



Air Operations

17. AIR UNITS

- 17.1 OVERVIEW
- 17.2 ARMY AIR UNITS
- 17.3 NAVAL AIR UNITS
- 17.4 KAMIKAZES
- 17.5 JETS
- 17.6 AIR TRANSPORTS
- 17.7 STRATEGIC BOMBERS
- 17.8 INTERCEPTORS
- 17.9 PARTIAL AIR COUNTERS

17.1 OVERVIEW:

17.11 Air forces are represented by seven types of units: army air units, naval air units, kamikazes, jets, air transports, strategic bombers and interceptors.

17.12 Air units are distinguished from one another by where they may base, what operations they may carry out, their construction cost and limitations on their rate of construction, and certain other unique abilities.

17.13 References to air units refer to army and naval air units, kamikazes, jets and air transports, unless otherwise specified. Strategic bombers and interceptors are SW units.

17.14 AIR FACTORS AND SQUADRONS:

17.141 Each air factor represents approximately three times as many planes as an air squadron. This is reflected in the following:

A. COST: Each air factor costs three BRPs; each air squadron costs one BRP. Naval air units are the only type of air unit constructed as squadrons (NAS). All other types of air units, including army air, are constructed as factors, not squadrons.

B. APPLICATION OF 3:1 RATIO: One air factor is equivalent to three air squadrons for basing (18.1), sea transport (21.434) and sea escort (21.64).

C. AIR COMBAT: When air units of any type engage in air combat with naval air units, each air factor is converted into three squadrons, each of which is equivalent in size to an NAS. The number of air squadrons is then used as the basis for determining the row used on the Air Combat Table for the air combat dice roll and the effect of the air combat dice roll (see 19.2).

D. ARMY AIR INTERACTION WITH NAVAL UNITS: When army air units search, provide air cover, or attack enemy naval units at sea, the army air units operate as squadrons (23.13). AAS of the required type and NAS are equivalent for these purposes.

17.142 WHEN AAF AND NAS EQUIVALENT: AAF and NAS are equivalent for the following activities:

A. ATTACKING ENEMY NAVAL UNITS IN PORT: This reflects the special training and equipment which characterized naval air units. In effect, naval air units are considered to be three times as effective as army air units in attacking enemy naval units in port.

B. AIR DEFENSE EFFECTS: Air defense results for naval units attacked in port apply equally to AAF and NAS. For example, a "1/2" air defense result would eliminate one AAF or one NAS, and force two AAF or two NAS to return to base without attacking.

17.143 WHEN AAF AND NAS NOT EQUIVALENT: AAF and NAS are *not* equivalent for other activities, such as counterair missions, providing ground support, and so on. For example, three NAS are required to provide one factor of ground support. Three NAS are equivalent to one AAF for diplomatic purposes, whether in relation to the limit on forces which may enter a minor country after a diplomatic result of "8" or "-1", or when applying the diplomatic modifier for having forces in a minor country.

17.2 ARMY AIR UNITS:



17.21 BASING: Army air units must base on cities, ports, airbase or artificial port counters. Each city, port, airbase and artificial port may base five AAF (EXCEPTION: Each city, port, airbase and artificial port in a Pacific theater one-hex island or hex containing jungle or jungle/mountain may base only three air factors). A hex containing two cities or a city and an airbase may therefore base ten air factors; a hex containing two cities and an airbase may base 15 air factors (or, in Pacific theater one-hex islands and hexes containing jungle or jungle/mountain, six or nine air factors, respectively). There is no limit to the number of AAF which may base in a mapboard box. AAF may not operate from carriers under any circumstances.

17.22 RANGE: Army air units have a range of four hexes in Europe and three hexes in the Pacific.

17.23 OPERATIONS: Army air units may conduct the following air operations:

- A. Counterair.
- B. Air cover.
- C. Search during naval combat and modify submarine attacks.
- D. Attack enemy naval units at sea and in ports.
- E. Bomb enemy economic targets.
- F. Ground support.
- G. Intercept enemy defensive air support.
- H. Provide defensive air support.
- I. Oppose enemy bombing.
- J. Intercept air transport operations.
- K. Counter-intercept defending air which intercept air transports.

17.24 CONSTRUCTION: Each AAF costs three BRPs to build.

17.25 AAF AND SQUADRONS: Whenever AAF engage in air combat with enemy naval air units, participate in naval combat, search, fly air cover or attack enemy naval units at sea, they operate as squadrons, subject to the restrictions set out in 23.11.

17.3 NAVAL AIR UNITS:



17.31 BASING: Naval air units base in the same manner as army air units, with three NAS being equivalent to one AAF. In addition:

17.311 ONE HEX ISLANDS: One NAS may base at a one-hex island (18.13).

17.312 FAST CARRIERS: Each fast carrier may base a number of NAS of its own nationality equal to its size in factors. Other types of air units may not operate from carriers.

17.3121 Each fast carrier and its naval air units move, fight and redeploy as one unit. This does not prevent naval air units on a fast carrier from attacking different targets, other than when raiding (21.5361B).

17.3122 Naval air units may be transferred between a port or mapboard box and fast carriers in that location during the owner's player turn as follows, subject to carrier and location basing capacity.

A. MOVEMENT PHASE: Immediately before or after staging air units, naval base changes or sea transport.

B. REDEPLOYMENT PHASE: Immediately before or after TRs or NRs.

C. RESTRICTIONS: Inverted naval air units may not transfer onto carriers (EXCEPTIONS: Naval air units constructed in a shipyard or mapboard box may transfer to carriers launched in that shipyard in the same construction phase).

D. INVERSION:

- When based on a carrier, naval air units have the status of the carrier on which they are based. The uninversion of a carrier uninverts any naval air units on the carrier.
- The transfer of naval air units to an uninverted carrier allows the carrier to operate normally as soon as naval air units are transferred to the carrier.
- Naval air units which transfer from an inverted carrier are inverted, and may be uninverted normally.

17.3123 At the end of the owning player's turn, it must be clear whether naval air units are on board fast carriers or not. This will determine whether the naval air units are eligible to modify interceptions and searches, or whether fast carriers in the port have their full complement of naval air ready for naval combat. Only naval air units which are on board carriers are concealed by TF markers.

17.3124 If the sinking of one of several fast carriers in a naval force causes the number of NAS in that naval force to exceed the capacity of the remaining fast carriers, a corresponding number of NAS are eliminated. When a naval force containing fast carriers is attacked, the NAS are considered to be based first on undamaged fast carriers, then on damaged fast carriers, and only then on fast carriers which are sunk. Naval air units may be freely transferred among undamaged fast carriers in the same naval force. If transferred from an inverted carrier to an uninverted one, the receiving carrier also becomes inverted. Naval air units flying combat air patrol (but not counterair or air strikes) may also transfer to a land base within three hexes of their naval force but are inverted for the remainder of the player turn if they do so (22.463). A damaged carrier at sea may carry, but not land or launch, naval air units. Once a damaged carrier returns to base, any naval air units on the damaged carrier may transfer to land bases. Naval air units may not fly onto a damaged carrier, whether the damaged carrier is in port or at sea.

17.3125 Naval air units based on a fast carrier are stacked on top of their carrier or placed by it on the owning player's Naval Status Board.

17.3126 AIR ATTACKS AGAINST PORTS CONTAINING CARRIERS: Naval air units based on a fast carrier in port, including those concealed by a TF marker, are limited to defending against enemy air attacks against their base.

A. If a base containing fast carriers is attacked by land-based or carrier-based enemy air units, the presence of all carrier-based naval air units concealed by a TF marker is revealed.

B. If a counterair attack is made against the base, all carrier-based naval air units are treated as land-based air, regardless of the stacking limit of their base. The naval air units engage the attacking air units in the same manner as other air units based in the attacked hex, and may be eliminated or inverted by the attacker's air combat result.

C. Once all air attacks against their base in the current phase are completed, all surviving naval air units continue as land-based air units and naval air units which were forced to abort by the attacker's final counterair combat dice roll are inverted for the remainder of the player turn. (EXCEPTION: Naval air units may transfer to carriers that go to sea. Inverted naval air units that transfer to uninverted carriers will uninvert, because naval air units adopt the inversion status of their carriers - 17.3122D).

D. If an enemy air attack is directed against the naval units in a base containing carrier-based air units, those air units may engage the attacking air units in the same manner as land-based air units in the attacked base.

E. Other than defending against enemy air attacks, naval air units may perform no combat related activities and may not aid naval interception or search.

Historically naval air units left their carriers when they entered port and rejoined them when they left port. For ease of play, however, such naval air units remain with their carriers on the owning player's Naval Status Board, concealed by a TF marker, while their carriers are in port, although they are not considered to be on their carriers if that port is attacked by enemy air units. Carrier-based naval air units do not appear on the map unless attacked, do not count against the air basing limit of the port in which their carriers are based, and may not perform any of the functions of land-based naval air units other than to defend their base from enemy air attack.

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.

17.32 RANGE: Naval air units operating from land or from carriers have a range of three hexes in both Europe and the Pacific.

