

# **UNITED STATES**

# **HIGH ELEVATION BOMBERS**

The United States designed the B-29 Superfortress to be the highest-flying aircraft of the Second World War. Its operating altitude of 31,000 feet (9,450 m) kept it out of reach of most anti-aircraft artillery.

U.S. bombers are immune to anti-aircraft fire during one strategic bombing raid.

### MARINE AMPHIBIOUS DOCTRINE

Anticipating the need for a world-class amphibious assault force, the United States established the Fleet Marine Force to study the problems of amphibious attacks and recommend improved training and equipment. The techniques they developed were applied to the Marine Corps and adopted by the U.S. army, improving amphibious assault performance in all U.S. ground forces.

U.S. infantry hit at +1 during one amphibious attack.

## **LEND-LEASE**

Passed in March 1941, the Lend-Lease Act authorized the President of the United States to share war materials with any nation deemed vital to U.S. defense. By the war's end the U.S. had shared over \$50 billion worth of supplies, tanks, aircraft, and warships with its allies.

Replace any two U.S. units with equivalent Allied units of any nation(s) with which they share a space.

## **ISLAND AIR STRIP**

Supporting Allied naval forces with land-based fighters from nearby islands was a central piece of the "Island Hoping" strategy employed by the United States. In battles such as Guadalcanal, New Guinea, and Peleliu, U.S. fighters were operating from captured runways even before Japanese resistance on the island had ceased. Allied fighters on one U.S. controlled island may defend the adjacent ocean space instead of the island during this turn.

## **GUERILLA WARFARE**

Chinese forces compensated for their limited supply and lack of heavy weapons by relying on guerilla style tactics. Advancing Japanese forces were routinely ambushed by Chinese soldiers that disappeared into the countryside as abruptly as they had appeared.

One defending Chinese infantry unit may fire once and withdraw to a Chinese controlled space without being fired on.

## DAMAGE CONTROL TEAMS

The loss of the USS Lexington led to a major overhaul of damage control techniques on United States warships, with improved standards that demanded every sailor assist in firefighting. The changes helped multiple carriers survive devastating hits for the remainder of the war.

Treat one U.S. aircraft carrier as a two-hit unit during one battle.

# DESTROYER BOMBARDMENT

American destroyers supported landings in Sicily, Salerno, Kwajalein, Normandy, and Iwo Jima. During the Normandy landings at Omaha Beach, U.S. destroyers advanced so close to shore that they received hull damage from German small arms and machine guns. Their support was essential in suppressing German defenses and ensuring the success of D-Day.

U.S. destroyers can support an amphibious landing with bombards scoring hits at 2 or lower.

### ADVANCED FIRE CONTROL RADAR

The United States Navy developed radar guided targeting to direct the fire of its ships, improving accuracy at night, at long ranges, and in rough seas. This advance proved decisive at the Battle of Surigao Straight, where the U.S. fleet fired multiple accurate volleys before the Japanese were able to return fire.

U.S. battleships and cruisers hit at +1 during a naval battle or shore bombardment.





# **UNITED STATES**

### **DIVE BOMBERS**

The United States used small aircraft such as the SB2C Helldiver and SBD Dauntless as "dive bombers." Carrying a lighter payload than a strategic bomber, their small size and high speed enabled them to make pinpoint attacks against specific targets. U.S. dive bombers at the battle of Midway knocked out three Japanese aircraft carriers in the span of six minutes, turning the tide of the Pacific war.

You may choose which casualties U.S. fighters inflict on your enemies during one battle.

# "MAGIC" INTERCEPTS

The U.S. Navy's Combat Intelligence Unit had decrypted enough Japanese messages to anticipate the Japanese advance in the Coral Sea as well as the attack on Midway. Following the American success at Midway, the United States Army and Navy formed a joint cryptanalysis project, code named Magic, which eventually cracked every single Japanese code.

Force Japan to reveal a maximum of three cards you select randomly from their hand.

