

Gary Grigsby's War in the East
Read me File – 16 March 2015
Version 1.08.03

Welcome.

Thank you for playing Gary Grigsby's War in the East™! We are always looking for ways to improve your gaming experience. For the latest information on the game, please go to the Matrix Games web site at www.matrixgames.com.

Below you will find the latest and greatest information on Gary Grigsby's War in the East™. Information in this document supersedes that in the official game manual.

Troubleshooting:

Ensure that your system meets the minimum system requirements. These are found in the game manual. Also, ensure that you have the latest video and sound drivers available for your system and that you have upgraded to the latest version of DirectX from Microsoft. The vast majority of reported problems are resolved by upgrading all drivers and DirectX to the latest versions.

If you are still experiencing problems with the game, please use our Help Desk at www.matrixgames.com/helpdesk or post in the Gary Grigsby's War in the East™ Support Forum at www.matrixgames.com. Please provide as much detail on your issue as you can.

To obtain optimum game performance, close all other applications before beginning a game.

V1.08.03 – March 16, 2015

Bug fixes

1. Fixed a bug where some of destroyed Soviet divisions (rifle, motorized and tank) were reorganized into new units (rifle divisions and tank brigades) twice.
2. Fixed a bug where Soviet divisions being part of corps combat units were getting the same number (usually 1st) upon promotion to Guards.
3. Fixed a bug where it was impossible to transfer goods (resources, supplies, oil, fuel) from cities that had minor shortages to cities that had huge shortages.
4. Fixed a bug where it was impossible to resupply units from cities that had shortages.

V1.08.02 – February 5, 2015

New features

1. Scenario description files in the German version will be loaded from files ending with ".ger.txt" instead of just ".txt", to reduce the number of file conflicts between the English and German versions of the game to zero.

2. Improved the way some elements and messages are displayed, and some functions work, that are related to item pools on the production screen in the editor. It will be now possible to set the pools of captured equipment for each country in the editor.

3. Axis leaders of the lowest rank (Generalmajor for Germany) will be automatically promoted to the next rank (Generalleutnant for Germany) on the date of their historical promotion (if provided in game data). Since the lowest rank is not the optimum rank to command an Axis Corps HQ, there was no way for these leaders to be appointed to command position without a risk of losing some skill points.

4. Units will now consume 50% of their weekly requirement (was 60%). Supply consumed by units during the logistics phase will reduce supply requirements by the same amount for the remainder of the turn, which will result in units being presented as having higher percentage of required supply stocks on hand (just like before 1.08.01). Logistics phase log will now contain information about the amount of supplies required by all units for consumption, amount of supplies converted to ammo and amount of ammo that was actually delivered to units (previously presented amount of ammo delivered to units was inaccurate). Unit supply details screen will now contain information about the percentage of desired supply consumed during the logistics phase in addition to the absolute value.

5. Soviet Heavy Industry multiplier changed to 85% of pre-1.08 values (was 75%). This means a multiplier of 110 in 1942 (was 100), 130 in 1943 (was 120), 145 in 1944 (was 130), and 155 in 1945 (was 135).

6. Units doing a HQ BuildUp will not be exempt from MP reduction due to failed leader rolls, although the penalty will be halved (the multiplier will be 0.9, instead of 0.8). HQ BuildUp bonus to maximum supply levels reduced from $25 + 0.75 * \text{buildUp score}$ to just buildUp score. Units will not return extra supplies for two turns after performing a HQ BuildUp, instead of just one turn. To participate in a HQ BuildUp, units and HQs must have at least 25% of their MP remaining.

7. Improved the way support units are displayed, by marking them with "*", when they are blocked from being reassigned due to taking part in a HQ BuildUp.

8. When resupplying, HQ units (and other units resupplying like HQ units) will not be bound by global supply and fuel shortages, rather by local shortages in the city or town from which they draw their supplies. Global stock percentage will not be shown in unit supply details window, replaced by city stock percentage.

9. Elements added to empty slots will now have their starting experience equal to 90% of average unit experience. In case unit is empty and has no average experience, normal build experience will be used. Unit's morale will now have double weight when determining starting experience of replacement elements (morale below 20 will count as 20). Units marked as Guards (including "Guards" or "Gds" in unit name), Axis Elite, SS Elite or LW Elite will get replacement elements with starting experience increased by 25%. Build experience will be slightly higher due to rounding up instead of down.

10. Axis replacement needs will be reduced by Axis Rail Modifier, in addition to the regular distance to rail modifier.

11. Added the ability to influence the flow of supplies in the production system and to fort construction. It will be now possible to define production levels (25-100%) for aircraft, ground elements (produced in factories), armaments and vehicles as well as fort construction levels (0-100%, separately for units and cities) on the production screen. Changing production level by 1 uses 2 AP, changing construction level by 1 uses 1 AP. All those activities require supplies, which are also needed by units for consumption and conversion to ammo. In case of shortages it might be wise to tune down production levels so that units will not suffer grave shortages. Lend-Lease equipment will not be affected, since it does not use supplies for production.

12. Information about supply and fuel requirements of units and available stocks (not reserved

for production or population) was added to the logistics log. It will be now easier to track whether stocks are dwindling or expanding.

13. Tigers and King Tigers will be treated as high-match elements by the replacement system. Units having Tigers in their TOE will never use other Heavy Tanks (or worse) in their place, including captured tanks.

14. Tooltip for air bases will now show percentage of miles flown for each air group located in that air base.

15. Added the ability to turn off Lend-Lease in the editor with a scenario parameter. Factories "producing" Lend-Lease ground elements and aircraft will be erased at some point during Soviet logistics phase, so they do not have to be erased manually in the scenario.

16. For the purposes of sending elements back, MAX TOE setting lower than 80% will be treated as 80%. Since elements below 125% of MAX TOE are not send back immediately, this means units will not drop below 100% of TOE, just by sending back surplus elements immediately, while having MAX TOE set to a value lower than 80%.

17. Improved selection of national high commands, so it will work properly more often (especially in case of Rumania, Hungary and Slovakia). This function is used when detaching city flak and support units attached to units of different nationality.

18. Improved selection of commanding HQ in battle, by reducing the possibility of artillery units affecting the choice.

19. Combat units will not return extra (over support need) support squads, to eliminate negative impact on unit morale and experience due to constant squad rotation (removal and replacement), as well a number of other problems in the production and replacement procedures. Since support squads have a CV of 1, certain units will be a bit stronger now, at the cost of higher manpower consumption.

20. Updated and improved German translation.

21. Added the ability to select and build air bases and air groups of various types manually. AI will use the old automatic creation routines, but human players will now have more freedom at the price of having to spend more AP. It will be possible to build 1 air base and 8 air groups per turn (production percentage limit will be applied in smaller scenarios), starting from August 1941. Each will cost 1 AP. VVS air bases will be limited to 15 (production percentage limit will be applied in smaller scenarios). The new function is accessible by using the "Build new unit" function. Air bases are placed on the target hex, just like any other unit, while air groups will arrive to the National Reserve at the start of next turn. Plane type is automatically selected based on the highest amount of extra planes available (extra planes are those left from subtracting number of aircraft missing in air groups that use them from those available in the pool) and are valid for given air group type (with the exception that IAP regiments trained as bombers are choosing only from fighter-bombers).

22. Build morale will be randomly determined between 0.8 (rounding up) and 1.0 (inclusive) of current national morale. Previously it was in the range of 0.75 (rounding down) and 1.0 (exclusive).

23. Improved the way Rifle, Motorized and Tank Divisions are reformed in all aspects. The state of new formation will depend more on the current morale, experience and TOE percentage of the reformed unit (if it was disbanded after being routed, not destroyed), as well as on current national morale level for given formation type. Rifle and Motorized divisions will return as Rifle Divisions in 8+Random(8) turns, as opposed to 4+Random(23) turns. Tank Divisions will return as Tank Brigades in 6+Random(6) turns, as opposed to 11 turns (but they can't show up earlier than turn 12). Logistics phase log will now contain information about those reforming units, which were destroyed during the previous enemy turn.

24. It will now cost AP to put units in static mode. The cost to make a unit static will equal 2 AP

for motorized units and 1 AP for the rest. Cost to reactivate will be the same. Vehicle pool must contain at least 5k vehicles in order to be able to reactivate static units (see bug #14). It will be impossible to make static or reactivate units in beachhead or airhead supply state.

25. Using the Reduced Blizzard Effect option will change Soviet Guards Year Modifier (see 9.2.2.2) by +2 in 1941, by +2 in 1942, and by +1 in 1943. Using the Soviet Combat Bonus set to NONE will change the Year Modifier by +1 in 1941 and by +1 in 1942. These modifiers apply only to games starting in 1941.

26. The number to convert Soviet Armies to Guards used in Condition One (see 9.2.2.2) changed from 75 to 50. The change was intended to go out with an earlier patch, but was not reported and not fully working.

27. Added two new special rules to Soviet restrictions for changing the aircraft in an air group (see 8.1.5). First: fighters, fighter bombers (if the group is trained as fighters) and jet fighters can switch to night fighters. Second: night fighters can switch to fighters, fighter bombers and jet fighters. This is partially a bug fix as well, because without these rules there was no way the new Pe-3bis night fighter (introduced with 1.08.00) could be used, unless assigned to an air group in the editor.

28. Added new function to the scenario editor check utility, that will point out units with delay (turn of arrival) not less than withdrawal (turn of departure), unless both are zero. Another check will look for incomplete leader promotion data.

29. Labor squads will be protected in combat just like support squads.

30. Added new ground element type 71 - "Air Support". It is similar to regular support squads in all aspects, however it can't be augmented by HQ support squads, may not utilize Hiwi manpower (in case of German units), may not be converted to infantry squads, and counts normally against unit TOE percentage.

31. It will be impossible to relocate frozen units, unless they are out of supply or in a beachhead/ airhead supply state.

32. It will be possible to adjust MAX TOE of frozen non-combat units.

33. German "/StG" air groups will be renamed to "/SG" in October 1943.

34. Partisan units will attack rail in hexes occupied by enemy units, though the chance will be smaller as the number of undepleted combat units in the target hex increases.

35. In order to decrease possible confusion the "ASSIGN / FORM" buttons were changed to "ASSIGN" only (related tooltips were adjusted accordingly) for combat units, cities and Axis HQs, as it is not possible to form new units in these cases, only assign existing units.

36. Reduced the limits to air group replacements. Previously only air groups below 50% of maximum number of aircraft were allowed to automatically get replacements, unless the number of aircraft available in the national pool was over 99 (otherwise there was a random chance to get some replacements, but the last 1-2 missing machines would never be replaced). The two numbers were changed to 75% (and it will be possible to replace all missing machines) and 49 (9 for Axis Allies, as rarely do they have large pools).

37. Aircraft performing recon missions will get a bonus to evade flak. Earlier there had been x10 bonus, but it was disabled at some point. Now there will be a x4 bonus to evade flak.

38. Reworked combat messages, so that less important ones were moved to lower priority and that all messages fit on screen. Damage and destruction can be observed on level 4, disruption on level 5, shot details and combat events other than firing on level 6, and firing on level 7.

39. Reduced the accuracy of "Mortar" devices.

40. German Army Group renames (and the arrival of Army Group B) will be shown in the logistics phase log.

Bug fixes

1. Fixed a bug where it was impossible to set air supply range for isolated air bases, because of conflict with the "set color" function.

2. Fixed a bug where aircraft lost when an airbase was displaced or destroyed (including surrender of a nation) were not recorded in any loss category. They will be included in "Lost On The Ground" category now, and for games already suffering from this problem the difference between "TOTAL LOSSES" and four loss categories will be added to "Lost On The Ground" category.

3. Fixed a bug where air groups assigned to an air base that was disbanded voluntarily were lost - neither moved to national reserve nor erased. They will be moved to national reserve now.

4. Fixed a bug in the editor where it was impossible to set supply requirements for delayed units.

5. Fixed a bug in the editor where German equipment was listed multiple times on the production screen when a country filter was selected. Now only the correct equipment will be shown for each country (though for Czech, Poland, Bulgaria and Yugoslavia German equipment will be shown, which is intended).

