

Strategic Warfare Combat Table - 24.62											
SW Fac	Dice Roll										
	2	3	4	5	6	7	8	9	10	11	12+
1	0	0	0	0	0	0	0	0/1	0/1	0/2	1/1
2	0	0	0	0	0/1	0/1	0/1	0/2	0/2	1/1	1/2
3	0	0	0/1	0/1	0/2	0/2	0/2	1/1	1/1	1/2	1/3
4	0	0/1	0/2	0/2	1/1	1/1	1/1	1/2	1/2	1/3	1/4
5	0/1	0/2	1/1	1/1	1/2	1/2	1/2	1/3	1/3	1/4	1/5
6	0/2	1/1	1/2	1/2	1/3	1/3	1/3	1/4	1/4	1/5	1/6
7	1/1	1/2	1/3	1/3	1/4	1/4	1/4	1/5	1/5	1/6	2/5
8	1/2	1/3	1/4	1/4	1/5	1/5	1/5	1/6	1/6	2/5	2/6
9	1/3	1/4	1/5	1/5	1/6	1/6	1/6	2/5	2/5	2/6	2/7
10	1/4	1/5	1/6	1/6	2/5	2/5	2/5	2/6	2/6	2/7	2/8
DR	2	3	4	5	6	7	8	9	10	11	12+
11	1/5	1/6	2/5	2/5	2/6	2/6	2/6	2/7	2/7	2/8	3/7
12	1/6	2/5	2/6	2/6	2/7	2/7	2/7	2/8	2/8	3/7	3/8
13	2/5	2/6	2/7	2/7	2/8	2/8	2/8	3/7	3/7	3/8	3/9
14	2/6	2/7	2/8	2/8	3/7	3/7	3/7	3/8	3/8	3/9	4/8
15	2/7	2/8	3/7	3/7	3/8	3/8	3/8	3/9	3/9	4/8	4/9
16	2/8	3/7	3/8	3/8	3/9	3/9	3/9	4/8	4/8	4/9	4/10
17	3/7	3/8	3/9	3/9	4/8	4/8	4/8	4/9	4/9	4/10	5/9
18	3/8	3/9	4/8	4/8	4/9	4/9	4/9	4/10	4/10	5/9	5/10
19	3/9	4/8	4/9	4/9	4/10	4/10	4/10	5/9	5/9	5/10	5/11
20	4/8	4/9	4/10	4/10	5/9	5/9	5/9	5/10	5/10	5/11	6/10
DR	2	3	4	5	6	7	8	9	10	11	12+
21	4/9	4/10	5/9	5/9	5/10	5/10	5/10	5/11	5/11	6/10	6/11
22	4/10	5/9	5/10	5/10	5/11	5/11	5/11	6/10	6/10	6/11	6/12
23	5/9	5/10	5/11	5/11	6/10	6/10	6/10	6/11	6/11	6/12	7/11
24	5/10	5/11	6/10	6/10	6/11	6/11	6/11	6/12	6/12	7/11	7/12
25	5/11	6/10	6/11	6/11	6/12	6/12	6/12	7/11	7/11	7/12	7/13
26	6/10	6/11	6/12	6/12	7/11	7/11	7/11	7/12	7/12	7/13	8/12
27	6/11	6/12	7/11	7/11	7/12	7/12	7/12	7/13	7/13	8/12	8/13
28	6/12	7/11	7/12	7/12	7/13	7/13	7/13	8/12	8/12	8/13	8/14
29	7/11	7/12	7/13	7/13	8/12	8/12	8/12	8/13	8/13	8/14	9/13
30	7/12	7/13	8/12	8/12	8/13	8/13	8/13	8/14	8/14	9/13	9/14

If more than 30 SW factors engage in SW combat, the result is determined by applying the SW combat dice roll to the "30" row and whatever other row is required to equal the total number of SW factors engaged and combining the effects.