#### PT BOATS & DESTROYER ESCORTS

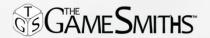
The United States Navy used two important small craft as fleet auxiliaries. The Patrol Torpedo or "PT" boat's ability to attack Japanese surface ships at high speed earned it the nickname "Devil Boat" from Japanese sailors. The tight turning radius and forward firing mortars of the Destroyer Escort made it ideal for hunting Japanese submarines. Though both were highly effective, the limited range of the PT boat and the slow speed of the Destroyer Escort prevented either from moving with major fleets in the open ocean.

Score one free hit in a naval battle adjacent to a U.S. controlled territory.

## **NORDEN BOMBSIGHT**

The Norden M. Bombsight used an analog computer to automatically calculate adjustments for airspeed and wind. It predicted a bomb's impact point with such incredible accuracy that it remained in U.S. service into the Vietnam War.

Add four additional damage to one successful U.S. strategic bombing raid.





# **UNITED KINGDOM**

### **COMMANDO RAID**

The United Kingdom trained special Commando units to infiltrate enemy territory and destroy vital installations. Relying on stealth tactics over brute force, a typical raid was accomplished by a tiny number of highly trained soldiers, often landing on hostile shores via row boats launched from a nearby naval vessel.

Eliminate one Axis anti-aircraft gun on any land space adjacent to any UK naval unit.

# **"ULTRA" INTERCEPTS**

Alan Turing and his team at Bletchley Park decrypted the supposedly unbreakable German codes by using the world's first programmable electronic digital computer. Winston Churchill and Dwight Eisenhower both considered the insights to German plans gained from the Ultra program to be a decisive factor in Allied victory. Force Germany to reveal a maximum of three cards you select randomly from their hand.

## COASTAL COMMAND

A section of the RAF, Coastal Command directed land-based aircraft in defense of the coastal waters of the British Empire. It provided protection to ships and supply lines throughout the Atlantic, Mediterranean, and Indian Ocean.

One Allied fighter in a UK controlled land space may be used to defend an adjacent ocean space instead.

## **DOWDING SYSTEM**

The world's first ground-controlled interception network, the Dowding System used a dedicated telephone network to ensure quick and efficient information sharing between all elements of anti-air defense, including civilian watchers. It tracked the location of attacking aircraft so effectively that it more than doubled the average fighter interception rate, providing a vital edge to British defenses in the Battle of Britain.

Axis fighters in a UK controlled space containing an anti-aircraft gun hit at -1 during one battle.

## **ASV RADAR**

When pre-war testing of a planned air-to-air radar system detected the presence of ships in the English Channel, the technology was quickly adapted for locating submarines. This Air-to-Surface Vessel (ASV) Radar was used extensively by the Royal Navy and RAF Coastal Command to locate and destroy German U-boats.

UK air units may attack Axis submarines during one battle without needing the presence of a destroyer.

# **DESTROYER BOMBARDMENT**

British destroyers bombarded shore positions to support attacks against Norway, Madagascar, Sicily, Salerno, the Dodecanese Islands, and Normandy. During the Normandy landings at Omaha Beach, British destroyers advanced so close to shore that they received hull damage from German small arms and machine guns. Their support was essential in suppressing German defenses and ensuring the success of D-Day.

UK destroyers can support an amphibious landing with bombards scoring hits at 2 or lower.

# **POLISH & FREE FRENCH DIVISIONS**

As the nations of Europe fell to the Axis powers, many of their refugees escaped to the United Kingdom, the defiant last bastion of the Allies. Thousands of them volunteered to serve with the British Army and continue the fight. French and Polish citizens enlisted in such numbers that they were formed into entire divisions.

Place two free UK infantry units in the United Kingdom.





# **UNITED KINGDOM**

# **JOINT OPERATIONS**

The United Kingdom and the United States went beyond armies fighting side by side and implemented a completely unified command structure. Operational planning was fully coordinated, and units from each nation were routinely commanded by their ally's Generals, creating an incredibly integrated multinational force.

UK units in two spaces of your choice do not move on your turn, but move and attack on the U.S. turn instead.

