

Naval Interception Table - 22.21	
Dice	Relevant Factors
2	Activities carrying cargo (sea supply, sea transports, seaborne invasions, sea escort), shore bombardment and fast carrier missions.
2	Patrols which attempt to remain in their patrol hex for the remainder of their player turn.
2	Counter-interception in an interception hex.
1	Each TF in the intercepted force.
1	Each ground factor defending against a seaborne invasion in the interception hex. Maximum +3.
1	Each air squadron which spots the naval activity. Maximum +3.
1	Each submarine that is on patrol or uninverted in a base within three hexes of the interception hex; surface forces only. Maximum +3.
1	Codebreaking. Maximum +1.
-1	The intercepting force contains slow ships or is a submarine.
Explanation: The number of dice rolled for naval interception is determined by the total for the applicable relevant factors. If none of the factors apply, no interception may take place. In the Pacific theater, the interception result is halved (round up).	
Patrols: Naval units on offensive patrol, including patrolling submarines, do not roll dice to counter-intercept. Instead they immediately support a friendly naval force within three hexes of their patrol hex; their support is deferred by one combat round for every additional four (European) or two (Pacific) hexes to the interception hex (22.163).	
Counter-interceptions: Counter-interceptions and counter-counter-interceptions are resolved in the same manner as interceptions.	
Maximum range: The maximum range for naval interception is 40 (European) or 20 (Pacific) hexes.	

Naval Repair and Construction Costs - 27.721				
Status:	Damaged		New Construction	
Unit	Turns	SB	Turns	SB
Transports	immediate	no cost	immediate	1
Subs, ASW	not applicable		immediate	1
DDs, CVEs	not applicable		1	1
CAs	1	no cost	2	2
2-factor ships	2	1	4	2
3-factor ships	2	1	8	3
4-factor ships	2	1	12	4
5-factor ships	2	1	16	5
<p>Named ships which are sunk in port may be repaired by first expending one shipbuilding point and three BRPs to raise them to damaged status, after which they may be transferred to a shipyard for repairs in the normal manner. Cruisers, destroyers and CVEs which are sunk in port are permanently eliminated.</p> <p>With the exception of transports, which are repaired at no cost, one-factor naval units are never damaged.</p> <p>The construction of three-factor and larger ships may be accelerated (27.7272B); the construction and repair of naval units may be deferred (27.7272C).</p> <p>Only the U.S. may build CVEs.</p>				

Search Table - 22.45	
Number of search die rolls	
+1	Each land-based air squadron assigned to search (22.451A). (Maximum: +3).
+/-1	Codebreaking advantage (48.51A, 48.62).
+1	Each previous round of naval combat. (No maximum).
+1	Each friendly active combat group consisting of at least ten undamaged naval factors (22.451D). (Maximum: +6).
+1	Each friendly distant combat group containing at least one fully operational fast carrier (22.451D). (Maximum: +5).
Search results	
No search result	The enemy combat group remains hidden and may not be attacked.
One or more search results	The enemy combat group is found and is eligible to be attacked. The owning player must reveal whether the combat group consists of less than ten naval factors, how many fast carriers it contains, its speed and whether it is carrying cargo.

Surprise Table - 23.7413	
Surprise Level	Result
1	Surprise achieved. The defender does not receive a +1 DRM in air combat between attacking air units and air units flying combat air patrol.
2	Anti-aircraft defenses less effective. The defender's air defense level is reduced by one.
3	Damage control problems. The attacker receives a +1 DRM on its air attack dice rolls against enemy naval units.
4	One fewer defending air squadron engages the attacking naval air.
5	Two fewer defending air squadrons engage the attacking naval air.
6	Three fewer defending air squadrons engage the attacking naval air.
7+	Four fewer defending air squadrons engage the attacking naval air. Air attacks which damage a named ship trigger a critical hit die roll against the target (20.524).
Determining surprise: Roll one die and modify as follows:	
+1	Two search results against the defending combat group.
+2	Three search results against the defending combat group.
-1	Each defender radar result.
Naval combat: Surprise effects are cumulative - each result includes all lesser effects.	

