exceed 5.
- A CD takes one hit of damage for every two firing hits it receives.

c. **CDs versus Main Body Step.** The CD player fires on the enemy main body with the surviving gunnery strengths of his general and reserve groups; their targets are any naval units in the enemy main body. The naval player cannot fire in this step.

Resolve the fire and implement its results as in step b, except that a CD unit may fire its gunnery strength up to three times during this step if all of its fires are targeted against transports at short range (only).

At the end of this step, combat between the naval units and the CDs is over, and the naval units can resume movement or whatever else they were doing.

Designers' Note: Although each combat between naval units and CDs is resolved in a single round, the typical turn will see a series of single-round combat being fought.

Example: The Entente player decides to amphibious assault the German fortress island of Heligoland (GW1:2304) and moves his invasion armada towards that island. When he enters hex GW1:2105, naval combat is initiated for the first time (as the German CD unit on the island with a range of 3 has a combat zone into that hex). This first combat will be fought as a single round at long range (as the naval units are 2 hexes away from the hex containing the CDs). Upon conclusion of that round, the British player continues moving to the island, entering hex GW1:2204, and initiating a second one round naval combat (fought at medium range as the naval units are in a hex adjacent to the hex containing the CDs). Upon conclusion of that round, the British player moves into the Heligoland island hex, initiating a third one round naval combat (fought at short range.
as the naval units and CDs are in the same hex). Upon conclusion of that round, the invasion force may begin spending MPs to disembark the amphibious landing force in the hex.

C. Disengagement.

At the end of a round of naval combat between naval units, both players simultaneously announce if they will attempt to disengage their naval groups (NGs):

- If both attempt to disengage, disengagement is automatic. Both player’s NGs are disengaging.
- If only one player attempts to disengage, each player rolls a die, modifying his roll as shown by the modifiers listed on the Disengagement Summary. (Note that only the die roll of the player attempting to disengage is modified.) If the modified die roll of the player attempting to disengage is higher than the die roll of the other player, his attempt succeeds. His NG is disengaging. If the player’s disengagement attempt fails, another round of naval combat occurs.
- If neither player attempts to disengage, check for involuntary disengagement. Both players roll a die; if a player rolls a 6, that player's NG is disengaging. If neither player is forced to disengage, another round of naval combat occurs.

A disengaging NG immediately moves, per the rules of naval movement. If an NG disengages during an enemy naval movement step, it makes a naval reaction movement, with a movement allowance of 15 MPs, per the naval reaction movement step. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it makes a naval reaction movement, with a movement allowance of 15 MPs, per the naval reaction movement step. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules. If an NG disengages in a friendly naval movement allowance of 15 MPs, per the naval reaction movement step, it resumes (or begins) its naval movement in the movement rules.

The only special restrictions on a disengaging NG are:

- It must, if it has sufficient MPs remaining, immediately either move from the hex it occupies or enter port if there is a friendly-owned port in its hex.
- If it initiated combat by putting to sea from a blockaded port, it must return to that port and end its movement there for the current movement step.

**Designers’ Note:** The various modifiers on the Disengagement Summary cover the following: 1) reduced visibility (bad weather, night), 2) the effects of speed (fast BCs and DDs get away easier, while slow types such as GB, LC, etc. have a much harder time), and 3) the German battle fleet (TFs only) was skilled at performing a special simultaneous turning movement that allowed them to break off action much easier than other nations’ navies.

Involuntary disengagement was relatively common. Even in cases where both sides wished to continue naval combat, the vagaries of weather (sudden storm squalls, etc.), the onset of night, or a subordinate’s lack of desire to press the attack (among other things) could all end a particular action prematurely.

It is deliberate that there is no provision for partial disengagement. All or nothing disengagement seems to encourage players to spread out their naval forces in a number of naval groups instead of concentrating everything in one huge ahistorical stack.

### Rule 30 — Ports and Beaches

#### A. Ports.

All cities (per Rule 3E2) or fortresses with port symbols (see the Master Terrain Key) are seaports. All non-seaport cities and fortresses in hexes adjoining riverine hexsides are river ports. Unless specifically identified otherwise, all references to ports in these rules apply to both seaports and river ports.

Only type GB, MT, MW, TB, LC, and/or RT naval units may use river ports. River ports are not considered ports for other naval unit types. All naval units can use seaports.

A player may use a port in a turn only if he owns it at the start of his initiative phase.

1. **Capacity.** There are five types of ports: marginal, minor, standard, major, and great. Each type of port has an RE capacity, which is the number of REs of cargo that may embark/disembark at the port in a player turn. (Note that all river ports are minor ports.) The capacities of ports are listed on the Port Summary.

2. **Damage.** Ports may be damaged due to bombing (Rule 20G1b and 20G2f) or demolition (Rule 13A2). Each hit of damage on a port reduces its capacity by 1 RE; and reduces the number of REs which may trace a naval sub-element of a supply line through the port by 3 REs. Each type of port may take a maximum number of hits of damage, as listed on the Port Summary.

3. **Strong Natural Harbor.** Any port marked with a strong natural harbor symbol has its docks carved from solid rock. Each hit of damage on a port with a strong natural harbor symbol reduces its capacity by 1/2 RE, not 1; and reduces the number of REs which may trace a naval sub-element of a supply line through the port by 1.5 REs, not 3.

4. **Artificial Harbor.** Any port marked with an artificial harbor symbol is enclosed by an artificial breakwater or is dependent on a system of locks. Each hit of damage on a port with an artificial harbor reduces its capacity by 2 REs, not 1; and reduces the number of REs which may trace a naval sub-element of a supply line through the port by 6 REs, not 3.

5. **Off-Map Ports.** Each player has off-map ports, as shown in the holding boxes on his various Game Charts.

Each off-map port is listed by name, type of port, and the distance in hexes from the off-map port to one or more map entry hexes. For example, the major port of Kirkwall (i.e. Scapa Flow) in the Orkney Islands Holding Box on the British Isles Game Chart is 17 hexes by sea from hexes GW1:0120, 0119, 0118, 0117, 0116, 0115, 0114, 0113, 0112, 0111, 0110, 0109, 0108, 0107, and 0106.

A player may move his naval groups (NGs) (and any cargo) between the map and its holding boxes, by using the off-map ports. To do so, an NG may exit or enter the map at the indicated map entry hexes. AN NG may not move to an enemy off-map port.

It may take more than one movement step for an NG to move between the map and an off-map port. Use status markers or make a note to keep track of the progress of the moving NG.

6. **Inland Ports.** Several seaports are located inland, on rivers, canals, or lakes. In order to use an inland seaport, a naval unit must be able to move along a path of riverine hexsides to the
purposes of naval transport or amphibious landings starting beach during the movement phase, it is friendly owned for the affected:

When a transport takes hits of damage, its cargo can be eliminated. Randomly choosing one item of cargo, the division is selected and eliminated. This leaves 4 REs of cargo (an infantry cadre, an artillery regiment, and a cavalry regiment), exceeding the remaining cargo capacity of 2. Randomly choosing one item of cargo, the infantry cadre is selected and eliminated. This leaves 1 RE of cargo, which no longer exceeds the remaining capacity.