6. Fixed a bug in the editor where captured equipment was not shown on the production screen when a country filter was selected.

7. Fixed a bug where HQ BuildUp status wasn't cleared from some units, most notably from support units, blocking their further reassignment.

8. Fixed a bug where it was possible to reassign support units, that should have been blocked by HQ BuildUp, by using the "ASSIGN / FORM" and "[X]" buttons.

9. Fixed a bug where it was impossible to disband support units attached to Soviet "Defense Zone" or "Military District" HQ.

10. Fixed a bug where air group arrivals were shown one turn later than they would actually occur.

11. Fixed several bugs related to the creation of new units, involving naming, morale, experience and other parameters.

12. Fixed a bug where units that were being split could take slots occupied by units disabled in given scenario (having delay set to a value greater than 300 but lower than 1000), which in turn could result in support units assigned to those overridden units being shown as assigned to some of those newly created subunits.

13. Fixed a bug where some elements (including assigned soldiers) could be lost while merging units, when there was no free slots in the target unit.

14. Fixed a bug where stated reactivation cost for a static unit was different than the one actually paid. This required making the costs independent of the number of vehicles in the unit or unit's vehicle need or in the global vehicle pool (see new feature #24).

15. Fixed a bug where Soviet Polish or Czech units could be converted to Guards, losing their identity in the process.

16. Fixed a bug where ground elements of type "Assault Gun" in support units attached to cities were considered to be flak elements in map tooltips.

17. Fixed a bug where reactivated static units were reported as temporarily motorized, which wasn't true.

18. Fixed a bug where support units attached to combat units were not properly accounted for when their parent unit was put into static mode or reactivated.

19. Fixed a bug where AP (and HVAP) shots were fired only against frontal armor of target ground elements. Side shots will remain blocked for "AT-Rifle" and "s.PzB41" devices, in order to compensate for their overrated efficiency, because of not taking light and fast projectile shattering problems and low beyond-armour effect into account.

20. Fixed a bug where only Army HQs attached to Army Group South were reassigned to

O.K.H., when the HQ was split into Army Group A and B HQs, instead of all units.

21. Fixed a bug where aircraft name was missing from combat messages related to airfield bombing.

22. Fixed a bug where aircraft doing bomber mission during airfield bombing were counted as having only one instance of each weapon (even if carrying multiples of). Escorts relegated to strafing mission during airfield bombing were not affected.

Scenario changes

1. Updated "Drama on the Danube 44-45" and "Vistula to Berlin 1945" scenarios with dozens of changes, making proper use of new ground element and aircraft types introduced in 1.08 and increased historical accuracy, courtesy of Randolph J. Seger.

2. Improved German Stuka/Schlacht air units in all campaigns, by checking whether valid aircraft types are used, removing duplicate units, and taking advantage of the new renaming function, to avoid unnecessary withdrawals and arrivals of essentially the same units.

3. Added some additional Italian aircraft factories to 41-43 campaigns.

4. Fixed duplicate Polizei SS Division in 43 Campaign.

5. Fixed duplicate Feldhernhalle Division in Stalingrad to Berlin.

6. Eliminated ghost withdrawals (disabled/inactive units having non-zero withdrawal turn number specified) in all campaigns and multiple scenarios.

7. Fixed some Rumanian airbases with vast amount of surplus support squads in certain scenarios.

8. FBD 5 delayed to mid-May 1942 in all 41 Campaigns, and FBD 2 switched name with FBD 3.

Device changes

1.[1] .303 Vickers 'K' MG: antiAir changed from 40 to 53.

2.[34] 20mm Hispano Cannon: rof changed from 21 to 20.

3.[44] 20mm Hispano Cannon: name changed from 20mm Hispano Cannon to 20mm Hispano V Cannon, rof changed from 21 to 23.

4.[355] 65mm L17 Gun: acc changed from 250 to 200, rg changed from 1250 to 5000.

5.[356] 75mm leIG 18 Gun: acc changed from 250 to 200, rg changed from 1500 to 3900.

6.[370] 76mm M27/39 Gun: rg changed from 1250 to 4600.

7.[391] 105mm 105/25 Gun: rof changed from 8 to 5.

8.[394] 105mm 105/25 Howitzer: name changed from 105mm 105/25 Howitzer to 105mm 105/28 Gun, acc changed from 250 to 350, rg changed from 12000 to 13100, rof changed from 6 to 5.

9.[414] 150mm sIG33 L/11 Gun: acc changed from 300 to 250, rg changed from 2500 to 5100.

10.[415] 150mm StuH43 L/12 Gun: acc changed from 300 to 250, rg changed from 2500 to 5100.

11.[419] 149mm 149/20 Howitzer: name changed from 149mm 149/20 Howitzer to 149mm 149/19 Howitzer, rof changed from 4 to 3.

12.NEW [636] 105mm 105/14 Howitzer.

13.NEW [637] 149mm 149/35 A Gun.

14.NEW [638] 6.5mm M1891 Rifle.

Ground element changes

1.[22] Panther D: top armor changed from 18 to 16.

2.[23] Panther A: front armor changed from 124 to 123, top armor changed from 18 to 16.

3.[24] Panther G: front armor changed from 124 to 123, supply use changed from 1487 to 1512, weapon 0 ammo changed from 81 to 82, weapon 1 ammo changed from 2800 to 3100.

4.[189] 75mm Anti-tank Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

5.[190] 20mm Anti-tank Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

6.[191] 37mm Anti-tank Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

7.[192] 47mm Anti-tank Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

8.[193] 20mm Anti-aircraft Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

9.[194] 90mm Anti-aircraft Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

10.[195] 65mm Infantry Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

11.[196] 81mm Mortar: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

12.[197] 8mm Machine Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

13.[200] 45mm Mortar: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

14.[204] 75mm Field Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

15.[205] 100mm Howitzer: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

16.[206] 105mm Howitzer: weapon 0 changed from [394] 105mm 105/25 Howitzer to [636] 105mm 105/14 Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

17.[207] 149mm Howitzer: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

18.[208] 210mm Howitzer: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

19.[213] 75mm Anti-aircraft Gun: weapon 1 changed from [141] 7.35mm M1938 Rifle to [638] 6.5mm M1891 Rifle.

20.[759] IS-2 M1944: expansion rate changed from 0 to 1.

21.[781] 45mm Anti-tank Gun M42: turn build limit changed from 100 PER TURN to 150 PER TURN, turn build % changed from DEFAULT to 60%.

22.[782] 57mm Anti-tank Gun: turn build limit changed from 100 PER TURN to 150 PER TURN, turn build % changed from DEFAULT to 60%.

23.[1491] Support: symbol changed from 0 to [1490] Support.

24.[1492] Support: symbol changed from 0 to [1490] Support.

25.[1493] Support: symbol changed from 0 to [1490] Support.

26.[1494] Support: symbol changed from 0 to [1490] Support.

27.[1495] Support: symbol changed from 0 to [1490] Support.

28.NEW [215] Motorized Rifle Squad.

29.NEW [222] 105mm Field Gun.

30.NEW [239] 149mm Field Gun.

31.NEW [1590] Air Support.

- 32.NEW [1591] Air Support.
- 33.NEW [1592] Air Support.
- 34.NEW [1593] Air Support.
- 35.NEW [1594] Air Support.
- 36.NEW [1595] Air Support.
- 37.NEW [1601] Air Support.

Aircraft changes

1.[124] G.50(F): max altitude changed from 35108 to 32811, climb changed from 2540 to 2562, durability changed from 24 to 28.

2.[138] Ca.135bis: endurance changed from 320 to 360, range changed from 1120 to 1260, first year changed from 1939 to 1938, first month changed from 1 to 4, crew changed from 5 to 4, sortie ammo changed from 3390 to 2290, sortie fuel changed from 3307 to 3638, build limit changed from 0 to 1, last year changed from 1945 to 1940, last month changed from 9 to 12, expansion rate changed from 0 to 1, weapon 3 number changed from 6 to 4.

3.[139] Ca.310 Libeccio: max speed changed from 227 to 221, cruise speed changed from 200 to 187, endurance changed from 330 to 360, range changed from 1100 to 1122, first year changed from 1939 to 1938, upgrade changed from 0 to [137] Ca.311, sortie fuel changed from 1758 to 1720, build limit changed from 1 to 3, max import changed from 0 to ALL, import from changed from 0 to [215] Ca.310 (H), last year changed from 1945 to 1939, last month changed from 9 to 12.

4.[140] Ca.311: name changed from Ca.311 to Ca.313, max altitude changed from 22969 to 26906, max speed changed from 225 to 267, cruise speed changed from 180 to 208, climb changed from 1100 to 1200, endurance changed from 305 to 325, range changed from 915 to 1126, first year changed from 1939 to 1941, maneuver changed from 21 to 22, armor changed from 0 to 1, upgrade changed from 0 to [144] Ca.314C, sortie ammo changed from 940 to 990, sortie fuel changed from 1758 to 1720, build limit changed from 2 to 3, last year changed from 1945 to 1941, last month changed from 9 to 12, weapon 0 changed from [7] 7.7mm SAFAT MG to [22] 12.7mm SAFAT MG, weapon 1 changed from [7] 7.7mm SAFAT MG to [22] 12.7mm SAFAT MG, weapon 2 changed from [61] 100kg GP Bomb to [7] 7.7mm SAFAT MG, weapon 3 changed from 0 to [61] 100kg GP Bomb, weapon 2 number changed from 4 to 1, weapon 3 number changed from 0 to 4, weapon 2 face changed from INT to BR, weapon 3 face changed from FWD to INT.

5.[142] CR.32bis: max altitude changed from 25265 to 27070, cruise speed changed from 173 to 174, climb changed from 1800 to 1889, range changed from 490 to 493, first year changed from 1939 to 1934, first month changed from 9 to 3, upgrade changed from [145] G.50bis Freccia to [143] CR.42 Falco, build limit changed from 0 to 5, last year changed from 1945 to 1938, last month changed from 9 to 12, expansion rate changed from 0 to 1, factory upgrade changed from [145] G.50bis Freccia to [143] CR.42 Falco.

6.[143] CR.42 Falco: max altitude changed from 33467 to 33139, max speed changed from 283 to 274, cruise speed changed from 180 to 231, endurance changed from 160 to 135, range changed from 480 to 519, first month changed from 9 to 1, sortie fuel changed from 744 to 695, build limit changed from 13 to 7, last year changed from 1945 to 1943, last month changed from 9 to 12.

7.[145] G.50bis Freccia: max altitude changed from 35108 to 35107, cruise speed changed from 240 to 231, climb changed from 2540 to 2562, max load changed from 0 to 707, range changed from 420 to 404, maneuver changed from 28 to 30, durability changed from 24 to 28, sortie ammo changed from 60 to 390, last year changed from 1943 to 1942, last month changed from 2 to 12, weapon 1 changed from 0 to [61] 100kg GP Bomb, weapon 1 number changed from

0 to 2, weapon 1 face changed from FWD to EXT.

8.[146] G.55/I Centauro: max speed changed from 417 to 410, cruise speed changed from 308 to 305, climb changed from 3500 to 3316, endurance changed from 145 to 150, range changed from 744 to 762, maneuver changed from 36 to 35, durability changed from 28 to 29, first month changed from 3 to 4, sortie fuel changed from 924 to 926, build limit changed from 2 to 4.

9.[148] MC.200 Saetta: max speed changed from 311 to 313, cruise speed changed from 230 to 225, climb changed from 2894 to 2627, max load changed from 222 to 707, endurance changed from 120 to 135, range changed from 460 to 506, sortie ammo changed from 280 to 390, sortie fuel changed from 551 to 655, build limit changed from 3 to 8, weapon 1 changed from [60] 50kg GP Bomb to [61] 100kg GP Bomb.

10.[149] MC.202 Folgore: max speed changed from 372 to 373, climb changed from 3300 to 2900, endurance changed from 110 to 107, range changed from 489 to 476, maneuver changed from 33 to 34, sortie fuel changed from 710 to 711, build limit changed from 6 to 9, last month changed from 5 to 3.

