

Example of Play: Pearl Harbor attack
Scenario: Global War
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This example of play quickly walks through an attack on Pearl Harbor. In this game the Japanese decide to stay and launch a second air strike in an attempt to destroy the Western Allied Pacific oil reserve. Japan attacks Pearl Harbor in Winter 1941.

I will use **green text for scenario results** and **blue text for commentary on results from the scenario**. Apologies to those with green-blue color blindness.

Current situation: It's Winter 1941, and the USJT level = 24.

Japan mobilizes (for the fourth and final time) in Winter 1941 and uses the mobilization to increase Japanese shipbuilding.

This increases the USJT level used on the Pearl Harbor Surprise Table.

36.11 TIMING: Mobilization represents the conversion of civilian factories to military production and has the economic and military effects set out below in each turn in which mobilization occurs. Mobilization increments are triggered for each major power in the following turns.

C. JAPAN: Fall 1939, and thereafter at the option of the Japanese player, but in no event later than when the USJT level reaches 10, 20 and 30. If USJT increases from status modifiers trigger a Japanese mobilization in the turn Japan attacks the U.S., the USJT level increases by one prior to the Japanese declaration of war, with a possible additional increase if Japan uses the mobilization to increase its shipbuilding rate. If a Japanese mobilization is triggered by a USJT increase during an Allied player turn, that mobilization is considered to have occurred during the preceding Japanese player turn.

(The boxed comment to 51.311 was recently added.)

51.311 DETERMINING WHICH COLUMN TO USE: The column used on the Pearl Harbor Surprise Table is determined by the USJT level at the moment Japan declares war on the U.S., less one for each strategic Magic card played by Japan and plus one for each strategic Magic card secretly applied by the U.S. in the turn in which Japan attacks. Strategic Magic cards used in the Pearl Harbor attack may not be used for any other purpose.

If USJT increases from status modifiers trigger a Japanese mobilization in the turn Japan attacks the U.S., the USJT level increases by an additional one prior to the Japanese declaration of war, with possible additional increases if Japan uses the mobilization to increase its shipbuilding rate (36.11C).

USJT = 24 + 1 turn + 3 mobilization + 1 embargo + 1 French Indochina + 2 SBP increase (second increase) = 32.

The U.S. player throws a die one last time to determine the effective USJT level.

49.852 USJT:

A. The actual USJT level is determined by the USJT modifiers. The effective USJT level is the actual USJT level as modified by a die roll. This die roll is made at the end of each Allied diplomatic phase (EXCEPTIONS: If Japan declares war on Britain without declaring war on the U.S., the die roll is made immediately, rather than at the end of the ensuing Allied diplomatic phase; if Japan declares war on the U.S., a final die roll is made immediately). This die roll does not change the actual USJT level.

B. This die roll may result in the effective USJT level being less than, the same as, or more than the actual USJT level, as follows: die roll of 1: -2; die roll of 2: -1; die roll of 3 or 4: no effect; die roll of 5: +1; die roll of 6: +2.

Effective USJT die roll = 6.

Effective USJT = 32 + 2 = 34.

Then the U.S. player secretly plays Magic strategic card(s) to modify USJT for the purposes of determining the column on the Pearl Harbor Surprise Table. Remember that Magic wild cards may be played as strategic cards.

51.311 DETERMINING WHICH COLUMN TO USE: The column used on the Pearl Harbor Surprise Table is determined by the USJT level at the moment Japan declares war on the U.S., less one for each strategic Magic card played by Japan and plus one for each strategic Magic card secretly applied by the U.S. in the turn in which Japan attacks. Strategic Magic cards used in the Pearl Harbor attack may not be used for any other purpose.

48.22 TYPES OF CARDS: There are six types of Ultra and Magic cards: submarine warfare, ASW, tactical, strategic, wild card and blank.

E. WILD CARD (American Magic only): The American Magic wild card may be used as any other Magic card.

Japan only starts with 1 tactical and 1 submarine warfare card and hasn't added a Magic strategic card via production. The U.S. player drew neither a Magic strategic card nor a Magic wild card, so the USJT level remains at 34. The "34-35" column is used on the Pearl Harbor Surprise Table for the initial Japanese air strike on Pearl Harbor.