SW Combat Modifiers Table	
<i>Submarine warfare</i>	
General:	
+/-#	Naval Nationality DRM (22.552A)
+/-#	air range research levels
+#	attacker torpedo research level
-#	defender ASW research level
Atlantic:	
-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
+2	Axis control Brest, Lorient, St. Nazaire or La Rochelle
+1	Axis control La Coruna, Vigo, Lisbon or Cadiz
+1	Axis control Gibraltar
+1	Germany and the U.S. are at war
+#	Germany and the U.S. are at war: first turn: +2; second turn: +1 (25.66)
+1	a diplomatic result for Ireland of "7" or more
+/-1	Ultra codebreaking advantage
Indian Ocean:	
-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
+1	Japan controls Colombo (Japanese submarines only)
+/-1	Ultra codebreaking advantage (German submarines only)
+/-1	Magic codebreaking advantage (Japanese submarines only)
Pacific:	
-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.
+1	Japans controls Townsville, Noumea, Suva or any port in the Hawaiian Islands (Japanese submarines only)
+2	Allies control Manila (American submarines only)
+/-1	Magic codebreaking advantage
<i>Strategic bombing</i>	
Strategic bomber forces v. defending air units (air combat):	
+/-#	relative Air Nationality DRMs
+/-1	for each jet engaged
-#	defender's radar research level
Strategic bomber v. bombing targets:	
+1	for each attacker strategic bomber research result beyond that needed to construct strategic bombers
+1	for every eight (Europe) or four (Pacific) hexes of excess bombing range (as limited by the number of strategic bomber research results - 26.461B)
-#	defender's air defense research level
Bombing targets use the SW Combat Table row equal to the defensive strength of the target, which is the total of the following:	
1	each flak factor, airbase counter, objective or anchor symbol
2	each city or port
1	each fortification level (+1 for each fortification; +2 for a fortress; beach defenses have no effect on air defense levels)
<i>"+" modifiers favor the attacker and "-" modifiers favor the defender. The net modifier for both SW combat dice rolls is always the same, except one is positive and one is negative.</i>	

Pearl Harbor Surprise Table - 51.31					
	USJT Level + Magic Draw				
DR	0-33	34-35	36-37	38-39	40+
2	Pearl	Pearl	Pearl	Pearl	Pacific
3	Pearl	Pearl	Pearl	Pacific	Pacific
4	Pearl	Pearl	Pacific	Pacific	Pacific
5	Pearl	Pacific	Pacific	Pacific	6
6	Pacific	Pacific	Pacific	6	5
7	Pacific	Pacific	6	5	4
8	Pacific	6	5	4	3
9	6	5	4	3	2
10	5	4	3	2	Auto
11	4	3	2	Auto	Auto
12	3	2	Auto	Auto	Auto
DRM	+6	+6	+5	+4	+3
Pearl:	Carrier TF in Pearl Harbor.				
Pacific:	Carrier TF in the Pacific U.S. box.				
Number:	Distance of carrier TF from Japanese patrol hex.				
Auto:	Interception of Japanese patrol automatic.				
Explanation:	Consult the appropriate column and roll two dice for each American carrier TF. The column used is determined by the USJT level at the moment Japan declares war on the U.S., less all strategic Magic cards played by Japan and plus all strategic Magic cards (secretly) applied by the U.S. in the turn in which Japan attacks (48.71). The result indicates the location of each American carrier TF at the time of the Japanese attack. A numerical result means the American carrier TF is at sea (the larger the number, the farther the distance from the Japanese striking force). If the Japanese striking force launches a second air strike against Pearl Harbor, the U.S. player may try to intercept it. American carrier TFs in Pearl Harbor or a U.S. box may not attempt interceptions; American carrier TFs which achieved an Auto result intercept automatically; otherwise one die is rolled for each American carrier TF. The interception attempt succeeds if the result is equal to or greater than the numerical result for that American carrier TF.				
"DRM"	indicates the modifier applied to the die roll made by the Japanese to determine the level of surprise achieved against Pearl Harbor in the first round of their attack. In all cases, apart from any other modifiers, American air defense dice level is reduced by one and Japanese air attack dice rolls against enemy naval units and surprised air units receive a +1 DRM. American air units which are surprised on the ground are attacked as naval units (One AAF and three NAS are the equivalent to one naval factor). Army and naval air units are attacked separately.				
Surprise Level	Result				
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+	No defending air squadrons engage the attacking naval air. No air defense dice roll is made. All air attacks which damage a named ship trigger a critical hit die roll against the target (20.5241C).				

