XXI

THE NAVAL WONDER WEAPON 1943-1945
RULES of PLAY

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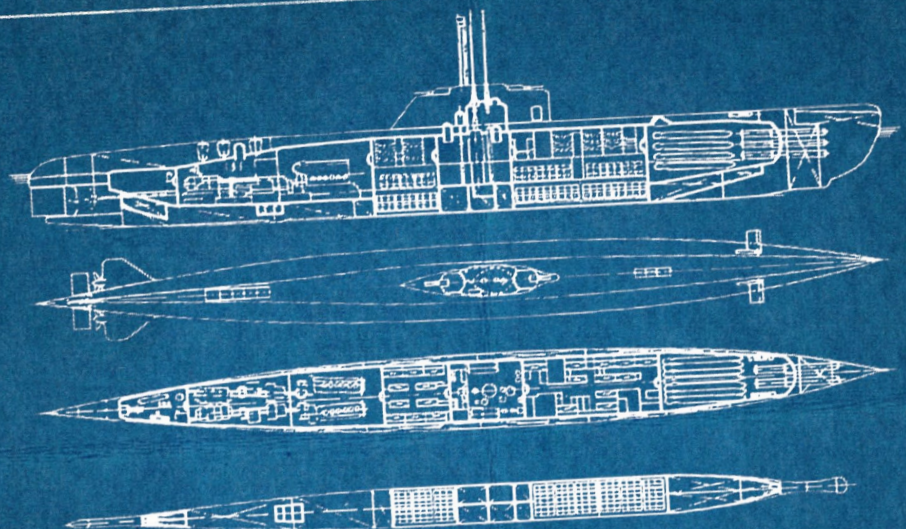
READ THIS FIRST

We've organized the overall structure of the rules of this LPS simulation game to follow this game's sequence of play in introducing concepts. The rules themselves are written in a format known as the Case System. This approach divides the rules into Modules (each of which deals with a major important aspect of play). Modules are numbered sequentially as well as possessing a title. Each Module is divided into Sections (that deal with a major sub-topic inside the Module) which are also numbered sequentially. Modules and Sections are introduced by some text that briefly describes the subject covered by that particular Module or Section. Finally, the majority of each Section consists of Cases. These are the specific, detailed rules that govern play. Each Case is also numbered sequentially. The numbering follows a logical progression based upon the number of the Module of which the Cases are a part. A Case with the number 7.5.1, for example, is the first Case of the fifth Section of the seventh Module of the rules. The numbering system is designed as an organizational aid. Use it to determine where a Case is located in the rules.

3.1.4 *This example is the number of the fourth Case of the first Section of the third Module of the rules.*

LEARNING TO PLAY THE GAME

Begin by familiarizing yourself with all of the components listed for this game. Then skim through the charts and rules, reading all the titles of the Modules and Sections. Set up a game scenario or portion of a scenario (after reading the applicable Module) and play a trial game against yourself. During this trial game, try referring to the rules only when you have a question and remember the numbering system we employ makes it easy to look up rules when you do. While a trial game may take you an hour or two, it is the quickest and most pleasant way to learn (short of having an experienced friend teach you). We also don't recommend attempting to learn the rules word-for-word. Memorizing all the details is an effort that few can do. We've written these rules to be as comprehensive as possible, but they are not designed to be memorized. Taking in the rules in this way (as you play along) is the best approach to mastering this game. We're always open to suggestions on how to improve the comprehension of our rules. Write to us (see addresses below) if you have an idea on how we can communicate better with you.

If any of the supplied parts are missing or damaged, write to:

Against the Odds Magazine, PO Box 165
Southeastern, PA 19399-0165 USA
Attn: *XXI*

Or e-mail us at: *admin@atomagazine.com*

We hope you enjoy this game. Should you have any difficulty interpreting the rules, please write to us at the above postal address, or send an e-mail to: gamesupport@atomagazine. com, phrasing your questions so that a simple sentence, word, or number can answer them. If you send a letter by mail, you must enclose a stamped, self-addressed envelope to receive a reply. We recommend e-mail as the best way to resolve a query. Although we welcome comments and suggestions about the game's interpretation of events, we cannot promise to respond to questions on theory or design intent. Additionally, check out the *Against the Odds* and *Sea Monsters!* discussion folders at www.consimworld.com.