11.[150] MC.205 Veltro: max altitude changed from 37732 to 38061, cruise speed changed from 310 to 311, climb changed from 3685 to 3333, range changed from 465 to 466, maneuver changed from 36 to 35, first month changed from 6 to 4, sortie fuel changed from 710 to 711, build limit changed from 6 to 4.

12.[152] Re.2000 Falco I: max speed changed from 329 to 330, cruise speed changed from 267 to 274, climb changed from 2591 to 2627, endurance changed from 130 to 160, range changed from 578 to 730, maneuver changed from 31 to 30, durability changed from 27 to 26, first month changed from 3 to 1, build cost changed from 354 to 302, build limit changed from 1 to 2, last year changed from 1942 to 1941, last month changed from 5 to 12.

13.[153] Re.2001 Falco II: max speed changed from 337 to 339, cruise speed changed from 267 to 292, climb changed from 2591 to 2850, range changed from 623 to 681, maneuver changed from 33 to 34, durability changed from 28 to 29, first month changed from 6 to 1, sortie fuel changed from 867 to 899, build limit changed from 3 to 8, last month changed from 4 to 3.

14.[154] Re.2005 Sagittario: max speed changed from 426 to 413, cruise speed changed from 285 to 302, climb changed from 3500 to 3316, range changed from 617 to 654, maneuver changed from 36 to 35, durability changed from 29 to 30, first month changed from 5 to 4, sortie fuel changed from 867 to 868.

15.[155] SM.75 Marsupiale: climb changed from 500 to 600, max load changed from 6617 to 7719, endurance changed from 330 to 560, range changed from 1111 to 1885, crew changed from 5 to 4, sortie fuel changed from 4452 to 8000.

16.[156] SM.79 Sparviero: durability changed from 34 to 36, crew changed from 4 to 5, sortie ammo changed from 2860 to 2330, build limit changed from 4 to 6, last year changed from 1945 to 1943, last month changed from 9 to 6, weapon 3 number changed from 1 to 2, weapon 4 number changed from 5 to 4.

17.[157] SM.81 Pipistrello: max speed changed from 211 to 216, cruise speed changed from 200 to 161, climb changed from 750 to 900, max load changed from 3309 to 4412, endurance changed from 350 to 520, range changed from 1166 to 1395, first year changed from 1939 to 1938, first month changed from 9 to 1, upgrade changed from 0 to [158] SM.82 Canguro, crew changed from 6 to 5, sortie fuel changed from 3970 to 4409, last year changed from 1945 to 1939, last month changed from 9 to 12.

18.[158] SM.82 Canguro: climb changed from 500 to 987, max load changed from 11027 to 8822, endurance changed from 330 to 600, range changed from 1111 to 2020, armor changed from 0 to 1, crew changed from 5 to 4, sortie fuel changed from 8000 to 9567.

19.[199] SM.79B(R): durability changed from 34 to 36, crew changed from 4 to 5, sortie ammo changed from 2870 to 2320, weapon 4 number changed from 5 to 4.

20.[200] SM.79JR: durability changed from 34 to 36, crew changed from 4 to 5, sortie ammo changed from 3420 to 2870, weapon 4 number changed from 6 to 5.

21.[214] Ca.135bis(H): cruise speed changed from 230 to 210, endurance changed from 320 to 360, range changed from 1226 to 1260, first year changed from 1939 to 1940, first month changed from 1 to 6, crew changed from 5 to 4, sortie ammo changed from 3360 to 2290, sortie fuel changed from 3307 to 3638, weapon 3 number changed from 6 to 4.

22.[215] Ca.310 (H): max speed changed from 227 to 221, cruise speed changed from 200 to 187, endurance changed from 330 to 360, range changed from 1100 to 1122, sortie fuel changed from 1758 to 1720.

23.[216] CR.32bis(H): max altitude changed from 25265 to 27070, max speed changed from 224 to 220, climb changed from 1800 to 1889.

24.[217] CR.42(H): max altitude changed from 33467 to 33139, max speed changed from 283 to 274, cruise speed changed from 180 to 231, endurance changed from 160 to 135, range changed from 480 to 519, sortie fuel changed from 744 to 695.

25.[232] Re.2000 Heja: sortie fuel changed from 1056 to 1058.

26.[234] SM.75(H): climb changed from 500 to 600, max load changed from 6617 to 7719, endurance changed from 330 to 560, range changed from 1111 to 1885, crew changed from 5 to 4, sortie fuel changed from 4452 to 8000.

27.[237] Re.2000 Heja II: max import changed from 120 to ALL, import from changed from [152] Re.2000 Falco I to [232] Re.2000 Heja, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 40%.

28.NEW [4] Bf 109E-7/U1.

29.NEW [137] Ca.311.

30.NEW [141] Ca.314A.

31.NEW [144] Ca.314C.

32.NEW [159] BR.20M Cicogna.

33.NEW [160] Z.1007bis Alcione.

TOE changes

1.[18] 41 Hun. Border Guard Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

2.[21] 41 Hun. Motorized Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

3.[22] 41 Hun. Mountain Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

4.[32] 41 Jager Division: first month changed from 6 to 12.

5.[55] 42c Rifle Division: last year changed from 1944 to 1943, last month changed from 5 to 4, upgrade changed from [100] 44 Rifle Division to [738] 43 Rifle Division.

6.[60] 42b Rifle Brigade: last year changed from 1945 to 1943, last month changed from 9 to 4, upgrade changed from 0 to [740] 43 Rifle Brigade.

7.[66] 44 Hun. Hussar Division: last year changed from 0 to 1945, last month changed from 0 to 9.

8.[78] 42 Rum. Mountain Division: last year changed from 0 to 1945, last month changed from 0 to 9.

9.[88] 43 Heavy Jagdpanzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

10.[95] 43 Panzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

11.[102] 43 Rum. Security Division: last year changed from 0 to 1945, last month changed

from 0 to 9.

12.[114] 44 Elite Panzer Division: last year changed from 0 to 1945, last month changed from 0 to 9.

13.[119] 45 SS Grenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

14.[123] 44 Heavy Jagdpanzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

15.[128] 44 Mountain Division: last year changed from 0 to 1945, last month changed from 0 to 9.

16.[130] 45 SS Mountain Division: last year changed from 0 to 1945, last month changed from 0 to 9.

17.[133] 44 Airlanding Division: last year changed from 0 to 1945, last month changed from 0 to 9.

18.[134] 44 Rum. Armored Division: last year changed from 0 to 1945, last month changed from 0 to 9.

19.[135] 44 Rum. Cavalry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

20.[136] 43 Rum. Infantry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

21.[137] 44 Stug Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

22.[138] 44 Heavy Panzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

23.[139] 44 Volksgrenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

24.[140] 44 Luftwaffe Field Division: last year changed from 0 to 1945, last month changed from 0 to 9.

25.[148] 42d Guards Rifle Corps: squad 6 changed from [780] 45mm Anti-tank Gun M37 to [781] 45mm Anti-tank Gun M42.

26.[153] 45 SS Panzergrenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

27.[154] 45 SS Panzer Division: last year changed from 0 to 1945, last month changed from 0 to 9.

28.[155] 45 Panzer Division: last year changed from 0 to 1945, last month changed from 0 to 9.

29.[156] 45 Elite Panzergrenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

30.[157] 45 Panzergrenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

31.[158] 45 Jager Division: last year changed from 0 to 1945, last month changed from 0 to 9.

32.[159] 45 Grenadier Division: last year changed from 0 to 1945, last month changed from 0 to 9.

33.[160] 45 SS Cavalry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

34.[161] 45 Fallschirmjager Division: last year changed from 0 to 1945, last month changed from 0 to 9.

35.[162] 41 K18 Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

36.[163] 41 Mixed Artillery Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

37.[164] 41 sFH Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

38.[165] 41 H39 Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

39.[166] 41 M18 Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

40.[167] 41 Heavy Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

41.[168] 41 K39 Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

42.[169] 41 Matterhorn Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

43.[170] 41 SP Light Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

44.[171] 41 Motorized Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

45.[173] 42 leFH Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

46.[179] 41b AT Artillery Regiment: upgrade changed from 0 to [186] 43 AT Artillery Regiment.

47.[182] 42b AT Artillery Regiment: last year changed from 1945 to 1943, last month changed from 9 to 6, upgrade changed from 0 to [737] 43a AT Artillery Regiment.

48.[183] 42 Heavy AT Regiment: upgrade changed from 0 to [186] 43 AT Artillery Regiment.

49.[185] 42 TD AT Artillery Brigade: name changed from 42 TD to 42.

50.[221] 41 Nebelwerfer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

51.[222] 41 Construction Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

52.[223] 41 Bicycle Recon Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

53.[227] 41 LW Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

54.[228] 41 LW Mixed Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

55.[229] 41 LW Heavy Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

56.[231] 43 LW Flak Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

57.[232] 41 LW SE Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

58.[234] 41 R.A.D. Labor Detachment: last year changed from 0 to 1945, last month changed from 0 to 9.

59.[235] 41 R.A.D. Labor Group: last year changed from 0 to 1945, last month changed from 0 to 9.

60.[236] 41 Panzer Pioneer Battalion: last year changed from 0 to 1943, last month changed from 0 to 6.

61.[237] 41 K3 Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

62.[238] 41 Machine Gun Battalion: last year changed from 0 to 1945, last month changed

from 0 to 9.

63.[239] 41 Nebelwerfer Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

64.[274] 41 Rum. Machine Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

65.[275] 41 Rum. Cavalry Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

66.[278] 42a Jagdpanzer Battalion: last month changed from 3 to 2.

67.[284] 44 Panzer Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

68.[286] 43 Heavy Panzerjager Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

69.[287] 45 Jagdtiger Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

70.[289] 41 Hun. AA Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

71.[290] 41 Hun. Artillery Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

72.[291] 41 Hun. Engineer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

73.[292] 41 Hun. Heavy Artillery Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

74.[293] 41 Hun. Construction Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

75.[294] 41 Rum. Light Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

76.[295] 41 Rum. Howitzer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

77.[296] 41 Ital. Anti-tank Gun Battalion: last month changed from 9 to 12.

78.[297] 41a Ital. Infantry Division: last month changed from 6 to 12, upgrade changed from [670] 43 Ital. Infantry Division to 0, squad 1 changed from [201] Assault Engineer Squad to [202] Cavalry Squad, squad 10 changed from [1492] Support to [189] 75mm Anti-tank Gun, squad 11 changed from 0 to [1492] Support, squad number 1 changed from 12 to 18, squad number 2 changed from 30 to 45, squad number 3 changed from 16 to 8, squad number 4 changed from 8 to 16, squad number 5 changed from 8 to 16, squad number 9 changed from 72 to 48, squad number 10 changed from 201 to 6, squad number 11 changed from 0 to 192.

79.[299] 42b Ital. Infantry Division: last month changed from 6 to 12, upgrade changed from [670] 43 Ital. Infantry Division to 0.

80.[300] 41c Ital. Infantry Division: last year changed from 1943 to 1942, last month changed from 6 to 1, upgrade changed from [670] 43 Ital. Infantry Division to [750] 42c Ital. Infantry Division, squad 1 changed from [201] Assault Engineer Squad to [202] Cavalry Squad, squad number 0 changed from 220 to 216, squad number 1 changed from 12 to 18, squad number 2 changed from 45 to 72, squad number 3 changed from 16 to 8, squad number 4 changed from 8 to 16, squad number 5 changed from 8 to 16, squad number 9 changed from 66 to 48, squad number 10 changed from 377 to 368.

81.[302] 42 Ital. Mountain Division: squad 1 changed from [201] Assault Engineer Squad to [189] 75mm Anti-tank Gun, squad 4 changed from [189] 75mm Anti-tank Gun to [193] 20mm Anti-aircraft Gun, squad 5 changed from [193] 20mm Anti-aircraft Gun to [204] 75mm Field Gun, squad 6 changed from [204] 75mm Field Gun to [206] 105mm Howitzer, squad number 0 changed from

216 to 162, squad number 1 changed from 9 to 6, squad number 4 changed from 8 to 16, squad number 5 changed from 16 to 24, squad number 6 changed from 24 to 12, squad number 7 changed from 72 to 54, squad number 8 changed from 72 to 54, squad number 9 changed from 490 to 361.