Raider Table - 21.5342	
<i>One die is rolled for each raider group to determine how many defending naval units are able to engage that raider group. The die roll is modified as follows:</i>	
General modifiers:	
-3	Automatic
+1	for each additional raider group operating in the SW box (+1 for the second group, +2 for the third group, etc.)
+1	if the raider group contains three ships
+1	for each defender air range research result
Additional Atlantic modifiers:	
+1	the U.S. is at war with Germany
+1	for every 6 CVEs in the Atlantic SW box (round down): 0-5: 0; 6-11: +1; 12-17: +2; 18-23: +3; 24+: +4
Additional Indian Ocean modifier:	
+1	Japanese raiders based in Singapore.
+1	for every 3 CVEs in the Indian Ocean SW box (round down): 0-2: 0; 3-5: +1; 6-8: +2; 9-11: +3; 12+: +4. Each operational search AAS and land-based NAS in the India box is equivalent to one CVE.
Additional Pacific modifier:	
+1	for every 3 CVEs in the Pacific SW box (round down): 0-2: 0; 3-5: +1; 6-8: +2; 9-11: +3; 12+: +4. Each operational search AAS and land-based NAS in the Australia box is equivalent to one CVE with respect to Japanese raiders entering the Pacific SW box off the southern edge of the Pacific mapboard (only).
Additional modifier for German and Italian raiders:	
+/-1	Ultra codebreaking advantage
Additional modifier for Japanese raiders:	
+/-1	Magic codebreaking advantage
Modified results of "1" or greater permit defending ships to engage the raider group in question.	
<i>The types of defending ships which engage each raiding group is determined by rolling one die. The defender must choose a lesser die roll result if no eligible ship of the required type is available.</i>	
<i>Only fast ships may engage raiders during the first engagement; slow ships may engage a returning raiding group containing damaged ships.</i>	
1	One destroyer factor
2	2-factor cruiser or 2-factor battlecruiser
3	3-factor battleship or battlecruiser
4	4-factor battleship
5	5-factor battleship
6	One fast carrier of any size and an equivalent number of light ship factors

Air Range Effects Table				
Air range results	Europe		Pacific	
	Bombers	Inter.	Bombers	Inter.
0	4	4	3	3
1	8	4	6	3
2	16	8	12	6
3	24	12	18	9
<p>"Air range results" refer to the number of "10+" air range research results achieved. Each major power coalition may increase its air range no more than three times per game.</p> <p>The maximum ranges in hexes for strategic bombers and escorting interceptors for each theater are given for each level of air range achieved. Strategic bombers and escorting interceptors begin the game with a range of four hexes in Europe and three hexes in the Pacific.</p>				

Submarine Attack Table - 22.94									
DR	2	3	4	5	6	7	8	9	10+
Sub	*	0	0	1	1	2	2	3	3
Modifiers									
+/-# Naval Nationality DRM (22.552A, 22.9411)									
+/-# Relative torpedo and ASW research levels (22.9412)									
+/-# Every three land-based air squadrons used for search in the submarine attack hex, fully operational fast carriers and CVEs in the attacked naval force (round down) (22.9413)									
-# Every three destroyer factors in the attacked naval force, including destroyers which are carrying units (round down) (22.9414)									
-# Every three ASW factors in the relevant SW box in excess of the corresponding number of enemy submarines (round down) (22.9415)									
-1 For each previous submarine attack made against the defending naval force in that naval combat round (22.9416)									
+1 If the attacked naval unit is damaged or involved in carrying out a naval activity which reduces its effectiveness (22.9417)									
+/-1 Submarine or ASW codebreaking advantage (22.9418)									
One dice roll is made for each attack. On a "*" result, the attacking submarine factor is eliminated.									
Determine the net modifier for each category, then determine the overall net modifier. <i>The maximum effect from each modifier in italics is +/-2.</i>									
The maximum overall modifier for a submarine attack cannot exceed +/-4.									
Advanced submarines always attack at net +1.									
One die is rolled to determine the target of each submarine attack (22.93E).									

E. SELECTING TARGETS: Each attacking submarine targets a category of defending naval units: fast carriers; capital ships (non-carrier named ships); or light ships.

- If there is a single category of defending ships, that category is attacked.
- If there are two categories of defending ships, the target category is determined by rolling one die: 1-3: the higher category (fast carriers or capital ships); 4-6: the lower category (capital ships or light ships).
- If there are three categories of defending ships, the target category is determined by rolling one die: 1-2: fast carriers; 3-4: capital ships; 5-6: light ships.
- Within each category, the attacker chooses his specific target; light ships are attacked as a group.

Carrier Effects Table				
Number of CVEs	Atlantic		Indian Ocean and Pacific	
	Submarine warfare	Raiders	Submarine warfare	Raiders
0-2	0	0	0	0
3-5	0	0	-1	+1
6-8	-1	+1	-2	+2
9-11	-1	+1	-3	+3
12-14	-2	+2	-4	+4
15-17	-2	+2	-4	+4
18-20	-3	+3	-4	+4
21-23	-3	+3	-4	+4
24+	-4	+4	-4	+4
Negative submarine warfare modifiers favor the defender; positive raider modifiers favor the defender.				