Pearl Harbor Surprise Table - 51.31							
USJT Level + Magic Draw							
DR	0-29	30-31	32-33	34-35	36-37	38-39	40+
2	Pearl	Pearl	Pearl	Pearl	Pearl	Pearl	Atlantic
3	Pearl	Pearl	Pearl	Pearl	Pearl	Atlantic	Pacific
4	Pearl	Pearl	Pearl	Pearl	Atlantic	Pacific	Pacific
5	Pearl	Pearl	Pearl	Atlantic	Pacific	Pacific	6
6	Pearl	Pearl	Atlantic	Pacific	Pacific	6	5
7	Pearl	Atlantic	Pacific	Pacific	6	5	4
8	Atlantic	Pacific	Pacific	6	5	4	3
9	Pacific	Pacific	6	5	4	3	2
10	Pacific	6	5	4	3	2	Auto
11	6	5	4	3	2	Auto	Auto
12	5	4	3	2	Auto	Auto	Auto
DRM	+6	+6	+6	+6	+5	+4	+3
<p>Pearl: Carrier TF in Pearl Harbor. Atlantic: Carrier TF in the Atlantic U.S. box. Pacific: Carrier TF in the Pacific U.S. box. Number: Distance of carrier TF from Japanese patrol hex. Auto: Interception of Japanese patrol automatic.</p> <p>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 further 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.</p> <p>“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 land-based 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.</p>							
Surprise Level	Result						
4	Only two-thirds (round up) of the defending air engages the attacking naval air before they attack their targets. The remaining defending air is surprised on the ground.						
5	Only one-third (round up) of the defending air engages the attacking naval air before they attack their targets. The remaining defending air is surprised on the ground.						
6	All of the defending air is surprised on the ground.						
7+	Enemy defenses in disarray. No air defense dice roll is made. All air attacks which damage a named ship trigger a critical hit die roll against the target (20.525D).						

Then the U.S. player secretly rolls for the location of each of his three carrier TFs in Pearl (see results highlighted in red in the table above).

TF1 DR 9 5
TF2 DR 3 Pearl
TF3 DR 8 6

Because the effective USJT level is 34, the +6 surprise DRM guarantees the Japanese player of the maximum 7+ surprise level.

THE INITIAL JAPANESE AIR STRIKE

American player: Surrender now and I'll forget about all this :-)

Japanese 18 eNAS attack Pearl.

With no air defenses in Pearl Harbor, the U.S. player simply lines up all his ships and air units in Pearl Harbor for the Japanese player to target as he sees fit.

U.S. targets:

3 AAF
3 NAS (which are onboard the CV3)
8 BB3s
DD8
CA10
CV3

The 3 NAS that are based on the CV3 are potential targets for the first Japanese air strike. If they are not eliminated in the first air strike – even if their carrier is sunk – they are available for the defense of Pearl Harbor vs. a second Japanese air strike.

17.3127 CARRIERS SUNK IN PORT: If a fast carrier is sunk in port, any naval air units based on the fast carrier are displaced to the port and are not eliminated by the loss of the carrier unless sufficient basing in the port hex is unavailable.

23.4111 COUNTERAIR OPTIONAL: When air units attack an enemy port which contains both enemy air and naval units, including naval air units based on carriers in the attacked port, the attacker has the option of counterairing the defending air units with some, all or none of his attacking air factors. Carrier-based naval air units concealed by a TF marker are revealed when the attacker announces his attack on the carriers' base and may be counteraired at the attacker's option.

51.34 RESOLVING THE INITIAL PEARL HARBOR ATTACK: The initial Japanese air strike against Pearl Harbor is resolved normally, with the Japanese player assigning his attacking naval air units separately to any American AAF, NAS, named ships and light ships in Pearl Harbor as he wishes. Oil counters in Pearl Harbor may not be attacked in the initial Japanese air strike against Pearl Harbor.

51.35 STATUS OF AMERICAN AIR UNITS IN PEARL HARBOR: During the first Japanese air strike against Pearl Harbor, the status of American air units in Pearl Harbor, including naval air units on carriers which are in Pearl Harbor, is determined by the Japanese surprise result at Pearl Harbor.