82.[303] 41 Ital. Celere Division: squad 3 changed from [201] Assault Engineer Squad to 0, squad 7 changed from [178] L6/40 to [177] CV-33, squad number 3 changed from 12 to 0, squad number 6 changed from 24 to 36, squad number 9 changed from 249 to 251.

83.[307] 42 Ital. Armored Division: last year changed from 0 to 1943, last month changed from 0 to 12.

84.[308] 41 Ital. Light Howitzer Battalion: suffix changed from Ital. Light Howitzer Battalion to Ital. Light Gun Battalion, last year changed from 0 to 1943, last month changed from 0 to 12.

85.[309] 41 Ital. Medium Howitzer Battalion: last year changed from 0 to 1943, last month changed from 0 to 12.

86.[310] 41a Ital. Heavy Howitzer Battalion: last year changed from 0 to 1943, last month changed from 0 to 12.

87.[311] 41 Ital. Light AA Battery: last year changed from 0 to 1943, last month changed from 0 to 12.

88.[312] 41 Ital. AA Gun Battalion: last year changed from 0 to 1943, last month changed from 0 to 12.

89.[313] 41 Ital. Assault Engineer Battalion: last year changed from 0 to 1943, last month changed from 0 to 12, squad number 0 changed from 48 to 27, squad number 1 changed from 24 to 15.

90.[314] 41 Ital. Construction Battalion: last year changed from 0 to 1943, last month changed from 0 to 12, squad 0 changed from [201] Assault Engineer Squad to [214] Labor Squad, squad 1 changed from [214] Labor Squad to [1492] Support, squad 2 changed from [1492] Support to 0, squad number 0 changed from 9 to 27, squad number 1 changed from 27 to 15, squad number 2 changed from 18 to 0.

91.[315] 41 Ital. Labor Battalion: last year changed from 0 to 1943, last month changed from 0 to 12.

92.[316] 41 Ital. Ski Battalion: last year changed from 0 to 1943, last month changed from 0 to 12, squad 1 changed from [200] 45mm Mortar to [197] 8mm Machine Gun, squad 2 changed from [197] 8mm Machine Gun to [1492] Support, squad 3 changed from [1492] Support to 0, squad number 0 changed from 18 to 27, squad number 1 changed from 9 to 8, squad number 2 changed from 9 to 15, squad number 3 changed from 18 to 0.

93.[317] 41 Ital. CCNN Legion: last year changed from 0 to 1943, last month changed from 0 to 12, squad 1 changed from [200] 45mm Mortar to [196] 81mm Mortar, squad 2 changed from [197] 8mm Machine Gun to [192] 47mm Anti-tank Gun, squad 3 changed from [1492] Support to [200] 45mm Mortar, squad 4 changed from 0 to [197] 8mm Machine Gun, squad 5 changed from 0 to [1492] Support, squad number 0 changed from 54 to 48, squad number 1 changed from 18 to 9, squad number 3 changed from 48 to 18, squad number 4 changed from 0 to 32, squad number 5 changed from 0 to 38.

94.[318] 42 Ital. Parachute Division: last year changed from 0 to 1943, last month changed from 0 to 12.

95.[319] 42 Ital. CCNN Brigade: last year changed from 0 to 1943, last month changed from 0 to 12.

96.[321] 41 Fin. Jaeger Brigade: last month changed from 12 to 9.

97.[322] 41 Fin. Cavalry Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

98.[323] 41 Fin. Engineer Battalion: last year changed from 0 to 1945, last month changed

from 0 to 9.

99.[324] 41 Fin. Light Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

100.[325] 41 Fin. Heavy Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

101.[326] 41 Fin. Artillery Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

102.[327] 41 Fin. Heavy Artillery Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

103.[328] 41 Fin. Tank Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

104.[329] 44 Fin. Stug Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

105.[330] 41 Fin. Coastal Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

106.[331] 44 Fin. Coastal Division: last year changed from 0 to 1945, last month changed from 0 to 9.

107.[333] 41 Fin. Commando Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

108.[334] 41 Fin. Construction Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

109.[343] 43 Slov. Infantry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

110.[347] 45 Infantry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

111.[351] 41 Infantry Regiment: last month changed from 8 to 6.

112.[360] 44 Stug Company: last year changed from 0 to 1945, last month changed from 0 to 9.

113.[364] 43 Hun. Infantry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

114.[367] 44 Hun. Reserve Division: last year changed from 0 to 1945, last month changed from 0 to 9.

115.[368] 44 Hun. Guard Division: last year changed from 0 to 1945, last month changed from 0 to 9.

116.[369] 44 Hun. Heavy Tank Company: last year changed from 0 to 1945, last month changed from 0 to 9.

117.[371] 41 Rum. Infantry Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

118.[373] 44 Fin. Infantry Division: last year changed from 0 to 1945, last month changed from 0 to 9.

119.[374] 43 Fin. Infantry Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

120.[375] 43 Fin. Armored Division: last year changed from 0 to 1945, last month changed from 0 to 9.

121.[377] 42d Rifle Corps: last year changed from 1944 to 1943, last month changed from 5 to 4, upgrade changed from [378] 44 Rifle Corps to [739] 43 Rifle Corps.

122.[405] 41 Fortified Zone: last year changed from 0 to 1945, last month changed from 0 to 9.

123.[406] 41 Fin. Fortified Zone: last year changed from 0 to 1945, last month changed from 0

to 9.

124.[407] 41 Ital. Fortified Zone: last year changed from 0 to 1943, last month changed from 0 to 12.

125.[410] 42 Cavalry Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

126.[411] 41b LW Light Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

127.[449] 42 Cossack Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

128.[450] 41 Heavy Nebelwerfer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

129.[453] 43 Heavy Nebelwerfer Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

130.[454] 43a Werfer Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

131.[455] 43b Werfer Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

132.[457] 44 Volks Werfer Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

133.[458] 45 Nebelwerfer Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.

134.[461] 44 Skijager Division: last year changed from 0 to 1945, last month changed from 0 to 9.

135.[468] 41 SP Flak Company: last year changed from 0 to 1945, last month changed from 0 to 9.

136.[469] 44 LW SP Light Flak Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

137.[471] 42 Ital. Celere Division: last month changed from 9 to 12, squad 2 changed from [201] Assault Engineer Squad to [189] 75mm Anti-tank Gun, squad number 2 changed from 12 to 6, squad number 11 changed from 249 to 254.

138.[472] 42 Ital. Cavalry Brigade: last year changed from 0 to 1943, last month changed from 0 to 12.

139.[473] 42 Ital. Security Division: last year changed from 0 to 1943, last month changed from 0 to 12, squad 1 changed from [201] Assault Engineer Squad to [202] Cavalry Squad, squad number 0 changed from 216 to 240, squad number 1 changed from 12 to 18, squad number 2 changed from 30 to 18, squad number 3 changed from 16 to 12, squad number 4 changed from 4 to 8, squad number 6 changed from 72 to 96, squad number 7 changed from 150 to 133.

140.[474] 44 Hun. Assault Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

141.[475] 41 Fin. Infantry Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

142.[476] 41 Fin. Machine Gun Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

143.[478] 41 Rum. AA Artillery Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.

144.[479] 41 Rum. Anti-tank Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

145.[481] 42 Rum. Pioneer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.

- 146.[482] 41 Rum. Construction Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.
- 147.[483] 41 Ital. Machine Gun Battalion: last month changed from 9 to 12.
- 148.[484] 41b Ital. Heavy Howitzer Battalion: last month changed from 9 to 12.
- 149.[485] 41 Ital. Flame Tank Company: last month changed from 9 to 12, squad number 0 changed from 12 to 10.
- 150.[492] 43 Fortress Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.
- 151.[493] 43 Schnelle Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.
- 152.[502] HQ Ital. Expeditionary Corps: last month changed from 9 to 12.
- 153.[503] HQ Ital. Alpini Corps: last month changed from 9 to 12.
- 154.[504] HQ Ital. Special Corps: last month changed from 9 to 12.
- 155.[510] 44 SS Security Division: last year changed from 0 to 1945, last month changed from 0 to 9.
- 156.[511] 44 FJ Reconnaissance Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.
- 157.[513] 44 Fallschirmjager Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.
- 158.[514] 43 Security Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.
- 159.[515] 44a Artillery Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.
- 160.[516] 44b Artillery Brigade: last year changed from 0 to 1945, last month changed from 0 to 9.
- 161.[518] 44 Infantry Regiment: last year changed from 0 to 1945, last month changed from 0 to 9.
- 162.[533] HQ Defense Zone: squad number 2 changed from 0 to 1.
- 163.[552] HQ Ital. Corps: last month changed from 9 to 12.
- 164.[553] HQ Ital. Army: last month changed from 9 to 12.
- 165.[554] HQ Ital. Army Group: last month changed from 9 to 12.
- 166.[555] HQ Ital. Air Base: last month changed from 9 to 12.
- 167.[592] HQ Ital. Air Corps : last year changed from 1945 to 1943, last month changed from 9 to 12.
- 168.[670] 43 Ital. Infantry Division: last year changed from 1945 to 1943, last month changed from 9 to 12.
- 169.[671] 43 Ital. Mountain Division: last year changed from 1945 to 1943, last month changed from 9 to 12.
- 170.[674] 43a Ital. Motorized Division: last year changed from 1945 to 1943, last month changed from 9 to 12.
- 171.[701] 42a Motorized Division: last month changed from 6 to 5.
- 172.[703] 43 Panzer Pioneer Battalion: last year changed from 0 to 1945, last month changed from 0 to 9.
- 173.[712] 41a Rum. Infantry Brigade: last year changed from 0 to 1941, last month changed from 0 to 12.
- 174.NEW [737] 43a AT Artillery Regiment.
- 175.NEW [738] 43 Rifle Division.
- 176.NEW [739] 43 Rifle Corps.
- 177.NEW [740] 43 Rifle Brigade.

178.NEW [741] 44 Rifle Brigade.

179.NEW [750] 42c Ital. Infantry Division.

Leader changes

1.[002] Erich Abraham: promo 2 month changed from 1 to 3, promo 2 day changed from 3 to 1, promo 2 rank changed from 0 to General.

V1.08.01 – December 5, 2014

New features

1.Disabled the rule that blocked replacements for Soviet infantry units over 60% TOE and Axis infantry units after 1941 over 80% TOE when not on refit (which included units on refit adjacent to enemy units). This is to reduce micromanagement required for rotating the units, and is a better choice when compared with allowing refit on the front lines. Players who wish to keep their units under strength (to conserve manpower) are free to use the MAX TOE function.

2.Soviet infantry units and Axis infantry units after 1941 under the control of human player will be automatically set to 60% (Soviet) / 80% (Axis) MAX TOE upon scenario start, provided their current MAX TOE setting is higher. If their current TOE% is higher, then this value will be used instead. This is an extension of the function introduced in 1.08.00 that sets MAX TOE of all HQ units, airbases, and construction units to their current TOE%+1, and is intended to counter the effect of change #1 (see above) on resource pools, especially for the player going second, who is unable to alter MAX TOE settings of his units before the first logistics phase.

3.Added new restrictions to prevent the abuse of the HQ Buildup system: (1) overloaded HQs may not initiate HQBU, (2) HQs may not initiate HQBU on two consecutive turns, (3) units may not take part in HQBU on two consecutive turns, (4) HQs and units that took part in a HQBU during this or previous turn may not be reassigned to a new HQ.

4.Changed the effect of range to rail (in MP) to affect the number of requested replacements more decisively, to -1% for every MP away (but to no less than 1%, when 100+ MP away), rounding up. Previously the number was reduced only when over 20 MP (and to no less than 20%, when 101+ MP away), which resulted in units getting to 100% TOE with too much ease.

5.Reworked formulas that determine how many supplies and fuel are required by air groups stationed in air bases. Correct amount of extra supplies and fuel will now be requested by air groups using level bombers or transports, taking into account maximum effective cargo load instead of weekly consumption or sortie usage. Transports will be prepared for up to 8 sorties with each resource, whereas level bombers for up to 4 sorties with supplies. As a result, supply stocks in airbases with level bombers will increase many times over, while other stocks (and related truck usage) will decrease between 20% and 60%. This should allow level bomber groups to participate in air supply missions more often, including those flying automatically from certain Soviet air bases to supply partisan units, while at the same time free a lot of trucks for other uses.

