

Global Glory

**1939-1946 scenario for
Gary Grigsby's WORLD AT WAR: A World Divided™**

DRAFT version 4.00.A

GG version 4.00

created by Brian Banister, AKA WanderingHead.

mailto: wanderinghead@san.rr.com

Table of Contents

1	Preface.....	5
1.1	Caveats for play	5
1.2	Change History	6
1.3	Acknowledgments.....	6
2	Introduction.....	7
2.1	Oil.....	7
2.2	The Mediterranean and East Africa	7
2.3	Air units.....	8
2.4	Other Considerations.....	8
2.5	Details of the Mod.....	8
3	Unit Capabilities, Deployment and the Map.....	10
3.1	Initial Deployment Differences.....	10
3.2	Unit Attributes.....	11
3.3	Changes to air units.....	11
3.3.1	Air movement over narrows	11
3.3.2	Max range combat penalty for air units	11
3.4	Transport capacity changes.....	12
3.5	Insta-Militia for Neutrals	17
3.6	Map Differences.....	17
4	Production and Research.....	18
4.1	Undeveloped Resources	18
4.2	Production differences	19
4.3	Research limits	20
5	USA and USSR preparedness (WR and strat move)	21
6	Random Political Events.....	23
6.1	Overview of major themes	23
6.1.1	Military preparedness of Russia and neutrals while not at war	23
6.1.2	Political uncertainty in the Balkans	23
6.1.3	Some flexibility in Japan's aggression and the USA response.....	24
6.1.4	Remote Western Allied regions could have capitulated.....	24

6.1.5	Allied powers could have surrendered	25
6.2	Details of Events	25
6.2.1	Australia surrenders	25
6.2.2	Finland border war	26
6.2.3	Finland coup	26
6.2.4	Greece border war	26
6.2.5	Greece joins WA	27
6.2.6	Indian nationalist uprising.....	27
6.2.7	Iraq coup	27
6.2.8	Italy joins Axis	28
6.2.9	Netherlands join the WA.....	28
6.2.10	Portugal leases Azores to Britain.....	29
6.2.11	Rumania joins Axis	29
6.2.12	Rumania border war and occupation by Russia.....	30
6.2.13	Rumania territorial concessions	31
6.2.14	Russian tensions along Caucasus border	31
6.2.15	Russia rearms	32
6.2.16	Russia surrenders	32
6.2.17	Spain coup.....	34
6.2.18	Spain responds to occupation of Portugal.....	35
6.2.19	Sweden coup	35
6.2.20	Syria joins Axis	36
6.2.21	USA responds to Japanese invasion of Russia.....	36
6.2.22	USA responds to Japanese aggression in China (gift reduction)	37
6.2.23	USA embargos Japan (Japanese gift termination)	37
6.2.24	Vichy France declares war on Allies	38
6.2.25	Western Allies rearm	38
6.2.26	Western Allies surrender	39
6.2.27	Yugoslavia Pro-Axis Coup	41
6.2.28	Yugoslavia Pro-Allied Coup	42
7	Victory Conditions.....	43
8	Final Discussion.....	45
8.1	Suggestions and warnings for play	45

9	References	47
10	Appendix A: Historical Daily Production (barrels), sorted by region (from [1])	48
11	Appendix B: Historical Daily Production (barrels), sorted by mean production (from [1])	49

1 Preface

Global Glory is a scenario for Gary Grigsby's World at War: A World Divided™. The scenario has a start date of Summer 1939.

The primary AWD documentation and release notes should be consulted first, as most of the rules are presumed and not reiterated in this description. This description will focus mostly on the rules and conditions that differ from the standard scenarios, with Total War as the baseline against which it is compared.

The two primary purposes of the scenario are: to apply a greater emphasis on oil and its contribution to the course of the war, and to make certain aspects of the game more realistic with more sophisticated rules and political events. Factories in zero-population regions, which can only build supplies, are included to model oil refining centers. "Undeveloped" resource centers are included, representing oil fields requiring investment of time and capital to bring online. Rule changes for transports more accurately reflect the difficulties both Axis and Allies had in moving troops around North Africa and other obscure corners of the globe. Other rule changes provide extra abilities and limitations to air units. Many political events are added or changed to enhance realism, variability and/or playability, including surrender events for Russia, Australia and India. Finally, there are also various little adjustments, such as to War Readiness and frozen strategic movement, allowing for the WA and USSR to better prepare defensively without necessarily declaring war.

The surrender events for Russia and the WA cause a yielding of some territory (only regions that are adjacent to Axis controlled land regions) and the re-freezing of the surrendering player, so that Russia or the WA cannot continue the fight. These events cannot trigger unless the VP level for Axis autovictory is reached, so these can only come into play in non-AV games. It does make it possible for players to agree to a different end game, e.g. non-AV where the Axis goal is to get one or both major Allied players to surrender. Alternatively, players can agree to non-AV games without these surrenders: they can be disabled with the "No special surrenders" option in the Game Options window.

1.1 Caveats for play

The AI is not optimized for the changes made in the scenario, and may not play it very well.

Some of the political events will seem somewhat complex when first encountered, and require careful reading.

1.2 Change History

version	date	notes
1.00	2007-01-06	initial mod version compatible with versions ≤ 1.010 , no longer available.
2.00	2007-04-28	Updated to exploit new modding capabilities of the GGAW:AWD v1.011 patch. Compatible with v1.011, available at the www.wargamer.com .
3.00	2007-11-10	Updated for further abilities of the GGAW:AWD v1.020 patch, and included in the patch. This is the first version included in an official release.
4.00	2008-07-06	Updated for GGAW:AWD v1.030 patch. Added undeveloped resource centers, retuned events (several changes, most notably the WA surrender, post surrender “rearm” events for USSR and WA, and Balkans events).

1.3 Acknowledgments

Every idea that bounces around discussions in the forums adds to this scenario, so it is impossible to give credit to everyone who may have somehow contributed. But special mention for the following (Matrix usernames): *Lebatron* (Uncommon Valor, Franco’s Alliance, and innumerable suggestions and ideas of his own), *Uncle_Joe* (ever observant and attentive), *JanSorensen* (many contributions to AWD itself, plus the port benefit concepts applied herein), and *Christian_Brown* (who first played a version of GG). And of course 2by3 who provided the great game engine in the first place, not to mention the latitude to make some code changes for mod-ability.

Prior to public distribution of v2.00, playtest and suggestions were also provided by *rjh*, *Dobeln*, and *Charles Lamb*.

Prior to public distribution of v3.00, playtest and suggestions from *Lebatron*, *forwarn45* and *tica* contributed immensely to the 3.00 version of the scenario.

Prior to public distribution of v4.00, playtest and suggestions were provided by *rjh*, *tica*, *Lebatron*, *GKar*, *forwarn45*, and *SGT Rice*.

2 Introduction

2.1 Oil

The scenario's emphasis on oil has been attained in two basic ways: slightly increasing resources in the Middle East (Iraq and Persia), and placing factories in some zero population regions to represent oil refining capabilities (Trans-Jordan, S Persia, Borneo, Sumatra).

It is emphasized that the oil refining capabilities that have been added are historical, based on [1]. Oil flowed from Kirkuk (Iraq) to Haifa (Trans-Jordan) for processing, where it fueled the British in the Eastern Mediterranean. Palestine had refining capacity for 40,000 daily barrels of crude. The Dutch East Indies (DEI) had processing capacity for 170,000 daily barrels of crude. These refineries were sabotaged by the Dutch as they retreated, repaired by the Japanese, and used to fuel Japanese naval vessels directly when it became impossible, due to lack of shipping, to bring the oil to the fleet. The naval fleets *went to the oil*, rather than the oil going to the fleets.

A look at the historical oil production of the Middle East shows production levels that might be considered low by today's expectations. It should be noted that it was known the oil reserves existed. There was a very real fear of Axis control of Middle Eastern oil reserves, but the reserves had not been fully exploited. See [2], which is written contemporary to the conflict (in fact, despite the copyright date 1942, the contents imply it was written prior to the initiation of Operation Barbarosa): "Germany and Italy, in order to supplement their fast diminishing stocks of lubricants and high octane aviation gasoline, will endeavor to acquire possession of the Iraq and possibly Iranian and Russian oil fields."

In fact, the British poured concrete down Middle Eastern wells to hinder exploitation by the Germans. The strategic significance of the Middle Eastern oil was not so much the supply to the Allies (the USA provided almost all of the Allied fuel), but rather the *potential* to supply the Axis. Placing undeveloped resources in some of these regions models some of this dichotomy, allowing the resource-poor Player to invest capital and time to give more resources to the region than were historically *exploited* in real life.

One final note on USA oil production. It was huge. It fueled everything except the local theaters that could fuel themselves. But there is the comment in [1] that no more than 25% of US oil production ever went directly to the war effort. Much of the oil stayed domestic, and people continued to drive their private automobiles. This situation is probably unique in the world, since the production of most other combatant nations and captured territories most likely went directly to the war effort.

2.2 The Mediterranean and East Africa

Getting troops and supplies to North Africa was a huge problem for the Italians. The British had similar problems going around Africa. An additional factor to consider is that the Italians had a huge numerical advantage over the British (about 500,000 troops facing 50,000), but an awful deficit in quality. Similarly, the Italians had about 200,000 troops in East Africa, which were eventually defeated by a British force of about 100,000.