1.0 INTRODUCTION

XXI: The Naval Wonder Weapon 1943-1945 is a solitaire game that places you in charge of building a fleet of war-winning submarines: the Type XXI U-boats. Construction of these large, complex, and resource- and manpower-intensive submarines requires a radical transformation in shipbuilding techniques.

You must figure out how to coordinate the accumulation of hulls, systems, crew, and other resources from factories and training bases spread all over Germany to make the XXI U-boat flotillas. With sufficient numbers, you can launch an all-out submarine offensive to cripple the Western Allies.

But those resources are scarce, Allied bombers devastate transportation lines, and ground forces steadily advance from east and south as the Western Allies prepare for a cross-channel invasion. If you can defy such odds, no doubt the Western Allies will be most generous to obtain such technology when the Reich finally crumbles into oblivion.

2.0 GAME COMPONENTS AND TERMS

A complete game of *XXI: The Naval Wonder Weapon 1943-1945* consists of:
- This rules booklet
- One 17″ x 22″ game map
- 88 counters

Players will also need at least one six-sided die to play the game, although multiple six-sided dice are preferable.

Game scale is one month per turn. U-boat counters represent flotillas. Allied convoy counters represent the resources needed to mount the D-Day invasion and advance across France. The Allied Army counters are roughly equal to Army Groups. Markers represent various abstractions of resources, bombing efficiency, and more.

2.1 Unit Counters

2.1.1 Type VII U-boat Flotillas The two Type VII counters represent the workhorse of the German submarine fleet. The third counter is optional (Case 16.1.3). By mid-1943, Allied countermeasures rendered them vulnerable. All Type VIIs have a combat value of 2 for Engine, Silence, Attack, and Defense on both their Full-strength and Depleted sides.
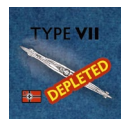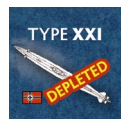
When a full-strength Type VII takes a hit, flip it over to its Depleted side. When a Depleted Type VII takes a hit, the counter is eliminated from play and placed in the Scrap Pile. Eliminated Type VII counters never get placed in the Counter Draw Pile but may be used as a marker on the Gotterdammerung Turn Record Track (GTR).

2.1.2 Type XXI U-boat Flotillas The five Type XXI counters represent an ever-improving, advanced U-boat design. The combat values change from model to model, as noted on the Model Development Track (MDT), but all counters will use the combat values of the most recently constructed model.

When a full-strength Type XXI takes a hit, flip it over to its Depleted side. When a Depleted Type XXI takes a hit, the counter is eliminated from play and placed in the Scrap Pile. Eliminated Type XXI counters never get placed in the Counter Draw Pile but may be used as a marker on the Götterdämmerung Turn Record Track (GTR).

2.1.3 Allied Convoys Seven Allied Convoy counters begin the game in the CDP. The eighth (+6) counter is optional (Case 16.2.3). The number printed on the counter is its defense against submarine attacks; the U-boat needs to roll that number or higher to sink the convoy.

2.1.4 Allied Army All eight Allied Army counters begin the game in the CDP. In the Grinding War Phase (Module 10.0), each army on the map rolls 1d6. If any one of the die rolls is a 6 or higher, advance all Army counters one space up the Grinding War Track.

2.2 Resource Counters

These counters represent various on-going aspects of the production effort.

2.2.1 Hull Sections Printed with Hull [square] icons, these 16 counters represent the mass-produced, pre-fabricated hull sections produced far inland that needed to be transported and welded together in the shipyards to make the submarines. Hull Section counters are color- and letter-coded to help you determine starting hubs and how many you need to build a specific Type XXI. Three Hull counters start the game on the Reich Transport Map and the rest start in the Counter Draw Pile (CDP).