6.Half of supplies intended for "horses" will be no longer reserved for and used during movement, instead all those supplies will be consumed during the logistics

phase. Supply shortages will not affect non-motorized units movement points. Units will no longer consume either 50% or 75% (after failed Admin roll) of the supplies they nominally require, but always 60%.

7. Extra support squads won't be sent back when over support need, but still under TOE requirements and below 125% of support need. Bear in mind that, as before, new support squads won't be requested when over support need, even if under TOE requirements. This is to reduce the constant rotation of support squads between units and pool. Units taking losses during a turn usually ended up with more support squads than required and sent them back at the start of the replacement procedure. However, as they were granted new elements immediately after that, they ended up with support squad shortage. This change will also allow to see emergency conversion of support squads to rifle squads more often.

8. Increased repair bonus for support squads from 25 to 35 points.

9. Changed the limit of support units that can be attached to a fort unit from 1 to 3 (same as before 1.08.00).

10. Damaged elements will still require a normal amount of ammunition instead of no ammunition at all. This may come handy when they will be repaired or replaced, without creating ammo shortages. Obviously, this will increase the number of supply trucks required by units (though truck rotation will decrease).

11. Non-motorized elements with 0 fuel use (for example Cavalry Squads) will not require trucks when being part of motorized units, but supplies (as in non-motorized units).

12. Static units will not ask for trucks and will require half of the normal amount of fuel. Since they were never granted any trucks, this helps to bring their needs in sync with what they get or have. Fuel is required to move those units once reactivated (they get half of the regular amount of MP on the turn of reactivation), but as long as they are in static mode, none of it will be used.

13. Made sure Machine Guns won't be used in place of Infantry AT and/or Flamethrowers (and vice versa). The same applies to the following pairs: Motorcycle Squads/Bicycle Squads, and Flamethrower Squads/Engineer Squads.

14. Added new "Flamethrower Squad" ground element type, to differentiate between small elements of the "Infantry Weapon" class with 0 CV and big squad-like elements of the "Infantry" class with 3 CV and 12 support need.

15. Improved leader editor to automatically adjust ranks when changing leader nationality after ranks were specified. Added leader rank checking to scenario check utility.

16. Added new ground element and aircraft parameter, "Factory Start Limit" (displayed in parentheses next to regular Build Limit in the editor). This parameter is used when another ground element or aircraft factory upgrades to this new ground element or aircraft and if set to a value different than 0, ensures factory size will not exceed this value. Later the factory may grow to regular Build Limit, as before. This allows to reduce factories to desired size upon upgrade, while allowing to keep higher Build Limit.

17. Increased interface uniformity by making all the "Anti-Something" elements use lower case for the second word.

Bug fixes

1. Fixed a bug where one of the players in a server game was recognized as an AI-controlled player during scenario initialization, and because of that certain

adjustments (like MAX TOE or Hanko adjustments) were not working as designed.

2. Fixed a bug where non-motorized units were asking for extra supplies and fuel that were not used, leaving those units with extra resources in comparison to motorized units. After this fix, an artificial increase of 25% in supply requirements reported by motorized units, introduced in 1.08.00 to match their supply levels with those of non-motorized units, was no longer required, and thus was removed.

3. Fixed a bug where Axis fort limit was calculated against Axis "Production available to East Front" percentage instead of the base "Production Usage", as was intended.

4. Fixed a bug that prevented attaching support units to fort units, that was first fixed in 1.07.15, but crept back with 1.08.00.

5. Fixed a bug where German units could select Finnish city as a supply source even if still separated from it by sea or Soviet territory. Now, it will be allowed only for those German units that are located north of the "Finnish No Attack Line" (a compromise between a fully accurate solution involving checking paths and the need for speed).

6. Fixed a bug where units in supply range of HQs that were on beachhead supply were themselves marked as being on beachhead supply, even if deep inland (and no supply was actually given to them).

7. Fixed a bug where it was impossible to detrain isolated units due to lack of strategic movement points. It will be now possible to unload them, though they will have zero movement points after that operation, and will have to wait until next turn to get some.

8. Fixed a bug where elements might be lost (without registering the fact in statistics) when merging units in case of reaching the limit of slots. Now ready elements will be sent back and only the damaged elements will be lost (though only 30% manpower will become disabled, the rest will return to the pool).

9. Fixed a bug where countries that have surrendered when playing game version 1.07 were repairing vehicles for the Axis side once the game was continued under 1.08.

10. Fixed a bug where no armaments were given for scrapping lend-lease elements from games started under game version 1.07. One armament point should be awarded for scrapping one such element.

11. Fixed a bug in the editor where it was impossible to enter names for new ground elements and aircraft by clicking on the "ID" text.

12. Fixed a bug where Soviet "Minors" (Polish, Rumanian, and Czech) units were losing their nationality marker ("Pol.", "Rum.", "Czech") and original unit number upon TOE upgrade.

13. Fixed a bug where soldiers using captured equipment were given more (Soviet) or less (Axis) food compared to their colleagues using national equipment.

14. Fixed a bug where HQ units didn't require any supply trucks to carry their own (local) supplies.

15. Fixed a bug where supply need (including truck need) were not recalculated immediately after a unit was put into static mode.

16. Fixed a bug where aircraft radius was incorrectly displayed in air group window (range was divided by 3 instead of 30).

Scenario changes

1. Updated "Vistula to Berlin 1945" scenario with hundreds of changes, making

proper use of new ground element and aircraft types introduced in 1.08 and increased historical accuracy, courtesy of Randolph J. Seger.

Device changes

- 1.[0130] Anti-Tank Grenade - renamed Anti-tank Grenade.
- 2.[0177] 20mm Lahti AT-Rifle - rate of fire from 10 to 6, penetration from 22 to 31.
- 3.[0373] 83.5mm vz.22 AA gun - renamed 83.5mm vz.22 AA gun.
- 4.[0383] 90mm 90/53 AA gun - effect from 0 to 6.
- 5.NEW [0625] 128mm Twin Flak40 AA gun.
- 6.NEW [0629] 128mm Flak40 AA gun.

Ground element changes

- 1.A number of German AFV (listed below) got a 3-point increase in their side armor parameter to take into account the effect of Schürzen (spaced armor).
- 2.[0021] Panzer IVh - side armor from 31 to 34.
- 3.[0029] StuH42 - side armor from 30 to 33.
- 4.[0031] StuG IIIg - side armor from 30 to 33.
- 5.[0032] Jagdpanzer IV - side armor from 32 to 35.
- 6.[0041] Jagdpanzer IV/70(V) - side armor from 35 to 38.
- 7.[0125] Panzer IVj - side armor from 31 to 34.
- 8.[0140] StuG IIIg(F) - side armor from 30 to 33.
- 9.[0166] Panzer IVj(F) - side armor from 31 to 34.
- 10.[0170] StuG IV - side armor from 30 to 33.
- 11.[0234] T-4(h) - side armor from 31 to 34.
- 12.[0236] TA(g) - side armor from 30 to 33.
- 13.[0252] 7.92mm Quad Anti-Aircraft MG - renamed 7.92mm Quad Anti-aircraft MG.
- 14.[0284] Panzer IVh(H) - side armor from 31 to 34.
- 15.[0286] StuG IIIg(H) - side armor from 30 to 33.
- 16.[0308] 80mm Anti-Aircraft Gun - renamed 80mm Anti-aircraft Gun.
- 17.[0730] Flamethrower Squad - type changed from Flamethrower to Flamethrower Squad.
- 18.[0787] 37mm Anti-Aircraft Gun - renamed 37mm Anti-aircraft Gun.
- 19.NEW [0392] Panzer 35-S 739(f).
- 20.NEW [0393] Panzer 35H 735(f).
- 21.NEW [0394] Panzer 39H 735(f).
- 22.NEW [0395] Panzer 35R 731(f).

Aircraft changes

- 1.[0290] Yak-9M - max load from 0 to 443.
- 2.[0371] Spitfire IX - renamed Spitfire LF.IX, fuel from 584 to 639, climb from 2800 to 3400, max altitude from 43000 to 40000, build limit from 17 to 18.
- 3.[0372] Spitfire VB - max speed from 382 to 368, cruise speed from 201 to 210, endurance from 140 to 135, fuel from 573 to 639, build limit from 12 to 9.

TOE changes

- 1.Soviet 41a Rifle Division TOE was reduced by about 24% elements, mostly artillery and AFVs (number of men changed from 14416 to 11188). This TOE represented an "ideal", impossible to reach by most units before the war started, and

it all went downhill from there. AFVs were mostly withdrawn to form Tank Divisions, while artillery and machineguns were often well under 50% of allowed establishment. The 41b Rifle Division TOE was actually an official recognition of that fact. This change reduces the burden on Soviet resource pools in the early stages of the war, makes their units a bit weaker (reducing the chance for a successful "Wall of Steel" in the north or center), and prevents a sharp and often very unwelcome drop in strength when units upgrade to 41b (original 41a had 41% more elements than 41b, the difference will now be 7%).

Leader changes

1.All (more than 100) end dates set to May 1945 were changed to December 1945. This should prevent certain issues from occurring in games that will continue to June 1945 and beyond.

2.[0070] Gotthard Heinrici - added promotion to Generaloberst on January 30th, 1943.

3.NEW [0277] Mortimer von Kessel.

4.NEW [0278] Guenther Krappe.

V1.08.00 – October 21, 2014

New features

1.Reworked ground element upgrade, swap and replacement formulas (including training, sending back damaged or excess elements, converting support squads and adjusting morale and experience) from the ground up. It should result in better utilization of ground pools and choosing better models on upgrade or swap, prioritizing units in the rear over those on the front. Also, it should prevent units on the front from being starved of replacements, by reserving part of manpower, armaments and equipment pools for their use. Refit replacement segment was split into two parts, A and B. In part A only combat units on refit and support units attached to them get replacements. They have a chance to use more manpower, armaments and equipment than their numbers suggest. In part B the units that are considered to be always on refit (like HQs with support units attached to them, airbases and rail construction units) get replacements. This allows the player to better control the units that get replacements, where previously most of the available manpower was used on keeping the HQs up to strength, while combat units were sucked dry. The logistics phase log now gives a much better overview of replacements process.

2.When a new game is started, MAX TOE of human player's HQs, airbases and construction units is set to their current TOE percentage plus 1. Players are free to adjust the numbers as they see fit. This is to prevent sucking nearly all available manpower and armaments to understrength HQ units, as defined by the scenario designers, which is especially important for the player going second, who had no control over MAX TOEs before his first full logistics phase.

3.Unit slot matching to TOE slots was vastly improved, and is now able to cope

with certain variants of historical unit composition that differ from TOE composition, without immediately sending unmatched elements back to the pool. Please note that in time the unit will slowly transform to match TOE, this is inevitable. The improvement is in the fact that units will be quicker to request newly introduced elements and will not send back unmatched elements if some other elements of the same type are understrength.

4.Changed what the Hiwi number means. It now represents the number of core elements using Hiwi manpower, instead of representing additional elements using Hiwi manpower. Surplus Hiwis will be returned to pool whenever detected, for example when loading saves started under older version of the game.

5.Reworked aircraft upgrade and swap procedure from the ground up. It should result in better utilization of air pools and choose better models on upgrade or swap, prioritizing groups in reserve or the rear over those on the front.

6.It is now possible to import ground elements and aircraft from the same country's pool (this is called a conversion). This is enabled for both sides, Axis and Soviet. It may be used to represent the process of upgrading older tanks with extra armor plates or new guns, or the process of adding (or even removing) a few weapons to rifle squads, without having to build them again from scratch and pay full cost. It is also possible to use this function to convert captured equipment to its native equivalent to better fit historical unit OBs, wherever such equivalents exist. Most of the Soviet anti-tank guns, common artillery, mortars and some tanks have their equivalent in each of the Axis countries' equipment databases. This feature helps to reduce huge armament pool drain at certain dates, which caused problems with reinforcing units. Convertible infantry squads can be upgraded "in place", that is immediately in the unit without sending old elements to the pool, and taking new elements from the pool or building them.