17.33 OPERATIONS: Naval air units may conduct the following air operations:

- A.** Counterair.
- B.** Air cover (land-based naval air units only).
- C.** Search during naval combat and modify submarine attacks (land-based naval air units only).
- D.** Attack enemy naval units at sea and in ports.
- E.** Combat air patrol (carrier-based naval air units only).
- F.** Ground support.
- G.** Intercept enemy defensive air support.
- H.** Provide defensive air support (land-based naval air units only).
- I.** Intercept air transport operations (land-based naval air units only).
- J.** Counter-intercept defending air which intercept air transports (land-based naval air units only).

17.34 CONSTRUCTION: Each NAS costs one BRP to build.

17.35 NAVAL AIR TRAINING:

17.351 Naval aviation, especially operations from carriers, required particularly high levels of training. This is reflected in the following rules.

17.352 ELITE JAPANESE NAVAL AIR UNITS: At the start of the game, all Japanese naval air units are elite units represented by distinctive black on gold counters. Elite Japanese naval air units:

A. Have a +1 Air Nationality DRM, in addition to any increases from Japanese Air Nationality DRM research.

B. Are added to the Japanese force pool as a result of mobilization and production if constructed prior to the outbreak of war between Japan and the Western Allies; once war has broken out, Japanese naval air force pool additions enter the game as regular (yellow on black) NAS. If the Japanese have unbuilt naval air units in their force pool when war breaks out with the Western Allies, these are built as regular, rather than elite, units.

C. Are rebuilt as regular NAS when lost. When elite Japanese NAS are eliminated, the equivalent number of regular Japanese NAS are substituted in the Japanese force pool as allowable builds.

17.353 NAVAL AIR TRAINING RATES:

A. The number of NAS which may be built each turn, including both NAS being rebuilt after having been eliminated and force pool additions, is limited by the naval air training rate for all major powers and Australia as follows: the U.S.: 4; Japan: 1; Britain: 1; Germany: 0; Italy: 0; Australia: 0; plus any *Gathering Storm* and *Storm Over Asia* naval air training results for Britain, Germany, Italy and Japan.

Classic A World at War

In classic *A World at War*, the starting naval air training rates are U.S.: 4; Japan: 3; Britain: 2; Germany: 1; Italy: 1; Australia 0.

B. American CVE construction does not count against the American and British naval air training limits, but each turn the U.S. may not begin construction of more American CVEs than the current American naval air training rate (EXCEPTION: European scenarios - 17.355) and may not begin construction of more British CVEs than the current British naval air training rate.

C. Naval air training rates may be increased by the investment of RPs in production (42.23D).

D. France, Russia and China may never build naval air units.

17.354 ATTACKING NAVAL UNITS AT SEA: Naval air units attacking ships at sea, whether based on land or carriers, receive a +1 modifier on their attack dice rolls (23.441C).

17.355 AMERICAN NAVAL AIR ASSIGNMENTS: Before war breaks out between the U.S. and Japan, newly constructed American naval air units must be assigned to fast carriers as soon as possible in order to make the fast carriers operational.

17.356 EUROPEAN SCENARIOS: The American naval air training rate at the start of a European scenario is 0. This may be increased by the investment of RPs in production. In a European scenario, the U.S. may build up to four American CVEs per turn, regardless of the American naval air training rate.

17.4 KAMIKAZES:



17.41 INVOKING THE KAMIKAZE RULE: Japan may invoke the kamikaze rule during any Japanese unit construction phase by announcing this to the Allies.

17.42 UNITS: Kamikazes are represented by using Japanese elite naval air counters. Any surviving elite Japanese naval air units are converted to regular Japanese naval air units when the kamikaze rule is invoked.

17.43 KAMIKAZE FORCE POOL:

A. Japan's initial kamikaze force pool is 15 kamikazes. This is the maximum number of air squadrons which may be converted to kamikazes during the Japanese unit construction phase.

B. During the Japanese unit construction phase following the first use of all 15 kamikazes to attack Allied naval units, the maximum permitted size of the Japanese kamikaze force pool increases to 30 kamikazes.

C. If Japan subsequently uses all 30 kamikazes to attack Allied naval units, the Japanese kamikaze force pool increases by another 15 kamikazes, to 45 kamikazes. This continues each turn Japan uses all its kamikazes.

While kamikazes may be created at any time (17.41), the Japanese may not expand their kamikaze force pool until their initial kamikazes are completely used (17.43B).

17.44 BUILDING KAMIKAZES:

A. During its unit construction phase Japan may expand its kamikaze force pool as permitted by 17.43B by converting NAS (one NAS = one kamikaze) and/or AAF (one AAF = three kamikazes) to kamikazes, up to the new limit of the Japanese kamikaze force pool. NAS and AAF which are already built are converted to built kamikazes; kamikazes created from unbuilt NAS and AAF are added to the Japanese force pool and must be constructed before being used. NAS and AAF converted to kamikazes are permanently removed from the Japanese force pool.

B. Japan may build newly-created and previously eliminated kamikazes during its unit construction phase, up to the limit of its kamikaze force pool, subject only to the normal limits on construction. The Japanese naval air training rate does not affect the construction of kamikazes.

C. Each kamikaze costs one BRP to build.

17.45 OIL: Kamikazes do not require oil (33.61A).

17.46 SPECIAL ATTRIBUTES: Kamikazes are distinguished by the following special attributes:

17.461 BASING: Kamikazes do not base on the mapboard and may therefore be placed in any convenient location visible to both players. Kamikazes may not be counterair.

17.462 RANGE: Kamikazes have an operational range of four hexes from any air base in Japan, without regard for basing limits.

17.463 LIMITED TO NAVAL ATTACKS: Kamikazes may only attack enemy naval activities and naval units, either at sea or in port.

17.464 AIR NATIONALITY DRM: Kamikazes have the same Air Nationality DRM as non-elite Japanese naval air units in air combat, but are treated as elite Japanese naval air units when attacking naval units (17.47H).

17.47 TARGET SELECTION:

A. AGAINST SINGLE ENEMY COMBAT GROUPS: Whenever kamikazes attack a naval force outside of naval combat, that force deploys into combat groups, following the procedure set out in 22.42 (EXCEPTION: A naval force attacked by kamikazes outside of naval combat may contain more than six combat groups). Kamikaze attacks are made against individual enemy combat groups, whether the enemy naval units are engaged in naval combat or not. Kamikazes never attack a multi-TF naval force as a whole.

B. ONLY FOUND COMBAT GROUPS MAY BE ATTACKED: Kamikazes attacking during naval combat may only attack found enemy combat groups.

C. ONE KAMIKAZE ATTACK PER COMBAT GROUP: All kamikaze attacks during naval combat are made in the first round of combat, at the same time as other air strikes. Kamikazes may not attack a combat group that is being attacked by other Japanese air units, including other kamikazes. Similarly, a combat group attacked by kamikazes may not be attacked by other Japanese air units in that combat round.

D. MECHANICS: Kamikaze attacks are carried out as follows:

- **All kamikaze attacks simultaneous:** When the Japanese player announces kamikaze attacks, all kamikazes used to attack during that turn must attack at that time. Kamikazes may not be used to attack during a subsequent phase or combat round during that turn.
- **No more than 15 kamikazes in each attack:** No more than 15 kamikazes may attack any one Allied combat group unless the attacked Allied naval force consists of only a single Allied combat group, in which case a second wave of kamikazes may attack that Allied combat group immediately after the first kamikaze attack is resolved.
- **Kamikazes attack alone:** Other types of air units may not accompany kamikazes in their attack.

E. ALLIED DEFENSES: Attacking kamikazes are engaged by defending air units flying air cover and combat air patrol over the attacked combat group (23.2, 23.3), then by the defender's ships (23.42). Kamikazes:

- do not make an air combat dice roll against the defending air units flying air cover and combat air patrol;
- are eliminated if shot down by the defender's air combat result or the defender's air defense result (the number before the "I").
- are diverted to attacking a combat group of the defender's choice if forced to abort by the defender's air combat result or the defender's air defense result (the number after the "I"). No additional air combat or air defense rolls are made by combat groups attacked by diverted kamikazes.

F. SELECTING TARGETS: Each attacking kamikaze 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 number of attacking kamikazes is compared to the number of fast carriers and capital ships:
 - Each fast carrier and capital ship may be attacked by no more one kamikaze (EXCEPTION: Surplus kamikazes).
 - If there are more fast carriers or capital ships than kamikazes attacking that category of ship, the Japanese player chooses which fast carriers and capital ships to attack.
 - If there are fewer fast carriers or capital ships than kamikazes attacking that category of ship, the surplus kamikazes may attack any target in the attacked combat group, as decided by the Japanese player, including fast carriers or capital ships that are already being attacked, or light ships. This is the only instance when more than one kamikaze may attack a named ship.
 - Light ships are attacked as a group.

G. RESOLVING KAMIKAZE ATTACKS: Once the targets of all attacking kamikazes are determined, each attack is resolved by making a dice roll on the Naval Attack Table for each target. For the purpose of determining kamikaze attack levels on the Naval Attack Table, each kamikaze is equivalent to two air squadrons. If two kamikazes attack the same target, a single attack dice roll is made for that target, using the "4" row on the Naval Attack Table; three kamikazes use the "6" row, and so on.