This scenario has addressed the critical transportation capacity issues in two ways: a reduced number of starting Italian transports, and modified transport rules. The transport rules now impose a transport capacity penalty for adjacent enemy land regions (in this case, Malta) and bonus for adjacent friendly ports. With this change, Malta is truly the key to large scale shipping to North Africa.

The scenario includes enlarged Italian garrisons of militia in Tobruk and Italian East Africa, modeling the large but ineffective Italian armies of the time. With the militia in Tobruk, the British will need units in Egypt to prevent an immediate Italian advance, but at the same time the Italians will find it requires some time and commitment before they can easily move further east along North Africa. The Italian force in Italian East Africa truly hinders British shipping, as was a dominant British concern in the region. But without a source of supplies, there is little that this force can do offensively.

2.3 Air units

Generally air units will not perform as well at great distances from their bases as they can closer to their bases. Payloads are reduced, sortie numbers are reduced, fuel expenditure is increased, runs are aborted unsuccessfully. The scenario implements new rules to penalize air units that are operating at their maximum range.

In addition, the cost of fighters and heavy bombers is increased relative to other scenarios. This can be considered to model the additional training time in addition to factory production.

2.4 Other Considerations

The course of actual political events during the early war years could have been very different, but in the context of a playable game events are forced into a certain degree of predictability. It is quite possible that Russia would have collapsed and surrendered, although it did not. It is possible that India would have revolted against British rule, although it did not. Many political events have been included in the scenario to model these possibilities. Notably included are events defining the surrender of Russia, the WA, India or Australia. In addition, events are defined to give a graduated impact of Japanese actions in China, so that the USA resource gift can be adjusted gradually.

Finally, a campaign across the middle of Africa in WWII was not a real possibility. This kind of campaign is precluded in the scenario by severing many of the land connections on the map, as described in §3.6.

2.5 Details of the Mod

It will be easiest to describe the scenario in terms of how it differs from the standard Total War scenario. All comparative references to “Total War” are the setup of GGWAW:AWD “Total War” v1.020.

Each section provides first the details of changes, then some small description of the motivations and impacts if appropriate.

3 Unit Capabilities, Deployment and the Map

3.1 Initial Deployment Differences

The scenario starts mostly the same as Total War, but the initial deployment differences are too numerous for a detailed list. Instead, the general ideas and important items will be described, but the list is not comprehensive.

Factories

Oil refineries have been placed in the following zero population regions¹:

Trans-Jordan, S Persia, Borneo, Sumatra

Other factories are added to

The Low Countries, New South Wales, Smolensk

A factory is removed from Moscow but put in the production queue.

Italian deployments

The starting number of Italian transports is reduced, to model the supply problems the Italians experienced in Africa. The starting numbers of Italian militia in North Africa and Italian East Africa have been increased, to model the overwhelming numbers of very poor Italian troops.

Rumania

Initial deployment is unchanged, but 2 transports are placed in the production queue². The Rumanian transports are in the queue at 3 turn delay, meaning that they are more expensive than usual, but since they start in the queue the German player does have a chance to build this limited quantity if he so chooses (even though Rumania can't build transports from scratch).

Neutrals

Some populations and initial deployments are adjusted for the insta-militia rules (§3.5).

Resources

Some resources have been added or moved around on the map. There are more resources in Iraq, Persia and Venezuela. Some resources start the game as undeveloped (in the USA and Iraq) representing oil fields that can expand production with some investment.

¹ Zero population regions can only produce supplies (not even research can be built by them in this scenario). In general these represent oil refining capabilities.

² Note that they do count against transport research if Rumania is German controlled. They can be disbanded (with no resource penalty).

3.2 Unit Attributes

Many air units costs have been modified, too many to list explicitly. A broad outline is attempted here, but some details may be missed.

- 1) Transport capacities are adjusted to give a benefit to ports and region control, (see §3.4):
transport capacity: 20 +15 (adj port) +10 (near port) -10 (adj hostile)
- 2) The anti-air WS of carrier fleets is lowered, while for heavy fleets it is increased³.
- 3) Many adjustments to air units, including the cost of air units, have been made. Fighters and heavy bombers are more expensive. Tac air is a bit better for use against navies. Since CAGs are not made more expensive, their evasion world standard is lowered to make it harder for them to keep up with fighters.

3.3 Changes to air units

3.3.1 Air movement over narrows

Air units are now allowed to move land-to-land over narrows, expending MPs based only on the borders of the land regions (i.e. the air unit doesn't move over either of the adjacent sea regions).

For example, from W France to England takes 1MP. From Saudi Arabia to Italian East Africa takes 2MP.

3.3.2 Max range combat penalty for air units

An air unit is “at max range” when it has no more movement points left and it is more than 1 move away from its home base, unless that 1 move is a land-to-land narrows move (e.g. England is not considered “adjacent to” a home base in W France for this rule). Note this refers to “1 move” (adjacent regions), not “1 movement point”. I.e., it can still be 1 move across a double MP border.

- a CV qualifies as home base for an attached CAG
- at max range, air suffers a -3 die modifier when firing
- at max range, air suffers a +1 die modifier when fired upon

Note that since being 1 move from its base nullifies the max range penalty, it can be effective to rebase the air unit adjacent to the region it is attacking if the attack requires maximum range.

³ An attempt to give Heavy and Light Fleets a valid CV escort role.

3.4 Transport capacity changes

Transports have a reduced base strategic movement capacity of 20 cargo points (from 30), but with the following adjustments for each transport:

- +15 for a transport which is connected to a port (i.e. a naval unit can actually move from the port to the sea zone and vice versa, not just adjacent). This is does not accumulate for multiple ports.
- +10 for a transport that is not directly connected to a port, but is one removed from connections to a port. This is does not accumulate for multiple ports.
- -10 for a transport which is adjacent to an enemy controlled land region. This is noncumulative (only assessed once, even if adjacent to multiple enemy regions).

These adjustments apply only to the regular transport capacity, not amphibious capacity. They are assessed equally for each transport in a sea zone.

For example, if the WA control Malta then every transport in the Central Mediterranean will benefit from the ports in Italy but suffer from the hostile control of Malta, netting a capacity per transport of 20 (20 base, +10 for radiated port, -10 for enemy adjacent), and two transports would have a total capacity of only 40.

The radiating effect of the port benefit is illustrated in Figure 5 for the Allies and Figure 6 for the Axis, shown for region ownership of the historical 1942 scenario.

As has been noted, these changes help make North Africa a bit more realistic, reducing both WA and German shipping capacity. They provide some historical role for Italian East Africa in hindering British shipping, and also a direct role for Norway in hindering lend lease to Russia.



Figure 1: Example of how the port benefit radiates from Cape Town toward the Northwest



Figure 2: Continued example, how the port benefit radiates from Cape Town toward the South and East

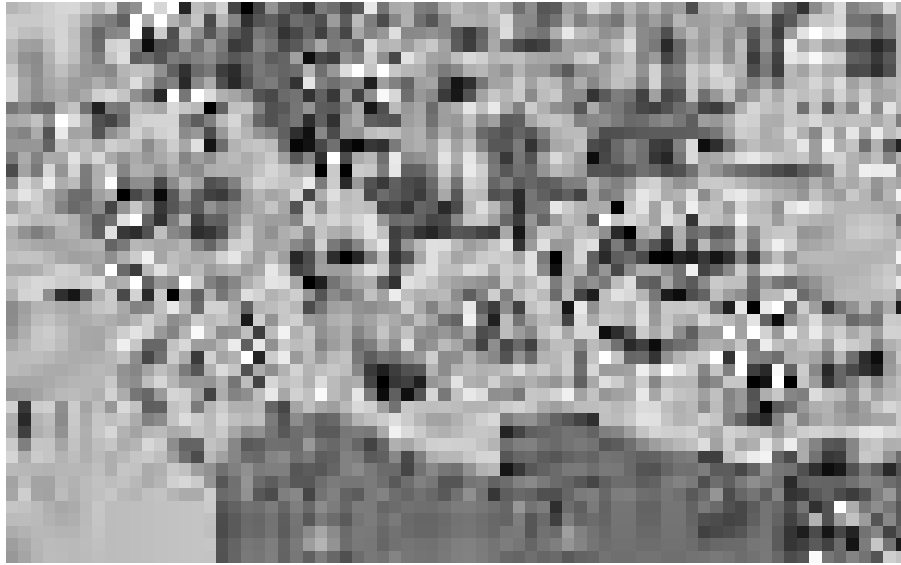


Figure 3: What it means for Germany in the Med, without Malta or Greece

Adriatic:	35 = 20 base + 15 direct port
Aegian Sea:	20 = 20 base (no modifiers)
Tyrrhenian Sea:	20 = 20 base (no modifiers)
Central Med:	20 = 20 base + 10 radiated port - 10 hostile
Eastern Med:	10 = 20 base - 10 hostile (no port benefit!)