2.2.2 Internal Systems Printed with Systems [diamond] icons, these eight counters represent the engines, hydraulics, batteries, weapons, and advanced electronics necessary to enable the world's most advanced U-boats to operate. Internal Systems counters are color- and letter-coded to help you determine starting hubs and how many you need to build a specific Type XXI. Two System counters start the game on the Reich Transport Map and the rest start in the CDP.
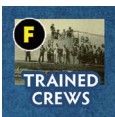
2.2.3 Trained Crew Printed with Crew [circle] icons, these eight counters represent the trained seaman and naval base technical staff. Trained Crew counters are color- and letter-coded to help you determine starting hubs and how many you need to build a specific Type XXI. Two Crew counters start the game on the Reich Transport Map and the rest start in the CDP.

2.2.4 IBG Commands Printed with Command icons, these counters represent the focused attention of the German Ministry of Armaments and Naval High Command (and their political connections) working through the Ingenieurbüro Glückauf, which roughly translates as the Engineering Bureau named Glückauf, to overcome problems and enable production. Required for submarine completion, they may also be used as a "wild card" resource. All 10 IBG Commands start the game in the CDP.

2.2.5 Heavy Anti-Aircraft Defenses Printed with AA gun icons, these two optional counters enable the player to defend against Allied air bombardments (Case 16.1.6).
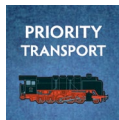
2.2.6 Priority Transport Printed with Train icons, these three optional counters enable the player to cut through red-tape and get his other resources moved as a priority on the overloaded German river and rail networks (Case 16.1.8).

2.3 Markers

2.3.1 Available Transport Points This marker for the Ingenieurbüro Glückauf Display (IGD) tracks how many Transportation Points the player received for the turn and how many remain as the player spends them.

2.3.2 Bomber Devastation The eight Bomber Devastation markers represent the destruction of the German transportation infrastructure inflicted by Allied bombing. A Devastation marker placed on a hub city may be removed if the player spends resources to fix the damage. Of course, that means fewer resources available to build Type XXIs. All Bomber Devastation markers start the game in the CDP.

2.4 Game Map Areas

The overall game map divides into a variety of areas (called tracks, piles, boxes, etc.) for the use of production counters and markers as well as a transportation map used to shuttle resources to shipyards.

2.4.1 Reich Transportation Map This stylized point-to-point map depicts the seven Production City spaces (labeled A-G) that generate the various resources (hull, crew, and systems) needed to build Type XXI submarines and the 16 hub cities (labeled 3-18). Three of these cities are Shipyard City spaces: Bremen (hub city space number 8), Hamburg (hub city space number 12), and Danzig (hub city space number 18) for U-boat construction, each with an attached Shipyard Display of squares to stockpile the resource counters necessary to build the U-boats.

All 23 spaces are interconnected with transportation lines. The numbered hub city spaces are susceptible to Allied bombing and Devastation. The lettered spaces are immune from Allied bombing.

2.4.2 Ingenieurbüro Glückauf Display (IGD) The Ingenieurbüro Glückauf Display represents the elaborate bureaucratic apparatus set up by Reich Minister Speer and Grand Admiral Dönitz to manage construction of the new submarine fleet. Its 12 numbered boxes hold Transport Points available during for the turn.

2.4.3 Prototype U-boat Pen The Prototype U-boat Pen box holds the Type XXI flotilla counters until a U-boat flotilla is constructed and placed in the Valentin U-boat Shelter. Type XXI flotilla counters eliminated during combat are permanently removed from the game.

2.4.4 Götterdämmerung Turn Record Track (GTR) Each box represents one month. Unlike most wargames, XXI does not contain a turn record counter. Instead, counters from the Scrap Pile are used to mark the game turns used. If the Scrap Pile is empty, the player removes one counter of choice from either the Reich Transportation Map or the Counter Allocation Box.

2.4.5 Scrap Pile Counters of all types are placed here once spent or eliminated. If all counters have been drawn from the Counter Draw Pile (CDP), then place all counters in the Scrap Pile back in the CDP except one resource counter that stays to mark the turn.

2.4.6 Counter Draw Pile (CDP) Most counters start in the CDP, either upside down on the table or preferably in an opaque container, for blind draws. The number of counters to be drawn depends on the Grinding War Track (GWT). In general, the longer the war lasts, the fewer resources you get to build XXI flotillas.