H. KAMIKAZE ATTACK MODIFIERS: Kamikazes initially attack with the same Air Nationality DRM as elite Japanese naval air units. Each time Japan increases its kamikaze force pool (17.43B, C), kamikazes receive an additional +1 modifier in their subsequent attacks. This modifier is cumulative. Kamikazes therefore become more effective over time, provided they are fully used.

17.48 DISPOSABILITY: Kamikazes are eliminated after they complete a single air sortie.

17.5 JETS:



17.51 BASING: Jets base in the same manner as army air units. Jets may not operate from fast carriers.

17.52 RANGE: The range of jets is determined by the research result for jets:

- A. "9": two hexes in Europe and one hex in the Pacific.
- B. "11": three hexes in Europe and two hexes in the Pacific.
- C. "12+": four hexes in Europe and three hexes in the Pacific.

17.53 OPERATIONS: Jets may conduct the following air operations:

- A. Counterair.
- B. Escort air attacks on enemy naval units in port.
- C. Escort the bombing of enemy economic targets.
- D. Intercept enemy defensive air support.
- E. Escort defensive air support.
- F. Oppose enemy bombing.
- G. Intercept air transport operations.
- H. Counter-intercept defending air which intercept air transports.

17.531 Jets may not provide air cover, attack enemy naval units, escort other air units which attack enemy naval units at sea, bomb, or provide ground support or defensive air support.

17.54 CONSTRUCTION: Each jet factor costs three BRPs to build. Jets may not be built until a "9" research result for jets is achieved.

17.55 AIR COMBAT STRENGTH: For the purpose of determining air attack levels in air combat, each jet factor is equivalent to three AAF. Jets take air combat losses in the same manner as other air units. Jets engaged in air combat involving NAS are converted to squadrons (one jet factor is converted to three jet squadrons, each of which is equivalent to three air squadrons), and are recombined into factors in the same manner as AAF (23.14).

17.56 AIR COMBAT MODIFIERS: Each jet factor or three jet squadrons engaged in air combat generates a favorable +/-1 modifier for air combat dice rolls. If both sides have jets in an air battle, only the net modifier is applied.

17.57 Jets are a distinct type of air unit and may suffer casualties in air combat with non-jets in accordance with 19.6.

17.58 BOMBING:

17.581 ESCORTING JETS: Jets may escort army air units and strategic bombers up to the limit of their range (26.43B). Escorting jets participate in air combat with defending air units (26.452).

17.582 DEFENDING JETS: Jets within range of an enemy bombing route may engage the bombing force in air combat (26.443B).

17.59 FLYING BOMBS: Jets may be used to defend against flying bombs if they are within range of the hex being attacked (26.66).

17.6 AIR TRANSPORTS:



17.61 BASING: Air transport units base in the same manner as army air units.

17.62 RANGE: Air transport units have a range of four hexes in Europe and three hexes in the Pacific.

17.63 OPERATIONS: Air transport units may conduct the following air operations:

- A. Air supply.
- B. Air transport.
- C. Airdrops.
- D. Fly BRPs over the Hump to China.

17.64 CONSTRUCTION: Each air transport factor costs three BRPs to build.

17.65 COMBAT: Whenever air transports engage in air combat with enemy naval air units, they operate as squadrons (23.18). Air transport units are a distinct type of air unit and may suffer casualties in air combat in accordance with 19.6. Air transport units are not counted when determining the number of air factors the owning player uses for air combat (18.521B).

17.7 STRATEGIC BOMBERS:



17.71 BASING: Strategic bombers may only base in an SW box. Each SW box is considered to consist of three parts which correspond to the three different fronts on each mapboard (5.92). Strategic bombers may be deployed from one SW box to another SW box, or from one front to another front (within an SW box),

during the redeployment phase, whether or not they were used during the owning player's turn. Strategic bombers may bomb targets on a front in their theater other than the one in which they are based if they have the range to do so.

17.72 RANGE: Strategic bomber range is determined by the number of hexes from any operational air base (26.31) on their assigned front, regardless of the number of other air factors using the base, to their target. Strategic bomber range depends on the research result for Air Range:

- A. No results: Four hexes in Europe, three hexes in the Pacific.
- B. One result: Eight hexes in Europe, six hexes in the Pacific.
- C. Two results: Sixteen hexes in Europe, twelve hexes in the Pacific.
- D. Three results: Twenty-four hexes in Europe, eighteen hexes in the Pacific.

17.73 OPERATIONS: The only operation which may be carried out by strategic bombers is bombing.

17.74 CONSTRUCTION: Each strategic bomber costs three BRPs to build.



17.75 AMERICAN PACIFIC STRATEGIC BOMBERS:

A. American Pacific strategic bombers may only be used in the Pacific theater (24.232).

B. Production of American Pacific strategic bombers may not begin until 1944 (42.22B).

C. Have a +1 Air Nationality DRM, in addition to any increases from Western Allied Air Nationality DRM research.

17.8 INTERCEPTORS:



17.81 BASING: Interceptors may base only in an SW box. Each SW box is considered to consist of three parts which correspond to the three different fronts on each mapboard (5.92). Interceptors may be deployed from one SW box to another SW box, or from one front to another front (within an SW box), during the redeployment phase, whether or not they were used during the owning player's turn, without impairing the ability of the interceptors to conduct SW in the next player turn.

17.82 RANGE: Interceptors may engage enemy strategic bombers whenever they pass through or attack targets on their assigned front and whenever they pass within interceptor range of any controlled, fully-supplied air base on their assigned front, regardless of the number of other air factors using the base. The range for escorting interceptors is determined by the number of hexes from any operational air base (26.31) on their assigned front, regardless of the number of other air factors using the base, to their target. Interceptor range depends on the research result for Air Range:

- A. No results: Four hexes in Europe, three hexes in the Pacific.
- B. One result: Four hexes in Europe, three hexes in the Pacific.
- C. Two results: Eight hexes in Europe, six hexes in the Pacific.
- D. Three results: Twelve hexes in Europe, nine hexes in the Pacific.

17.83 OPERATIONS: Interceptors may escort bombing missions during their player turn (26.43) and may oppose enemy bombing and flying bomb attacks during the opposing player turn (26.44, 26.66).

17.84 CONSTRUCTION: Each interceptor costs three BRPs to build.

17.85 AIR NATIONALITY DRM AND COMBAT: Interceptors have an additional +1 Air Nationality DRM, and therefore have an advantage in air combat, unless accompanied by air units with a lower Air Nationality DRM.

17.9 PARTIAL AIR COUNTERS:

17.91 Air counters may be broken down into smaller counters of the same nationality at any time during play, including during an opponent's player turn. Similarly, smaller counters may be recombined into larger ones at any time.

17.92 A player may begin a scenario with air units broken down into partial air counters.

17.93 Although a player may have as many partial air counters in play as desired, air counters in the same hex must be combined at the end of their owner's player turn if the opposing player finds the unnecessary partial air counters distracting.

18. AIR OPERATIONS

- 18.1 BASING
- 18.2 STAGING
- 18.3 RANGE
- 18.4 EMPLOYMENT
- 18.5 OFFENSIVE AIR MISSIONS
- 18.6 DEFENSIVE AIR MISSIONS
- 18.7 UNINVERTING AIR UNITS



18.1 BASING:

18.11 BASING LIMITS: Basing limits are always stated in terms of air factors. A hex capable of basing air units may base three AAS or NAS for each allowable air factor. Thus a hex which may base five air factors could base four air factors and three NAS, three air factors and six NAS, and so on, up to a maximum of 15 NAS.

18.12 Each city, port, airbase and artificial port may base five air factors (EXCEPTION: Each city, port, airbase and artificial port in a Pacific theater one-hex island or hex containing jungle or jungle/mountain may base only three air factors). A hex containing two cities or a city and an airbase may therefore base ten air factors; a hex containing two cities and an airbase may base 15 air factors (or, in Pacific theater one-hex islands and hexes containing jungle or jungle/mountain, six or nine air factors, respectively).

18.13 Each one-hex island, in either theater, may base one NAS, in addition to whatever air factors it may base. A hex containing a one-hex island with a city or airbase counter may thus base five (or, in Pacific theater one-hex islands or jungle or jungle/mountain hexes, three) air factors and one NAS; a one-hex island with a city and an airbase counter may base ten (or, in Pacific theater one-hex islands or jungle or jungle/mountain hexes, six) air factors and one NAS.



18.14 AIRBASES: Each major power is provided with airbase counters as follows: Germany: 4; Japan: 3; Britain: 3 (Europe), 1 (Pacific); Russia: 3 (Europe), 1 (Pacific); U.S.: 3 (Europe), 3 (Pacific); Italy, France: 2; China: 1. The number of airbase counters may be expanded by production (42.22E).

18.141 OPENING SETUP: Each major power except the U.S. and Britain (Pacific only) may place one airbase on the board in each theater during the opening setup of a Global War campaign game. Airbases may be placed at the start of a scenario as specified in that scenario. The U.S. may not place airbases in Europe until it is at war with Germany, and the U.S. and Britain may not place airbases in the Pacific until the game turn after they go to war with Japan or until the USJT level reaches 40.