# **DOMINION & EMPIRE DIVISIONS**

The many peoples of the British Commonwealth and Empire fielded their own military forces to resist the Axis. The largest of these were mobilized in India, Canada, and Australia, though the armed forces of New Zealand, South Africa, and Egypt also joined the Allied cause.

Place one free UK infantry unit in any two of the following: Eastern Canada, India, or Australia.

## **CHINDIT BRIGADES**

"Chindits" were specially trained forces based in India. Officially known as Long Range Penetration Groups, they made long marches through difficult jungle terrain, harassing Japanese forces in Burma with surprise attacks well behind the front lines.

Score one free hit during one battle in Burma or India.





# **SOVIET UNION**

# **ARMORED CORPS**

The Soviet Union grouped armored divisions together into armored "tank" corps. Maintaining coordination between armored forces on a scale unmatched by any of their allies, Soviet tank corps lead the encirclement of Axis forces at Stalingrad, and spearheaded Operation Bagration, the largest defeat ever suffered by Germany. Soviet armor hit at +1 during a Soviet attack for as long as three or more are present.

# **MOBILE INDUSTRY**

As Axis armies advanced at an alarming pace, the Soviet Union embarked on an unprecedented effort to transfer entire industrial regions away from the threat. Machines were unbolted and crated up, tools were catalogued and packed away, and whole factories were disassembled and loaded on rail cars. All told, I 500 installations and their workers were moved eastward and reestablished safely out of harm's way.

You may move a Soviet industrial complex one space immediately after placing units.

## **ORDER NO. 227**

Stalin issued order number 277 to the Soviet defenders of Leningrad, Stalingrad, and Moscow. This "Not a Step Back" order promised glorious honor for soldiers that stood firm, and brutal reprisals against those that didn't. The Red Army defended Leningrad through an 872 day siege, threw the Germans back with a counterattack in front of Moscow, and turned the fight for Stalingrad into a battle of attrition that was measured in yards rather than miles.

Soviet infantry in Russia, Caucasus, or Karelia S.S.R. defend at +1 during one battle.

# NARODNOE OPOLCHENIYE

The Narodnoe Opolcheniye, or "National Popular army", was a mass levee of civilians which Russia had called on in times of national crises since 1611. Many that volunteered during the German invasion in 1941 remained under arms, forming five regular army rifle divisions.

Place one free Soviet infantry unit in any two of the following: Russia, Karelia S.S.R. or Caucasus.

## **MODELS KVI& IS2**

The massive 45-ton KVI and 46-ton IS2 tanks bore thick armor plating capable of withstanding most attacks. These well protected but slow-moving tanks were used in a breakthrough role, smashing through enemy lines at the start of a battle to create a gap for faster armor to exploit.

Treat one Soviet armor unit as a two-hit unit during one battle.

# **RAIL NETWORK**

Stalin implemented several five-year plans designed to improve Soviet industrial capacity. The first plan doubled rail capacity, and further investment doubled it again, leading to a fourfold increase in just a decade. While intended to boost the economy, the increased capacity was a key military asset, enabling rapid movements of soldiers, weapons, and supplies throughout Soviet territory.

Any or all Soviet ground units in one land space of your choice may move as a group through up to three Soviet controlled land spaces this turn.

### **KATYUSHA ROCKETS**

Used in conjunction with traditional artillery, Katyusha rockets were lightweight explosives that could launch from ordinary trucks. They could concentrate, fire a barrage, disperse, and fire from a new location before the enemy could fix their position.

Up to three Soviet artillery units hit at +1 during one battle.





# **SOVIET UNION**

### **TANKOGRAD**

Chelyabinsk, a small city in the Urals, quickly grew into an efficient producer of Soviet armored weapons. The city produced so many tanks with so few resources it came to be called "Tankograd" or "Tank City." Place one free Soviet armor unit in Urals.

# **SALVAGED VEHICLES**

Every Soviet tank corps included a special battalion tasked with repairing damaged vehicles, even those left behind by their enemies. These mechanics were so effective that Soviet operational reports frequently list more tanks being "knocked out" in a battle than were ever present, due to individual tanks being returned to service for a second, third, or even fourth time.