2.4.7 Counter Allocation Box Place all drawn counters face up in the Counter Allocation Box. You will deploy them as appropriate.

IBG Command counters and Priority Transport counters remain in the Counter Allocation Box until deployed and used.

2.4.8 Grinding War Track (GWT) Tracks the advance of Allied armies from bottom (At Start) to top (Constant Retreat). Depending on the die rolls, Army counters on the GWT may advance from bottom to top. Army counters on the GWT never move downward, only upward. Boxes explain how many Transport Points and counters drawn from the Counter Draw Pile you receive each turn.

2.4.9 Model Development Track (MDT) At start, you field Type VII U-boat flotillas. As you move resources to shipyards, you can build Type XXI U-boat flotillas, starting with the relatively weak model A. With good resource

management and a bit of luck, you develop better and better models (B, C, and D) to go out and sink Allied convoys. Better yet, earlier existing models receive free upgrades to the better models.

Note that you need fewer and fewer resources in order to build the better models, symbolizing the sorting out of production problems.

The numbers next to Engine, Silence, and Attack are the number of d6s rolled per icon. The large number is the defense rating of the U-boat flotilla that you roll against when suffering depth charge attacks. The squares, diamonds, and circles represent the resources needed to build that type. The command square is where you place an IGB marker to indicate that you built that type.
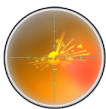
2.4.10 U-boat Mission Track (UMT) The U-boat Mission Track (UMT) consists of the Valentin U-boat Shelter, four intermediate combat mission boxes, two Dangerous Trip Home boxes, and the Atlantic Ocean and Western Approaches convoy deployment areas, which double as combat areas should the U-boat flotillas succeed in fighting their way through the combat mission boxes.

2.5 Other Terms
1d6: 1 six-sided die; **2d6:** 2 six-sided dice; **3d6:** 3 six-sided dice.

Encounter Spaces: Where U-boat flotillas combat Allied countermeasures.

Hub City spaces: All the spaces connected by lines on the Reich Transportation Map, although some are also Production Hub City spaces and Shipyard Hub City spaces.

Production Hub City spaces: Lettered spaces, seven in total, where resource counters appear.

Shipyard Hub City spaces: Three in total: Bremen (space number 8), Hamburg (space number 12), and Danzig (space number 18), where resources must be sent in order to build Type XXI submarine flotillas.

Shipyard Display: Squares to hold resources until enough have been accumulated to build a Type XXI submarine flotilla. Note that Danzig has four squares, Bremen has six squares, and Hamburg has eight squares indicating resource holding capacity. Excess resources counters remain on the Shipyard Hub City space. Bombing Devastation that

destroys a Shipyard Hub City also destroys any resources in the city and in the Shipyard spaces.

3.0 SEQUENCE OF PLAY
Each turn consists of the following nine phases. Complete each phase before starting the next phase. At the end of the ninth phase, start a new turn.

1. Draw Phase
2. Allocation Phase
3. Bombing Devastation Phase
4. Movement Phase
5. Construction Phase
6. Battle Phase
7. Grinding War Phase
8. Repair Phase
9. End Phase

4.0 DRAW PHASE
Check the Grinding War Track (GWT) for the number of counters you draw from the Counter Draw Pile (CDP). On the first turn of the game, you draw six counters. As the war grinds on, you will likely draw fewer counters per turn.

Place all drawn counters in the Counter Allocation Box.

If the CDP is empty during the draw phase, place all counters in the Scrap Pile and all the counters marking the turns on the Götterdämmerung Turn Record Track (except one counter marking the current turn) back into the CDP. Continue to draw until you draw the full amount noted on the GWT.