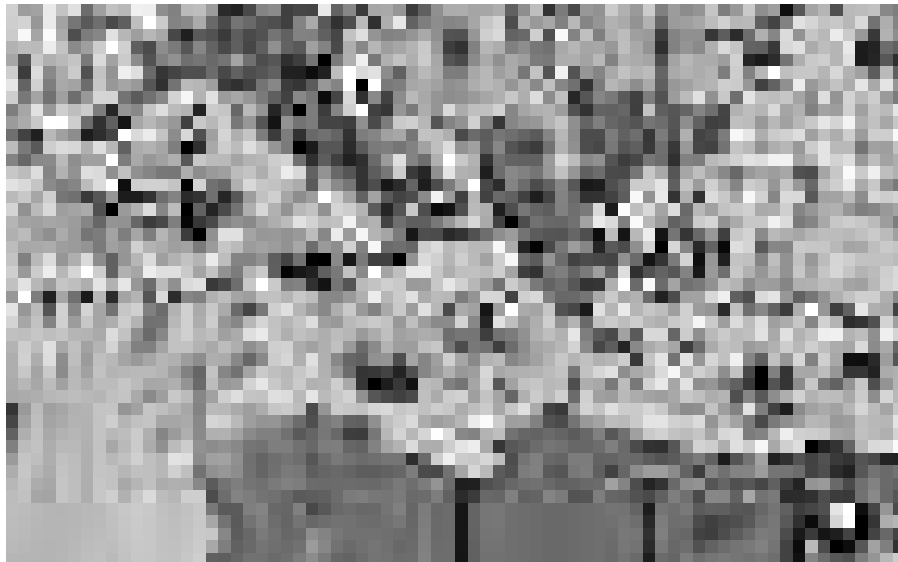


Figure 4: What it means for Germany in the Med, with the port in Greece

Adriatic:	35 = 20 base + 15 direct port
Aegian Sea:	⇒ 35 = 20 base + 15 direct port
Tyrrhenian Sea:	20 = 20 base (no modifiers)
Central Med:	20 = 20 base + 10 radiated port - 10 hostile
Eastern Med:	⇒ 20 = 20 base + 10 radiated port - 10 hostile



Figure 5: Global reach of Allied port benefit, historical 1942 (ports are red dots, +10 and +15 port benefited highlighted in yellow, effect of adjacent hostile regions not shown)

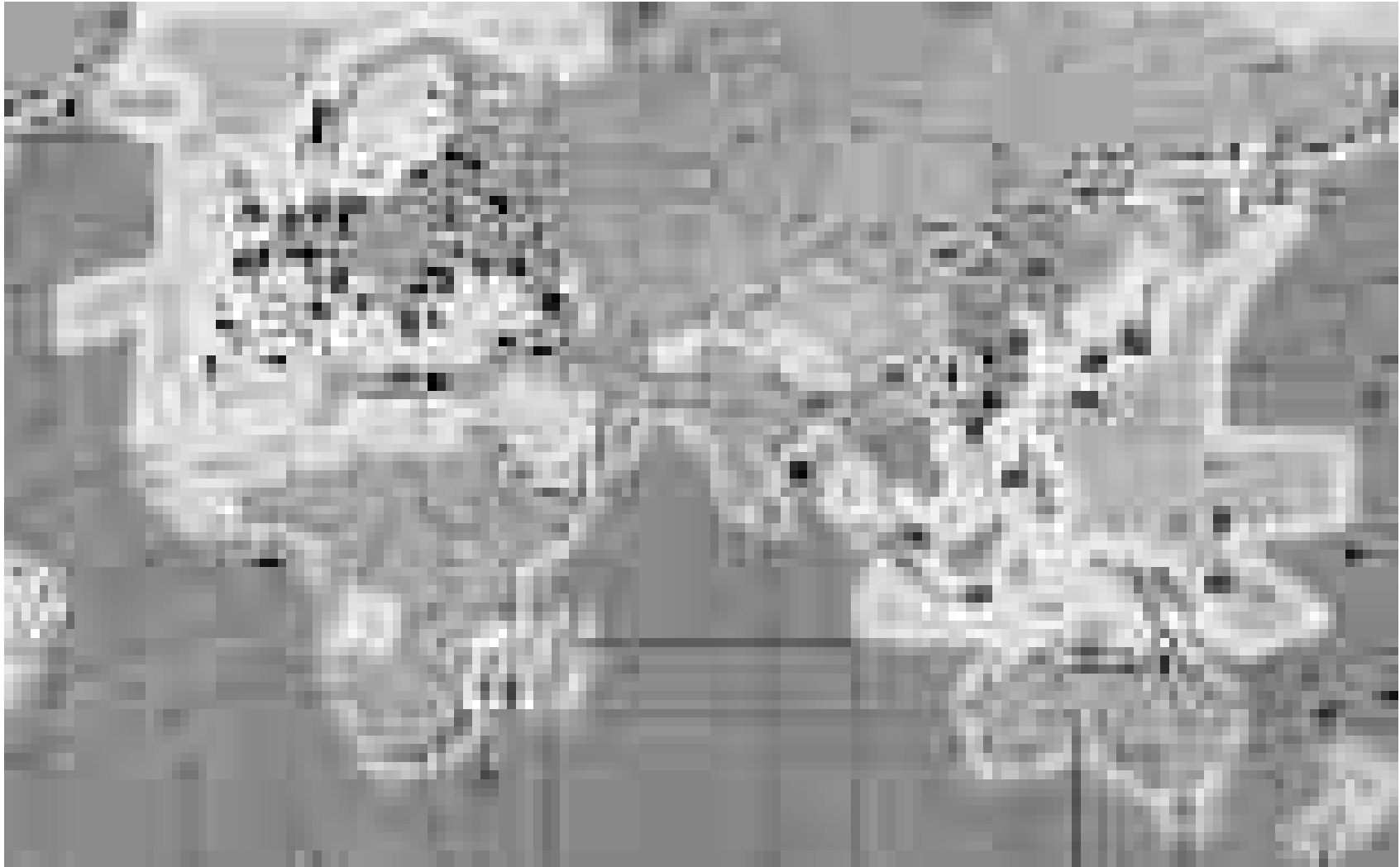


Figure 6: Global reach of Axis port benefit, historical 1942 (ports are red dots, +10 and +15 port benefited highlighted in yellow, effect of adjacent hostile regions not shown)

3.5 Insta-Militia for Neutrals

All neutral nations will generate 1× population of instant militia whenever it is attacked *while it is still neutral*.

This means a nation will have more units to defend itself, but fewer for offensive assistance to a player if the nation joins a player by other means (an event or an attack against a neighbor).

3.6 Map Differences

- all inland routes in Africa have been severed to land units, except from Rhodesia. Severed borders are shown in the figure below. These borders may still be traversed by air units.
- ports have been added: Panama, Port Moresby, Okinawa, Lisbon, Sao Paulo
- ports moved: Singapore (new port connection to Gulf of Siam), Cape Town (moved westward, disconnected from the Indian Ocean)

The change to Africa brings a little more realism, since supplying Sudan from the coast of French Equatorial Africa, or campaigning across the continent, are practical impossibilities.



Figure 7: Severed inland routes in Africa

4 Production and Research

4.1 Undeveloped Resources

A new type of status for resources has been added: “undeveloped”. These represent natural resource reserves (generally intended to be oil) that have not yet been developed and require some investment before they can produce resources.

The resources can start at 1-4 levels of development away from exploitation. By investing 5 supply (maximum per turn) they increase one development level, until they hit level 0. At the end of the player's production phase, any resources at level 0 will become "double damaged" as normal, and can be repaired next turn. Supplies are expended to develop resources in the same way as for repairs.

For example, a resource starting at undevelopment level 2.

- turn 1, expend 5 supply to bring level to 1.
- turn 2, expend 5 supply to bring level to 0. At end of turn, it becomes double damaged.
- turn 3, expend 10 supply to "repair" the double damaged resource.
- it is now producing resources.

Capture or bombing of undeveloped resources does not change their status. Hence, it is always possible that developing them will in fact assist an enemy who later captures the resources.

These raw resources are in the SW USA (3), SC USA (3), Iraq (3), N Persia (1), S Persia (1), Venezuela (1), Caucasus (1) and Kazakh (1), and are represented with a pick-and-hammer icon with the undevelopment level superimposed.

Figure 8 shows the state of the starting resources in Iraq; one resource starts online (the green circle), one resource at undeveloped level 1, two resources at undeveloped level 2.

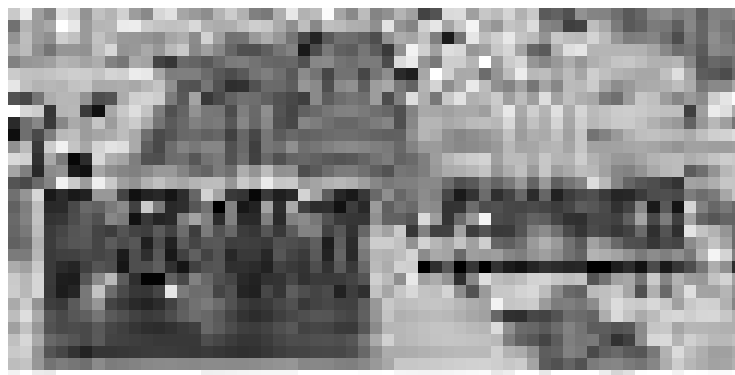


Figure 8: Example of the starting resources in Iraq, some undeveloped

4.2 Production differences

The changes of factory placement have been noted in §3.1.

Zero population regions may not do research, they may only build supplies (generally these regions are Trans-Jordan, S Persia, Sumatra, Borneo, Manchuria).

Changes related to Germany:

- Germany has a non-military resource consumption (NMRC) of 5 while its factory multiplier is 2
- the Russian resource gift to Germany is 4 (increased from 3 in Total War)
- Germany factory multiplier automatically becomes 3 in 1942.