A unit is under no special restriction in the player turn it undergoes naval transport. For example, a unit transported to a port during a naval movement step may move (if it has MPs remaining) in the ground movement sub-phase, attack in the combat phase, and move (if so capable) in the exploitation phase.

A. Transport Costs.

Transports move as part of naval groups (NGs), per the naval movement rules. An NG must spend MPs to embark or disembark cargo as listed on the Naval MP Cost Summary. For example, an NG must spend 30 MPs to embark or disembark cargo at a port.

The listed MP costs must be paid both when the cargo is embarked and when the cargo is disembarked. It may take more than one movement step for an NG to embark/ disembark cargo. Use status markers or make a note to keep track of the embarking/disembarking.

The transport and its prospective cargo must be present in the hex together at all times while embarkation is underway. When the transport has spent all necessary MPs to embark the cargo, the cargo is embarked and henceforth affected by what happens to the transport. Similarly, cargo embarked on a transport which is spending MPs to disembark it, is subject to adverse effects on the transport until the transport has spent all necessary MPs to disembark it.

A ground unit must spend MPs to be transported. These MPs are spent from the transported unit's movement allowance in the movement or exploitation phase the unit disembarks. The unit spends MPs based on the number of naval movement steps it spent at sea during the phase in which it disembarks, as detailed in the Naval Transport Costs Summary. (Note that a unit which is at sea in more than one phase only spends MPs for the steps it was at sea in the phase it disembarks.) For example, a unit with a movement rating of 5 that spent three complete naval movement steps and part of a fourth step at sea during a movement phase before disembarking, would pay 4 MPs upon completion of disembarkation. However, a unit may always disembark by spending all of its MPs remaining in the current phase. During the exploitation phase, a unit with 0 MPs may disembark; it may not, however, embark during this phase.

A rail-only unit (see Rule 14B1) can embark only at a port in a rail hex; it may disembark only at a port in a rail hex of the same gauge (see Rule 7A3) as that it embarked from. (Make a note of the gauge when the rail-only unit embarks.)

A unit may (if possible) move after disembarking. Logistics items (Rule 11H) may be carried by a unit or moved by rail after disembarking.

### Rule 31 — Naval Transport

The phasing player may use naval transport during the naval movement steps of his movement and exploitation phases, moving cargo (ground units, logistics items, and manpower/equipment points; per Rule 27B3) between friendly-owned ports or beaches. Due to the slow speed of most transport naval units while carrying cargo and the extensive time required to embark/disembark cargo, naval transport cannot be used during the naval movement steps of any reaction movement phase (i.e., naval units cannot move if carrying cargo (except by naval reaction movement), cannot embark cargo, and cannot disembark cargo during the reaction movement phase).

Transports carry cargo using their cargo capacities (Rule 27A3). Two or more transports may combine their capacities to carry large cargoes (such as divisions), as long as they all move in the same naval group (NG) while transporting the cargo. A transport may move both prior to and after transporting cargo if it has the MPs to do so.

When a transport takes hits of damage, its cargo can be affected:
- If the transport is sunk, any cargo it is carrying is eliminated.
- If the transport has its cargo capacity reduced, cargo in excess of its remaining cargo capacity is eliminated.
- If two or more transports combine to carry cargo and any are sunk or damaged, cargo in excess of the remaining cargo capacity is eliminated.

When cargo is eliminated and there is a choice of what can be eliminated, randomly choose one item of cargo and eliminate it. If the remaining cargo still exceeds the remaining cargo capacity, repeat this procedure. Continue repeating this procedure until the cargo no longer exceeds the remaining cargo capacity. Example: An NT with a cargo capacity of 6 is carrying an infantry division (3 REs of cargo), a artillery regiment (2 REs of cargo), and a cavalry regiment (1 RE of cargo). The division is full strength and has a cadre side. The NT takes four hits of damage, reducing its cargo capacity to 2. Randomly choosing one of the items of cargo, the division is selected and eliminated.

Since the division has a cadre, it is reduced to a cadre upon elimination (Rule 9E). This leaves 4 REs of cargo (an infantry cadre, a artillery regiment, and a cavalry regiment), exceeding the remaining cargo capacity of 2. Randomly choosing one item of cargo, the infantry cadre is selected and eliminated. This leaves 3 REs of cargo, still over the remaining capacity. Randomly choosing one item of cargo, the artillery regiment is selected and eliminated. This leaves 1 RE of cargo, which no longer exceeds the remaining capacity.

A unit is under no special restriction in the player turn it undergoes naval transport. For example, a unit transported to a port during a naval movement step may move (if it has MPs remaining) in the ground movement sub-phase, attack in the combat phase, and move (if so capable) in the exploitation phase.

Transports move as part of naval groups (NGs), per the naval movement rules. An NG must spend MPs to embark or disembark cargo as listed on the Naval MP Cost Summary. For example, an NG must spend 30 MPs to embark or disembark cargo at a port.

The listed MP costs must be paid both when the cargo is embarked and when the cargo is disembarked. It may take more than one movement step for an NG to embark/ disembark cargo. Use status markers or make a note to keep track of the embarking/disembarking.

The transport and its prospective cargo must be present in the hex together at all times while embarkation is underway. When the transport has spent all necessary MPs to embark the cargo, the cargo is embarked and henceforth affected by what happens to the transport. Similarly, cargo embarked on a transport which is spending MPs to disembark it, is subject to adverse effects on the transport until the transport has spent all necessary MPs to disembark it.

A ground unit must spend MPs to be transported. These MPs are spent from the transported unit's movement allowance in the movement or exploitation phase the unit disembarks. The unit spends MPs based on the number of naval movement steps it spent at sea during the phase in which it disembarks, as detailed in the Naval Transport Costs Summary. (Note that a unit which is at sea in more than one phase only spends MPs for the steps it was at sea in the phase it disembarks.) For example, a unit with a movement rating of 5 that spent three complete naval movement steps and part of a fourth step at sea during a movement phase before disembarking, would pay 4 MPs upon completion of disembarkation. However, a unit may always disembark by spending all of its MPs remaining in the current phase. During the exploitation phase, a unit with 0 MPs may disembark; it may not, however, embark during this phase.

A rail-only unit (see Rule 14B1) can embark only at a port in a rail hex; it may disembark only at a port in a rail hex of the same gauge (see Rule 7A3) as that it embarked from. (Make a note of the gauge when the rail-only unit embarks.)

A unit may (if possible) move after disembarking. Logistics items (Rule 11H) may be carried by a unit or moved by rail after disembarking.
B. Beaches.

Transports of any type may embark cargo at a beach. However, only type LC transports may embark cargo with heavy equipment from a beach.

Transports may disembark cargo at a beach as follows:

- Type NT transports may disembark cargo at a beach only if the cargo is intrinsically amphibious per Rule 27B7.
- Type RT transports may disembark any cargo without heavy equipment at a beach.
- Type LC transports may disembark any cargo at a beach.

A transport may not embark or disembark cargo at a beach during stormy or typhoon sea conditions. (Sea conditions are covered in Rule 36C.)