7.Added editable "import cost" attribute to ground elements and aircraft. It may be positive or negative and represents the cost (when positive) or returns (when negative) in armament points to import or convert one ground element or aircraft. Positive values may be used to simulate adding new weapons or upgrading structure of an existing item (like fitting a tank with armor plates). Negative values may be used to simulate removing some weapons of an existing item (like when reducing 12-man rifle squads to 10-man rifle squads).

8.Added editable "minimum imports" attribute to ground elements and aircraft. It may be used to force the import of at least the specified number of elements or aircraft, provided they exist in the source pool, overriding import percentage (for example 5% from 10 is 0, but with minimum imports set to 1, one element or aircraft would be imported anyway).

9.Added editable "import percentage" attribute to ground elements and aircraft. It may be used to override default values of 5% for imports and 10% for conversions by any value in range from 1% to 100%. Import percentage determines how many % of the source pool are imported or converted each turn.

10.Added editable "build flags" attribute to ground elements and aircraft. It may be used to specify elements as "no auto-build" (when set to 1) or "lend-lease" (when set to 2). "No auto-build" is designed to replace using build cost of 9999 to disable building of auto-produced equipment. "Lend-lease" is designed to replace using build cost of 0 to prevent paying for production of lend-lease equipment. Both of these values allow specifying proper build cost for those elements and getting proper gains from scrapping. Lend-lease aircraft also have slightly better dynamic reliability.

11. Added editable "scrap type" attribute to ground elements and aircraft. It may be used to change the default scrap policy of scrapping ground elements 1 year after their end date, and no scrapping at all for aircraft. Scrap type 255 means no scrapping at all. Scrap type 254 means instant scrapping, immediately after end date. Scrap type in range from 1 to 253 means scrapping that many years after end date. This value allows specifying proper end dates for older equipment, which in turn affects upgrade and swapping procedures, as the routines are able to determine that given equipment should not be used.

12. Added editable "factory upgrade" attribute to ground elements and aircraft. It may be used to specify different upgrade path for factories that produce given equipment, from equipment "field" upgrades, which are now reserved for telling the upgrade and swap procedures what successor given equipment should have. If not specified (like in case of games started under older versions of the game), the default value of factory upgrade is its normal upgrade for vehicles and aircraft and no upgrade for auto-produced elements.

13. Added editable "TOE update" attribute to ground elements. If set to "yes", each occurrence of given element in TOEs will be replaced by its upgrade element after this element's end date and the upgrade element's start date. It may be used to help with upgrading certain elements that change their type or class.

14. Added editable "initial build" attribute to ground elements. It may be used to force the game to build a number of auto-produced elements, even if there is no demand yet. This helps to kick start upgrades.

15. Added editable "turn build limit" and "turn build percentage" attributes to ground elements. They may be used to put a hard and a soft cap on the number of elements built to replace missing elements in units. It's safer to use "percentage" rather than "limit", because it adjusts to greater need. Some elements like artillery or cavalry squads by default have some percentage set, lower than 100% that depends on their build cost. Build limits cause slower replacement rate for certain elements, even if there is enough manpower and armaments in the pool, to represent limited training capacity or limited resources (like horses) for auto-build elements without actual amount of production per turn defined.

16. Added editable "change from modifier" and "change to modifier" attributes to aircraft. They may be used to affect chances to upgrade or swap given aircraft to another model. "From" is used when given aircraft is current air group's model. "To" is used when given aircraft is considered to become new air group's model.

17. Whenever ground element weapons are listed (except in the editor), modified rate of fire and accuracy is now shown instead of element modifiers to rate of fire and accuracy, which more useful information to the player.

18. More information about ground elements and aircraft is now visible on certain screens, including start and end dates, factory upgrade, type and some other parameters.

19. Germany will now export 1% of its armament pool, but no more than 4000 points, to every allied country that has less than a certain amount of armament points (20000 for Rumania and Hungary, 15000 for Finland and Italy, 5000 for Slovakia). In addition, information about armament exports is now visible in the Event Log. Previously it was always 1000 points and only when Germany had over 100000 armament points.

20. Added "Super Heavy Gun" ground element type, to be used for guns with a caliber of 210mm and above. In games started under previous version, "Heavy

Artillery” elements were not swappable. In games started under this version, “Super Heavy Gun” elements will have that restriction instead. “Super Heavy Guns” require trucks to move, have a supply requirement of 90 (vs 30 of “Heavy Artillery”) and have double the effect on fort destruction compared with “Heavy Artillery”.

21. Added the ability to set custom Command Points (CP) limit for HQ TOEs and individual units in the editor. The limit remains constant and does not change with time, as do the hardcoded CP limits. This feature is intended to be used in smaller scenarios, where some elite armies (especially Soviet) were double the size of normal armies allowed by the game, without incurring leader skill roll penalties on them (which actually prevented them from functioning as elite formations).

22. Added the ability to set default motorization for TOEs in the editor. This allows to force the game to consider some units as motorized (or non-motorized) independently of the hardcoded rules that use TOE’s type, suffix and unit’s name to determine motorization. Non-motorized support units attached to motorized combat units will still be forcibly motorized.

23. Added the ability to set custom colors for any ground unit. This can be done by opening unit detail’s window and clicking “SET COLOR”. Color has to be specified as a combination of red, green and blue values, each of them in range from 0 to 255. Specifying a color of (0,0,0) returns to default (hardcoded) paint scheme. All units without a custom color specified, inherit the custom color of the first unit in their attachment chain that has such color specified.

24. Made leaders more visible across the interface. Leader name and his average skill will be visible in the unit info box below the counter image. Leader rank, full name, his average skill and victory: defeat ratio will be visible in hex tooltip. Average skill is equal to the average of morale, admin, initiative, mech and infantry skills for land leaders, and to the average of morale, admin, initiative and air skills for air leaders. Also, leader rank will be visible in HQ unit detail screen. And finally, the names of leaders commanding in land battles (leaders assigned to the commanding HQs, one for each side) will now be visible in battle reports.

25. Hiwis return via transfer pool instead of immediately going to the active pool. This can be seen in the production window. There are now also pools for disabled and captured Hiwis (invisible, but included in total losses). Disabled Hiwis return to the active pool at a rate of 0.5% per turn, with another 0.5% being permanently lost.

26. Improved tracking of vehicle movement between pool and units. Additional vehicle information is now visible in the losses window: “Vehicles Spent On Production” (2 for every mechanized infantry element built), “Vehicles Withdrawn With Units”, “Vehicles Arrived With Units”, “Vehicles Captured From Enemy” and “Vehicles Damaged To All Causes”. Information about vehicles in the logistics phase log was also expanded to contain information about repairs per country and vehicles lost/damaged due to unit movement.

27. Scenarios and games saved under this version will not load under older versions of the game.

28. Unit load costs will no longer be reduced by half when rail difficulty modifier is above 109, and by another half when it is above 119.

29. Changed experience formula for new ground elements. It is tied to national morale and higher for the Germans than for the other countries.

30. Added safety checks to make sure city, light urban and heavy urban terrain is always considered dense and gives a reduced (by 1) defensive CV bonus, even when there is not enough population. Population value does not change during the game

(only the manpower “factories” are reduced during population evacuation), so this should be an issue only in case of bad scenario data.

31. Towns with a population of at least 3 in clear terrain will now give a defensive CV bonus, like the light woods (+1).

32. Reworked strength of anti-air fire formula. Morale and ammo level of the unit, experience and fatigue of the ground element slots, as well as accuracy, range of fire and blast of the weapon are now included in it, rather than only the anti-air strength of the weapon. This change will result in significantly lower Axis aircraft losses and higher Soviet aircraft losses. The procedure selecting which units on the aircraft path to target get to fire and the modifier to their strength of anti-air fire was also improved, as was the code that lists the number and type of firing ground elements.

33. Slightly adjusted aircraft reliability formula, especially for lend-lease aircraft (aircraft reliability is not constant; it fluctuates over time, being decreased for fresh models and older models).

34. Reworked leader death, dismissal, promotion and skill increase messages to follow a common pattern, with full rank and command name (where possible) listed.

35. Aircraft factories in Polish and Czech territory will now also send 25% of their production “to the other front” (lost), as do the factories in Germany and Italy.

36. Reworked unit engineer strength formula (used to destroy forts), to take morale, experience and ammo level into account. Previously only fatigue counted.

37. Reworked unit construction strength formula (used to build forts), to take morale and experience into account. Previously only fatigue counted (and morale for elements other than engineers). However, Soviet units will have an additional bonus to construction strength, as they were renowned for their entrenchment speed.

38. Reworked how HQs and their support units assist in construction of forts. Only engineer and construction support units will be now allowed to help.

39. Changed fort construction rules. Fort level 5 can be built only in cities with large port containing a fort unit. Fort level 4 can be built only in big cities (city, light urban or heavy urban terrain) or towns with port containing a fort unit. Fort level 3 can be built only in big cities, towns with port, in hexes with a fort unit or adjacent to an enemy. Fort level 2 can be built only next to a fort unit, in coastal zones or up to 3 hexes from a supplied enemy unit. Fort level 1 can be built only up to 20 hexes from a supplied enemy unit. In swamp terrain the fort cannot be larger than 2.

40. Forts level 3 and above will count as dense terrain.

41. Improved the way units and population build forts. They can now build a part of the fort if not enough supplies are available, with proper costs being incurred when fort size changes during build. City population will build forts more often now, the biggest change being unlocking fort building by cities with population smaller than 6.

42. Newly created night-fighter groups will be automatically set to night missions.

43. Adjusted fort defensive CV bonus formula, so that partially built forts will increase defensive CV proportionally to their size. For example a fort with level 1 and 50% completion towards next level will give 1.5 the bonus of a level 1 fort. Other effects of forts are still tied to finished fort level.

44. Changed how the fort difficulty modifier works. Values above 100 speed up fort building as before, but values under 100 (down to 1) reduce fort defensive CV bonus, instead of slowing down fort building. Those who want to play a more dynamic game, where prepared positions are less powerful, can now do so. Other effects of forts are not affected by this modifier.

45. Added the ability to adjust national morale for each country (Germany, Finland,

Italy, Rumania, Hungary, Slovakia, and Soviet Union) in the editor. A bonus (or malus) to morale can be specified separately for each year.

46. Added the ability to alter "Soviet Combat Odds" special rule (see 15.8) in the game options screen. Besides remaining as is, it can be now reversed to give defensive odds shift or turned off completely.

47. Added the ability to change how the CV is calculated and what base CV values are used in the editor. Under "Alternate Values A" CV of artillery elements is 1 (up from 0), and CV of "Labor" and "Support" elements is 0 (down from 1). Under "Alternate Values B" CV of artillery elements is 1 (up from 0). "Improved Calculation" means using proper math for determining the impact of morale and experience as well as leader skills to get a better approximation of unit CV in combat. Expect to see higher CV on the counters, especially the offensive CV. On the other hand the CV in combat will no longer go up as much as before, so make sure you have clear superiority when attacking. Alternate base values allow to better see the growth of intrinsic artillery and the higher proportion of fighting elements vs the logistical tail in Soviet units. The idea behind this rule is to close the gap between displayed CV and actual combat performance. Under default rules, late war Soviet units are usually perfectly safe attacking at 1:1 ratio, whereas Axis units must use 2:1 to achieve the same rate of success. The parameter (called "CV Mode") can be set to any of the 6 combinations of default or alternate values and default or improved calculations. There is a variant of 1941 Campaign scenario with "Improved Calculation" turned on, called "1941-45 Campaign - Alt CV". Unfortunately, "Improved Calculation" requires more computing power, and thus may slow down the game, especially when played against the AI. The suggestion is to use this scenario only for multiplayer games.

48. National morale and "CV Mode" are listed at the end of logistics phase log, to make sure players know under which rules they play.

49. Adjusted morale difficulty CV modifier, so it is affected only once (for example at morale difficulty 50 final CV will be half of the original value, instead of quarter). This allows scaling the difficulty linearly.

50. Adjusted AI build limits for on-map units (static limit) and support units (dynamic limit, connected to the number of armies present and following historical pattern with monthly changes).