51.36 EFFECT OF SURPRISE ON AIR UNITS: Defending American air units which are surprised in the first round of carrier air strikes in the Pacific theater are not counteraired, but instead are subject to attack in the same manner as naval units with a Naval Nationality DRM equal to the Western Allied Air Nationality DRM. Each Naval Attack Table result eliminates one AAF or three NAS, as the case may be.

DRMs for Japanese attacks:

Japanese ADRM = 2 + 1 elite NAS = 3

US ADRM = 2 (but is considered to be NDRM of 2 on the Naval Attack Table)

US NDRM = 2

vs. air = + 3 ADRM - 2 ADRM + 1 surprise level 3+ = +2

vs. naval = + 3 ADRM - 2 NDRM + 1 surprise level 3+ = +2

vs. CV = + 3 ADRM - 0 NDRM* + 1 surprise level 3+ = +4

* US CVs have a -2 NDRM, and 2 - 2 = 0

The Japanese player decides to play it safe and make it more likely that all the U.S. air units – especially all the AAF – are destroyed in the first air strike. Otherwise, any remaining U.S. air units may defend against a second Japanese air strike.

51.41 THE SECOND JAPANESE AIR STRIKE: Once the first air strike against Pearl Harbor is resolved, the Japanese player may either withdraw his strike force or launch a second air strike against Pearl Harbor with some or all of his available naval air units. If the Japanese player launches a second air strike, no surprise die roll is made and any American air units in Pearl Harbor which survived the initial Japanese air strike without being damaged are available to defend Pearl Harbor. A second Japanese air strike on Pearl Harbor may target any American air units, naval units or oil counters ([33.424](#)) in Pearl Harbor.

Target	Die roll	Result	Effect	Critical hit die roll triggered
4 eNAS vs. 3 AAF	10 + 2 = 12	5	US 3 AAF eliminated	
1 eNAS vs. 3 NAS	6 + 2 = 8	1	US 3 NAS eliminated	
3 eNAS vs. CV3	7 + 4 = 11	3	CV3 sunk	yes
3 eNAS vs. BB3	6 + 2 = 8	2	BB3 dam	yes
3 eNAS vs. BB3	8 + 2 = 10	3	BB3 sunk	yes
4 eNAS vs. BB3	9 + 2 = 11	4	BB3 sunk	yes

With the US air destroyed, the second Japanese air strike will only undergo an air defense dice roll, allowing more eNAS to inflict further losses. So far so good for the Japanese...

Now for the critical hit die rolls:

20.525 CRITICAL HITS: In the following circumstances, one die is rolled to determine if a critical hit occurs on a named ship. If the die roll exceeds the size of the named ship, it incurs a critical hit. Critical hit rolls are made when:
D. DAMAGED AT PEARL HARBOR: An American named ship at Pearl Harbor is damaged or sunk by Japanese air attack, provided Japan achieved a surprise result of "7+" ([51.31](#)).

20.527 EFFECTS OF CRITICAL HITS: A critical hit has the following effect, in addition to any effect of the combat roll which triggered the critical hit:

- A. An undamaged ship is damaged.
- B. A damaged ship at sea is sunk.
- C. A damaged ship in port is sunk in port.
- D. A ship sunk in port is destroyed.

So the Japanese player rolls one die for each of the four ships above for which a critical hit die roll was triggered. All four ships are 3-factor naval units. Thus,

DR 1-3 = no (further) effect.
 DR 4-6 = sunk in port (if damaged) or destroyed (if sunk).

If a ship is destroyed, it's totally lost.
 A ship that's sunk in port may be raised from the dead, so to speak.

27.7262 SHIPS SUNK IN PORT: Cruisers and named ships which are sunk in port may be repaired by first expending one shipbuilding point and three BRPs during a unit construction phase to raise them to damaged status, after which they may be transferred to a shipyard for repairs in the normal manner. Otherwise ships sunk in port may not move. Repairs may not be started on a ship in the same player turn in which it is raised to damaged status. Destroyers and CVEs which are sunk in port are permanently eliminated.

Ship	Critical hit die roll	Effect
sunk CV3	2	none
damaged BB3	6	sunk
sunk BB3	2	none
sunk BB3	5	destroyed

U.S. casualties after the initial Japanese air strike:

Destroyed: 3 AAF, 3 NAS, BB3
 Sunk in port: CV3, BB3, BB3

THE SECOND JAPANESE AIR STRIKE

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The Japanese player decides to conduct a second air strike on Pearl Harbor: the primary targets are the Western Allied oil counters.