C. Transfer of Cargo.

Cargo may be transferred from one transport to another. The two transports must be in the same hex with both at sea or both in port, and must have spent the same number of MPs in the phase, and must spend an additional 30 MPs (as listed on the Naval MP Cost Summary) to perform the transfer. If the two transports have spent differing amounts of MPs, one must idly consume MPs in the hex until they have spent the same amount. If the transports are at sea, one of them must by type LC or RT for the transfer to take place. Once transferred, the cargo is embarked aboard the receiving transport. Both transports may subsequently continue naval movement spending any remaining MPs normally. Example: A type NT transport transfers cargo to a type LC transport while both are at sea in the same hex. The NT has already spent 45 MPs in the phase, while the LC has spent 21 MPs. The LC must spend an additional 24 MPs waiting for the NT before the cargo transfer can be started (increasing its total of MPs spent to 45, matching that of the NT). Both the NT and LC spend an additional 30 MPs to transfer the cargo. The NT and LC (with its newly transferred cargo) may resume their movement following the transfer, each having spent 75 MPs.

Transports may not transfer cargo during stormy or typhoon sea conditions (see Rule 36C).

Rule 32 — Amphibious Landings

The phasing player may make amphibious landings at enemy-owned beaches. In general, the rules of naval transport (Rule 31) are used, with the following restrictions governing amphibious landings:

- Amphibious landings may occur only in the naval movement steps of the movement phase; landings cannot occur during the naval movement steps of the reaction movement or exploitation phases.
- Amphibious landings may not be made during stormy or typhoon sea conditions (see Rule 36C).
- Only amphibious units (per Rule 27B7) may make an amphibious landing.

A. Transport Costs.

A naval group must spend 90 MPs to disembark cargo making an amphibious landing (as listed on the Naval MP Cost Summary).

A ground unit making an amphibious landing must spend all its remaining MPs to make an amphibious landing.

B. Ground Operations.

A unit making an amphibious landing is affected in several ways. During the remainder of the player turn in which a unit makes an amphibious landing:

- A unit loses its ZOC if it would normally have a ZOC.
- A unit has its attack strength quartered. Exceptions: 1) A half-capable marine unit (i.e. a naval troops unit) has its attack strength halved, and 2) A fully-capable marine unit's attack strength is unaffected. (Marine units are covered in Rule 14I.)
- In addition to the above effects, a unit landing during rough sea conditions has its attack strength halved.
- A non-mountain unit making an amphibious landing from a sea hex into a hex containing coastal cliffs has its attack strength halved in addition to all other modifications.
- A non-mountain unit making an amphibious landing from a riverine hexside into a hex with an escarpment adjacent to the riverine hexside has its attack strength halved in addition to all other modifications.
- A unit has its movement allowance halved.

In the player turn following the turn in which a unit in general supply makes an amphibious landing, the unit is automatically in general supply.

1. Amphibious Overrun. Units landing in an enemy-occupied hex may overrun enemy units there, if the landing units achieve overrun conditions (per Rule 6F, ignoring all MP costs). The overrun occurs after all units have landed. Only units making amphibious landings may participate in the amphibious overrun of the hex; other friendly units may not join in this overrun.

2. Combat. Units landing in an enemy-occupied hex must attack the enemy units there during the combat phase, if both sides still occupy the hex at this time. Friendly units in other hexes may also join in the attack, per the standard combat rules.

For purposes of combat supply, the units making an amphibious landing may trace a special supply line from their beach to one or more transports at sea in their hex (or at sea on a riverine hexside adjacent to their hex). Resource points embarked on these transports may be spent to provide combat supply (per Rule 11D).

When differing sides occupy the same hex, combat is resolved as normal with two exceptions:

- On an AQ, AS, or AX result, the units that landed in the enemy-occupied hex must also retreat. All other units treat the result normally.
- If required to retreat, the units which landed in the enemy-occupied hex are eliminated. All other units retreat as normal.

If both sides have units remaining in a hex after combat resolution (as may occur, for example, if combat takes place on the positional CRT and neither side is required to retreat), the units which landed in the hex are under siege (per Rule 15D) upon conclusion of the combat.

Designers' Note: The provision for landing forces to become besieged is what historically happened to the British forces which landed at Gallipoli.
C. Planning and Preparation.

Amphibious landings must be planned in advance: the target hex of the landing and the units to be landed there must be planned at least one turn in advance.

During the player’s initial phase at least one game turn prior to an amphibious landing, the player writes down the identity of the units involved in the landing and the target hex of the landing. A unit may have only one landing planned for it at a time. Once planned, a landing may be canceled at the player’s option in a subsequent friendly initial phase, and a new landing for the unit may be planned at that time. A player may also cancel a landing during the phase in which it is to occur.

During an initial phase, a landing may not be planned for a unit that is in an enemy ZOC at that time. Once a landing is planned for a unit, it must be canceled if the unit is in an enemy ZOC, attacks, or is attacked at any time between the planning and the execution of the landing. If for any reason the unit is not able to participate in the landing during the phase in which it is to take place, the landing must be canceled. An amphibious landing may be planned in advance to occur for a unit on the turn it arrives as a reinforcement.

A player may plan an amphibious landing for each of his intrinsically amphibious units. For all other units, a player has a maximum RE planning limit equal to the RE/cargo capacity of all his type LC and RT transport naval units currently in play (not sunk or in the replacement pool). For example, if a player has LC/RT transport naval units with a combined cargo capacity of 16 REs in play, he could plan amphibious landings for a maximum of 16 REs of his units (in addition to plans for his intrinsically amphibious units) in that initial phase.

D. Enemy Response.

If a player makes any amphibious landings during his naval movement steps, the enemy player responds to the landing at the end of the naval movement sub-phase (after all naval movement steps are done), but before any amphibious overruns are conducted.

For each hex in which an amphibious landing was made, the responding player rolls one die and consults the Ground Success Table. Results are:

- **Failure:** No response occurs.
- **Success:** One ground unit of the player may respond. The unit must be within 3 hexes of the landing hex; it cannot be in an enemy ZOC. The player immediately moves the responding unit.

A responding unit moves as follows:

- It may spend up to 1 MP (if non-cavalry, light, mountain, infantry, or c/m), 2 MPs (if cavalry, light, mountain, or infantry) or 3 MPs (if c/m) to move.
- A unit may always move a single hex (except into or across prohibited terrain), by spending all of its responding MPs.
- It may enter a hex occupied by both friendly and enemy units. If it does so, it must stop its movement in that hex.
- If in a hex containing enemy units (such as due to an enemy amphibious landing), it may leave the hex. Alternately, it may overrun (if possible) the enemy units in the hex. Follow the rules of overrun (Rule 6F), including spending MPs for the overrun.
- It may not end its movement in violation of the stacking limits (Rule 8A).
- It may not break down or assemble (Rule 15E).

### Rule 33 — Naval/Land Interaction

#### A. Naval Gunfire Support (NGS).

Taskforces (TFs) may support friendly ground units in combat through naval gunfire support (NGS).

To provide NGS, the TF must first prepare for the fire by spending at least 90 MPs in a hex during a friendly movement or exploitation phase (as listed on the Naval MP Cost Summary). Once prepared, it remains prepared as long as it remains in the same hex and does not fire during any naval combat. **Note:** When a TF is prepared for fire, place a NGS marker on the TF to denote this.