Place one free Soviet armor unit in a territory where you have just won a battle in which either side lost an armor unit.





# **GERMANY**

### **SKAGERRAK**

The Skagerrak, a narrow waterway between Denmark and Norway, enabled Germany to transfer troops between Scandinavia and Western Europe without dedicated naval support. The short distance meant that even slow-moving civilian vessels could be relied on to move troops without exposing them to attack.

German infantry may move between North Western Europe and Norway during this turn if Germany controls both territories.

# **ATLANTIC WALL**

Stretching from the Northernmost reaches of Norway to France's border with Spain, the Atlantic wall was a series of fortifications designed to stop an amphibious landing. Built from 17 million cubic meters of concrete and 1.2 million tons of steel, it was teeming with pre-sighted artillery, mortars, and machine guns.

Axis infantry in Norway, France, or North Western Europe defend at +1 during the first round of an amphibious attack.

## **U-BOAT BASES**

Germany housed many U-Boats in a series of submarine pens along the Atlantic coast. These massive bunkers protected U-Boats from attack while keeping them within striking distance of Allied fleets. Repeated attempts to destroy these bases failed, and many remain in use today as industrial sites, museums, and even as facilities for the French and Norwegian Navies.

Axis submarines adjacent to a space controlled by Germany may be placed on their side and are safe from any attack until Germany's next turn.

# **PANTHERS & TIGERS**

The 50-ton Panther, 60-ton Tiger, and 75-ton Tiger II were amongst the most feared weapons of the Second World War. Germany intended to replace all of their armored forces with these heavy tanks, but technical challenges and the Allied bombing campaign combined to prevent their production in sufficient numbers. Instead, they were interspersed throughout existing divisions to provide a powerful auxiliary to the Panzer IV, which remained the most numerous German tank in service through the end of the war.

Treat one German armor unit as a two-hit unit during one battle.

### RAIL NETWORK

The German state of Prussia pioneered the use of railways for rapid troop deployments, leading it to a decisive victory in the Franco-Prussian War of 1870 and the fusing of the various German states into a single nation the following year. This new German nation invested in a world-class rail network which enabled it to sustain a war on two fronts throughout the First World War. During the Second World War, Germany's rail assets expanded with each conquered nation, enabling movements over previously unheard-of distances with stunning rapidity. Any or all German ground units in one land space of your choice may move as a group through up to three German controlled land spaces this turn.

### **ARMORED CORPS**

Germany grouped armored divisions together into armored "panzer" corps. Maintaining coordination between armored forces on a scale unmatched by any Axis army, German panzer corps were essential in the conquests of Poland and France, and stunned the world by penetrating hundreds of miles into Soviet territory in a matter of weeks during Operation Barbarossa.

German armor hit at +1 during a German attack for as long as three or more are present.





# **GERMANY**

# **DIVE BOMBERS**

Germany designed the Ju 87 "Stuka" as a "dive bomber." Carrying a lighter payload than a strategic bomber, its small size and high maneuverability enabled it to make pinpoint attacks against specific targets. Stukas devastated Allied ships along the coasts of Norway and crushed ground forces during the invasions of Poland, France, and the Soviet Union.

You may choose which casualties German fighters inflict on your enemies during one battle.

## **BATTLE OF THE ATLANTIC**

Germany sought to exploit the United Kingdom's dependence on offshore resources by ambushing merchant ships throughout the Atlantic. Over the course of the war, German U-boats sank more than 3,500 Allied merchant ships totaling 14.5 million gross tons, causing massive disruptions to British production.

Subtract I point of UK income for each German submarine adjacent to any UK industrial complex at the start of their next turn.

#### 8.8 CM FLAK

Originally designed as an anti-aircraft weapon, the German 8.8 cm Flak proved highly effective when used in anti-tank and ground support roles. As with Italy's Cannone DA 90/53, Germany deployed the dreaded "88" to traditional artillery units, providing a flexible weapon that could be used in multiple capacities.

One German artillery unit may be treated as an anti-aircraft gun during a battle in which no anti-aircraft gun is present.