18.142 AIRBASE PLACEMENT: Once play begins, major powers may place airbases on the mapboard as follows:

A. Airbases may be placed on the board only during the placing player's movement, unit construction and redeployment phases. Major powers that may place two airbases in a turn may place both of them in the same phase or in different phases. Airbases may not be placed during the opponent's turn.

B. Each turn:

- Italy, Japan, Britain, France and China may place one airbase.
- Germany and the U.S. may place two airbases.
- Russia may place one airbase each turn from 1935-1942; and may place two airbases each turn starting in Spring 1943.

Classic A World at War

In classic A World at War, Russia may place one airbase each turn from 1939-1942, and may place two airbases each turn starting in Spring 1943.

- The airbase placement capabilities of Russia, Britain and the U.S. apply separately to each theater.

C. Airbases may be placed in any fully supplied hex, including hexes in the ZoC of enemy armor, controlled by the placing major power or an alliance faction partner, if permitted by the ally. A major power may not place an airbase in a hex controlled by an ally who is not a member of its alliance faction.

Airbases may not be placed in minor countries in the movement phase of the first turn of activation, association or hex control, as full supply would not yet have been traced to the minor country's hexes.

The Western Allies may not place airbases in Russian-controlled hexes, and vice versa.

D. No more than one airbase counter may occupy a single hex.

E. No more than one airbase may be placed in each Pacific island group by each alliance faction (EXCEPTION: Airbases may not be placed in Aleutian islands).

18.143 RECYCLING AIRBASE COUNTERS: Once all of a nation's available airbase counters are on the board, a player may only place an additional airbase counter by simultaneously removing an existing airbase counter from another hex, so that the total number on the board does not exceed the limit set out in 18.14. An air unit may stage or redeploy to a newly placed airbase which is created by recycling an airbase counter. If an airbase on which air units are based is recycled, those air units must stage or redeploy during that phase, including to the newly placed airbase.

18.144 Once placed, airbase counters may not be moved or redeployed. This prohibition does not prevent the recycling of airbases to different hexes (18.143).

18.145 In a Global War game, the number of airbases, including airbases added by production (42.22E), and the recycling capacity of the U.S., Britain and Russia are distinct for each theater.

18.146 Only air units belonging to the placing major power may use an airbase in the phase in which it is placed (EXCEPTION: Australian and Free French air units may use British airbases in the phase in which they are placed). In subsequent phases of the turn of placement, air units belonging to the placing major power's major power allies, minor allies and associated minor countries may use the airbase. Thus a German air unit may redeploy to an Italian airbase placed during the movement or unit construction phase, but may not redeploy to an Italian airbase placed during the redeployment phase of that player turn. This restriction does not prevent a major power from placing an airbase in a hex containing a city during the movement phase and staging an air unit to that airbase, while an ally stages an air unit to the city.

18.147 An airbase is removed from the board if the hex it occupies comes under enemy control. Airbases which are cut off from supply by enemy action are removed from the board in the same manner as ground units. In either case, the airbases may be placed on the board again in accordance with 18.142.

18.15 If the recycling or removal of an airbase, or the failed or aborted sea transport of air units, results in there being more air units in a hex than the basing capacity of that hex, the excess air factors must be moved or redeployed to another base or mapboard box in the same phase or be eliminated. When an airbase is overrun or eliminated by isolation or surrender, the provisions of 18.25 apply.



18.2 STAGING:

18.21 An air unit may stage (change base) up to twice its operational range at the beginning of the movement phase whether or not it is inverted, subject to the following:

A. The new base need not be on the same front as the old base.

B. The new base must have been controlled by the staging side at the start of its movement phase. Air units may not stage to new bases acquired by ground units during the same movement phase.

C. Association by an attacked minor country or a successful diplomatic die roll resulting in hex control of a minor country results in the acquisition of air bases which may be used immediately.

D. An air unit may stage to a base which is not fully supplied, but it may not carry out any activities from the new base unless supply is later provided to it (30.523). An air unit may stage to a base which is partially supplied (30.523A) or subject to air oil effects, but may only conduct defensive air activities and only over the hex in which it is based.

18.22 Staging may not be intercepted. Air units may stage over all playable non-neutral territory, including enemy-controlled territory, territory of minor countries independently at war and hexes controlled by no one. Air units may not stage over land hexes that are completely neutral, but may stage over hexes which are part water, part neutral land, provided they do not cross a hexside containing exclusively neutral land.

18.23 Western Allied air units may stage off the mapboard to the Australia and India boxes (5.57A, 5.47A) and Russian air units may stage off the mapboard to the Urals box (5.77A). Air units may not otherwise stage off the mapboard.

18.24 Air units may be sea transported from one port to another during the movement phase. Air units may not stage during a turn in which they are sea transported. The destination port becomes the air unit's new base. Air missions may be flown from the new base, subject to supply requirements.

18.25 DISPLACED AIR UNITS: Air units on bases that are occupied by enemy units or on airbases that are eliminated by isolation are displaced to the nearest controlled base within staging distance that has the capacity to base them, regardless of its supply status. Should two such bases be equidistant, the owning player chooses. If the nearest base is able to base only some of the displaced air units, the owning player chooses which air units go to that base, and the remainder go to the next closest base. Air units which are unable to reach a base within range with the capacity to base them are eliminated. If a base is captured while its air units are absent on a defensive air mission, any air units which attempt to return to the captured base are displaced at the end of the phase in which they flew their mission. Mapboard boxes are considered bases for the purpose of this rule and may receive displaced air units.

18.251 If an enemy airborne unit airdrops on a hex that is defended by a ground unit, any air units based in that hex are displaced from their base only if the enemy airborne unit wins the resulting ground combat.

18.252 The movement of displaced air units may not be intercepted.

18.253 EFFECT OF DISPLACEMENT: Displaced air units are inverted.

18.3 RANGE:

18.31 RANGE: Air units have the following ranges:

A. ARMY AIR UNITS: Four hexes in Europe and three hexes in the Pacific.

B. NAVAL AIR UNITS: Three hexes in both Europe and the Pacific, whether operating from land or from carriers.

C. KAMIKAZES: Four hexes.

D. AIR TRANSPORT UNITS: Four hexes in Europe and three hexes in the Pacific.

E. JETS: Two hexes in Europe and one hex in the Pacific after a research result for jets of "9"; three hexes in Europe and two hexes in the Pacific after a research result for jets of "11"; four hexes in Europe and three hexes in the Pacific after a research result for jets of "12+".

F. STRATEGIC BOMBERS: The minimum range of strategic bombers is four hexes in Europe and three hexes in the Pacific. This may be increased by air range research (17.72).

G. INTERCEPTORS: Interceptors operating defensively in an SW box may engage enemy strategic bombers only if the strategic bombers pass through or attack targets on the interceptor's assigned front and pass within interceptor range of any controlled, fully-supplied air base on their assigned front, regardless of the number of other air factors using the base. Interceptors may also escort strategic bombers to their targets, subject to their range as determined by their current air range research result (17.82).



18.4 EMPLOYMENT:

18.41 ONE MISSION PER PLAYER TURN: During each player turn uninverted air units may perform one, and only one, offensive or defensive air mission; or may search, provide air cover, or attack enemy naval units at sea with respect to one or more naval activities during the same player turn, as set out in 23.16. An air unit may perform an offensive mission during its player turn and a defensive mission during the opposing player turn, provided it is uninverted when it performs each mission.

18.42 INVERSION OF AIR UNITS:

A. Air units which perform an air mission are inverted for the remainder of the player turn. Air units are uninverted at the end of the player turn as set out in 18.7.

B. Air squadrons which search, provide air cover or attack enemy naval units at sea are not considered to be flying a mission and may be used for these purposes in more than one phase, but may not perform air missions in the turn they do so. Air squadrons used for these purposes in the movement and combat phases are inverted at the start of the redeployment phase if redeployed, or at the end of the redeployment phase if not redeployed (23.164). For the inversion of AAF formed by combining AAS, see 23.144.

C. Air units which assist in naval interception by spotting enemy naval units are not considered to be flying a mission and are not inverted (22.22F).

18.43 EFFECTS OF COUNTERAIR: Air units that are counteraired and either forced to abort during the final round of air combat or disengage from air combat by leaving their base are inverted and may not perform any mission for the remainder of the player turn.

18.44 For naval air units on carriers, see 21.55.

18.45 OPERATIONAL RANGE: An air unit may fly a number of hexes from its base equal to its range to perform offensive air missions during the movement or combat phase, either during an offensive option, as a limited offensive operation, or by participating in an alliance faction partner's offensive option. This operational range is in addition to staging. An air unit may stage up to twice its range during the movement phase, then fly to a target hex during the combat phase, then return to base (EXCEPTION: Kamikazes do not return to base). A defender's air unit may also fly a number of hexes from its base equal to its range to perform defensive tasks (EXCEPTIONS: Air units subject to a winter result of "9" or air oil effects, or which are based in a partially supplied base (30.523A), may only fly defensive air operations over the hex in which they are based).

18.46 RETURNING TO BASE: Subject to stacking limits, land-based air units which survive an air activity may return to their base of origin or any operational base within range of their activity hex that was under friendly control at the start of the phase in which the air activity was conducted. Air units that return to a base other than their base of origin are immediately inverted.