During a subsequent combat or reaction combat phase a prepared TF may provide NGS as follows:

- To provide NGS for friendly attacking units, the hex being attacked must be in or adjacent (per Rule 27B5) to the TF’s hex or adjoining its hexside.
- To provide NGS for friendly defending units, the units must be in or adjacent (per Rule 27B5) the TF’s hex or adjoining its hexside.

A TF has an NGS strength equal to its current gunnery strength. The NGS strength of TFs is halved in rough sea conditions, quartered in stormy sea conditions, and reduced to zero in typhoon sea conditions. (Round fractions down.)

When firing, the owning player may divide a NGS strength among any eligible hexes within range. **Example:** During a friendly combat phase, a prepared TF with an NGS strength of 10 is within range of 3 hexes being attacked. The owning player decides to have the TF provide 7 points of NGS to one hex, 3 to the second hex, and none to the third.

Each NGS strength point has a ground combat strength of 1 and is treated as a 1/4 RE artillery unit for the purposes of Rule 12 (Artillery). Treat a TF as a field artillery, heavy artillery, or siege artillery unit as follows:

- **Field Art:** all type TB, MW, GB, and DD.
- **Heavy Art:** all type CS, CV, CL, CA, CD, and MT.
- **Siege Art:** all type PD, BB, and BC.

TFs may fire NGS only in support of attacking or defending ground units. Ignore NGS strength when calculating losses due to ground combat. A TF providing NGS is not affected by ground combat results.

In each combat or reaction combat phase, after DAS and GS air operations are flown but before any ground combat is resolved, the defending player must allocate his NGS to the hex. NGS allocated to a specific hex may not be switched to another hex that phase, even if its assigned hex is not attacked. There is no similar requirement for the attacking player to allocate NGS; the attacking player decides on and announces the amount of NGS in an attack only when he resolves the attack.

#### B. Coast Defenses (CDs).

Various units have naval gunnery strengths as shown on the Coast Defenses Summary; these units are coast defenses (CDs). CDs engage in naval combat with enemy naval units in the CD's...
CD's gunnery strength to zero (as 0.75 - 0.5 = 0.25, which further affected (as 1.25 - 0.5 = 0.75, which rounds back to 1). A takes its first hit of damage, its naval gunnery strength is not would be halved to 1.25, which rounds down to 1. When the CD 3. If the regiment were disrupted, its naval gunnery strength equal to half its attack strength, or 2.5, which rounds to Example: A 5-7-5 heavy artillery regiment has a naval gunnery bombardment strength of TFs. Roll one die and column that most closely matches (without exceeding) the bombardment strength among any eligible targets. Bombarding TFs may bombard individually, or some (up to all) may combine their bombardment strengths to make a single bombardment. The owning player may divide a TF's bombardment strength among any eligible targets. Use the Bombardment Table to resolve naval bombardments. For each naval bombardment, use the bombardment strength column that most closely matches (without exceeding) the bombardment strength of the bombarding TFs. Roll one die and modify the number rolled with the appropriate modifiers on the Bombardment Table. Cross-index the bombardment strength column with the modified die roll to obtain a result. Possible results are: M (miss, no effect), H (one hit), 2H (two hits), 3H (three hits), and 4H (four hits). Bombardment hits have the following effects:

a. Major Cities. Each hit reduces by 1 point the morale of
the country in which the bombed city is located. (Morale is covered in Rule 40.)

b. Factories. Each hit damages the factory (use hit markers to show this). (Factories and the effects of damage on them are covered in Rule 37B).

c. Airbases. Each hit aborts one air unit (bombing player’s choice) on the ground on the airbase's hex. Place aborted air units in the aborted air units box on the appropriate game chart.

d. Rail Lines. A hit breaks the line in the target hex (use a rail hit marker to show this). Once a rail line in a hex is broken, any further rail line hits in the hex are ignored.

e. Ports. Each hit damages the port (use port hit markers to show this). (Ports and the effects of damage on them are covered in Rule 30A.)

2. Naval Bombardment of Enemy Units. During a combat phase, TFs eligible to provide NGS (per Rule 33A above), may bomb bard enemy units. Note: A TF may not both bombard and provide NGS in the same combat phase. TFs bombard enemy units per rule 12C, with each bombardment strength point treated the same as an artillery unit except that they do not require combat supply.

Rule 34 — Special Naval Rules

A. Naval Movement.

1. Protected Waters. Light naval groups (NGs) (e.g. those NGs containing only transports and/or type DD, GB, MT, MW, and TB taskforces), may use protected, inshore waters to screen their movement from enemy NGs and CDs. Each friendly-owned coastal hex is a protected waters hex. A light NG that enters a protected waters hex:

- Does not trigger reaction movement by enemy NGs.
- Does not initiate naval combat with enemy NGs or CDs unless it enters the enemy NG’s (or CD’s) hex.

2. Movement at Night. During each friendly naval movement step, friendly naval groups (NGs) may make part of their movement at night. In a friendly step, a friendly NG may spend any 10 continuous MPs as night movement. Exception: During a naval movement sub-phase, once an NG uses night movement, it may not do so again (in a subsequent step) until it has spent at least 20 MPs.

Night movement affects naval units as follows:

- Air units cannot fly naval patrol missions at night.
- Amphibious landings and naval bombardments cannot be made at night.
- A combat or mixed NG or CD has a combat zone only in the hex (or hexside) it occupies while at night.
- A CD has its gunnery strength halved at night.
- A TF has its gunnery strength quartered at night.

Night also affects naval units in various ways, per the die roll modifiers to the various naval combat charts and tables.

3. Movement along Major Canals. The Kaiser Wilhelm Canal in Germany (connecting the Baltic and North Seas), the Suez Canal in Egypt (connecting the Mediterranean and Red Seas), and the Panama Canal in Central America (connecting the Caribbean Sea and the Pacific Ocean) are major canals. A player may move any of his naval units along the hexsides constituting a major canal (this is an exception to the Rule 28 prohibition on
certain naval unit types from entering riverine hexes), so long as the following conditions apply:

- All ports in hexes (or holding boxes) adjoining the canal are friendly-owned and functioning. (A port is functioning unless it has maximum damage per the Port Summary.)
- The hexes (or holding boxes) on both sides of the section of the canal to be traversed are friendly-owned.

4. Movement of River Transports across Open Seas. Due to their generally low freeboard and small size, river transports risk damage if they enter the open sea. Check a type RT naval unit for damage:

- The first time it enters an all-sea hex during any naval movement step.
- If it starts a friendly naval movement step at sea in an all-sea hex.

To check for damage, roll a die and consult the Naval Success Table:

- Failure means the open sea conditions are too much for the RT. If the RT started the naval movement step at sea in an all-sea hex, or the current sea condition is rough, stormy, or typhoon (per Rule 36C), the RT is sunk; otherwise the RT is turned back (must move in a direct line to the closest coastal hex, and, once there, end its movement for the naval movement step).
- Success means the RT crosses the open sea without problem.