Now the Japanese player must decide whether or not to have any of his carrier-based eNAS fly CAP over the Pearl Harbor attack TF – just in case any of the American player's outstanding carrier TFs intercept the Japanese TF.

51.43 NAVAL COMBAT RESOLUTION: If one or more American carrier TFs intercept the Japanese strike force, naval combat is resolved as follows:

- A. A single round of naval combat is resolved, after which the Japanese strike force must withdraw.
- B. Japanese naval air units used for a second strike against Pearl Harbor are not available for offensive or defensive operations against the intercepting American carrier TFs.
- C. Each American carrier TF must form a separate combat group.
- D. Japanese and American search rolls are made normally, with the U.S. deemed to have rolled an automatic "1" search result in addition to any results achieved by the U.S. search rolls. Thus any American carrier TFs not found by the Japanese may make a surprise die roll or engage in fleet combat.

The Japanese player looks over the "34-35" column on the Pearl Harbor Surprise Table in order to assess the likelihood that

- 1. U.S. carrier TFs may be eligible to intercept the Japanese Pearl Harbor strike force; and
- 2. If so, how likely it is that one or more U.S. carrier TFs will successfully intercept the Japanese Pearl Harbor strike force.

51.42 NAVAL INTERCEPTION PERMITTED: Once the second Japanese air strike is resolved, any American carrier TFs which achieved a numbered result may attempt to intercept the Japanese strike force by rolling one die. Each American carrier TF makes a separate naval interception dice roll. American carrier TFs which achieved an "Auto" result may intercept automatically. American naval units in Pearl Harbor or a U.S. box may not intercept the Japanese strike force. The American player is not required to attempt interception of the attacking Japanese TF.

The Japanese player decides that if any U.S. carrier TFs achieved a numbered result (the only results on the "34-35" column that would allow interception of the Japanese TF), that the U.S. carrier TFs are probably too far away to successfully intercept. But just in case, the Japanese player leaves 1 eNAS flying CAP. If one U.S. carrier TF does intercept the Japanese TF, then 1 eNAS and the air defense dice roll by the Japanese TF will probably be enough to eliminate/abort the US 3 NAS conducting the air strike.

Japanese 1 eNAS flies CAP.
Japanese 17 eNAS attack Pearl.

No surprise effects apply to the second air strike. Consequently, if any surviving American air units remained in Pearl Harbor, they could engage the Japanese eNAS conducting the second air strike. If Japan did not counterair these remaining U.S. air units, then they would make one air combat dice roll and eliminate/abort some of the Japanese eNAS prior to their air attacks.

This is why the Japanese player elected to use 4 eNAS to attack the US 3 AAF in the first air strike. Any American air that remain to defend against a second Japanese air strike can really reduce the effectiveness of the second Japanese air strike.

23.4111 COUNTERAIR OPTIONAL: When air units attack an enemy port which contains both enemy air and naval units, including naval air units based on carriers in the attacked port, the attacker has the option of counterairing the defending air units with some, all or none of his attacking air factors. Carrier-based naval air units concealed by a TF marker are revealed when the attacker announces his attack on the carriers' base and may be counteraired at the attacker's option.

23.4113 SOME ATTACKING AIR UNITS COUNTERAIR: If some of the attacking air units carry out a counterair attack and the remainder are assigned to attack the naval units in the enemy base, one round of air combat is resolved between the attacking and defending air units engaged in counterair combat. Attacking air units which engaged in counterair combat may not attack naval units in the enemy base in that combat round, regardless of the result of the counterair combat. Some or all of the remaining attacking air units may be able to carry out their attack on the naval units in the enemy base, depending on the defender's air combat result ([23.4115B](#)).

23.4114 NO ATTACKING AIR UNITS COUNTERAIR: If all of the attacking air units attempt to attack the naval units in the enemy base, ignoring the defending air units, the defending air units make one air attack dice roll against the attacking air units ([23.4115B](#)).