Changes related to Japan:

- the USA resource gift to Japan is significantly tweaked
 - gift is 6 (increased from 5 in Total War)
 - the gift does not automatically terminate for any Chinese territories captured by Japan (e.g. inland China, Siam). Entering Russia will still terminate the gift immediately.
 - the gift termination date is Winter 1943 (from Summer 1941).
 - two political events can probabilistically reduce or terminate the Japanese gift
 - “USA responds to Japanese aggression in China (gift reduction)” (§6.2.22) reduces the gift by 2 with probability increasing based on how many Chinese regions are captured and how many Chinese factories are bombed. This event can occur 3 times (i.e. eventually reduce the gift to zero).
 - “USA embargos Japan (Japanese gift termination)” (§6.2.23) terminates the resource gift, with a probability increasing based on how many Japanese land or air units are in French Indochina.

Changes related to the WA:

- USA non-military NMRC has been reduced to (65,40,25) for USA factory multipliers (0,1,2) respectively (NMRC reduced from 75,50,25 in Total War).
- Netherlands has a production factory multiplier of FM=0 in 1939, FM=1 thereafter.
- France has production factory multiplier FM=0 in 1939, FM=1 from 1940 onwards. (The multiplier does not grow to 2 in '41 and 3 in '43 as in basic Total War).

With these changes, particularly the German NMRC, Germany has a motivation to grab and accumulate resources from the very beginning of the game. As with the USA, the German

NMRC represents civilian use. Historically, the German economy did not go to a real war footing until 1943. In the game it occurs as soon as Russia is attacked or 1942 when the FM=3 level is reached.

4.3 Research limits

The research limits for technologies that have surpassed the World Standard have been increased from baseline Total War, allowing a player to complete research in the late game in a reasonable period of time. They still grow slower than the initial 3 points per level, to hinder rapid deployment of super-units.

Research limits (Total War baseline in parentheses)

tech level $\leq$ WS: 3 (3)

tech level = WS+1: 6 (6)

tech level = WS+2: 7 (3)

tech level = WS+3: 8 (4)

tech level = WS+4: 9 (5)

The limit increases by one for every level beyond WS+2.

As in baseline Total War, this limit does not apply to Heavy Bomber land Attack, in order to allow a-bomb development.

5 USA and USSR preparedness (WR and strat move)

Some changes have been made in War Readiness accumulation and thresholds and frozen strategic movement, in order to allow the Allies to better prepare defensively without having to DOW to do it, so delayed DOW is possible but more difficult for the Axis.

for the USA

WR thresholds (parentheses are original Total War):

28, 40, 52 (28, 37, 52) (respectively for FM=2, DOW, FM=3)

WR die increment per turn (parentheses are original Total War)

2,2,2,3,3,4,4 (2,2,2,3,3,0,0) (respectively for 1939,40,41,42,43,44,45+)

frozen strategic movement⁴ limit per turn (starting in year given)⁵

1939 0

1941 $\frac{1}{4}$

1942 $1\frac{3}{4}$

1943 $3\frac{1}{4}$

WR increases from u-boats sinking transports are reduced

40%, 20% (50%, 25%) (respectively: destroyed, damaged transport)

WR for USSR

WR thresholds:

10, 41, 45 (10, 34, 43) (respectively for FM=2, DOW, FM=3)

WR die increment per turn

2,2,2,3,4,4,4 (2,2,4,4,4,0,0) (respectively for 1939,40,41,42,43,44,45+)

frozen strategic movement limit per turn (starting in year given)

1939 1

1941 $1\frac{1}{2}$

1942 2

1943 3

⁴ Note that for the WA, frozen strat moves have the following limitations: (i) units may move into frozen zones, but may not move out (undoing a move is possible, however), (ii) American units may only strat move to American frozen zones, and non-American units may only strat move to non-American frozen zones.

⁵ A fractional limit means that probability exists to be able to move 1 unit. E.g. a strat move limit of $\frac{1}{4}$ means there is a 25% chance that 1 unit may be moved.

In general, these rules are intended to give the Axis more latitude in delaying conflict with the Allies, but at a greater cost in terms of the preparedness of the Allies.

6 Random Political Events

Some events are the same or similar to Total War, but there are many new events. *It is critical that events be carefully considered, because some have major implications to play.* It is important to note also that any number of events can now happen in a single turn; the limitation of Total War that only one event can occur is removed.

The most notable new events are the surrender events for the WA, Russia, Australia and India.

Random political events have certain probability modifiers, based on things like which Player owns a certain region (e.g. if Malta is German, the Spanish coup is more likely), the size of a garrison in a given region (e.g. the Japanese in Indochina, which can trigger the embargo), the number of Japanese hits against Chinese factories (e.g. the USA response to aggression in China, which reduces the gift to Japan). These probability modifiers are shown on the Political Events screen in the same order as described in the event details sections below.

The implementation of some surrenders as random events requires that a notion of *momentum* be considered. It wouldn't make sense to have Russia surrender after several turns of reclaiming lost territory. This leads to some more complex implementations of the surrender event probabilities, based on the prior history of region ownership. The momentum modification is based on the history of the event probability modifiers: the *prior turn* probability adjustment and the *maximum previous* (maximum over the whole game history) probability adjustment are used to determine the momentum modification. These values will be denoted *last_turn(modifier)* and *maximum(modifier)* and explained further in the specific events below.

6.1 Overview of major themes

Some of the major themes at work in some of the events are given below, with the primary events that support them enumerated. Not all events are included in these listed themes.

6.1.1 Military preparedness of Russia and neutrals while not at war

- Russian tensions along Caucasus border (§6.2.14)
- Spain responds to occupation of Portugal (§6.2.18)

“Russian tensions along Caucasus border” provides the Russian player with increased strategic movement in response to an occupation of Turkey or Persia by Germany, allowing for a realistic response by the USSR.

“Spain responds to occupation of Portugal” allows neutral Spain to respond in a relatively realistic way (mobilizing and possibly turning to her ally Germany) when Portugal is invaded by the WA.

6.1.2 Political uncertainty in the Balkans

- Greece border war (§6.2.4)

- Greece joins WA (§6.2.5)
- Rumania joins Axis (§6.2.11)
- Rumania border war and occupation by Russia (§6.2.12)
- Rumania territorial concessions (§6.2.13)
- Yugoslavia Pro-Allied Coup (§6.2.28)

The situation in the Balkans in 1939 was chaotic, and could have resolved in several different ways. The several political events are required to give some texture to the possibilities, particularly pivoting on the political status of Yugoslavia and Rumania. The setup allows the German some control of the events by quickly capturing Greece, which can give Yugoslavia to Germany without conquest. There are three major courses possible for the Balkans:

- (i) Yugoslavia becomes Pro-Allied and is conquered by Germany. Rumania joins the Axis either in response to the conquest or on her own (if on her own due to the “Rumania joins Axis” event, Germany is penalized with an increase in Russian War Readiness).
- (ii) Yugoslavia joins the Axis voluntarily after a preemptive German conquest of Greece.
- (iii) Rumania is conquered by Russia as a result of the crisis over Bessarabia. A more aggressive footing is adopted by both Germany (increased production) and Russia (increased strategic movement).

6.1.3 Some flexibility in Japan's aggression and the USA response

- USA responds to Japanese invasion of Russia (§6.2.21)
- USA responds to Japanese aggression in China (gift reduction) (§6.2.22)
- USA embargos Japan (Japanese gift termination) (§6.2.23)

These events provide for an uncertain US response to Japanese aggression in China and southeast Asia, giving the Japanese player tradeoffs in terms of how to deal with China. The response to the invasion of Russia increases the uncertainty of how and when the USA will respond.

6.1.4 Remote Western Allied regions could have capitulated

- Australia surrenders (§6.2.1)
- Indian nationalist uprising (§6.2.6)

These events merely cede some territory to the Axis. The effect in game terms is to make India and Australia tempting targets for Japan.

6.1.5 Allied powers could have surrendered

- Russia rearms (§6.2.15)
- Russia surrenders (§6.2.16)
- Western Allies rearm (§6.2.25)
- Western Allies surrender (§6.2.26)

These events attempt to reasonably model capitulation by Russia and/or the Western Allies. If the surrender occurs then the surrendering Player will cede some territory and all remaining regions controlled by that Player will be re-frozen, with new War Readiness thresholds.

These events only occur when the Axis VPs exceed those required for Auto Victory, so they are only experienced in a continuation game or if A V is disabled. They allow one to play beyond AV and get a more explicit glimpse of what the world might have looked like. The game could be played until one or both major Allied powers surrenders.

The purpose of the “rearming” events is merely to provide some basic garrison requirements to the Axis (the probabilities of the event are dependent on garrisons). If the Axis pays some attention to the garrisons then the surrendered Allied powers will not reenter the war for several years.

These events can be disabled before the game is started with the “No special surrenders” option in the Game Options window if desired.

6.2 Details of Events

6.2.1 Australia surrenders

Much of Australia is remote, and under pressure with a collapse of the government it is conceivable that outlying regions of Australia could have been taken over with little meaningful resistance.

Requirements: 1 out of Victoria or New South Wales must be German or Japanese controlled.

Probability: 5% base + modifier - momentum

modifier = +20% if Japan controls NSW

+60% if Japan controls Victoria

momentum = $\frac{1}{2} \times \text{maximum}(\text{modifier}) + \frac{1}{2} \times \text{last_turn}(\text{modifier})$

Effect: All Australian mainland regions that have no ground units immediately become Japanese/German controlled with no damage to infrastructure. Any of those regions with WA land units remain WA controlled with no effect.