5. Naval Patrol. At the end of the first naval movement step of each friendly naval movement sub-phase, a player may assign to naval patrol any of his at sea naval groups (NGs) which consist solely of type BC, CA, CL, or C taskforces. (Place a naval patrol marker on the NG to show this assignment.)

An NG may not spend MPs for any purpose during the remainder of the phase in which it is assigned to naval patrol, but in the naval movement steps of the next enemy movement, exploitation or reaction movement phase (as appropriate) it gains the following capabilities:

- The die roll for any naval reaction movement attempts it makes is modified by +2.
- Each time it makes a naval reaction movement attempt and succeeds, any one other friendly NG within 60 hexes that is assigned to dedicated reaction (see Rule 28A1) may attempt to use naval reaction movement as well.

Remove all naval patrol markers from friendly NGs at the start of each friendly naval movement sub-phase.

Designers' Note: The British normally kept a cruiser squadron in the North Sea off the German coast on naval patrol. Most of the time this succeeded in providing advance warning of any movements of the German High Seas Fleet, allowing the British Grand Fleet at Scapa Flow (normally assigned to dedicated reaction) to put to sea long before the Germans entered regular reaction range.

B. Naval Bases.

All major and great ports are minor naval bases. (Note that this includes minor and standard ports upgraded to major status through the use of port construction engineers per Rule 13C2.) Also, some countries have additional major and minor naval bases as listed in the appropriate section of Rule 41 (Nations). Naval units can be refitted (Rule 35A) and repaired (Rule 35D), and TFs can replenish (Rule 34C4), only at naval bases. Major naval bases also produce naval repair points (Rule 35D).

In general, naval bases are usable by naval units of any nationality on a player's side except that type BB, BC, PD, CA, CD, and MT taskforce naval units may only be refitted or repaired at their own nation's naval bases. For example, a French PD naval unit could refit at a French naval base, but not at a British naval base.

When a naval base is captured from the enemy, roll a die and consult the Naval Success Table to see if it is captured intact (result of "S") or damaged (any other result). A damaged naval base may not be used until it is repaired. A naval base is repaired in the same manner as a demolished bridge (Rule 13A3) except that a resource point is always required.

Various rules depend on if a naval base is functioning or not. A naval base is functioning unless it is damaged (per above) or the port in its hex has maximum damage.

C. Naval Supply.

1. Ammo Depletion. A TF which provides naval gunfire support (NGS) (Rule 33A), or bombards enemy units (Rule 33C2) during a combat phase, is ammo-depleted at the end of that phase. (Place an "ammo depl" marker on the TF to note this.) An ammo-depleted TF has its NGS and bombardment strength halved when providing NGS or bombarding enemy units in subsequent combat phases until it replenishes.

Note: Ammo depletion only occurs due to NGS or bombardment of enemy units and only affects NGS and bombardment strength versus enemy units. Neither naval combat nor bombardment of enemy facilities depletes ammunition, and the gunnery strength of an ammo-depleted TF is unaffected for naval combat.

Designers' Note: Major fleet battles rarely used even 10% of a ship's ammo, while a shore bombardment could easily burn through 30-50% (and a ship normally went off station when its ammo reserve dipped below 30%).

2. Torpedo Depletion. A TF which fires its torpedo strength during a round of naval combat, is out of torpedoes at the end of that combat round. (Place an "out of torps" marker on the TF to note this.) A TF which is out of torpedoes may not fire its torpedo strength in subsequent rounds of naval combat until it replenishes.

Designers' Note: Almost no surface ships carried reloads for their torpedo tubes in WW I.

3. Fuel Depletion. A naval unit which spends MPs during its player turn for any purpose other than naval reaction movement is low on fuel at the end of that player turn unless it replenished at some point during the player turn. (Place a "low fuel" marker on the naval unit to show this.) A naval unit with low fuel at the beginning of a naval movement step has its movement allowance halved during the step.

If a naval unit with low fuel is unable to replenish in its next player turn, it must be scuttled (Rule 34D below) at the end of that player turn.

4. Replenishment. A naval unit may replenish its ammunition, torpedoes, and fuel during naval movement as follows:

- All Naval Units: By spending 30 MPs at any friendly-
owned functioning naval base (major or minor) in general supply. An unlimited number of naval units may replenish at each such naval base during a player turn.

- **Transports Only:** By spending 30 MPs at any friendly-owned minor, standard, major, or great port in general supply. The number of transport naval units that may replenish at a port during a player turn is equal to the port's current capacity.

Remove all "ammo depl", "out of torps", and "low fuel" markers from a naval unit when it replenishes.

### D. Scuttling.

When an enemy unit gains ownership of a port containing naval units in port, the naval units there must try to escape to sea. The owning player consults the Scuttle Table, rolling one die for each naval unit attempting to escape. A naval unit will either escape to sea, be scuttled, or be captured.

- If the naval unit escapes to sea, it is at sea in the port's hex (if the port is a coastal seaport) or it is at sea in an adjoining riverine hexside to which it may move (if the port is an inland seaport or river port). If the port is blockaded, or there is no riverine hexside to which it may move, the naval unit is scuttled instead.
- If the naval unit is scuttled it sinks.
- If the naval unit is captured, it immediately becomes a naval unit of the capturing player. (Mark the naval unit with any convenient marker to note this.) A captured naval unit is not immediately usable, however. The capturing player rolls two dice and the result (doubling this if the naval unit is a TF) is the number of turns the naval unit will be out of service (not counting the turn of capture). For example, a naval unit captured during the May II 16 turn and out of service for 8 turns, would return to service during the initial phase of the Oct I 16 turn. While a naval unit is out of service, its player may not use it for any purpose (the enemy player may bomb it), and if it must try to escape to sea it is automatically scuttled.

When a naval unit is on a riverine hexside and an enemy unit gains ownership of both hexes adjoining the hexside, the naval unit must immediately displace to any adjacent (per Rule 27B5) riverine hexside or coastal hex to which it may move. If none are available, the naval unit is scuttled instead.

### E. Mine Warfare.

The orders of battle list minebelts that exist at the start of play. During play, both players can lay and sweep mines in all-sea and coastal hexes. Mines may damage naval units.

A player receives mine points per the order of battle and by converting resource points. One resource point converts into 5 mine points. (Mine points cannot be converted back to resource points.) Both sides are limited in the number of resource points they may convert to mine points depending on whether or not the West (British Isles/North Sea) command is in play:

- If the command is in play, both sides may convert a maximum of 1 resource point to mine points each month.
- If the command is not in play, both sides may convert a maximum of 1 resource point to mine points each production cycle.

**1. Damage from Mines.** Check a naval group (NG) for mine damage:

- The first time it enters or puts to sea in an enemy minebelt hex during any naval movement step.
- If it starts a friendly naval movement step at sea in an enemy minebelt hex.

Use the following procedure to check an NG for mine damage:

1) Consult the Mine/Light Forces Attack Summary, noting all applicable modifiers, to determine the mine attack strike number. **Note:** Due to the dismal performance of Entente mines for most of the war, treat each 2 Entente mine points (or fraction thereof) in a hex as a single mine point for purposes of determining the mine attack strike number (only) prior to the Jun I 18 turn.