23.4115 EFFECTS OF AIR COMBAT:

B. DEFENDER'S AIR COMBAT RESULT: Attacking air factors which are eliminated or forced to abort by the defender's air combat dice roll may not attack the naval units in the enemy base in that round. If the effects of the defender's air combat result exceed the number of attacking air factors which counterair the defending air units, the excess is taken from the air factors which would have otherwise attacked the defender's naval units. This will always occur if the attacker did not counterair the defender, as the defender's uninverted air units still make an air combat dice roll. Apart from the defender's air combat result, defending air has no effect on air attacks on naval units in port.

Additionally, because no surprise effects apply to the second air strike, the U.S. player makes an air defense dice roll.

23.421 AIR DEFENSE LEVEL OF NAVAL FORCES: The defensive strength of a naval force is determined as indicated on the Air Defense Table:

A. All attacked naval units, including damaged naval units and destroyers which are carrying cargo, are counted in determining the air defense level (EXCEPTIONS: [23.421C-E](#)).

C. Ships sunk in port are not counted

Pearl Harbor enjoys a hefty air defense level of 10:

+4 naval units (5 BB3s + CA10 + DD8 = 33 naval factors)
+1 Air Defense research result
+1 objective
+4 two ports (+2 for each port)
--
10

AD roll = 8 3/2 result 17 - 5 = 12 eNAS remaining

Now it is time for the remaining Japanese 12 eNAS to attack.

U.S. targets:

1 sunk CV3
2 sunk BB3s
5 BB3s
DD8
CA10
3 oil counters

DRMs for Japanese attacks:

Japanese ADRM = 2 + 1 elite NAS = 3
US NDRM = 2

vs. oil = no DRM
vs. naval = + 3 ADRM - 2 NDRM = +1
vs. CV = + 3 ADRM - 0 NDRM* = +3
* US CVs have a -2 NDRM, and 2 - 2 = 0

(33.424 was recently clarified to specify that no DRMs are applied to the Japanese air attack dice roll vs. the 3 oil counters in the Western Allied Pacific oil reserve.)

33.424 DESTRUCTION OF OIL RESERVES: Oil counters in an oil reserve may not be bombed or otherwise damaged or destroyed except by the capture of objectives which reduce the maximum capacity of an oil reserve to less than the number of oil counters in that oil reserve. (EXCEPTION: The Pacific oil reserve. If, during its initial surprise attack, Japan carries out a second air strike against Pearl Harbor, Japan may target the oil counters in the Pacific oil reserve, which are all considered to be in Pearl Harbor, for air attack. The Pacific oil reserve is attacked as a single target using the Naval Attack Table. No DRMs are applied to the air attack dice roll. On a "1" air attack result, one oil counter is destroyed. On a "2" air attack result, two oil counters are destroyed. On a "3" or greater air attack result, all three oil counters are destroyed.)

The Japanese player decides that a "7" or higher (58.3% chance of success) is good enough for the attack on the oil counters. That will require 4 eNAS on the Naval Attack Table. The Japanese player also decides that, from his perspective, it's better to destroy a few U.S. ships than to damage several more U.S. ships. (To make a long story short, it takes longer to build a 3-factor ship from scratch than to repair or raise/repair a ship that is damaged or sunk in port.) So, the Japanese player targets the U.S. ships that were sunk in port during the first air strike.

Target	Die roll	Result	Effect
4 eNAS vs. 3 oil counters	7	3	3 oil counters eliminated
3 eNAS vs. sunk CV3	8 + 3 = 11	3	sunk CV3 destroyed
3 eNAS vs. sunk BB3	9 + 1 = 10	3	sunk BB3 destroyed
2 eNAS vs. sunk BB3	8 + 1 = 9	2	sunk BB3 destroyed

Total casualties at Pearl Harbor:

U.S.: 3 AAF, 3 NAS, CV3, 3 BB3s, 3 oil counters (the naval units may not be "raised from the dead")
 Japan: 3 eNAS

Now the American player rolls for any U.S. carrier TFs that will try to intercept the Japanese attack force (while most of the Japanese eNAS are away conducting the second air strike).

US carrier TF	Location	Interception die roll	Successful interception?
TF1	5	2	no
TF3	6	5	no

The Japanese player grins.

That's the end of this quick walk-through of a Japanese surprise attack on Pearl Harbor. The Japanese Pearl Harbor attack force returns to Truk intact for future engagements, and Admiral Negumo reports back the excellent news to Tokyo.