# **VOLKSSTURM**

The Volkssturm was a civilian militia modeled on the Prussian Landsturm that expelled Napoleon's armies from German lands. Despite being hastily trained and poorly equipped, Volkssturm units made determined stands at Kolberg, Breslau, Königsberg, and Berlin.

Place two free German infantry units in Germany.

# **ROMANIAN DIVISIONS**

Romania contributed more soldiers to the war against the Soviet Union than the rest of Germany's allies combined. Over a half million Romanian soldiers marched alongside German forces during Operation Barbarossa in 1941. By 1944 the Romanian army had grown to more than a million soldiers.

Place two free German infantry units in Bulgaria Romania.





# **JAPAN**

### LIGHTWEIGHT FIGHTERS

Thanks to its incredibly light weight, the Mitsubishi A6M "Zero" could operate at ranges of up to 1,100 miles (1,800 kilometers). While other nations developed small numbers of long-range fighters for special missions, the Zero was Japan's most numerous aircraft. It served as a carrier-based fighter, land-based fighter, dive bomber, and even a float plane.

All Japanese fighters may move one extra space during this turn.

## **KAMIKAZE**

Named for the typhoons that twice saved Japan from invasion during the 13<sup>th</sup> century, the Kamikaze or "Divine Wind" fighter was loaded with explosives and deliberately crashed into Allied naval units. Kamikaze attacks sank dozens of Allied ships and inflicted devastating damage on scores more, accounting for a high proportion of U.S. Navy losses in the final phase of the war.

Remove one Japanese fighter from a battle to score one hit on any Allied surface ship in the battle.

## **TOKYO EXPRESS**

Japan used its destroyers to transport supplies and soldiers. Nicknamed the "Tokyo Express" by Allied forces, this tactic leveraged the destroyer's high speed and shallow draft to make night runs into coastal areas, unload, and return to normal service before daybreak.

Up to three Japanese destroyers may each load one Japanese infantry unit during this turn, and transport them until they are unloaded.

## **MAOIST VS NATIONALIST STRIFE**

Beginning with a communist uprising in 1927, the nation of China was divided by civil war. The formation of the Second United Front in 1937 attempted to bring both sides into cooperation against Japan, but a lack of coordination between the Maoists and Nationalist forces, poorly defined front lines, and constant ambushes made it difficult to tell friend from foe. Fighting between Chinese forces and their supporters continued to flare up through the end of the war.

Remove one Allied infantry from any Chinese Territory.

#### **TYPE 94 GUNS**

The Japanese battleships Yamato and Musashi were outfitted with the largest caliber guns ever mounted on a warship. Officially designated as 16-inch (41cm) guns to disguise their firepower, they were in fact 18-inch (46cm) guns capable of firing a heavier projectile at a longer range than any ship they would face.

One Japanese battleship hits at +1 during a naval battle or shore bombardment.

# **ISLAND FORTRESS**

The Japanese developed extensive fortifications throughout the pacific. Networks of caves and tunnels on Peleliu, Iwo Jima, and Okinawa were adapted to protect soldiers and store supplies while blockhouses, pillboxes, and artillery installations studded the surfaces of smaller islands. The fortifications on Betio were so elaborate that a Japanese admiral boasted that capturing the island would take "a million men one hundred years."

Axis infantry on a Japanese controlled island defend at +1 during one battle.

## **RADIO SILENCE**

To maintain surprise, the complex maneuvers planned for the attacks on Pearl Harbor and Midway were accomplished without radio communication. This feat of incredible seamanship helped the Japanese fleets to slip across thousands of miles of ocean without being detected.

Japanese naval units may move through one Allied occupied ocean space without having to engage in battle during this turn.





# **JAPAN**

### **DIVE BOMBERS**

The Japanese designed the Aichi D3A as a "dive bomber". It carried a lighter payload than a strategic bomber but was fast and maneuverable enough to make pinpoint attacks against specific targets. The Aichi D3A sank more Allied ships than any other Axis aircraft, scoring hits against US carriers at several battles, including Coral Sea, Midway, Eastern Solomons, and Santa Cruz Islands.