2) Roll a die for each naval unit in the NG. If the number is equal to or greater than the mine attack strike number determined in step 1, the naval unit has struck the minefield.

3) For each naval unit which strikes a minefield, roll a die and consult the Torpedo/Mine Strike Damage Table to determine the number of hits of damage the mine strike inflicts.

**Example:** In 1916 during daylight and calm seas, an Entente NG consisting of one 4pt TF and one C3 transport enters a Central Powers minebelt hex containing 2 mine points. Step 1: The mine attack strike number is 5 (as the base strike number of 7 - 2 mine points in the hex = 5). Step 2: One die is rolled for each of the naval units in the NG. The die roll for the TF is 4, for no effect (as die roll is less than the mine attack strike number). The die roll for the transport is 6 which means the transport has struck the minefield. Step 3: Rolling another die, a 2, and consulting the Torpedo/Mine Strike Damage Table shows the mine strike inflicts 1 hit of damage on the transport.

**2. Laying Mines.** Any TF with code "M" on its counter may carry mine points (per naval transport, Rule 31). A type MW taskforce may carry up to 10 mine points, while any other type of code M taskforce may carry up to 2 mine points; halve these amounts if the TF in question is at reduced strength.

A TF carrying a mine point can lay the mine point in a hex by spending 5 MPs there (as listed on the Naval MP Cost Summary). Mark the presence of mines in a hex by placing mine markers there. (The numbers on the markers correspond to the number of mine points in the hex.)

**3. Sweeping Mines.** During the initial phase, the phasing player automatically sweeps all enemy mines in coastal hexes he owns. In addition, he automatically sweeps all enemy mines that are not within 5 hexes of an enemy-owned port, but are within 5 hexes of a friendly-owned port. Finally, all enemy mines in each hex in excess of 2 automatically self-destruct. Simply remove the mine points from the map.

During naval movement, a type MW taskforce may sweep enemy mines. The MW TF must first enter the minebelt hex and is checked for mine damage (per above). Once in the minebelt hex, the MW TF may sweep the mines there. For every 30 MPs it spends, one enemy mine point is swept; remove one mine point from the hex. Immediately upon sweeping each mine point, the MW TF is checked for mine damage (per above) if
any enemy mine points still remain in the hex. **Designers’ Note: The provision for mine points in excess of 2 in a hex to self-destruct every turn reflects the fact that it is very hard to maintain high density minefields (wind and wave are constantly breaking mines free of their moorings; and the denser the field, the greater the likelihood of a free mine exploding other, still-moored mines).**

During the first half of the war, most minefields were small, haphazard affairs. Beginning with late 1916, and accelerating in 1917-18, the Entente systematically laid major mine barrages in the Aegean, Adriatic, and North Seas. Thus, if you want mine fields in the early war period you are mostly going to have to buy them by converting resource points; while in the second half of the war, you’ll get a number of mine points directly through the OB.

**F. Light Naval Forces.**

Due to light naval forces not directly shown in the game (such as submarines and patrol craft), naval units risk damage in certain areas.

The Central Powers (CP) danger zone (e.g. the area in which CP naval units risk damage) consists of all hexes within 3 naval MPs of an Entente-owned, non-blockaded, functioning naval base in general supply.

The Entente danger zone (e.g. the area in which Entente naval units risk damage) consists of all hexes within 30 naval MPs of a CP-owned, non-blockaded, functioning naval base in general supply.

Check a naval group (NG) for contact by enemy light naval forces:

- The first time it enters or puts to sea in a danger zone during any naval movement step.
- If it starts a friendly naval movement step at sea in a danger zone.

To check for enemy contact, roll a die and consult the Naval Success Table, applying all applicable modifiers:

- **Failure** means enemy forces did not contact the NG; the NG may operate for the rest of the naval movement step without risk of damage due to danger zones.
- **Success** means enemy forces made contact with the NG. Immediately check for damage to the NG.

Use the following procedure to check an NG for damage from light naval forces:

1) Consult the Mine/Light Forces Attack Summary, noting all applicable modifiers, to determine the light forces attack hit number. Note that the modifiers listed under the table modify the hit number, not the die roll to see if you hit.

2) Roll a die. If the number is equal to or greater than the light forces attack hit number determined in step 1, apply one hit of damage to any one naval unit in the NG (choose the naval unit at random). **Example: During 1916 and in daylight and rough seas, an Entente NG consisting of one 4pt TF and one C3 transport enters an Entente danger zone. The CP player checks to see if his light forces contact the Entente NG using the Naval Success Table. He rolls a 6, modifies it by -1 to 5 (as the danger zone contact attempt takes place during rough seas), and the NG is contacted. Next, he consults the Mine/Light Forces Attack Summary. The light forces attack hit number is 5 (it normally would be 6 in 1916, but this is modified by -1 as CP light forces are attacking an Entente NG, and another -1 as the attack occurs during rough seas). The CP player rolls a 6 which results in one naval unit in the NG receiving one hit of damage. The TF is chosen at random to receive this damage.**

- **Designers’ Note: The majority of the craft making up the danger zones are submarines. The large Entente submarine fleet was predominantly used for port defense and rarely ventured very far asea. The CP sub fleet, on the other hand, was mostly used offensively far from its home bases. In 1914-15 alone, CP submarines sank 3x PD, 1x CD, 4x CA, and 3x CL (11 gunnery strength points) in addition to numerous transport vessels. Entente sub successes during the same period were insignificant.**

- **The modifiers for night and rough/stormy seas show that it is both harder to contact enemy forces when these conditions apply and that it is easier to close to effective attack range without discovery if contact is made.**

**G. Landing Craft Damage.**

Landing craft (LC) which disembark cargo with heavy equipment at a beach risk being damaged due to wear and tear from surf and beach conditions. Note that LCs never suffer damage while embarking cargo, or while disembarking cargo without heavy equipment.

When an LC disembarks cargo with heavy equipment at a beach, the owning player checks for damage. Roll one die and consult the Naval Success Table, applying all applicable modifiers. Immediately implement the result:

- **Success** means the LC disembarked the cargo without incurring damage.
- **Failure** means the LC is damaged and cannot be used for naval transport or amphibious landings until repaired. (Use an "LC Damage" marker to note this.)

Damaged LC may be repaired. During a player’s initial phase, roll a die for each damaged LC: it is repaired on a roll of 1 or 2. LC may also be repaired through the use of naval repair points (Rule 35D).

**H. Taskforces as Naval Transports.**

Under limited circumstances, any TF may be used as a transport. Only cargo without heavy equipment may be carried, and the cargo must both be embarked and disembarked at a port. **Exception: Manpower points (only) can be embarked at a beach. Each TF may carry up to 2 REs of cargo (1 RE if the TF is at half or less strength). Naval groups (NGs) containing TFs being used as transports must spend MPs to embark or disembark cargo the same as NGs containing other transports (per Rule 31A).**

While a TF is carrying cargo (e.g. from the instant an item of cargo completes embarkation onto the TF until the instant all cargo completes disembarkation from the TF), it is restricted:

- Its gunnery and torpedo strengths are halved for purposes of naval combat.
- It may not provide naval gunfire support or bombard enemy facilities or units.