51. Added the ability to Soviet AI to disband unwanted units and to build needed units (all support and some rare on-map units as well).

52. Added or enhanced logging of imports, conversions, scrapping, upgrades, swaps and armaments export.

53. Added the ability to repair damaged ground elements immediately after moving (at start of enemy's logistics phase, just like building forts). Repair rate depends on country, weather, experience, fatigue, element class, type and reliability.

54. Changed the formula that determines how many damaged elements are lost during replacements, slightly increasing the ratio of lost elements and allowing all types of elements to be lost that way, instead of only vehicles.

55. Improved the code that detects and fixes broken unit assignments, which often happened for the AI.

56. Added code to disband AA units from one side being present in cities owned by the other side (scenario data error).

57. Reduced leader death rate to 5% (15% during land battle) of previous rate from air attacks, to 80% (20% before their end date) of previous rate from regular attrition, and to 5% (10% when not in supply) of previous rate from HQ displacement.

No more than one leader may be lost to attrition per turn and Army Group/Front/Axis Army leaders have smaller chance to die this way (High Command leaders were already protected).

58. Increased chances to capture equipment.

59. Removed hardcoded modifiers for flamethrowers (non-HEAT penetration reduction) and German 88mm AA guns (AP ammo).

60. Medium and heavy AA guns with penetration/HVAP values higher than anti-armor/HEAT values will be considered to have AP ammo on hand (like the German 88mm AA gun was).

61. Slightly reworked the list of support units built with new Soviet armies.

62. Added a hard limit of 150 fort units, with an increasing cost in AP after 50 fort units (+1 for each unit over 50), for human players. These fort limits are modified by German/Soviet production usage percentages.

63. Self-propelled artillery is no longer included in AFV numbers. Before 1.07.12 assault guns and tank destroyers were SPA, so that made sense. Since that version SPA is reserved for only a handful of tracked artillery vehicles like Wespe, which have more in common with towed artillery than fighting vehicles.

64. Self-propelled artillery, self-propelled weapons and armored cars now have their own loss totals in the loss window. In battle reports and strength reports self-propelled artillery is included in artillery numbers, while self-propelled weapons and armored cars are included in AFV numbers.

65. Changed on-map unit reassignment costs. For combat units, the cost is based on the number of men in the unit (1 AP per 10 000 men). For land HQ units, the cost is based on double their command points limit. For air HQ units, the cost is based on command points limit of a land HQ of similar size (corps, army). For airbases and rail repair units it is equal to 1. For any reassignment a "root HQ" is determined, which is the first HQ unit that both the reassigned unit and its new HQ have in common. If the current HQ of the reassigned unit is the "root HQ", then the cost will be always 0, with the exception of nationality mismatch penalty. Otherwise the cost will be equal to the base cost plus any penalties that apply. If the nationality of the reassigned unit and its new HQ is different, this results in a penalty equal to the base cost. If the leader of the "root HQ" has lower political rating than the leader of the current HQ, this results in a penalty equal to the difference between their political ratings times 0.1 of the base cost. For each intermediate HQ between the current HQ and "root HQ" there is another penalty equal to 0.5 of the base cost. The total cost (base cost plus penalties) cannot be greater than 3 times the base cost. This cost can be no longer reduced by 50% because of an admin roll. Instead of always reassigning units to High Command and then somewhere else for free, players are encouraged to reassign units within the same armies, army groups or fronts, which should be cheaper now. Units can also be kept assigned to armies or army groups, not only to High Command, because all reassignments to subordinate HQs will be for free.

66. Ground elements of "mechanized infantry" class will now cost 2 vehicles to produce. Those vehicles will be never returned to the vehicle pool. Previously, every time a mechanized infantry element was added from pool to unit it costed 2 vehicles. They were supposed to be returned to the vehicle pool when the element was returning from unit to pool, but that was not always the case.

67. Soviet Rumanian units will use Rumanian national morale (usually 45) instead of Soviet national morale (usually 60 at this stage of the war).

68. Units will no longer unload automatically when changing game mode from rail

transport to normal movement using the toolbar button.

69. Non-elite SS units will give an additional +1 bonus to the surrender threshold when stationed in Axis Ally's capital. Elite SS units still give +2.

70. Regiments from a split German division no longer give bonus to the surrender threshold. Full divisions must be stationed in Axis Ally's capital to get the bonus.

71. Hungarian surrender will be tested before Rumanian surrender, so when Arad will not be garrisoned, the player will not lose Hungary on the same turn as Rumania.

72. Soviet Rumanian units will be reassigned to Soviet Rumanian Army HQs upon Rumanian surrender, instead of going directly to STAVKA. Each HQ will get a similar number of combat units and support units assigned.

73. All fortifications will be deleted upon conversion of hexes during nation's surrender. They are assumed to be facing wrong direction.

74. Upon Finnish surrender only the hexes in Finland will be converted to neutral, the rest will be left as is (possibly changing to Soviet control as they will be unconnected to an Axis supply source). Please note that a minor issue remains, where a few hexes in Finland, directly on the border, will convert Soviet control.

75. Units lost when resolving stack conflicts upon Rumanian surrender and surrendering Axis Minor's units will be completely wiped out from the game including attached support units and air groups assigned to air bases.

76. Element list on the production screen with "Show Types" enabled is ordered in a better way.

77. Improved disband and destruction function concerning unit's elements.

78. Unit strength comparison to TOE strength now takes split units and MAX TOE setting into account.

79. Improved fogged CV calculations.

80. Newly built Soviet Army HQ units will not be populated with support units for human player.

81. Made sure AA at night will be weaker. It has 10% of the original power.

82. Made HEAT ammo less reliable. Previously the penetration strength was randomly determined in 50%-100% range, now it's 25%-100%.

83. Reduced losses of damaged vehicles (ground elements of class AFV, SPA, AC and SPW) by 50% and of labor squads by 100% for an attacker that fails to win a battle.

84. Added code to switch Rumanian TOEs and ground elements to Soviet nationality (including moving Rumanian ground pools to Soviet pools) upon new game start, to allow using generic data while properly handling cases when Rumania is marked as having surrendered (like in the Operation Konrad scenario).

85. Fighter-bomber load impact on airbase support need reduced to 50% of previous value.

86. Aircraft support need reduced to 75% of previous value.

87. Each airbase will try to keep at least 500 tons of fuel, 100 tons of ammo and 50 tons of supplies (reduced proportionally by MAX TOE setting) to limit the movement of supplies back and forth (which increased vehicle usage and vehicle damage) when aircraft are moved in or out the airbase. For level bombers and transport aircraft this will be not enough, so players are advise to move them slowly, rather than en masse.

88. Added ability to proportionally reduce the amount of supply or fuel taken from a city to resupply units, in case the city didn't get all required supplies or fuel. This should prevent starving some units in case of shortages.

89. Shock and Guards armies will have 21 CP, in the period when regular armies have 18 CP. Guards Tank Armies will have 16 CP.

90. Movement reductions from failed leader rolls will be no longer affected by morale settings above 110 and 120.

91. Certain Rumanian elements (captured Soviet or imported/licensed German) will be no longer produced or imported/converted upon Rumanian surrender, and some will try to upgrade to their Soviet equivalent.

92. HQ build up was changed to become part of the normal supply system, instead of being a separate entity. It caused many problems in the past (like units on build up losing morale due to being counted as unsupplied or missing supply details) and was quite overpowered in that the supplies were drawn from any owned city that had them, even if it was 1000 miles away from the unit or in that only the HQ had to be stationary, while the units did not (which led to some gamey tactics of changing HQ attachment for build up). The new build up rules work in the following way: any normal HQ (not air HQ, airbase or construction unit) is able to initiate build up, if it has some movement points left and is within 25 hexes from the rail grid. The cost to be paid in AP depends on the number of men in units doing build up and distance to railhead. There is no immediate cost to be paid in damaged vehicles. If the cost is paid, the HQ (with all support units attached to that HQ) and all non-static combat units (with all support units attached to them) attached directly to that HQ, in range of 5 hexes, and having some movement points left, start building up. The percentage of movement left is recorded as their build up bonus, and then their movement points are reduced to 0. Support units inherit the build up bonus of their parent unit. During supply phase those units are eligible to replenish their stocks over the usual 100% by 25% plus the amount of their build up bonus multiplied by 0.75 (rounding up). The supply procedure remains the same as for all other units and is subject to the same costs, restrictions and penalties with the exception that costs in vehicles and fuel are doubled and the penalties (range to rail, MP to rail, Axis rail modifier, global vehicle shortage and unit vehicle shortage) are halved. It's important to remember that the HQ must be in range to the rail grid (at most 25 hexes and 100 MP away), otherwise the resupply process will fail. For example: when one unit had 20 MP left (out of 50) and the other had 50 MP left (out of 50) at the moment of initiating the build up procedure, the first one will try to restock to 155% of normal levels, while the other to 200%. Current and previous build up bonuses are visible in the supply details window.

93. To help Axis AI, Soviet garrison in Hanko will be severely weakened by reducing it's fort level when starting a new '41 game and by performing badly in combat during June and July 1941 (just like the garrison of Brest Litovsk performs badly on June 22nd turn).

94. Improved country selection and production percentage information on production screen. Yugoslavia is now visible for Axis player and "All Areas" is now visible for Soviet player (includes Soviet Union and captured areas). Air production percentage going to the East is now visible for Germany (this includes production in Czech and Polish cities). It's equal to 75% of the standard value, thus it will be 64% in 1941, 60% in 1942, 53% in 1943, 45% in 1944 and 38% in 1945. "All Areas" will now include captured factories as well. Added information about total fuel required by cities.

95. Added the ability to check using the "Scenario Check Utility" in the editor whether there exist air bases that contain supply and/or fuel dumps and whether there exist nationality conflicts in aircraft, ground elements, TOEs, units and air groups.

Another function checks for conflicts between unit HQ type and TOE type, as well as between TOE class and TOE type. Yet another new function checks for air groups without type or with country/player mismatch.

96. Partisan units won't get support squad help from the HQ.

97. Axis countries will now lose 0.05% of disabled men each turn, 0.95% will return to the active manpower pool (Soviet side remains unchanged at 0.50%/0.50%).

98. Soviet national morale changed to the following: January 1941 to June 1941 - 40, July 1941 to March 1942 - 45, April 1942 to September 1942 - 40, October 1942 to December 1942 - 45, January 1943 to June 1943 - 50, July 1943 to December 1943 - 55, January 1944 to December 1945 - 60.

99. Axis Allies morale increased by 5 points (except Finland). Rumanian and Hungarian will be increased by 5 points after 1942 (to 45 and 50, respectively).

100. German manpower production multiplier was changed from 7 to 6 for 1944 and from 6 to 7 for 1945. Axis Ally manpower production multiplier was separated from German multiplier and set to 9 between 1941 and 1943, and to 10 between 1944 and 1945.

101. Added individual pools of disabled men for each country, from which men return directly to those countries. Men from the global Axis disabled pool will return according to the old rules, but will be affected by Axis Allies production usage percentage. Number of men returned to duty (total for all countries) will be presented on the losses screen.

102. There is now a minimum Surrender Threshold value for Hungary (10), Finland (7) and Rumania (5), when the AI plays the Axis.

103. German armaments production multiplier changed from 220 to 210 in 1943, from 380 to 360 in 1944, and from 280 to 265 in 1945. Soviet supply production multiplier changed from 130 to 100 in 1942, from 155 to 120 in 1943, from 170 to 130 in 1944, and from 180 to 135 in 1945.

104. The base cost to dismiss leaders is now based on double the square root of HQ command points limit (0 for High Command). For air HQ units, the cost is equal to the cost for a land HQ of similar size (corps, army). This cost is doubled for Axis Allies during the entire war, and increased by 50% for Soviet Union corps and army leaders in 1941. Political rating of the dismissed leader will be added to this value, and political rating of his superior leader (High Command has no superior leader) will be subtracted from this value. The final cost cannot be less than 1.

105. Evacuation of Soviet factories may only start in July 1941, that is one turn later than before.

106. Soviet support units of brigade size will now cost 3 AP to form. Soviet support units of regiment size will now cost 2 AP to form.