You may choose which casualties Japanese fighters inflict on your enemies during one battle.

## **DESTROYER BOMBARDMENT**

Japanese destroyers bombarded US garrisons on Wake and Midway islands, as well as joining in repeated bombardments of the marines defending Henderson Field throughout the battle of Guadalcanal.

Japanese destroyers can support an amphibious landing with bombards scoring hits at 2 or lower.

## INDIAN NATIONAL ARMY

Japan organized and armed forces hoping to liberate India from British rule. Indian expatriates from Burma and Malaya were recruited to the "Indian National Army" which fought alongside Japanese forces in Southeast Asia. Place one free Japanese infantry unit in India or Burma.

#### **ISLAND AIR STRIP**

Following Japan's advance across the pacific was a group of civilian laborers and military engineers. They established airfields for land-based fighters whose mission was to provide air cover to the Imperial Japanese Navy as its operations spread further and further from the Home Islands.

Axis fighters on one Japanese controlled island may defend the adjacent ocean space instead of the island during this turn.





# **ITALY**

## **WINTER LINE**

The Allied advance through Sicily and Southern Italy came to a halt at a series of defensive positions South of Rome. Known as the Winter Line, these strong points converted the mountainous terrain into an imposing fortress, bringing heavy machine gun and artillery fire to bear on every possible avenue of advance.

Axis infantry and artillery which survive the first round of a battle in Italy defend at +1 during the remainder of that battle

# **E-BOATS & DECIMA FLOTTIGLIA MAS**

The Italian Royal Navy attacked Allied fleets with a combination of frogmen, manned torpedoes, and fast attack boats. Though limited in range, these methods resulted in the sinking of several Allied warships, including the cruisers York and Manchester.

Destroy one Allied cruiser or destroyer adjacent to any land space controlled by Italy.

# HALFAYA PASS

Located near the Egyptian-Libyan border, Akaba el-Kebir or "great ascent" features steep Eastward facing cliffs. British forces attempting to advance through the towering cliffs were forced into the narrow Halfaya pass, making them easy targets for Axis artillery. During operation Battleaxe, the first wave of British tanks was destroyed by German artillery in a matter of minutes, earning the pass its nickname, "Hellfire Pass." Axis artillery in Libya defend at +1 during the first round of a battle.

### BLACKSHIRT VOLUNTEERS

The paramilitary wing of the Italian fascist party provided a pool of volunteers ready for military service. These "blackshirts" provided recruits for five divisions of the Italian regular army.

Place two free Italian infantry units in Italy.

# **CANNONE DA 90/53**

Originally designed as an anti-aircraft gun for the Italian Royal Navy, the Cannone DA 90/53 was adopted by the army for use in anti-aircraft, anti-tank, and ground support roles. Like the German 88 cm Flak, Italy deployed the 90/53 with traditional artillery units, providing a flexible weapon that could be used in multiple capacities. One Italian artillery unit may be treated as an anti-aircraft gun during a battle in which no anti-aircraft gun is present.

### **ALPINI**

Specially trained for fighting in mountainous areas, the Alpini were an elite infantry force that proved to be skilled and determined in any terrain. During the battle of Stalingrad, Alpini held their position as Axis lines collapsed around them. After standing firm against the Soviet onslaught, the now isolated Alpini units fought their way out of encirclement and back to Axis lines.

One Italian infantry unit defends at +1 during one battle.

# **COMPLETE THE AQUILA**

The Italian Royal Navy began converting the ocean liner Roma into an aircraft carrier in 1940. Though the project stalled in favor of other priorities, work resumed in 1941 and continued until the Italian Armistice in 1943. The partially completed carrier was finally scrapped in 1952.

Purchase one aircraft carrier for the cost of 10 points.

### LIBYAN COLONIAL DIVISION

The Italian Army drew on citizens from their Libyan Colony to form the I<sup>st</sup> and 2<sup>nd</sup> Libyan divisions, both of which participated in the Axis invasions of Egypt.

Place one free Italian infantry unit in Libya.