5.0 ALLOCATION PHASE
One by one, deploy the counters in the Counter Allocation Box to the appropriate map areas.

5.1 Allocation Locations
• Hull, System, and Crew: Place on the Reich Transportation Map, matching the resource to a lettered space with the same letter and icon as that on the counter.
• Allied Convoys: Place in Atlantic Ocean encounter space on U-boat Mission Track (UMT).
• Allied Army counters: First counter is placed in the Enemy Start Box on the Grinding War Track. Subsequent counters are placed in the box containing the first counter.
• Priority Transport and IBG Commands: Remain in the Counter Allocation Box until deployed.
• Bombing Devastation markers remain in the Counter Allocation Box until the Bombing Devastation Phase (Module 6.0).

5.2 Duplicate Counters
If you draw two or more of the same counter, place all on the appropriate space. For example, if you draw two Hull (A) system counters, place both on the "A" Hub City. If you draw three Allied Army counters, place all three on the Grinding War Track.

6.0 BOMBING DEVASTATION PHASE
Ignore this phase if no Bombing Devastation markers are in the Counter Allocation Box.

Otherwise, roll 3d6 and place one Bombing Devastation marker on that hub city space. All resource counters currently occupying that space are destroyed and placed in the Scrap Pile.

If a Shipyard City—spaces 8 (Bremen), 12 (Hamburg), or 18 (Danzig)—suffers Devastation and the hub city and associated shipyard squares contain resource counters, all those resource counters are destroyed and placed in the Scrap Pile.

Only one Bombing Devastation marker is placed per hub city. If the 3d6 roll places a second Devastation marker on a hub city, reroll that second Devastation until it can be placed on a hub city.

Lettered cities **never** suffer Bombing Devastation.

Devastation markers can be removed and the transportation infrastructure repaired by spending a resource during the Repair Phase (Module 11.0).

7.0 MOVEMENT PHASE
You move resources around the Reich Transportation Map in this phase using Transportation Points and possibly optional Priority Transport Trains (Case 16.1.8).

7.1 Transportation Points
Check the Grinding War Track for the number of Transportation Points you receive for the turn: a 1d6 die roll plus a fixed number of Transportation Points depending how far along the track the armies have advanced.

On the first turn of the game, with "Stable Fronts," you receive 1d6 + 6 points (a total from 7 to 12) Transportation Points. As the armies advance up the Track, you receive fewer and fewer fixed Transportation Points.

Transportation Points are never saved from turn to turn – use 'em or lose 'em.

7.2 Moving Resources

Each resource counter requires 1 Transportation Point to move from one hub city space to a hub city space connected by a line. Movement is voluntary.

Each Resource counter moves a maximum of **one space per turn**.

Movement must be along lines connecting the hub cities and cannot skip hub city spaces.

For example: A resource counter in hub city space A can be moved, at a cost of 1 Transportation Point, to either space G, 13, 14, or D.

Movement into spaces with Bombing Devastation markers is prohibited.

An unlimited number of resource counters may be stacked in any hub city space.

Resources may be transferred at no Transportation Point cost from a Shipyard Hub City to a Shipyard square.

8.0 XXI CONSTRUCTION PHASE

Build Type XXI U-boat flotillas in this phase. You must build the models in order: first the Type XXI A, then B, then C, and then D, each with its own unique resource requirement. See the Model Development Track for specifics.

8.1 Resource Availability

You must have the required resources (Hull, System, and Crew) located in Shipyard squares **at the same shipyard** in order to build a Type XXI flotilla.

In addition, you need one IBG Command counter to complete the build.

For example, to build a Type XXI A flotilla, you need two Hull, two System, and two Crew counters at the same Shipyard plus one IBG Command counter from the Counter Allocation Box.

For example, to build a Type XXI C flotilla, you first needed to build a Type XXI A and B. Then you need two Hull, one System, and one Crew counters at the same Shipyard plus one IBG Command counter from the Counter Allocation Box.

If you do not meet these requirements, you cannot build a Type XXI this turn.

The game contains five Type XXI flotilla counters. You never build more than five in a game (unless using Case 16.1.5 optional rule).

You never build more than one Type XXI flotilla per turn.

Note: Resources remain in Shipyard boxes until used to build a submarine or destroyed by air raid Devastation. Otherwise, never move the resources (Hull, System, and Crew) to the Model Development Track.