18.47 AIR INTERACTIONS:

18.471 During each phase of the attacker's turn, the possibility arises that defending air may intercept an air transport activity (18.62) or participate in a naval activity (18.63).

18.472 The attacker may use eligible air units to counter-intercept the defender's interception of air transport activities (18.622). This is considered to be an offensive operation and the attacker must pay the normal BRP cost to employ its air units in this manner. Once the resulting air combat is resolved, the surviving air units for both sides are inverted for the remainder of the player turn.

18.473 The attacker and defender may also use eligible air units to search, provide air cover, or attack enemy naval units at sea (22.4422, 23.2, 23.7). Neither side has to pay any BRPs to use its air units in this manner. Air units which survive these activities and any air combat arising out of them are inverted at the end of the redeployment phase of the player turn in which the activity took place.

18.48 The restrictions of 18.22 governing the movement of air units over neutral hexes also apply to air units which fly offensive and defensive missions or redeploy.

18.49 Air missions may not be flown within a mapboard box, from the mapboard into a mapboard box, or from a mapboard box onto the mapboard except as follows:

A. Axis air units may bomb the Atlantic U.S. box, if the Axis have achieved three air range research results, or the Urals box (26.31, 26.462).

B. Japanese air units may bomb the Australia box, the India box, the Pacific U.S. box, if Japan has achieved three air range research results, or the Urals box (26.31, 26.462).

C. During Murmansk convoy battles (40.45).

18.5 OFFENSIVE AIR MISSIONS:

18.51 ELIGIBLE BASES: Offensive air missions may only be flown from fully supplied cities or airbases, or (NAS only) one-hex islands or carriers. Offensive air missions may not be flown from partially supplied bases (30.523A) or bases which are subject to air oil effects. The same restriction applies to the use of air units to search, provide air cover, or attack enemy naval units at sea.

18.511 AIR MISSIONS DURING THE MOVEMENT PHASE: The following offensive air missions may be flown during the movement phase:

A. Counterair (18.52).

B. Attacks on patrolling submarines (21.4184C).

C. Attacks on bases by patrolling TFs (21.41, 23.6).

D. Air supply (18.53).

E. BRP grants to China over the Hump (using air transports at no BRP cost - 40.85).

F. Air transport (18.54).

G. Ground support for overruns (18.55).

H. Interception of defensive air support for overruns (18.56).

I. Counter-interception of defending air which intercept air transports (18.622).

18.512 AIR MISSIONS DURING THE COMBAT PHASE: The following offensive air missions may be flown during the combat phase:

A. Counterair (18.52).

B. Attacks on naval bases (23.5, 23.6).

C. Airdrops (10.53).

D. Ground support, both for regular and exploitation attacks (18.55).

E. Interception of defensive air support (18.56).

F. Strategic bombing (26).

G. BRP grants to China over the Hump (using air transports at no BRP cost - 40.85).

H. Counter-interception of defending air which intercept air transports (18.622).

18.513 AIR MISSIONS DURING THE REDEPLOYMENT PHASE: The following offensive air missions may be flown during the redeployment phase at no BRP cost:

A. Air transport (18.54).

B. Counter-interception of defending air which intercept air transports (18.622).



18.52 COUNTERAIR:

18.521 Land-based air units and carrier-based air units at sea (17.33A) may counterair any enemy air base within range.

A. If the counteraired air base contains air units, the attacking air units must engage in at least one round of air combat with the defending air units.

B. All defending air units in the attacked air base engage the attacker, whether or not they are inverted. Air transport units may be engaged by the attacker, but are not counted when determining the air combat strength of the defender.

C. Carrier-based naval air units concealed by a TF marker are revealed when the attacker announces its counterair attack on their base and must participate in counterair combat.

D. Counterair attacks may be made against enemy air bases which do not contain air units.

Two examples of counterair attacks against enemy air bases which do not contain air units come to mind. The first is a counterair attack against an empty air base to deny the air base as a refuge to enemy air units withdrawing from another counterair attack (18.523). The second is a counterair attack against an enemy port containing a TF to determine whether the TF contains carriers carrying NAS (17.3123, 20.164A).

18.522 After one round of counterair combat is resolved:

A. If either the attacker or defender had all its air units eliminated, the counterair combat ends.

B. If both sides had air units survive, each side has the option of disengaging from the air battle:

- The defender announces its decision to disengage first. If it disengages, the counterair combat ends.
- If the defender elects to continue the counterair battle with its surviving air units, the attacker has two options:
 - The attacker may disengage, ending the counterair combat.
 - The attacker may initiate a second round of counterair combat with its surviving air units, including those forced to abort by the defender's previous counterair combat dice roll. The attacker may reinforce its surviving counterairing air units with additional, previously uncommitted air units.

C. This continues until one side or the other disengages or is completely eliminated.

18.523 The defender disengages from counterair combat by flying all surviving defending air units, including naval air units based on carriers in port, to one or more controlled air bases or mapboard boxes within staging range with the capacity to base them which are not also being counteraired, and which have not been counteraired earlier in the same phase. If no such bases exist, the defender may not disengage from counterair combat. Partial disengagement is not permitted. If the defender disengages from counterair combat, all surviving defending air factors are inverted for the remainder of the player turn.

18.524 Regardless of the outcome, once all rounds of counterair during the current phase are resolved:

A. LAND-BASED AIR: All surviving attacking land-based air units return to base (18.46) and are inverted for the remainder of the player turn.

B. CARRIER-BASED AIR: All surviving attacking carrier-based air units return to their carriers and, if their carriers are engaged in naval combat, are inverted for the remainder of that round of naval combat. Once any naval combat in which they are involved is resolved, they return to base with their carriers.

18.525 A defending air unit may be countered by different attacking air units during the movement and combat phases.

18.526 EFFECTS OF COUNTERAIR ATTACKS ON SURVIVING DEFENDING AIR UNITS: If the defender does not disengage from counterair combat, the status of the defender's surviving air units is determined by the attacker's final air combat dice roll:

A. Defending land-based air units which were forced to abort by the attacker's final counterair combat dice roll (the number after the "7" on the Air Combat Table result) are inverted for the remainder of the player turn. Excess abort results are disregarded. See 22.43 for the effects of counterair attacks during naval combat.

B. Naval air units, including NAS forced to abort by the attacker's final counterair combat dice roll, may return to their carriers if they go to sea, adopting the inversion status of their carriers (17.3126C).

C. Defending air units which were not forced to abort by the attacker's final counterair combat dice roll may operate without impairment during the attacker's player turn.

18.527 AIR SURPRISED ON THE GROUND AT PEARL HARBOR: For the effects of surprise on air units at Pearl Harbor, see 51.36.



18.53 AIR SUPPLY:

18.531 TIMING: Air supply missions may be flown by air transport units only during the movement phase, after the tracing of sea and land supply lines. Air transport units providing air supply must operate from fully supplied bases.

18.532 AIR TRANSPORTS REQUIRED: Each uninverted air transport factor may provide limited supply to one ground unit. The total number of ground units which may be air supplied each turn is limited by the number of available air transport units. Units may receive air supply from an alliance faction partner's air transport units if not prohibited from doing so by cooperation restrictions (53).

18.533 BASING, SUPPLY AND RANGE: Air transports providing air supply must fly from a fully supplied city or airbase not subject to air oil effects to ground units within their operational range (four hexes in Europe and three hexes in the Pacific – 17.62).

18.534 AIR SUPPLY SUBJECT TO INTERCEPTION: Air transports flying air supply missions may be intercepted by eligible defending air units (18.62).

18.54 AIR TRANSPORT:

18.541 TIMING: During the movement phase, at the same time as sea transport (21.43), or during the redeployment phase (28.36), eligible ground units may be air transported up to eight (Europe) or six (Pacific) hexes.

18.542 AIR TRANSPORTS REQUIRED: Each uninverted air transport factor may air transport one ground unit. The total number of ground units which may be air transported each turn is limited by the number of available air transport units. Units may be air transported by an alliance faction partner's air transport units if not prohibited from doing so by cooperation restrictions (53).

18.543 ELIGIBLE UNITS: Each uninverted air transport factor may air transport a one-factor infantry unit or a specialized unit.

18.544 PROHIBITED UNITS: Armor units, two- and three-factor infantry units, replacements, partisans and other units may not be air transported.

18.545 BASING AND SUPPLY: Air transport must begin and end in a city or airbase. Both air bases must be operational. The air transport factor involved may stage to the city or airbase from which the air transport activity is flown and may end the movement phase in either air base used in the air transport mission.

18.546 AIR TRANSPORT SUBJECT TO INTERCEPTION: Air transports flying air transport missions may be intercepted by eligible defending air units (18.62).

18.547 GROUND UNITS:

A. MOVEMENT: Ground units may use their full movement capability during the player turn in which they are air transported. Ground units may move to their base of embarkation before being air transported, prior to the movement of other ground units. Only ground units which have sufficient movement factors to meet the costs of embarkation (if any) and debarkation may be air transported. Ground units may move after being air transported, if permitted by their remaining movement factors, and may engage in offensive ground attacks or attrition in conjunction with other ground units.