**I. LC and RT as Ferries.**

A landing craft (LC) or river transport (RT) may operate as a ferry, allowing the owning player to:
• Treat one all-sea, lake, or great river hexside as a major river hexside for supply, ground movement, and ground combat purposes.

• Treat one major river or narrow strait hexside as a river hexside for supply, ground movement, and ground combat purposes.

To serve as a ferry, an LC or RT must start the initial phase at sea; be adjacent (per Rule 27B5) to the all-sea or narrow straits hexside or on the lake, great river, or major river hexside; and may not spend MPs for any purpose that turn. If there is more than one eligible hexside, the player indicates which hexside has the ferry.

As long as the LC or RT is present, friendly ground units treat the hexside as a major river or river hexside, as appropriate, for supply, movement, and combat purposes during the turn. Note that this will allow friendly units to retreat across the hexside if required to retreat. If the LC or RT is eliminated for any reason, the player immediately loses its ferrying services.

As a ferry must logically move back and forth between the two hexes adjoining the ferry hexside if it is to ferry anything across the hexside, an LC/RT operating as a ferry may be considered to start each naval movement step in either hex adjacent to the ferry hexside (enemy player's choice of hex each step) for purposes of naval patrol bombing missions (Rule 20G2h), initiation of naval combat (Rule 28C), mine attacks (rule 34E), and light forces attacks (Rule 34F).

J. Combat Naval Forces.

1. Permanent Losses. If a type BB, BC, PD, CA, or MT taskforce (TF) receives sufficient damage, it suffers permanent losses (representing the loss or writing off of ships that cannot be replaced in the timeframe of the game). When such a TF receives hits of damage that equal or exceed half its printed defense strength, the TF suffers permanent losses. Flip its counter to its 6-point half strength side for the rest of the game.

Example: A type PD TF with a printed defense strength of 12 already has 5 hits of damage when it enters naval combat. In the combat, it receives 2 further hits of damage, for a total of 7, and has a current defense strength of 5. Since its damage exceeds half its printed defense strength, flip its counter to its 6-point half strength side, and adjust the hits on it to reflect its current defense strength. The TF cannot be repaired or replaced above its half strength side for the rest of the game.

2. Naval Ground Support Supply. For a TF to provide naval gunfire support (NGS) or to bombard enemy units, it must be in naval ground support supply. Note that a TF which is not in naval ground support supply cannot provide NGS or bombard enemy units. A player places his TFs in naval ground support supply by spending resource points. Special: Type GB and MT taskforces are always in naval ground support supply and do not require resource points to be spent for this purpose on their behalf.

Immediately after announcement of a bombardment or combat, a player may spend resource points in friendly-owned ports for naval ground support supply. The resource point to be spent must be within 30 naval MPs of the TFs it is to supply. Each resource point spent will provide supply for friendly TFs totaling up to 30 naval gunnery or bombardment strength points (calculated before any modification of the gunnery or bombardment strength due to sea conditions) for that bombardment or combat (only).

Example: The CP player announces a combat against a hex. The Entente player has three TFs totaling 43 gunnery strength points that are eligible to provide NGS (e.g. are prepared and within range of the attacked hex). The Entente player spends 1 resource point at a friendly-owned port 26 naval MPs away, and notes, regretfully, that the only other resource point he has in a friendly-owned port is 32 naval MPs away and thus cannot be spent for supply. The one resource point he does spend places 30 of his TFs’ 43 gunnery strength points in naval ground support supply. The Entente TFs will, therefore, provide 30 pts of NGS to the combat.

Designers' Note: Gunboat and monitor TFs engaged in NGS and bombardment on a routine basis; for other types of TFs to do this was out of the ordinary. The resource point cost not only covers the large ammunition expenditures inherent in these tasks, but encourages players to use their naval units along historical lines.

K. Naval Supply Lines.

A player may not trace a naval sub-element of a supply line (Rule 11B3) from, into, or through any hex or hexside that is:

• In the combat zone (Rule 28B) of an enemy naval group or CD.

• Enemy-interdicted (Rule 28, third bulleted section).

Any 10 continuous MPs of a naval sub-element of a supply line may be traced at night. Note that night affects combat zones, per Rule 34A2.

L. Water-Only Units.

If a combat or mixed naval group enters a hex or hexside containing a water-only unit, the water-only unit is eliminated. Water-only units (Rule 14B2) may not enter hexes or hexsides in the combat zone of a mixed or combat naval group.

M. Limited Intelligence.

A player may not examine a stack of enemy naval units while they are at sea in an all-sea hex; he may examine them while they are in port or while they are at sea in a coastal hex or on a river hexside. Note that a player can always examine the top naval unit in a stack.

A player may not examine the cargo an enemy naval unit is carrying. (Simply stack the cargo under the naval unit and do not allow the enemy player to peek underneath. If there is a stack of naval units in a hex, the enemy player can demand that you spread the naval units out so he can see how many transport there are, but he cannot look under any of them.) Further, a naval unit may carry dummy cargo (use any agreed upon marker for this).

Designers' Note: Both sides usually had a pretty fair idea of what was going on with the enemy fleet while the enemy was in port or operating close to land, due to radio intercepts, air recon, and spies outside the naval bases.

Rule 35 — Naval Replacement System

During the course of the game, players may refit naval units, receive naval reinforcements and replacements, and must
withdraw and lay up naval units. All naval replacement activities are performed during the player's initial phase. The orders of battle (OBs) list the naval reinforcements and replacements in the game.

The various activities occur as detailed below. Each player follows these procedures separately for each of his nationalities.

A. Refits.

Type CA, CD, BB, BC, and PD naval units (but no others) must refit once each year or suffer penalties. To begin a refit, the TF must begin the player's initial phase in port at a friendly-owned, functioning major naval base usable by the TF to be refitted. (Place a refit marker on the TF to note this.) Two months (4 turns) later, the refit is completed. (Remove the refit marker at this time.) While under refit, the TF may not spend MPs for any purpose, or fire any of its strengths (except AA). A player may voluntarily remove the TF from the refit process before completion of the two-month period. Such a TF is not refitted, however. A TF may be refitted at the same time it is repaired (see Rule 35D).

Check the refit status of all TFs during the initial phase of the Jan I turn of each calendar year. Mark TFs that did not refit during the previous calendar year with a "no refit" marker. If the TF already has a "no-refit" marker on it, place a 1-point status marker under the "no refit" marker. Note: 1) At the beginning of each game, all TFs are considered to have refitted for the current calendar year if the scenario starts on or after Jun I; 2) TFs which enter play as reinforcements on or after the Jun I turn of a year are considered to have refitted for that calendar year prior to their entry.

TFs that are in need of refit (as indicated by no refit markers) may not be able to leave port. Roll one die each time such a TF attempts to leave port, modifying the die roll by +1 for each 1-point status marker under the no refit marker. If the modified die roll is 6 or greater, the TF has broken down and must remain in port; the TF may not attempt to leave port again during the same game turn. Additionally, if the modified die roll is 7 or greater, the TF has suffered major mechanical damage and immediately receives 1 hit of damage.

Each refit period a TF completes removes one 1-point status marker from under the no refit marker (or removes the no refit marker is there are no hit markers under it).