8.2 No Resource Substitution

You must use the exact resources stipulated for the construction of a specific Type XXI U-boat flotilla; no substitutions unless you are using the optional Resource Substitution rule (Case 16.1.9)

8.3 Shipyard Capacity

Of the three Shipyards (Bremen, Hamburg, and Danzig), Danzig has only four Shipyard squares. Note that the Type XXI model A and B flotillas need six and five resources respectively, more than the four squares available in Danzig to hold resource counters.

Thus, Type XXI model A and B flotillas can only be built in Bremen or Hamburg, while Danzig is restricted to building the Model C and D flotillas only.

8.4 Construction

Remove the resource counters used to build the flotilla and place them in the Scrap Pile. Place the IBG Command counter on the Model Development Track as a reminder of what you have already built (and the stats to use). Transfer one Type XXI counter from the Prototype U-boat Pen to the Valentin U-boat Shelter space on the U-boat Mission Track.

NOTE: You build a maximum of **one** Type XXI flotilla per turn. Even if you managed to accumulate enough resources at the same or different shipyards for two XXI flotillas, you can only build one per turn, never two or more per turn.

8.5 XXI Automatic Upgrades

All existing Type XXI flotillas (not VII flotillas) immediately upgrade to the stats of the newly built XXI model. Type VII flotillas never upgrade; they retain their original stats throughout the game.

For example, upon building a Type XXI version B flotilla, existing A versions now use B version statistics.

9.0 BATTLE PHASE

To win, you must commit your U-boat flotillas to battle through Allied countermeasures to reach the convoys in the Atlantic Ocean or Western Approaches.

9.1 U-boat Mission Selection

You must have at least one full-strength U-boat flotilla in the Valentin U-boat Shelter to send on a mission against Allied convoys.

Only full-strength flotillas may embark on a mission to the Atlantic Ocean or Western Approaches to sink Allied convoys. Depleted flotillas never leave the Valentin U-boat Shelter.

A U-boat flotilla advances along one mission path: either to the Atlantic Ocean or to the Western Approaches. Each path has four encounter spaces and U-boats must successfully transit all four to enter the appropriate Atlantic Ocean or Western Approaches spaces.

For example, if you send a U-boat flotilla on a mission to the Atlantic Ocean, the first encounter space is Open Ocean.

U-boat flotillas never skip encounter spaces on the way to the Atlantic Ocean or the Western Approaches.

U-boat flotillas never change paths mid-mission, although they may abort the mission and enter the Dangerous Trip Home box.

9.2 U-boat Flotilla Encounter Combat

In each encounter space, the U-boat flotilla must pass a test against Engine or Silence. The icon in the space determines the test type.

Roll a number of six-sided dice equal to the Engine or Silence rating of the U-boat flotilla as listed in the Model Development Track.

Full-Strength and Depleted U-boats roll the same number of dice for a test.

If any **one** die equals or exceeds the number in the encounter space, the U-boat flotilla successfully passes the test and advances to the next space.

If all dice are less than the number in the encounter space, the U-boat flotilla fails the test, is detected, and is then subjected to a number of depth charge attacks equal to the number of depth charge icons in that space.

Depending on the path chosen, success at the fourth encounter space allows the U-boat flotilla to automatically enter the Atlantic Ocean or Western Approaches space.

9.3 Open Ocean Depth Charge Attack

If a U-boat flotilla fails the engine test in the Open Ocean, it is subject to one depth charge attack (Section 9.4). If hit, it is immediately flipped to its Depleted side and faces a choice: either return directly to the Valentin U-boat Shelter (do not place the Depleted U-boat flotilla in the Dangerous Trip Home Encounter Box), or, continue Depleted to the next box, the PBY Searchers Encounter Box.

9.4 Depth Charge Attacks

Roll a number of six-sided dice equal to the number of depth charge icons in the space the U-boat sought to enter. If any **one** of the dice equals or exceeds the U-boat flotilla's defense rating (as noted on the Model Development Track), the U-boat is hit.

A hit on a full-strength U-boat flotilla flips it to its Depleted side, and if already Depleted, the U-boat is destroyed and placed in the Scrap Pile.

Note: U-boats take a maximum of one hit from a multi-dice depth charge attack, no matter how many dice equaled or exceeded the U-boat flotilla's defense rating.