On the turn after Japan captures Victoria, surrender is possible and fairly likely (85% if NSW and Victoria captured on the same turn). But if the surrender doesn't occur immediately, the momentum rule means that the probability becomes only 5%. And if the WA recapture NSW or Victoria, then the probability of surrender effectively becomes zero.

6.2.2 Finland border war

This event models the Winter War with Russia.

Requirements: Finland is Leaning or Pro Axis
Leningrad is Soviet controlled

Probability: 60%

Effect: Finland becomes Pro-Axis
4 militia are built in Finland

6.2.3 Finland coup

Historically, the Fins joined Germany in the war against the Soviet Union. In the game this can occur through this event or through German capture of adjacent regions.

Requirements: Finland is neutral, and Finland (the region) is neutral controlled
USA is not at war
Norway is German controlled
Finland is German or Neutral controlled
Russia is at war with Germany

Probability: 2%

Effect: Finland joins Germany

6.2.4 Greece border war

In October 1940 the Italians invaded Greece. Bulgaria initially declined Italy's invitation to participate, despite territorial ambitions in Thrace. Ultimately, Bulgaria joined the Axis in order to reclaim the lost territory. This event, in combination with "Greece joins WA" (§6.2.5), models these events.

Requirements: Greece is neutral, balanced to Pro-Allied
North Italy and Albania are both German controlled (Italy has joined Axis)

Probability: 35%

Effect: Greece changes to pro-Allied
Bulgaria politically shifts towards the Axis if it is neutral balanced to pro-Axis
1 militia is generated in Greece

6.2.5 Greece joins WA

Greece joins the war against the Axis.

Requirements: Greece is Pro-Allied
Greece (the region) is Neutral controlled

Probability: 10%

Effect: Greece joins WA
1 militia is built in Greece

6.2.6 Indian nationalist uprising

Nationalist movements in India considered taking advantage of the war to attain independence. This event can be considered to be a nationalist uprising in India, which sides with the Japanese.

Requirements: 1 out of E India, S India, W India must be German or Japanese controlled.

Probability: 20% base + modifier - momentum
modifier = 30% if Japan controls S India, +20% if Japan controls E India
momentum = $\frac{1}{2} \times \text{maximum}(\text{modifier}) + \frac{1}{2} \times \text{last_turn}(\text{modifier})$

Effect: All of the following regions that have no ground units immediately become Japanese/German controlled with no damage to infrastructure:
E/S/W/N India, Mandalay, Rangoon.
Any of those regions with WA land units remain WA controlled with no effect.

The momentum rule warrants some example. If the requirements are satisfied but neither S India nor E India is Japanese held, the probability is 20%. If S India is then capture by Japan, then the probability goes up to 50% for the next turn with modifier=30%. After that, the momentum value becomes 30%, and the overall probability returns to 20+30-30=20%. If S India is then recaptured by the WA, the modifier becomes 0%, but the momentum value is still 30% for the next turn, so the probability is 20+0-30 = -10% (i.e. won't happen). The next turn, the momentum value becomes 15% (since last_turn(modifier)=0), and the probability is 20+0-15=5%.

6.2.7 Iraq coup

The Iraqi government was sympathetic to the Italians and Germans, eventually prompting a British occupation. A pro-Axis policy in Iraq was directly dependent on the perception of the likelihood of Axis success in the Mediterranean and Middle East. The probabilities of this event occurring reflect this through regional control and momentum.

Requirements: Iraq is WA controlled
Iraq has no land units

S Italy is German controlled

Probability: 0% base + modifier - momentum

Modifier =

- +10% if Malta is German controlled
- +10% if Egypt is German controlled
- +10% if Cairo is German controlled
- +10% if Cyprus is German controlled
- +10% if Istanbul is German controlled
- +20% if TransJordan is German controlled
- +20% if Syria is German controlled
- +20% if E Turkey is German controlled

momentum = $\frac{1}{5} \times \text{maximum}(\text{modifier}) + \frac{2}{5} \times \text{last_turn}(\text{modifier})$

Effect: Iraq becomes German controlled, 1 militia and 1 supply created.

6.2.8 Italy joins Axis

This event allows Italy to join the Axis before or after Vichy. In contrast to Total War, Italy can join before Vichy, but not after war with Russia.

Requirements: Italy is neutral Pro-Axis, the USA is not at war, the USSR is not at war.

Probability: 4% base

- +6% if Low Countries are German controlled
- +60% if W France is German controlled
- +10% if Yugoslavia is German controlled
- +10% if Greece is German controlled

Effect: Italy joins the German player.

WARNING: as soon as Italy becomes Axis, all French regions will be unfrozen. If Southern France is German controlled then France will surrender when Western or Eastern France is captured, but Vichy will not be formed (European France will become German controlled, but non-European France will remain WA controlled).

6.2.9 Netherlands join the WA

Historically, the Low Countries postponed preparedness and avoided a declaration of war against Germany in the hope of avoiding conflict. This event represents the opposite choice.

Requirements: Netherlands are neutral Balanced to Pro Allied
Western France is WA controlled.
Probability: 10%
Effect: Netherlands joins the WA

6.2.10 Portugal leases Azores to Britain

In 1943 Portugal leased bases in the Azores to Britain. This event models that action.

Requirements: Portugal is Neutral, Leaning or Pro Allied.
Azores are Neutral controlled.
Spain is Neutral controlled.
Scotland, England and Gibraltar are all WA controlled.
NE USA is unfrozen (USA is at war)
Germany has not surrendered
Probability: 25%
Effect: The Azores become WA controlled
Portugal political leanings shift one step towards Allies
2 militia are created in Portugal⁶

6.2.11 Rumania joins Axis

Rumania invited German forces into the country after a coup and failed military uprising. The relationship with Germany was solidified by the prospect of recovering Bessarabia from the USSR.

Note that in game terms this event is not the most desirable way for Germany to attain Rumania's allegiance, since it gives the USSR a War Readiness increment. It is more desirable to prompt Rumania to join via the invasion of a pro-Allied Yugoslavia if possible.

Requirements: Rumania is neutral and Pro-Axis
Moscow is frozen (USSR is not at war)
W France is German controlled
Probability: 30% base
+35% if Yugoslavia is German controlled
Effect: Rumania joins Germany
USSR War Readiness increases by 2

⁶ This is an increased disincentive for subsequent WA invasion of Portugal.

6.2.12 Rumania border war and occupation by Russia

In June 1940, while the world was distracted by the fall of France, the USSR issued an ultimatum that Rumania hand over Bessarabia. Historically, the Rumanians complied and fighting was minimal.

This event models a different outcome, wherein either Rumania resists or fighting simply spirals out of control, and ultimately the USSR conquers and occupies Rumania. The Balkan neighbors respond to an apparently expansionist Russia by moving into the Axis fold and mobilizing. In addition, Germany sees the threat to the east and increases military production.

If Russia occupies Rumania, all infrastructure will be damaged as though it were captured in combat. Russian War Readiness adjustments penalize production to represent the military cost of the operation (supplies, damaged units, and repaired infrastructure that game-player may not choose to repair, but likely would have been repaired in reality). In order to attempt to keep peace with Germany, Russia increases her resource gift. However, the USSR takes a more warlike footing with an increased strategic movement limit.

The USA War Readiness is reduced, representing the more ambiguous view of which side of the European conflict is the aggressor and an increased reluctance to be involved.

For game play, note that the Russian garrison moved into Rumania leaves the USSR exposed behind the front, with Kiev and Odessa now empty. Odessa could be a tempting target for German paratroopers, and the Russian should plan accordingly.

Requirements: Rumania is neutral Balanced or Leaning-Axis

Moscow is frozen (USSR is not at war)

Kiev is Soviet controlled

W France is WA controlled (France has not yet fallen)

Probability: 2%

Effect: Russia occupies Rumania. All Rumanian units are destroyed and infrastructure is damaged. Russian occupation units from Kiev and Odessa move in. Rumania is politically frozen.

Hungary, Bulgaria, Yugoslavia all become full Axis if they are neutral.

USSR War Readiness is *decreased* by 4

USA War Readiness is *decreased* by 1

German production multiplier becomes FM=3.

the USSR resource gift to Germany is *increased* by 2 (compensating somewhat for the loss of Rumania).

the USSR strategic movement limit is *increased* by 1 unit per turn.

6.2.13 Rumania territorial concessions

This event models the historical progression of the crisis over Bessarabia with the USSR. Rumania concedes Bessarabia to Russia, and the Rumanian government drifts towards the Axis camp.

- Requirements: Rumania is neutral Balanced or Leaning-Axis
Moscow is frozen (USSR is not at war)
Kiev is Russian controlled
- Probability: 15% base
+15% for German control of the Low Countries
+50% for German control of W France
- Effect: Rumania becomes Pro-Axis.
Hungary shifts towards Axis if it is Balanced or Leaning-Axis
Bulgaria shifts towards Axis if it is Balanced or Leaning-Axis
4 militia are built in Rumania.

6.2.14 Russian tensions along Caucasus border

This event provides some variability of Russian response to the German conquest of Turkey or Persia. It also provides a fairly realistic response, in that a garrison is instantly established on the frontier, as well as increasing the strategic movement limit of frozen Russia.