Harbor Attack Table													
Dice roll	2	3	4	5	6	7	8	9	10	11	12	13	14+
Result	0	0	1	1	2	2	3	3	4	4	4	5	6
Modifiers													
<i>All harbor attacks:</i>													
-1 For each harbor attack previously conducted by any alliance faction in either theater, whether against one, two or three targets.													
-2 Defender applies a counter-intelligence result													
+/-1 Tactical codebreaking advantage (48.51C)													
<i>Submarine attacks:</i>													
+# Attacker's Naval Nationality DRM													
-# Defender's Naval Nationality DRM													
+/-# Net torpedo and ASW modifier													
<i>Carrier attacks:</i>													
+# Attacker's Air Nationality DRM													
-# Defender's Naval Nationality DRM													
+ Air defense level of the target hex (naval units are not counted)													
-1 Each uninverted AAF or naval air equivalent in the target hex													
Explanation													
Harbor attacks are resolved during the movement phase, immediately after patrols are resolved. Each harbor attack result must be used against a single hex – a "7" or "8+" result may not be split between two or more hexes. Harbor attacks may not be made against hexes which have been the target of counterair attacks in the current player turn or against mapboard boxes. The attacking player may conduct the harbor attack by submarine or carrier. Submarine attacks require one uninverted submarine factor to be based on the board in an operational port within 20 (Europe) or 10 (Pacific) hexes of the attacked port. In addition, a German submarine in the Atlantic SW box permits attacks on western front ports; Japanese and American submarines in the Pacific box permit attacks on Pacific front ports. This submarine factor is not actually used in the attack and may be used for other purposes. Once the attacking player has announced the target port he wishes to attack by submarine, the defender deploys into combat groups (22.93A). The attacker must select one combat group in that port as a target. The contents of that combat group are revealed. Targets are then selected from the naval units in the targeted combat group by following the targeting procedure set out in 22.93E. Submarine attacks are resolved by rolling two dice for each attack and applying the modifiers set out in the Harbor Attack Table (EXCEPTION: Advanced submarines always attack at a +1 modifier). Carrier attacks require one uninverted operational fast carrier to be based on the board in an operational port within 20 (Europe) or 10 (Pacific) hexes of a hex within air range of the attacked port. This fast carrier may not be intercepted, but is inverted when the attack is made. Once the attacking player has announced the target port he wishes to attack by carrier, all the defending ships in that hex are revealed. The attacker then selects one or more defending named ships or light ships as targets. One target may be selected for each level of Harbor Attack research result achieved, up to a maximum of three targets per harbor attack (after an "8+" result). The same named ship may not be targeted more than once in the same harbor attack. Carrier attacks are resolved by rolling three dice for each target and applying the modifiers set out in the Harbor Attack Table. On a modified result of "2" or less on any of the dice rolls, the fast carrier used in the attack is eliminated. Harbor attack research results may be held for future use, and may be accumulated, but two results may not be combined in a single attack against the same port. A result of less than "2" is treated as a "2" result; a result of more than "14" is treated as a "14+" result.													
Initial German harbor attack: Germany begins the game with the ability to make a harbor attack against one enemy target. This attack may be made in Fall 1939 or any subsequent turn, provided no other harbor attacks have been made. The execution of this attack does not modify subsequent harbor attacks.													