- There is no movement cost to embark (EXCEPTION: If the base of embarkation is in an enemy ZoC, there is a movement cost of two movement factors in Europe and one movement factor in the Pacific to embark, even if the ground unit and the air transport factor begin the turn in the base of embarkation).
- There is a movement cost of one movement factor to debark, plus an additional movement factor if the base of debarkation contains rough terrain (EXCEPTIONS: Japanese ground units and the Chindit entering jungle hexes do not incur an additional movement cost - 13.41C). There is no additional movement cost to debark in a hex in an enemy ZoC.

B. STACKING: The number of ground units which may air transport from or to a single base is not limited by stacking limits.

C. RESTRICTIONS:

- Ground units which are unsupplied may not be air transported.
- A unit may not be air transported from one location to another, then air transported again from the new location, in the same turn.
- A ground unit may not be air transported and sea transported in the same movement phase.
- Ground units which are air transported may not airdrop or invade in the same turn.



18.55 GROUND SUPPORT:

18.551 Air units within range of a hex capable of being attacked by ground units may fly to that hex and add their combat factor to that of any attacking ground units. Overruns and exploitation attacks may be similarly supported by air units. Air units which provide ground support during exploitation may not have provided ground support during the regular combat phase, even against the same hex. If a ground attack against more than one enemy hex is being conducted, the attacker may add ground support to its attack if its air units are able to reach all of the attacked hexes.

18.552 GROUND SUPPORT FROM NAVAL AIR UNITS: Naval air units, whether land-based or carrier-based, may provide ground support.

18.5521 Three NAS provide one factor of ground support, six NAS provide two factors of ground support, and so on. If ground combat losses are taken from naval air units, the 3:1 ratio is also used. Ground support from naval air units may be used in conjunction with shore bombardment, with remnants from both being added together.

EXAMPLE: Five infantry factors, supported by 12 NAS, invade a one-hex island defended by a 1-2 infantry unit. The ground combat ratio is 9:3 = 3:1. The attacker rolls a "1", and an exchange results. If the attacker wished to preserve its invading units, it would have to remove nine NAS.

Five NAS and seven fleet factors provide ground support and shore bombardment for an invasion. The total increase in attacking strength is four factors.

18.5522 GROUND SUPPORT FROM FAST CARRIERS: Carrier-based naval air units may provide ground support for regular ground attacks, including seaborne invasions, but not for exploitation attacks, provided the carriers are at sea within air range of the attacked units.

18.553 GROUND SUPPORT FROM CVEs:

A. CVEs may provide ground support only for seaborne invasions. CVEs which provide ground support must be in the invasion hex.

B. Each CVE factor which provides ground support adds one factor to the ground attack.

C. The number of combat factors added to a ground attack by ground support from CVEs may not exceed the number of invading ground factors involved in the invasion attack.

D. CVEs which provide ground support count against the overall limit on ground support. Ground support from CVEs may be supplemented by additional ground support from AAF or NAS, up to three times the number of invading ground factors involved in the invasion attack.

E. CVEs which provide ground support may be eliminated as a result of ground combat in the same manner as fleets providing shore bombardment (21.52). The attacker may freely choose from among participating ground, air and naval units when satisfying ground combat loss requirements, subject to 18.556 and 21.517H.

18.554 LIMITS ON GROUND SUPPORT:

A. LIMIT: The total number of AAF or their naval air equivalent and CVEs which may provide ground support for an attack may not exceed three times the total number of attacking ground factors.

B. CVEs: In addition to this overall limit, ground support from CVEs is limited to the number of invading attacking ground factors (18.553C).

C. LIMIT APPLIES ONLY AT THE START OF COMBAT: Once placed, ground support is not affected by the loss of ground units in combat - the limit on the amount of ground support applies only at the start of combat.

18.555 ELIMINATION OF GROUND SUPPORT IF ATTACK NOT MADE: If the attacking player decides not to attack a hex to which ground support has been committed, the air units providing ground support are eliminated. Air units providing ground support are not eliminated when the attacker is unable to attack as a result of enemy action or aborts a naval mission, but a voluntary decision not to attack, or a decision to attack with fewer ground factors than required to comply with 18.554, results in the elimination of the excess air units providing ground support.

18.5551 Ground support may be provided for seaborne invasions. If an invasion is turned back by the enemy, or is voluntarily aborted by the attacking player, air units providing ground support are not eliminated. The air units return to base and are inverted for the remainder of the player turn.

18.5552 If the interception of a portion of an invasion force or the sea transport of ground units results in more ground support than is allowed (18.554), the excess air factors are not eliminated. The excess air factors return to base and are inverted for the remainder of the player turn.

18.556 AIR LOSSES FROM GROUND COMBAT: If the attacker suffers ground combat losses, some, all or none of these losses may be taken from air units that provided ground support, provided sufficient factors are eliminated.

18.56 INTERCEPTION OF DEFENSIVE AIR SUPPORT:

18.561 After the defender has committed its air units to defensive air support (18.61), the attacker may intercept such defensive air support with any uninverted air units within range of the hex in which the defensive air support has been placed. Defensive air support provided in connection with overruns and exploitation attacks may also be intercepted.

18.562 AIR INTERCEPTION FROM CARRIERS: Naval air units based on fast carriers at sea may intercept defensive air support provided the carriers are within air range of the hex in which the defensive air support has been placed. Carrier-based and land-based air units may combine to intercept the same defensive air support. CVEs may not intercept defensive air support (20.42).

18.563 RESOLVING INTERCEPTION OF DEFENSIVE AIR SUPPORT:

18.5631 When defensive air support is intercepted, at least one round of air combat between the intercepting and defending air units is resolved. The defender then has the option of returning to base or continuing its defensive air support mission.

18.5632 If the defending air units which survived the initial round of air combat elect to return to base, their defensive air support mission is canceled and no additional rounds of air combat take place.

18.5633 If the defending air units which survived the initial round of air combat elect to continue their defensive air support mission, all defending air factors which were neither eliminated nor forced to abort by the attacker's final air combat dice roll (the number after the "/" on the Air Combat Table) provide defensive air support (subject to 18.614), unless the attacker elects to fight another round of air combat.

18.5634 If the defender elects to continue its defensive air support, the attacker may initiate a second round of air combat with its surviving air units, including those forced to abort by the defender's previous air combat dice roll; may reinforce its interception with additional, previously uncommitted air units, whether or not any intercepting air units survived the previous round of air combat; or disengage. All air units flying defensive air support which were not eliminated in previous rounds of air combat must be engaged, including those which were forced to abort in the previous air combat round. This continues until one side or the other disengages or is completely eliminated.

18.564 All surviving intercepting air factors return to their base and are inverted for the remainder of the player turn after the resolution of air combat with the defending air factors, regardless of the outcome.

18.57 BOMBING OF ECONOMIC TARGETS: See rule 26.

18.58 INTERACTING WITH NAVAL ACTIVITIES: Uninverted AAS or NAS in an operational air base may interact with naval units at sea as set out below. The use of air units in this manner is not an offensive mission and does not require the expenditure of BRPs. Searching, providing air cover and attacking enemy naval units at sea causes the air units used to be inverted at the end of the redeployment phase of the player turn in which they carry out the activity.

A. Searching (search AAS and land-based NAS - 22.4422).

B. Providing air cover (cover AAS and land-based NAS - 23.2).

C. Attacking enemy naval units at sea (attack AAS and NAS - 23.7).

18.59 SPOTTING: Uninverted search AAS or NAS in an operational base may assist naval interceptions (22.22F). Spotting does not invert the search AAS or NAS involved. Air units that spot may be used for another activity later in the turn, but air units already committed to another activity may not spot later in the turn.



18.6 DEFENSIVE AIR MISSIONS:

18.61 DEFENSIVE AIR SUPPORT:

18.611 During an enemy player turn, in the movement phase when overruns are attempted and in the combat phase, after the attacker has announced its ground support air missions, uninverted defending army air units and land-based naval air units may provide defensive air support to any ground units within range which are being overrun or that the defender thinks may be subject to ground attack, including by seaborne invasion and as yet unannounced airdrops (EXCEPTION: Defensive air support against low-odds attacks is deferred - 18.619).

A. EFFECT: Air units which fly defensive air support increase the strength of the defending ground units. The effect of defensive air support is not affected by the DM of the defending ground units. The defender has the option of not using all, some or none of its defensive air support prior

to the resolution of regular ground combat to preserve defensive air support for possible exploitation combat (18.618).

B. GROUND ATTACKS: Each AAF, and every three NAS, which fly defensive air support adds one factor to the strength of ground units defending against non-invasion ground attacks.

C. INVASION ATTACKS: Each AAF which flies defensive air support adds three factors to the strength of ground units defending against seaborne invasion; each NAS which flies defensive air support adds one factor to the strength of ground units defending against seaborne invasion. The number of factors added to the strength of the ground units is used when determining losses (15.63).

D. RESTRICTIONS: Defensive air support is subject to the following restrictions:

- Air units in a partially supplied base (30.523A), subject to air oil effects (33.61A) or providing defensive air support to units in a hex subject to a winter result of “9” may only fly defensive air support over the hex in which they are based.
- Defensive air support may be prohibited by cooperation restrictions (53.251D, 52.42, 53.52).
- Defensive air support may not be provided to partisans. If partisans and non-partisan ground units are attacked together, the non-partisan ground units may receive defensive air support (11.47).