- Repeatability: this event can occur 2 times
- Requirements: at least 1 of Istanbul, Turkey or N Persia is German controlled
Caucasus is Russian controlled
Caucasus is politically frozen
- Probability: 20% base + modifier - momentum
modifier = +20% for *each* German land or air unit in Istanbul
+20% for *each* German land or air unit in E Turkey
+20% for *each* German land or air unit in N Persia
momentum = $\frac{1}{2} \times \text{prior_turn}(\text{modifier})$
- Effect: the USSR frozen strategic movement limit is *increased* by 2.
1 militia unit is built in the Caucasus.

6.2.15 Russia rearms

This event establishes a form of German garrison requirement if Russia surrenders. If Germany does not place units to reduce the probability of the event triggering, then Russia will more quickly rebuild and eventually declare war again. Once the Axis achieves 100VPs, the event is precluded and the garrisons are no longer required. This event can repeat 20 times.

The garrison rules adjust probability of the event by counting German and Russian units present in starting factory regions divided into (i) the Western regions that can surrender, and (ii) the Western and Central regions that cannot surrender (see §6.2.16).

This event will not occur if the game is concluded with AV or if the “No special surrenders” game option is selected.

- Repeatability: this event can occur 20 times
- Requirements: all of Russia is frozen due to surrender
Axis VP<100
- Probability: 0% base
-2% for every German non-militia land unit ...
+3% for every Russian non-militia land unit ...
in the possibly -surrendering western starting factory regions:
Leningrad, Belorussia, Kiev, Smolensk, Kharkov, Moscow,
Rostov, Gorki, Stalingrad.
-3% for every German non-militia land unit ...
+2% for every Russian non-militia land unit ...
in the non-surrendering western and central starting factory regions:
Kazan, C Urals, S Urals.
- Effect: USSR War Readiness *increases* by a roll of die(16).
the USSR resource gift to Germany is *decreased* by 1.

6.2.16 Russia surrenders

Striking success of German armies in Russia could easily have caused collapse of the Russian government and surrender. This surrender implementation yields territories to the Germans and refreezes the remaining regions of Russia, setting a new gift and new War Readiness thresholds.

The dynamic probability assigned to the event is based entirely on the German control of regions with *starting* Russian factories in the Western and Central regions of the Soviet Union (the Urals and westward). This provides a relatively easy way to denote the important regions in a simple consistent way that the player can remember.

This event will not occur if the game is concluded with AV or if the “No special surrenders” game option is selected.

Requirements: either Moscow is German controlled, or Gorki+Yaroslavl+Kursk are all German controlled (i.e. Moscow surrounded).

2 out of the 3 following regions are German controlled: Moscow, Leningrad, Stalingrad.

Axis VPs $\geq$ 83

Probability: -70% base + modifier - momentum

modifier = +25% for each German controlled starting Russian factory region from the Urals westward:

Leningrad, Belorussia, Kiev, Smolensk, Kharkov, Moscow, Gorki, Stalingrad, Rostov, Kazan, Central Urals, Southern Urals

momentum = $\frac{2}{5} \times \text{maximum}(\text{modifier}) + \frac{1}{5} \times \text{last_turn}(\text{modifier})$

Effect: All unfrozen Russian regions south or west of Kazan+Astrakhan or in coastal far eastern coastal Asia that are *adjacent* to Axis regions become Axis controlled (German or Japanese) with no damage to infrastructure, and *any units in those regions are retreated*. Units that cannot retreat are destroyed.

The core Russian regions that do not surrender are Kazan, Astrakhan, Central and Southern Urals, non-coastal Siberia, and the Caspian Sea; the following regions:

361, 115, 119, 120, 121, 123, 124, 125, 368, 162, 163, 366, 365, 367, 118.

All remaining Soviet regions are frozen with unlimited strategic movement. Any subsequent attack by the Germans or Japanese will again unfreeze them, for good this time.

USSR War Readiness is set to a random value from 0 to 20, with new WR thresholds of (20,70,70) for (FM=2, DOW, FM=3).

The USSR reinitiates a Gift of 6 resources/turn to Germany, for 3 years.

USA War Readiness is increased by 4.

The Russian surrender exclusion zones listed above are highlighted in Figure 9. Recall that regions outside of the exclusion zone surrender only if unfrozen and adjacent to an Axis controlled region.



Figure 9: Regions Russia will not surrender

The momentum rules can be described as follows. For every new probability modifier region the Germans capture, there is a *one turn* increase in surrender probability of 25%, and a sticky increase of 10% per capture. The maximum surrender probability with no territory exchange is 60% (all applicable regions German controlled), the maximum probability when one region is captured (the last applicable region) is 75%. Capture of more than one applicable region in a single turn (without immediate Soviet counter attack, i.e. liberation before the start of season political event determination) yields a higher surrender probability.

The bottom line is that the Germans must maintain forward momentum to have a significant chance of forcing surrender, and if the Germans capture all 12 key regions and hold on then an eventual surrender is likely (60% per turn). As soon as the Germans lose the initiative and start to lose those critical territories the probability of surrender will quickly drop, because of the high water mark applied in the momentum value as the $\max(\text{modifier})$. In this way, if the Russians are enjoying forward momentum recapturing territory, then a surrender becomes impossible.

6.2.17 Spain coup

In this event, Franco opts to join the Axis in Europe. The probabilities are adjusted from Total War.

Requirements: Spain is neutral, and Spain (the region) is neutral controlled
W France is German controlled
USA is not at war

Probability: 1% base
+8% for German control of England
+4% for German control of Gibraltar

Effect: +2% for German control of Malta
Spain joins Germany
USA WR increases by 3

6.2.18 Spain responds to occupation of Portugal

In the event that Portugal were invaded by the WA, Spain would undoubtedly see itself as a stepping stone to France and view the situation as a threat. This event models the likely political fall out from such an invasion of Portugal, with Spain protesting the situation and mobilizing in order to defend herself.

Requirements: Portugal (the nation) is Axis, or Neutral Full or Pro-Axis.
Portugal (the region) is WA controlled.
Spain is Neutral.
W France is German controlled.

Probability: 15% base + modifier - momentum
modifier = +60% (WA control of Portugal)
momentum = $\frac{1}{2} \times \text{maximum}(\text{modifier}) + \frac{1}{2} \times \text{last_turn}(\text{modifier})$

Effect: 1 infantry + 1 artillery + 2 militia are created in Spain.
Spain shifts 1 level towards the Axis.

The momentum rule is such that the probability is 75% on the turn that Portugal is captured by the WA, 15% thereafter.

6.2.19 Sweden coup

This event is unmodified from baseline AWD scenarios.

Requirements: Sweden is neutral, and Sweden (the region) is neutral controlled
USA is not at war
Norway is German controlled
Finland is German or Neutral controlled
Russia is at war with Germany
USA is not at war

Probability: 2%

Effect: Sweden joins Germany

6.2.20 Syria joins Axis

This represents the Vichy government of Syria deciding to join Germany, a real fear of the British during the war, which led to Free-French versus Vichy-French fighting in Syria.

The event is very similar to the “Iraq coup”, and again an initiation of hostilities by the local Vichy forces would be directly dependent on the perception of the likelihood of Axis success in the Mediterranean and Middle East. The probabilities of this event occurring reflect this through regional control and momentum.

Requirements: Syria is WA controlled

Syria has no land units

Southern France is Neutral (i.e. Vichy)

Southern Italy is German controlled

Probability: 0% base + modifier - momentum

Modifier =

+10% if Malta is German controlled

+10% if Egypt is German controlled

+10% if Cairo is German controlled

+10% if Cyprus is German controlled

+10% if Istanbul is German controlled

+20% if E Turkey is German controlled

+20% if TransJordan is German controlled

+20% if Iraq is German controlled

momentum = $\frac{1}{4} \times \text{maximum}(\text{modifier}) + \frac{1}{4} \times \text{last_turn}(\text{modifier})$

Effect: Syria becomes German controlled, 1 militia and 1 supply created.

6.2.21 USA responds to Japanese invasion of Russia

This event provides some uncertainty as to exactly how and when the USA will respond to a Japanese invasion of Russia. If it triggers, it represents an explicit increase in military preparedness and planning by the USA.

The event can occur two times. The effects of this event are in addition to the standard +5 WR the USA gets immediately when Japan invades Russia.

Repeatability: this event can occur 2 times

Requirements: Japan controls Irkutsk, Vladivostok, or East Siberia.

the USA is frozen

Probability: 25%

Effect: +1 to USA WR
 1 militia built in the Philippines
 5 supplies built in the SW USA

6.2.22 USA responds to Japanese aggression in China (gift reduction)

The US response to Japanese aggression was eventually an oil embargo. This event models the US imposing a partial embargo (reduction, but not termination, of resource gift), depending on specific Japanese actions. The more aggressive the Japanese are, the more likely (or faster) the USA will reduce its resource gift to Japan. Aggression is measured in certain Chinese territories lost, and in number of Chinese factories that are damaged by bombing.

If French Indochina is controlled by China, the probability of the event is greatly decreased. This represents the USA refusing to stand up for an apparently aggressive China, and balances the baiting that the Chinese player can do to try to force the Japanese player into Indochina to trigger the “USA embargos Japan (Japanese gift termination)” event.

Since this event is allowed to occur 3 times, and reduces the gift (starting at 6) by 2 each time, it can eventually reduce the Japanese gift to zero.