9.5 Continue the Mission?

If a U-boat flotilla survives a depth charge attack, it may enter that encounter space and continue the mission, even if the U-boat flotilla was hit and was flipped to its Depleted side.

Or it may abort the mission and enter the Dangerous Trip Home space.

9.6 Dangerous Trip Home

The U-boat must successfully pass an Engine test to make it back to the Valentin U-boat Shelter.

Failure means the U-boat flotilla takes a hit. Full-strength U-boats become Depleted and Depleted U-boats are sunk and removed from play.

9.7 Convoy Attacks

If a U-boat flotilla made it to the Atlantic Ocean or Western Approaches spaces, it attacks the convoy of its choice. One U-boat flotilla counter attacks one convoy counter.
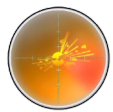
The U-boat flotilla rolls a number of d6s equal to the Attack rating (see the Model Development Track).

If any **one** die equals or exceeds the number listed on the Convoy counter, the U-boat flotilla successfully sinks the convoy. Remove the convoy from the space and place it in the Scrap Pile.

If **all** dice are under the number listed on the Convoy counter, the U-boat flotilla attack failed and the convoy remains in the space.

9.8 Convoy Depth Charge Attack

After a Convoy attack (**successful or not**), the U-boat flotilla is detected and subject to a depth charge attack. Roll 2d6 (Atlantic Ocean) or 3d6 (Western Approaches). If any **one** die equals or exceeds the U-boat flotilla's defense rating, the U-boat flotilla is hit. Full-strength flotillas become Depleted and Depleted flotillas are sunk and sent to the Scrap Pile.

9.9 Continue Convoy Attacks

A U-boat flotilla in Atlantic Ocean or Western Approaches may continue attacking convoys until it is sunk or heads back to Valentin. Remember that U-boat flotillas that survive Convoy depth charge attacks and head back to the Valentin U-boat Shelter must first move into the Dangerous Trip Home space (Section 9.6) in order to reach the Valentin U-boat Shelter.

U-boat flotillas never move from the Atlantic Ocean space to the Western Approaches space. Likewise, U-boats never move from the Western Approaches space to the Atlantic Ocean space.

Surviving U-boat flotillas with no more convoys to attack move to the Dangerous Trip Home space (Section 9.6).

Surviving U-boat flotillas that reach the Valentin U-boat Shelter always remain in that space until the next turn. For example, a U-boat flotilla counter that reaches the Atlantic Ocean, sinks convoys, and makes it back to Valentin never goes on a mission to the Western Approaches during the same turn, even if it returned to Valentin in full-strength condition. It must wait until the next turn to go out on another mission.

9.10 U-boat Mission Example

Assuming a convoy is in the Atlantic Ocean space, two Type VII U-boat flotillas are sent on a mission using the bottom path of the U-boat Mission Track. Type VIIs possess Engine, Silence, Attack, and Defense ratings of 2.

The first encounter space they want to enter is Open Ocean. In the encounter space, they need an Engine test, with a 4+ to pass. The first Type VII rolls 2d6 (Engine rating of 2 means roll 2d6) and rolls a 3 and a 4. The roll of 4 passes the test and the U-boat may advance into the Open Ocean encounter space.

The next encounter space is PBY Searchers, also an Engine test, but needing a 5+ to pass.

The first Type VII flotilla rolls 2d6 and rolls a 2 and 4. Both fail to pass, so the U-boat flotilla is subjected to a depth charge attack. As the space has one depth charge icon, the Allies roll 1d6, looking for a 2+. The roll is a 5 for a hit. The U-boat flotilla is flipped to its Depleted side.

The player decides to send the depleted U-boat home and places it in the Dangerous Trip Home space. It rolls 2d6, looking for a 4+ on the Engine test. It rolls a 4 and 5, thus passing the test and allowing it to move into the Valentin U-boat Shelter space. The turn ends for that first U-boat flotilla.