18.612 Land-based naval air units may provide defensive air support; carrier-based naval air units may not. Three NAS (round down) are required to provide one factor of defensive air support (EXCEPTION: Each NAS provides one factor of defensive air support against seaborne invasions - 18.611C).

18.613 The defender may similarly commit army air units which have not yet flown during that game turn to defensive air support of units being subject to overruns, or during exploitation. Defensive air support placed during movement that prevents an overrun remains in its hex and provides defensive air support during regular combat; defensive air support placed during regular combat may remain in its hex to provide defensive air support against exploitation attack, at the defender's option, provided it was not eliminated or forced to abort in air combat with intercepting attacking air units and was not used in regular ground combat.

18.614 LIMITS ON DEFENSIVE AIR SUPPORT:

A. 3:1 LIMIT: The number of AAF or their naval air equivalent which fly defensive air support may not exceed three times the number of defending ground factors. DMs are ignored when making this determination.

B. LIMIT APPLIES ONLY AT THE START OF COMBAT: Once placed, defensive air support is not affected by the loss of ground units in combat - the limit on the amount of defensive air support applies only at the start of combat.

C. EXCESS AIR: A player may commit additional air units in excess of the 3:1 limit on defensive air support, in anticipation of enemy interception and air combat, but the number of air factors which actually provide defensive air support when ground combat is resolved may not exceed the 3:1 limit. Such additional air factors:

- May not participate in any rounds of ground combat, even if ground combat losses cause the number of air factors providing defensive air support to drop below the 3:1 limit.
- Are unaffected by the results of the ground combat.
- Are considered to have flown a defensive air mission and are inverted for the remainder of the player turn when they return to base.

18.6141 JET ESCORT OF DEFENSIVE AIR SUPPORT: Jets may escort army and naval air units flying defensive air support. Jets are not included when determining the 3:1 limit on defensive air support, are unaffected by the results of ground combat, and are considered to have flown a defensive air mission and are inverted for the remainder of the player turn when they return to base. Army and naval air units may not escort defensive air support and are always subject to possible elimination as a result of ground combat unless they exceed the 3:1 limit on defensive air support.

18.615 If the attacker commits ground support and the defender commits defensive air support to the same ground battle, there is no direct air interaction. Each side simply adds its air factors to those of its ground units.

18.616 Air units which provide defensive air support may be eliminated by adverse results in ground combat. Should a combat result leave the defender with surviving factors, it may elect to take its losses from either air or ground

units or both, in any combination, provided it eliminates sufficient factors (subject to 15.632).

18.617 Defending air units which do not fly defensive air support may not be eliminated by an adverse ground combat result. An air unit which is based in an attacked hex and has not been committed to defensive air support does not take part in the ground combat and is simply displaced (18.25) if attacking ground units advance into the hex after combat.

18.618 Air units committed to defensive air support during the regular combat phase may remain in their hex to provide defensive air support against exploitation attacks, at the defender's option, provided they were not eliminated or forced to abort in air combat with intercepting attacking air units and were not used in regular ground combat. Air units that provided defensive air support have performed a mission and are inverted for the remainder of the player turn even if the attacker does not attack the ground units they were supporting.

18.619 DEFERRED DEFENSIVE AIR SUPPORT AGAINST LOW-ODDS ATTACKS: When the attacker announces a ground attack with initial odds of less than 1:1, the defender may use eligible, uncommitted air units to provide defensive air support to the attacked unit(s). Deferred defensive air support may be intercepted by the attacker in the normal manner. The ensuing air combat does not affect any previously provided defensive air support. Regardless of the outcome of any air combat between the attacker's intercepting air units and the deferred defensive air support, the attacker must complete the ground attack, even at worse odds. This sequence is repeated throughout the attacker's player turn, provided the defender has air units eligible to provide deferred defensive air support.

18.62 INTERCEPTION OF AIR ACTIVITIES BY DEFENDER:

18.621 INTERCEPTION: The defender may use uninverted air factors in an operational air base to intercept any of the following attacker air transport activities in any one hex along the air transport's route, including the base of origin and the destination hex:

- A. Air supply.
- B. Air transport.
- C. Airdrops.
- D. BRP grants to China flown over the Hump.

18.622 COUNTER-INTERCEPTION: If an air transport activity is intercepted:

A. Eligible friendly air units may attempt to protect the air transport activity by counter-intercepting the intercepting air units in the same manner as defensive air support is intercepted (18.56). All counter-intercepting air units engage in air combat with all intercepting air units.

B. One round of air combat is then resolved.

- If all intercepting air units are either eliminated or forced to abort by the counter-intercepting air combat result, the air combat ends and the air transport activity is completed without interference.
- If some intercepting air units are unaffected by the counter-intercepting air combat result, the intercepting side may elect to continue its interception. If it does:
 - A second round of air combat is resolved. Whether or not any counter-intercepting air units survived the previous round of air combat, the counter-intercepting air units may be reinforced by additional, previously uncommitted air units prior to resolving air combat; the intercepting air units may not be reinforced.
 - The moving side may withdraw its surviving counter-intercepting air units. The air combat then ends and all intercepting air units unaffected by the previous counter-intercepting air combat result may attack the air transport (18.623).

C. This process continues after each round of air combat until one side or the other withdraws or is eliminated.

18.623 ATTACKS BY SURVIVING INTERCEPTING AIR UNITS OPTIONAL: Once air combat between the intercepting and counter-intercepting air is resolved, some, all or none of the intercepting air units may attack the air transport by making a single air combat dice roll. Intercepting air units which were eliminated or forced to abort by the result in the final round of counter-interception air combat may not attack the air transport. No air combat dice roll is made by the air transport. If the air transport is eliminated or forced to abort, the air transport activity fails. Intercepting air units which did not engage in air combat with counter-intercepting air units and which do not attack the air transport return to base, are not inverted and may be used later in that player turn.

18.624 EFFECT ON GROUND UNITS: Grounds units being air transported or air dropped return to base if their air transport is forced to abort and are eliminated if their air transport is eliminated by the defender's air combat result.

18.63 ASSISTING FRIENDLY NAVAL ACTIVITIES: The defender may use uninverted AAS or NAS in an operational air base to assist friendly naval units at sea in same manner as the attacker (18.58).

18.7 UNINVERTING AIR UNITS:

18.71 An alliance faction may uninvert all its land-based air factors at any time during its player turn, subject to the restrictions in 18.72.

18.72 RESTRICTIONS: The uninversion of air units is subject to the following restrictions:

A. FULL SUPPLY REQUIRED: Air units may only be uninverted if they are fully supplied.

B. UNINVERSION AFTER USE ONLY AT END OF PLAYER TURN: When the rules state that an air unit is "inverted until the end of the player turn", this means that the air unit may not be uninverted until the final part of the player turn, after the redeployment phase. Air units which engage in an activity which results in inversion may therefore not be used again until the opposing player turn. Air units may be uninverted at the start of the owning player's turn and again at the end of the friendly player turn, after use; then may be used during the opposing player turn.

There are a number of examples of this general rule. For example, air units which carry out operations during their player turn (18.42,) and naval air units flying combat air patrol which land on air bases rather than carriers (22.463B), are inverted until the end of their player turn, at which point they may be uninverted and used during the ensuing opposing player turn - provided they are not redeployed (28.81).

C. NEW CONSTRUCTION: Air units may not be uninverted until after the redeployment phase of the player turn in which they are constructed. If redeployed to a new base during the redeployment phase, they remain inverted through the following opposing player turn (27.82A).

D. REDEPLOYMENT:

- Inverted air units which redeploy to a new base during the redeployment phase may not be uninverted at the end of the player turn of use (EXCEPTION: American air units may be uninverted if redeployed in a theater in which the U.S. is not yet at war).
- Air units which are TRed, then used to assist NRs, may not be uninverted until the next player turn.

E. OPPOSING PLAYER TURN: Air units may not be uninverted during the opposing player turn.

18.73 AUTOMATIC UNINVERSION: Air units in the following locations are uninverted at the end of the owning player's turn, even if out of supply:

A. STRATEGIC BOMBERS AND INTERCEPTORS: All strategic bombers and interceptors in an SW box.

B. WESTERN ALLIED AIR UNITS: All Western Allied air units in the U.S. boxes, unless NRed into the U.S. box during the current player turn.



19. AIR COMBAT

- 19.1 RESOLVING AIR COMBAT
- 19.2 AIR COMBAT TABLE
- 19.3 AIR COMBAT MODIFIERS
- 19.4 AIR COMBAT RESOLUTION
- 19.5 ARMY AND NAVAL AIR COMBAT
- 19.6 AIR LOSSES FROM MIXED FORCES

19.1 RESOLVING AIR COMBAT:

19.11 MULTIPLE ROUNDS OF AIR COMBAT: Air combat consists of one or more air combat rounds and normally continues until one side or the other is eliminated or withdraws.