B. Withdrawals and Lay Ups.

The OBs require certain naval units to withdraw from play or to be laid up in a decommissioned status at various times. Any naval unit of the indicated nationality and naval unit type may be withdrawn or laid up. The strength of the naval unit to be withdrawn or laid up must be equal to or greater than that specified in the OB; but if none such is available, any naval unit of the indicated nationality and naval unit type may be withdrawn or laid up instead.

If a naval unit with a strength less than that specified is withdrawn or laid up, the player forfeits NRPs (if the naval unit is withdrawn) or manpower points (if the naval unit is laid up) equal to the difference in strength between the specified TF and that actually withdrawn or laid up.

Simply remove a withdrawn naval unit from the map; it is out of play and may not return to play unless called for in the OB. Remove a laid up naval unit from the map and place it in the Laid Up Warships Box on the appropriate Game Chart; it is out of play unless (and until) the player recommissions the naval unit per below.

If no naval unit in play can be withdrawn, then an eliminated naval unit is removed from the replacement pool, and the player forfeits NRPs equal to the naval unit's replacement cost. If no naval unit in play can be laid up, then the player instead forfeits 1 manpower point for each strength point in the naval unit specified as laying up.

If a player must forfeit NRPs or manpower points and does not have sufficient number to meet this cost, then the player maintains a deficit until he has NRPs (or manpower points). (NRPs are covered in Rule 35D; manpower points are covered in Rule 16.)

Example #1: The German 6pt TF PD-1 is specified as withdrawing. Any German type PD TF with a current strength of 6 or more may be withdrawn. Failing that, any German type PD TF with a strength of 1 to 5 may be withdrawn, with the player then forfeiting NRPs equal to the difference in strength between the specified TF and the one actually withdrawn. Failing that, any German type PD TF in the replacement pool may be withdrawn with the player forfeiting 6 NRPs.

Example #2: The British 8pt TF PD-1 is specified as laying up. Any British type PD TF with a current strength of 8 or more may be laid up. (It would be placed in the Laid Up Warships Box on the British Isles Game Chart.) Failing that, any British type PD TF with a strength 1 to 7 may be laid up, with the player then forfeiting British manpower pts equal to the difference in strength between the specified TF and the one actually laid up. Failing that, any British type PD TF in the replacement pool may be withdrawn with the player forfeiting 8 British manpower pts.

1. Recommissioning Laid-Up Warships. Laid-up warships may be recommissioned (returned to play) using the following procedure:

1) Spend 1 manpower point (Man Pt) per strength point in the naval unit (current, not printed strength) to be recommissioned. The Man Pts must be of the same faction as the naval unit.

2) 12 turns later, remove the naval unit from the "Laid Up Warships" box and receive it as a reinforcement at any friendly-owned port in the naval unit's home country.

Designers' Note: The regular reinforcements section of the various OBs track the historical decommissioning (laying up) of warships. Laid up naval units are merely mothballed, their armament is still intact and given a new crew they could become operational again. Naval units which were disarmed historically are not shown as laying up in the OB, but withdraw instead (or convert into something else, such as heavy siege guns). Laying up the ships is not under player control, as the trained naval ratings from the laid up ships go to man new naval units appearing in the game or to man naval units fighting the abstracted submarine war. Players may recommission laid up ships, however, if they wish to pay a premium in manpower points.

C. Reinforcements.

Players receive naval reinforcements during the game. A
player places his reinforcements on the map during his initial phase, at the location specified in his OB. If the indicated location is enemy-owned at the time the reinforcement is to be received, it is eliminated instead.

When naval strength points are received, make a paper note of their location. If their indicated parent naval unit moves to that location, add the naval strength points to the parent naval unit. Note that these naval strength points may be added to the naval unit even if the naval unit is at its reduced strength side (this is an exception to Rule 34J1). Example: The Italian player receives 5 Hv Naval Strength Pts (BB-2) at Castellamare di Stabia (GW3:4715). If the Italian BB-2 naval unit moves to hex GW3:4715, the BB-2 naval unit would immediately have its strength increased by 5 points.

D. Replacements.

1. Naval Repair Point (NRP) Production. Players receive NRPs in the initial phase at the start of each production cycle. (The production cycle is covered in Rule 38.) A player receives 1/2 NRP for each friendly-owned, functioning major naval base in commands under his control. (Naval bases are covered in Rule 34B.) Note that a major naval base may have its NRP production reduced to zero under some circumstances (as listed in the appropriate nation-specific section of Rule 41). Example: An Entente player controlling the West (France/West Germany) and West (British Isles) commands in 1916 would receive a maximum of 2 British and 1 French NRPs each production cycle, assuming that his major naval bases at Toulon and Brest (France) and Scapa Flow, Rossyth, Portsmouth, and Plymouth (Britain) were are all friendly-owned and functioning. However, as the French major city of Lille is enemy-owned (Lille is the center of French naval armaments production as noted in the French nation-specific rules) French major naval base NRP production is reduced to zero. Thus the Entente player receives 2 British NRPs only.

2. Spending Equipment Points (Equ Pts) to buy additional NRPs. During the initial phase at the start of each production cycle, a player may spend a limited number of his Equ Pts to buy additional NRPs. The Equ Pts to be spent must be in a hex containing a friendly-owned, functioning major naval base. For every 2 Equ Pts spent at such a base (and a maximum of 2 Equ Pts may be spent for this purpose at each base), the player receives 1/2 NRP three months (six turns) later at that base. (Keep a paper record of when and where these NRPs will appear.)

3. Using NRPs to Repair/Replace Naval Units. During his initial phase, a player may spend his NRPs to repair hits of damage from naval units, to repair damaged landing craft, and to replace eliminated naval units. A player may accumulate NRPs for use in later turns.

A player spends NRPs as follows:

- 2 NRPs repair one hit of damage on a type BB, BC, PD, CA, CD, or MT taskforce. To be repaired, the TF must spend 4 complete turns in port at a friendly-owned functioning major naval base usable by the taskforce; it may not spend MPs for any purpose or fire any of its strengths (except AA) during the turns while it is under repair.
- 1 NRP repairs one hit of damage on a transport or type CL, C, CS, CV, DD, GB, MW, or TB taskforce. To be repaired, the naval unit must be in port at a friendly-owned functioning naval base (major or minor); it may not spend MPs for any purpose or fire any of its strengths (except AA) in the player turn it is repaired.

- 0.5 NRP repairs one damaged LC. The LC need not be in port; and it is fully operational in the player turn it is repaired.

- 1 NRP replaces one strength point of a sunken transport or type CL, C, CS, CV, DD, GB, MW, or TB taskforce. (Note: sunken type BB, BC, PD, CA, CD, and MT taskforces may not be replaced.) Upon replacement, place the naval unit at any friendly-owned functioning naval base in the command in which it was sunk. It is fully operational upon replacement. Mark the replaced unit with hit markers as necessary to show as yet unreplaced/unrepaired strength points. Example: A 3-point NT is in the replacement pool, and 2 naval repair points are spent. The NT is replaced at a strength of 2; place the 3-point NT, marked with one hit, at a friendly-owned functioning naval base.