Repeatability: this event can occur 3 times

Requirements: the date is Winter 1940 or later
 the USA is frozen

Probability: -10% base + modifier - momentum
 modifier = +10% per Chinese factory that is hit by strat bombing
 +20% Foochow controlled by Japan (coastal China)
 +20% Liuchow
 +40% Changsa (inland tier 1)
 +40% Paotow
 +40% Kunming
 +40% Chungking (inland tier 2)
 +40% Lanchow
 -100% French Indochina controlled by China
 momentum = $\frac{1}{2} \times \text{last_turn}(\text{modifier})$

Effect: Japanese gift is reduced by 2

6.2.23 USA embargos Japan (Japanese gift termination)

Historically, the USA ultimately initiated an oil embargo against Japan when Japanese military bases were established in French Indochina. Seeing this as a staging ground for invasion of the

Dutch East Indies, the USA imposed the embargo. This random event models that historical event by looking directly at Japanese troop levels in Indochina to determine the probability of a complete gift termination.

Requirements: Japan is still receiving a gift
NE USA is frozen
French Indochina is Japanese controlled

Probability: base -40% + modifier - momentum
modifier = +40% for each Japanese land or air unit in French Indochina
+40% for each Japanese land or air unit in Siam
momentum = $\frac{1}{2} \times \text{prior_turn}(\text{modifier})$

Effect: resource gift to Japan is terminated

6.2.24 Vichy France declares war on Allies

Historically, the Germans moved in to Vichy when N Africa was invaded by the USA. This was a response to the clear threat to the southern coasts of Europe. The game engine models this, but does not include other realistic triggers for such an action by Germany. This event adds other triggers.

Requirements: Vichy is Pro-Axis
W France is German controlled
At least 1 of the following regions is WA controlled:
N Italy, S Italy, Spain, Sardinia

Probability: 100%

Effect: Vichy becomes Full-Axis

6.2.25 Western Allies rearm

This event is similar to “Russia rearms” except dealing with the repercussions of the Western Allies surrender and resulting garrison requirements. Again, once the Axis achieves 100VPs the event is precluded and the garrisons are no longer required, and this event can repeat 20 times.

The garrison rules adjust probability of the event by counting non-WA (presumed to be Axis) and WA Russian land or air units present in regions divided into (i) the N American & British WA capitals (more difficult for the Axis to capture), and (ii) the European & Asian & Pacific WA capitals (easier for the Axis to capture).

Note that to influence the probabilities, the WA must use non-militia units, while the Axis can use militia.

This event will not occur if the game is concluded with AV or if the “No special surrenders” game option is selected.

Requirements: all WA regions are frozen from surrender

Axis VP<100

Probability: 0% base

-2% for every non-WA land or air unit ...

+3% for every WA non-militia land or air unit ...

in the European & Asian & Pacific WA capitals:

W France, S India, Victoria

-3% for every non-WA land or air unit ...

+2% for every WA non-militia land or air unit ...

in the N American & British WA capitals:

NE USA, England, E Canada.

Effect: USA War Readiness *increased* by die(16).

USA resource gift to Japan reduced by 1.

6.2.26 Western Allies surrender

Even the Western Allies may have lost the will to fight, and ceded those possessions which had been lost. This possibility is modeled in this event, with cession of some remote territories and political freezing of the remaining WA regions.

The event cannot fire unless the Axis VPs are 83 or higher, i.e. an Axis autovictory level is reached. The event can also be disabled via “No special surrenders” in the Game Options menu.

This event is much harder to model in game terms than Russian surrender, because the Western Allies position was more complex. The conflict was with Japan and Germany, and one opponent may have reach a negotiated settlement without the other. Also, after the fall of France most of the conflict occurred in peripheral regions and possessions.

In order to consider the importance of the air war in Europe and the Blitz, strategic bombing hits against factories are counted and used to modify the probability of surrender. In addition, the probabilities modified according to the territorial situation based on 4 classes of regions:

- (i) the major WA capitals (England, NE USA, W France),
- (ii) the minor WA capitals (S India, Victoria, E Canada),

(iii) all of the starting WA & Neutral factory regions in central and eastern Europe (i.e. those that could be taken by Russia),

(iv) all of the starting WA & Neutral factory regions in the rest of the world.

This division provides a relatively easy way to denote the important regions in a simple consistent way that the player can remember.

This event will not occur if the game is concluded with AV or if the “No special surrenders” game option is selected.

Requirements: at least 3 of the following regions are Axis controlled:

NE USA, England, Scotland, W France, S India, Victoria, Cairo

Axis VPs ≥ 83

Probability: -220% base + modifier - momentum

modifier =

+10% per UK factory that is hit by strat bombing (England or Scotland)

-10% per German controlled factory that is hit by strat bombing⁷

+75%, major WA power capitals, if not controlled by WA

England, NE USA, W France

+50%, minor WA power capitals, if not controlled by WA

S India, Victoria, E Canada

+25%, central & eastern European factory regions, if controlled by Germany

N Italy, S Italy, Hungary, W Poland, Rumania, Istanbul

+25%, other factory regions, if not controlled by WA

Scotland, Spain, S France, E France, the Low Countries, Trans-Jordan, S Persia, E India, New South Wales, Sumatra, Borneo, NW USA, SW USA, NC USA, SC USA, SE USA

momentum = $\frac{2}{5} \times \text{maximum(modifier)} + \frac{1}{5} \times \text{last_turn(modifier)}$

Effect: All unfrozen WA regions that are *adjacent* to Axis regions become Axis controlled (German or Japanese) with no damage to infrastructure, and *any units in those regions are retreated*. Units that cannot retreat are destroyed. All naval units in sea zones will move to port. Exceptions to these are the following regions, which do not retreat⁸:

25,63,318 (major capitals: England, W France, NE USA)

⁷ The German controlled factory could be any nationality, including occupied France.

⁸ If there are enemy units in one of these non-retreating seazones (e.g. subs), then WA units will retreat even though the region does not generally retreat.

24,291,293,294,295,296,317 (land regions, Britain and North America)

2,16,21,320,3,14,26,27,316,321,4,13,325,5,6,12,29,30,37,31,36,35 (Atlantic)

133,132,131,130,128,81,142,143,144 (Indian Ocean)

288,250,284,287,279,286,298,300,314 (Pacific Ocean)

All remaining WA regions are frozen with unlimited strategic movement. Any subsequent attack by the Germans or Japanese will again unfreeze them, for good this time.

USA War Readiness is set to a random value from 0 to 20, with new WR thresholds of (20,70,70) for (FM=2, DOW, FM=3).

The USA reinitiates a Gift of 6 resources/turn to Japan, for 3 years.

USSR War Readiness is increased by 4.

The WA surrender exclusion zones listed above are illustrated in Figure 10. Note that units in all non-excluded sea zones will retreat, while non-excluded land regions are only surrendered if there is an adjacent Axis controlled land region.



Figure 10: Regions the WA will not surrender

6.2.27 Yugoslavia Pro-Axis Coup

In the event of the invasion of Greece, the government of Yugoslavia nearly succumbed to German threats and provided Germany unhindered access. It took a coup to prevent this course and lead to the German invasion. This event models a non-historical course of events, wherein either Yugoslavia accepts German occupation without significant resistance or internal Yugoslavian forces take over and welcome the Germans.

This event requires that Greece be German controlled. This couples the event to the invasion of Greece, and also gives the German a specific objective to achieve (and quickly, before the Yugoslavia Pro-Allied Coup makes Yugoslavia Pro-Allied) in order to reap the reward of undamaged Yugoslavian infrastructure.

Requirements: Yugoslavia is neutral from Pro-Axis to Leaning Allied
both N Italy and Greece are

Probability: 75%
Effect: Yugoslavia joins Germany

6.2.28 Yugoslavia Pro-Allied Coup

The historical path for Yugoslavia was an anti-Axis coup, modeled in this event.

For game play, note that this event is helpful (if the Yugoslavia Pro-Axis Coup is not attained) to make Yugoslavia lean to the Allies, and hence enable an invasion of Yugoslavia to push the various pro-Axis Balkan states towards the Axis.

Requirements: Yugoslavia is neutral
Probability: 5% base
+20% for German control of N Italy
+50% for German control of Greece
Effect: Yugoslavia changes to pro-Allied

7 Victory Conditions

The addition of surrender rules for India and Australia could dramatically change the Axis victory occurs, so that it is possible to play without AV on. In addition, Japan can perhaps bring up production more quickly with factories in the DEI.

The AV conditions still exist but are changed as follows (Total War values in parentheses).

Strategic Point (SP) increases⁹:

- 1 (0) SP for Bismarck Archipelago
- 1 (0) SP for New Caledonia
- 1 (0) SP for Hawaii
- 1 (0) SP for Queensland
- 1 (0) SP for New Zealand
- 1 (0) SP for Vladivostok
- 1 (0) SP for Luzon
- 1 (0) SP for Malaya
- 1 (0) SP for Lanchow

SP decreases:

- 5 (6) SP for Moscow
- 1 (2) SP for New South Wales
- 2 (4) SP for Victoria
- 1 (2) SP for E India
- 2 (3) SP for Chungking
- 2 (4) SP for “cutting sea lanes” (air in range to New Zealand, canceled if Victoria is Japanese)

Victory point thresholds:

1st shift: 71 (67) 2nd shift: 77 (71) AV: 83 (78)

Japanese atomic bomb surrender:

- VP threshold is 7
- surrender if

⁹ Clearly, the SP system for the South Pacific owes some credit to the Uncommon Valor scenario.