19.12 SINGLE ROUND OF AIR COMBAT: Air combat against air transports arising out of the interception of air transport missions, air attacks on naval units at sea and strategic bombing are resolved by a single round of air combat. Counterair air combat arising out of carrier-based air strikes against land bases and land-based air attacks against naval bases is resolved by a single round of air combat. A naval patrol en route to its patrol hex may engage in one round of counterair air combat from each hex it enters.

19.2 AIR COMBAT TABLE:

19.21 AIR ATTACK DICE ROLLS: In each round of air combat, each side rolls two dice and consults the Air Combat Table.

19.3 AIR COMBAT MODIFIERS:

19.31 MODIFIERS: Each side's air combat dice roll is subject to the following modifiers. A positive net modifier for air combat for one side results in an equal negative net modifier for the other side:

A. The relative Air Nationality modifiers, as set out in the Air Nationality DRM Chart. The side with the higher Air Nationality DRM adds the difference to its air combat dice roll, and the side with the lower Air Nationality DRM subtracts the difference from its air combat dice roll. When a side has air units with different Air Nationality DRMs, the lowest Air Nationality DRM is used. If all the air units with the lowest Air Nationality DRM are eliminated, only the Air Nationality DRMs of the remaining air units are used in subsequent rounds of air combat. Air Nationality DRMs may be increased by research.

Air Nationality Chart - 19.31A, 23.441A	
DRM	Nationality
2	Germany, Japan, United States, Britain, Finland, Sweden, Australia, India
1	Italy, Russia, France, including Free and Vichy French air units
0	All other minor countries
Modifiers	
+1	Elite Japanese naval air
+1	Interceptors
+1	American Pacific strategic bombers
-1	British naval air
-1	Air units subject to a winter effect of 8 or more
-1	Air units in partial supply or subject to air oil effects

Classic A World at War

In classic A World at War, India does not have any army air units.

B. A favorable +/-1 modifier for each jet factor or three jet squadrons engaged in the air combat. If both sides commit jets, only the net modifier is used (17.56).

C. An adverse +/-1 modifier if one force is attacking an enemy naval force at sea and engages in air combat with defending air units flying combat air patrol. Surprise effects may negate this modifier (23.7413). Air units flying air cover do not benefit from this modifier.

D. In air combat arising from strategic bombing, a +/-1 modifier in favor of the defender for each radar research result achieved by the defender. The attacker's radar research results are ignored and do not give the attacker a favorable modifier.

Air Combat Table - 19.2												
AF AS	Dice Roll											
	2	3	4	5	6	7	8	9	10	11	12+	
1	0	0	0/1	0/1	1/0	1/0	1/1	1/1	1/2	1/2	1/3	
2	0/1	0/1	1/0	1/0	1/1	1/1	1/2	1/2	1/3	1/3	2/2	
3	1/0	1/0	1/1	1/1	1/2	1/2	1/3	1/3	2/2	2/3	2/4	
4	1/1	1/1	1/2	1/2	1/3	1/3	2/2	2/3	2/4	3/3	3/4	
5	1/2	1/2	1/3	1/3	2/2	2/3	2/4	3/3	3/4	3/5	4/4	
6	1/2	1/3	1/3	2/2	2/3	2/4	3/3	3/4	3/5	4/4	4/5	
7	1/3	1/3	2/2	2/3	2/4	3/3	3/4	3/5	4/4	4/5	4/6	
8	1/3	2/2	2/3	2/4	3/3	3/4	3/5	4/4	4/5	4/6	5/5	
9	2/2	2/3	2/4	3/3	3/4	3/5	4/4	4/5	4/6	5/5	5/6	
10	2/3	2/4	3/3	3/4	3/5	4/4	4/5	4/6	5/5	5/6	5/7	
11	2/4	3/3	3/4	3/5	4/4	4/5	4/6	5/5	5/6	5/7	6/6	
12	3/3	3/4	3/5	4/4	4/5	4/6	5/5	5/6	5/7	6/6	6/7	
13	3/4	3/5	4/4	4/5	4/6	5/5	5/6	5/7	6/6	6/7	6/8	
14	3/5	4/4	4/5	4/6	5/5	5/6	5/7	6/6	6/7	6/8	7/7	
15	4/4	4/5	4/6	5/5	5/6	5/7	6/6	6/7	6/8	7/7	7/8	
16	4/5	4/6	5/5	5/6	5/7	6/6	6/7	6/8	7/7	7/8	7/9	
17	4/6	5/5	5/6	5/7	6/6	6/7	6/8	7/7	7/8	7/9	8/8	
18	5/5	5/6	5/7	6/6	6/7	6/8	7/7	7/8	7/9	8/8	8/9	
19	5/6	5/7	6/6	6/7	6/8	7/7	7/8	7/9	8/8	8/9	8/10	
20	5/7	6/6	6/7	6/8	7/7	7/8	7/9	8/8	8/9	8/10	9/9	
Modifiers - Air Combat												
+/-#	Air Nationality DRM											
+/-1	for each jet factor or three jet squadrons engaged											
+/-1	combat involving CAP											
+/-1	each radar research result achieved by the defender (air combat arising from strategic bombing only)											
If more than 20 air factors/squadrons engage in combat, the result is determined by consulting the "20" row and whatever other row is required to equal the total number engaged. The dice roll is not modified by the number of air factors/squadrons over 20.												
Results: The number before the slash is the number of enemy air factors/squadrons which are eliminated. The number after the slash is the number of enemy air factors/squadrons which are forced to abort (EXCEPTIONS: Air units flying combat air patrol/air cover or defending against strategic bombing do not abort and ignore the number after the slash - 23.416B, 26.451).												

19.4 AIR COMBAT RESOLUTION:

19.41 AIR COMBAT SIMULTANEOUS: Air combat dice rolls are made simultaneously. The size of the forces engaged is calculated before any air combat losses for that round are incurred.

19.42 AIR COMBAT TABLE RESULTS: The number before the “/” indicates the number of enemy air factors or squadrons which are eliminated. The number after the “/” indicates the number of enemy air factors or squadrons which are forced to abort. Excess abort results are ignored. A dice roll of less than two is treated as a two.

19.5 ARMY AND NAVAL AIR COMBAT:

19.51 AIR COMBAT BETWEEN ARMY AND NAVAL AIR UNITS: When NAS and AAF engage in air combat, each AAF is broken down into three AAS prior to resolving combat, with all the AAS engaging in the air combat, regardless of type (23.131A). The row used on the Air Combat Table for air combat dice rolls is determined by the number of air squadrons involved, and losses are similarly taken in air squadrons. Losses from a force composed of both AAS and NAS are apportioned according to 19.6.

19.52 For the recombination of AAS into AAF, see 23.14.

19.6 AIR LOSSES FROM MIXED FORCES:

19.61 Combat effects to a force of mixed types must be distributed equally among the types involved, with any remnant being taken by the type having the most factors or squadrons involved unless otherwise specified. This rule applies to forces containing:

A. Different nationalities.

B. Different types of air units, such as army air, naval air, jets, interceptors and air transports.

C Air units of the same nationality but different Air Nationality DRMs (Japanese elite and non-elite NAS).

19.62 If an equal number of factors were involved, the remnant is taken from the type with the lower Air Nationality DRM (EXCEPTION: Air combat resulting from strategic bombing - 26.454). If the number of factors present and the Air Nationality DRMs are equal, the owner chooses.

19.63 The number of factors eliminated and aborted are totaled when apportioning losses per rule 19.61, then assigned as equally as possible to the various types of air units involved. Eliminated air factors are apportioned first, then air factors which are forced to abort. For example, a “1/1” air combat result against a force of three American and one British AAF eliminates one American factor and aborts one British factor.

19.64 If uninverted and inverted air units are counterair in the same hex, the attacker has the option in each combat round of either applying the counterair combat results only to the uninverted defending air units; or applying the counterair combat results to both the uninverted and inverted air units, provided the inverted defending air unit counted when determining the air combat strength of the defender. (EXCEPTION: If all the uninverted air units are eliminated, any surplus eliminated results are applied to the inverted air units, whether or not they participated in the counterair combat. Abort results have no effect on inverted air units).

19.65 A force fighting as squadrons, either because it contains naval air units or engages in air combat with enemy naval air units, apportions combat effects as set out in 19.61 - 19.64.

A. All AAS of the same nationality are considered to be of the same type. No distinction is made at this stage between search, cover and attack squadrons.

B. Once combat effects have been determined for each type of air unit engaged, including to the AAS of each nationality, rules 19.61 - 19.64 are applied to the AAS of each nationality, with attack, cover and search AAS each being considered a different type of unit for the purpose of taking losses and abort results.

C. Once AAS losses have been determined, AAF are taken as losses as set out in 23.14.

EXAMPLE: A Japanese carrier force counterairs 2 American AAF, 1 Australian AAF, and 1 American NAS. The American and Australian AAF are converted to AAS, so the attacked Allied force consists of 6 American AAS, 3 Australian AAS and 1 American NAS.

Japan achieves a 2/3 air combat result.

The U.S. and Australia lose 1 AAS each. The American NAS, 1 American AAS, and 1 Australian AAS abort. 19.65 then applies to the air combat effects on the American and Australian AAS by nationality. Because there are an equal number of attack, cover and search AAS, the Allied player decides what types of AAS to lose and abort. However, the U.S. could not take both air combat effects from the same type of AAS.