The second Type VII flotilla rolls a 1 and 6 to advance into the Open Ocean space. Next up is the PBY Searchers. The rolls were 3 and 5, thus passing the test and advancing into the PBY Searchers space. The next space is the Scout Bomber space. This time, the U-boat tests against Silence, needing a 4+ to pass.

The U-boat rolls 2d6 with results of 5 and 6, and so passes and advances into the Scout Bomber space.

That leaves the Destroyer Screen test against Silence, needing 5+ to pass. Alas, the rolls are 4 and 4 and so the second U-boat failed. As two depth charge icons are in the space, the Allies roll 2d6, looking for 2+. The die rolls are 3 and 6, so both hit, but only one hit applies. The second Type VII flotilla flips to its Depleted side.

Now comes a choice: Advance Depleted into the Atlantic Ocean for an attack against a convoy, or retreat into the Dangerous Trip Home space.

The U-boat advances Depleted into the Atlantic Ocean space and rolls 2d6 (Attack rating) against the Convoy rated a 5. Needing a 5+, the rolls are 4 and 5, so the Convoy is sunk. However, the Allies roll 2d6 (two depth charge icons in the Atlantic Ocean space) looking for 2+. The rolls are 1 and 4, generating one hit. The already depleted U-boat is eliminated and removed from the game.

10.0 GRINDING WAR PHASE

Ignore this phase if no Allied Army counters are on the Grinding War Track (GWT). Otherwise, check the progress of the war.

10.1 Allied Assaults

Each Allied Army counter on the map rolls 1d6. If any one of the die rolls is a 6 or higher, advance all Army counters one space up the Grinding War Track.

10.2 Allied Army Effects

As the Armies advance up the GWT, you receive fewer and fewer counters drawn from the Counter Draw Pile and likely fewer and fewer Transportation Points.

10.3 Constant Retreat

If Allied Armies in the Stubborn Defense space of the GWT roll a 6 or higher, they advance into the Constant Retreat space. Allied Armies in the Constant Retreat space that roll at least one 6 or higher do not advance but do remove one Crew counter (of your choice) from the Reich Transportation Map (including from lettered hub cities). If no Crew counters are on the RTM, remove one counter of your choice from the Counter Allocation Box.

If no counters are on the RTM or in the Counter Allocation Box, ignore.

11.0 REPAIR PHASE

11.1 Restore Depleted U-boat Flotillas

Flip all Depleted U-boat flotilla counters in the Valentin U-boat Shelter from the Depleted side to the full-strength side.

11.2 Repair Bombing Devastation

You have the option to remove **one** Bombing Devastation marker per turn by removing one resource with the same icon as the Bombing Devastation marker, or, removing one IGB marker. Place used markers in the Scrap Pile.

12.0 END PHASE

12.1 Convoys Move

Move all Convoys from the Atlantic Ocean space to the Western Approaches space. They will remain in the Western Approaches space until the end of the game or until they're sunk.

12.2 Mark the Turn

Take one counter of your choice from the Scrap Pile and place it on the Götterdämmerung Turn Record Track to mark the passing of the turn.

If no counters are in the Scrap Pile, remove one counter of your choice from the map (including from lettered hub cities) to use as a turn marker.

Check Victory Conditions (Module 14.0).

13.0 GAME SET UP

- Place one Hull Counter A on Hub City A space (Gustavburg).
- Place one Hull Counter B on Hub City B space (Wittenberg).
- Place one Hull Counter C on Hub City C space (Grünberg).
- Place one Systems Counter D on Hub City D space (Erfurt).
- Place one Systems Counter E on Hub City E space (Dresden).
- Place one Crew Counter F on Hub City F space (Stettin).
- Place one Crew Counter G on Hub City G space (Dortmund).
- Place two Type VII U-boat flotilla counters in the Valentin Submarine Pen.
- Place five Type XXI U-boat flotilla counters in the Prototype U-boat Pen.
- Place the Available Transport Points counter on the "0" box in the IGD.
- Remove one Type VII U-boat flotilla, one Convoy (6), three Priority Transports, and two AA counters from the mix and set them aside. These may be used with optional rules (Module 16.0).
- All other counters are placed in the Counter Draw Pile, preferably in an opaque container, for the random drawing of counters.