USA has bomb

AND Japanese VP<7

AND Japan at war with Russia

AND

(USA dropped a-bomb on nonzero pop Honschu or Kyushu *this* turn

OR Japan has no regions with both nonzero pop and nonzero production

)

8 Final Discussion

8.1 Suggestions and warnings for play

- The AI will not play this scenario well, it was not designed for it. Please don't complain about it.
- Leave items in the production queue "on hold" if their region has no production capability (e.g. factories at multiplier zero). If not on hold then they will consume resources even though they don't progress.
- Be careful to ensure that factories "on hold" in production get started at the appropriate time (if you want it to start). E.g. the SW USA would typically want to start factories moving in Winter 1940.
- Resource capabilities are carefully tuned.
 - o Germany should immediately repair all captured resources and factories in the first years of the war (prior to war with Russia or a successful Sealion). Even though there is a resource surplus early on, they can be stored and Germany will want them later when FM=3 hits.
 - o For a typical "historical" course of events, the German resource storage (unused resources stored in various regions) will generally be just about hitting max capacity in Fall 1941, just before the Russian resource gift ends. German resource surplus storage would generally start to fall after this unless Germany has attained new resources from ahistorical places.
 - o The WA will generally find it desirable to try to develop the resources in South Central and South Western USA (i.e. "develop new oil fields") relatively early in the game. Resources may start getting scarce prior to the USA ramping up wartime production. Also, early repair will lead to increased storage in anticipation of the unsustainable "burn" that occurs after the WA loses the DEI resources and hits higher factory multipliers.
 - o The USSR has 35 resources, but gives 4 to Germany every turn through Fall 1941. It starts with 13 factories and 1 in production. Russia has the resources to support *one more factory* without reducing long term production. It can be a good idea to start another factory for the Urals on the first turn. A second new factory is not unreasonable, but probably won't pay off unless war with Germany is substantially delayed so that it produces for some time after the Gift is terminated.
- Persia has resources that start damaged, and hence can only be exploited by a player that captures the regions and repairs the resources (those regions will not produce resources for free trade while they are damaged).
- Monitor the political events screen to see what is possible and what is probable. If a surrender event looms, the Allied player can reduce the probability if he can reverse the momentum.

- Transport and port rules add substantial value to Malta and Norway, enhancing or hindering transportation in the region. WA control of Okinawa will ultimately be crucial for any invasion of Japan.
- The addition of a factory and a resource in Australia, along with the port-rich region it inhabits, makes it both more of a juicy target and more of a potential thorn in the underbelly of Japan.
- Note the impact of the air-move-over-strights rule on airborne units. It will be possible for Germany to drop airborne on Scotland from Western France, and similarly for the WA to drop airborne from England onto Eastern France.

9 References

- [1] *OIL AND WAR: How the Deadly Struggle for Fuel in WWII Meant Victory or Defeat*. Robert Goralski and Russel Freeburg, 1987
- [2] *Petroleum Encyclopedia, DONE IN OIL: The Cavalcade of the Petroleum Industry from a Practical, Economic and Financial Standpoint*. David Leven, 1942

10 Appendix A: Historical Daily Production (barrels), sorted by region (from [1])

		1938	1939	1940	1941	1942	1943	1944	1945
N America	Canada	19,085	21,474	23,472	27,764	28,540	27,540	27,593	23,241
	Mexico	105,496	117,529	120,317	115,605	95,384	96,337	104,380	119,307
	US	3,327,000	3,466,000	3,697,000	3,842,000	3,799,000	4,125,000	4,584,000	4,695,000
S America	Argentina	46,783	50,995	56,309	59,927	64,942	75,929	66,202	62,688
	Bolivia	619	589	787	644	844	915	858	1,047
	Colombia	59,129	65,362	69,926	67,268	28,732	36,332	60,904	61,504
	Ecuador	6,153	6,337	6,418	4,266	6,241	6,342	8,107	7,299
	Peru	43,395	37,008	33,131	32,699	37,340	40,148	39,314	37,655
	Trinidad	48,595	52,795	60,730	56,181	60,463	58,589	60,489	57,789
	Venezuela	515,545	565,671	507,022	625,836	404,589	486,660	702,311	885,359
Europe	Albania	2,060	2,559	4,090	3,655	4,386	2,742	915	732
	Austria	1,049	3,397	7,672	11,611	16,162	20,488	22,454	8,422
	Czechoslovakia	356	329	445	501	742	547	505	249
	France	1,405	1,370	1,355	1,134	1,268	975	820	553
	Germany	10,578	12,293	20,139	17,268	14,222	13,625	16,814	10,780
	Hungary	789	3,022	5,139	8,721	13,800	17,390	17,150	13,748
	Italy	277	249	232	260	277	236	150	145
	Netherlands	0	0	0	0	0	3	33	112
	Poland	10,310	10,680	10,631	4,912	7,655	9,589	8,197	2,055
	Rumania	132,841	125,063	117,945	111,005	115,326	107,348	71,560	95,266
	UK	0	0	339	611	1,658	2,299	1,920	1,458
	USSR	571,992	605,112	608,197	663,424	634,164	563,699	765,027	424,529
	Yugoslavia	25	27	27	27	27	27	601	548
Mideast	Bahrain	22,734	20,792	21,049	18,614	17,099	18,005	18,344	20,025
	Egypt	4,332	12,784	17,773	23,414	22,671	24,529	25,727	25,770
	Iran	214,718	214,112	181,194	139,115	197,961	204,416	278,811	357,605
	Iraq	89,432	84,359	66,189	34,658	54,044	68,351	82,090	96,197
	Saudi Arabia	1,356	10,778	13,866	11,808	12,411	13,337	21,295	58,386
Asia	Brunei	18,940	19,444	19,254	18,805	8,219	12,329	16,393	5,753
	Burma	20,652	21,570	21,123	21,266	6,850	2,740	2,049	1,986
	China	0	11	27	238	932	1,225	1,380	1,326
	Dutch E Indies	157,036	170,101	169,429	147,134	65,753	132,312	60,820	20,822
	India	6,816	6,375	6,290	7,942	7,649	6,918	7,607	6,474
	Japan (+ Taiwan)	6,879	7,271	7,210	5,455	4,658	4,836	4,484	4,260
	total (summed)	5,446,377	5,715,458	5,874,727	6,083,768	5,734,009	6,181,758	7,079,304	7,108,090

11 Appendix B: Historical Daily Production (barrels), sorted by mean production (from [1])

	1938	1939	1940	1941	1942	1943	1944	1945	mean
US	3,327,000	3,466,000	3,697,000	3,842,000	3,799,000	4,125,000	4,584,000	4,695,000	3,941,875
USSR	571,992	605,112	608,197	663,424	634,164	563,699	765,027	424,529	604,518
Venezuela	515,545	565,671	507,022	625,836	404,589	486,660	702,311	885,359	586,624
Iran	214,718	214,112	181,194	139,115	197,961	204,416	278,811	357,605	223,492
Dutch E Indies	157,036	170,101	169,429	147,134	65,753	132,312	60,820	20,822	115,426
Rumania	132,841	125,063	117,945	111,005	115,326	107,348	71,560	95,266	109,544
Mexico	105,496	117,529	120,317	115,605	95,384	96,337	104,380	119,307	109,294
Iraq	89,432	84,359	66,189	34,658	54,044	68,351	82,090	96,197	71,915
Argentina	46,783	50,995	56,309	59,927	64,942	75,929	66,202	62,688	60,472
Trinidad	48,595	52,795	60,730	56,181	60,463	58,589	60,489	57,789	56,954
Colombia	59,129	65,362	69,926	67,268	28,732	36,332	60,904	61,504	56,145
Peru	43,395	37,008	33,131	32,699	37,340	40,148	39,314	37,655	37,586
Canada	19,085	21,474	23,472	27,764	28,540	27,540	27,593	23,241	24,839
Egypt	4,332	12,784	17,773	23,414	22,671	24,529	25,727	25,770	19,625
Bahrain	22,734	20,792	21,049	18,614	17,099	18,005	18,344	20,025	19,583
Saudi Arabia	1,356	10,778	13,866	11,808	12,411	13,337	21,295	58,386	17,905
Brunei	18,940	19,444	19,254	18,805	8,219	12,329	16,393	5,753	14,892
Germany	10,578	12,293	20,139	17,268	14,222	13,625	16,814	10,780	14,465
Burma	20,652	21,570	21,123	21,266	6,850	2,740	2,049	1,986	12,280
Austria	1,049	3,397	7,672	11,611	16,162	20,488	22,454	8,422	11,407
Hungary	789	3,022	5,139	8,721	13,800	17,390	17,150	13,748	9,970
Poland	10,310	10,680	10,631	4,912	7,655	9,589	8,197	2,055	8,004
India	6,816	6,375	6,290	7,942	7,649	6,918	7,607	6,474	7,009
Ecuador	6,153	6,337	6,418	4,266	6,241	6,342	8,107	7,299	6,395
Japan (+ Taiwan)	6,879	7,271	7,210	5,455	4,658	4,836	4,484	4,260	5,632
Albania	2,060	2,559	4,090	3,655	4,386	2,742	915	732	2,642
France	1,405	1,370	1,355	1,134	1,268	975	820	553	1,110
UK	0	0	339	611	1,658	2,299	1,920	1,458	1,036
Bolivia	619	589	787	644	844	915	858	1,047	788
China	0	11	27	238	932	1,225	1,380	1,326	642
Czechoslovakia	356	329	445	501	742	547	505	249	459
Italy	277	249	232	260	277	236	150	145	228
Yugoslavia	25	27	27	27	27	27	601	548	164
Netherlands	0	0	0	0	0	3	33	112	19