107. There was a random 10% chance for combat casualties to become disabled rather than killed. This chance is now 40%.

108. Changed the percentage of disabled men in damaged elements during the logistics phase resolution and when disbanding units from 40% to 30% (rest of the men are considered unharmed and return to the manpower pool).

109. Forts may be built by units in newly captured territory, albeit at 25% speed and with full penalty from spent movement points (normally only up to half of construction points are lost when the unit has spent all of its movement allowance).

110. Increased the limit of fort points built per hex, unit or population group from 50 to 55 points per turn (so the forts may be built with a proper buffer of 10%).

111. Updated elements recon values (Mech-Engr Squad from 4 to 2, Special

Forces from 0 to 4, Marine Commando from 0 to 4, Airborne Engineer from 0 to 1, DD Tank from 0 to 1, Airborne Squad from 0 to 2, Carrier-Inf Squad from 0 to 4, Air Landing Section from 0 to 2, Airborne Tank from 0 to 1, Recon Jeep from 0 to 1, Naval Rifle Squad from 0 to 1, CS Cavalry Tank from 0 to 1, Light Armored Car from 0 to 2, Recon Halftrack from 0 to 2). Support units will be now included in the calculation of on-map unit recon value. Recon value will be now affected by element's experience, fatigue and unit's morale. Recon value is used to determine detection level of enemy units during logistics phase (automated recon).

112. Axis vehicle repair rate changed from 10% to 15%.

113. Added "Bicycle Squad" ground element type. It's similar to "Rifle Squad", but has a recon value of 2 (instead of 1) and belongs to the recon elements family (instead of line infantry), which affects what elements it can replace in unit OB.

114. The game will now display the sum of Combat Values of the attacker and defender as a level 2 combat message (press "2" to see them), each time a new such value is determined during battle.

115. Improved the way odds are displayed. For example, instead of showing "0.6 : 1" the odds will be shown as "1: 1.67". In some cases the odds were wrong, so this is also a bug fix. Final CV value will be displayed with greater precision (one decimal digit).

116. Removed odds restriction on reserve commitment, for both the attacker (over 4:1) and defender (outside 1:10 and 10:1). The odds were based on randomly determined CV, thus not very representative of the actual combat. This may also mitigate the problems with attacking strong positions being impossible due to low stack limit - just provide the reserves in the rear. In a way this may also help the return of the soaking attacks tactics, since it will be easier to exhaust defender's reserves. In a way this allows for a more mobile warfare (easier breakthrough) and bloodier combat (more units engaged).

117. CR will display total kills for air groups, instead of air kills only. The sum of all ground kills will be visible at the bottom of the CR screen.

118. All sound files were transcoded using a much more compatible version and settings of the WAV codec, so that the game will not crash on certain Windows setups. The only downside is that files got bigger, by up to 3 times.

119. Ground elements of "infantry" or "mechanized infantry" class will have their CV affected by the number of men in the squad (where 10 is the norm).

120. Greatly improved layout of the Logistics Phase Log by separating various events and placing them under distinct headers. Log area on screen was expanded by moving the scrollbar to the right, so that longer lines of text will fit without problems.

121. Added popups with information about leader skill decrease when promoted during owner's turn. Added information about leader changes (and units destroyed and rebuilding under different name) during enemy turn to the logistics phase log. Leaders killed "in an air attack", "in battle" or "during retreat" are those killed during enemy turn. Leaders killed "in an accident" are those killed during your logistics phase.

122. Changed date format in various places from month/day/year to year-month-day.

123. Improved tooltips for frozen units, especially HQs - the displayed text is now identical to the one displayed for unfrozen units, with the exception that turns of freeze are displayed instead of MP.

124. According to the rulebook all elements inside Soviet infantry units (and Axis infantry units after 1941) shouldn't be able to take replacements above 60% TOE (80% in case of Axis) when not on refit. Previously only elements of type "Rifle Squad" were so affected, and only in Soviet units with "Rifle" in name (and in Axis units with "Infantry" in name). Now all units with TOE(OB) of type Infantry will be affected (and all element slots in those units). AI will not be subject to this limitation.

125. Added information about men killed, captured and disabled to the "Recent" and "Current Turn" columns in the loss screen. The information is no longer calculated from the numbers of destroyed and damaged elements and their crew size (which was only an approximation), but are based on the same values that are shown in the "Total" column value.

126. Added separate rank names for each nationality, for both the ground and air forces (and in case of Germany, the SS). The ranks of some leaders may still be incorrect, because air ranks are used for air only leaders, SS ranks are used for SS only leaders, and in other cases ground ranks are used.

127. When selecting a new HQ for a unit, all HQs in its current HQ chain (except the first) will be presented first on the list of available HQs. This will allow to move units to O.K.H. or STAVKA without the need to micromanage by moving those HQs using rail and guessing at which range to the target they will show up on the list.

128. Upon city capture, between 50% and 100% of current stocks (resource, oil, fuel, supply) in that city will be lost. Ports will be damaged to 100%.

129. For production purposes cities in Karelia will be treated as Finnish, and cities in Bessarabia and North Bukovina will be treated as Rumanian. There will be no garrison requirements in these cities (and thus no partisan generation), and no population evacuation upon capture by Axis forces.

130. Added information about the number of squads airdropped to partisan units, partisan units supplied from VVS and non-VVS airbases, and detailed information about partisan unit creation and merges to the logistics phase log. Each displacement of a partisan unit will be recorded as a loss for that unit.

131. The penalty for units smaller than divisions when entering pending friendly hexes will be reduced from +2 to +1, starting from July 1941. Hostile hex entry cost reduction for Soviet units during First Winter will be smaller, by using rounding up when dividing the cost by two.

132. Units isolated or in beach/air supply at start of turn will have their strategic movement points set to 0.

133. Reworked the rules for Interception Air Doctrine. Previously it was impossible to scramble more than 50-70 fighters, whether there were 100, or 200, or 300 incoming aircraft, regardless of doctrine settings. Sometimes higher doctrine setting could result in worse CAP than lower value. Under new rules, the game will try to scramble as much as 50% of the number of incoming aircraft when set to 100, 100% when set to 200, etc. However it will be getting progressively harder to scramble more than 25%, 50% and 75% of the desired number of aircraft, with each step requiring to pass one leader air skill test.

134. Requirements for Soviet airbases getting Guards status reduced by half (200 in 1941, 300 in 1942, and 600 in 1943+). PVO, SAD and VVS airbases may not become Guards.

135. Changed mild winter base defender bonus from +4 to +3, and snow/march/april defender bonus from +5 to +3.

136. Soviet Military District, Front, Air Command and Air Army renames will be

shown in logistics phase log.

137. It will be now impossible to recombine division or corps from units assigned to different HQs. Thanks to this, Axis players won't be forced to pay AP cost for a full division when reassigning a single regiment, and Soviet players won't be forced to reattach all corps divisions together.

138. Reduced chances to disband NKVD Border Regiments to 25%, and only if they are below 50% TOE. They still don't get replacements, so this will eventually happen. They can also be disbanded when routed with 20% chance. This was made to allow limited use for these units in some scenarios, like "Moscow 41-42", in which their contribution may be important during the first two turns. Actually, some of these units fought until 1945.

139. It is now possible to assign cavalry units of any size and independent units of brigade size or smaller to German RHG Command HQs.

140. The same AP cost rules will be applied to support units, when they are reassigned, as to on-map units. This means movement down the chain of command will be free, including moving through the "ASSIGN/FORM" function (of course one must still pay to form completely new units). On the other hand moving up the chain will usually cost 1 AP, including moving back to HQ from divided Soviet Rifle/Mountain/Cavalry corps.

141. Added the ability to specify leaders as "SS and Ground" and "Ground and SS". Both restrictions allow leaders to command regular and SS land HQs. First restriction makes the leader use SS rank names, while second restriction makes the leader use regular rank names.

142. After a leader is appointed to lead an unit manually, a turn must pass before he can be replaced.

143. Reduced the chances for leader skill decrease when forcibly promoted. No more than 2 skills can be reduced at one time, and the first tested for reduction will be political skill.

144. Updated German translation.

Bug fixes

1. Fixed a bug with German morale being stuck at 70 from 1942 until the end of the war. It will properly decrease now to 55 in 1945, as described in the manual.

2. Fixed a bug where too large supply or fuel requests from units resulted in reporting no needs at all, which resulted in shortages for all units drawing supplies from the same city. This mostly happened for empty airbases that received a lot of bomber or transport aircraft during previous turn.

3. Fixed a bug where the AI built over a thousand of Sapper Regiments.

4. Fixed a bug where it was possible to form a Soviet rifle corps from one rifle division and two rifle brigades.

5. Fixed a bug with supply of mountain units in mountain terrain. Please note that the displayed MP to rail value will still be wrong, but supply will work properly during the logistics phase.

6. Fixed a bug where inserting or deleting ground elements in the editor was breaking import id, photo id and symbol id, by not updating them to new values, after the elements were shifted up or down the list.

7. Fixed a bug where it was possible to use level bombers to drop fuel in some not so rare circumstances.

8. Fixed a bug where level bombers and transport aircraft with load less than 2000 were used for unit transport missions.

9. Fixed a bug where fighters were not able to escort recon aircraft.

10. Fixed a bug where escorts (of any type) for recon aircraft were not marked as performing escort mission.

11. Fixed a bug with wrong number of damaged and reserve planes lost, when an airbase was displaced.

12. Fixed a bug where ice level in retreat a minor river target hex across was compared with an invalid value.

13. Fixed a bug where certain hexes were not recognized as being behind "Finnish No Attack Line" (notably 83, 14).

14. Fixed a bug in anti-air fire formula, when instead of support unit's anti-air strength the anti-air strength of the unit receiving support was used again.

15. Fixed a bug where countries that have surrendered would still have a chance to capture ground elements.

16. Fixed a bug where it was possible to build fort units from countries that have surrendered.

17. Fixed a bug where Soviet Rumanian corps HQs were forcibly disbanded.

18. Fixed a bug where stack conflicts in hexes containing 2 or more Rumanian units were improperly resolved, when one unit was converted to Soviet nationality, but the rest weren't yet.

19. Fixed a bug where support units attached to HQs lost when resolving stack conflicts upon Rumanian surrender were not lost, but reassigned to another HQ.

20. Fixed a bug where all Soviet AA units attached to cities were reassigned to STAVKA upon Rumanian surrender.

21. Fixed a bug where rail was automatically repaired upon conversion of hexes during nation's surrender.

22. Fixed a bug where Rumanian pools were improperly added to Soviet pool upon Rumanian surrender. Captured equipment, armaments, manpower, vehicles in repair and transfer pools will now be properly transferred.

23. Fixed a bug with split unit withdrawals, where second and third sub-unit wasn't properly marked for withdrawal.

24. Fixed a bug where a factory with damage over 1 would be immediately reduced to 1 damage upon upgrade.

25. Fixed a bug where automatic expansion of a 0-size factory to 1-size factory for 0-expansion rate aircraft was checking an undetermined value instead of that aircraft's expansion rate.

26. Fixed a number of bugs in vehicle management routines that may have resulted in vehicles going missing or receiving free vehicles in some rare circumstances. Please note that it is still possible to get extra vehicles, whenever vehicles are to be taken from the vehicle pool, but there are not enough of them.

27. Fixed a bug where support units attached to a combat units would be detached before a failed split. Now those units will be detached only when the split will actually happen.

28. Fixed a cosmetic bug in initial CVs calculations for hasty attacks, where individual unit's CV didn't add up to the total initial CV.

29. Fixed a cosmetic bug, where fogged CVs were not updated correctly after each logistics phase. For example, when the weather will change to mud, offensive CVs will go down on every visible unit counter.

30. Fixed a cosmetic bug where captured equipment lost in combat was not visible in loss window and not included in loss totals in that window. Because of lack of nationality information, such captured equipment lost by any Axis country (including all Rumanian equipment lost before their surrender) will be listed as German.

31. Fixed a cosmetic bug where Commander's Report counted only the last slot using given ground element instead of all slots in a given unit, when using ground element filter.

32. Fixed a cosmetic bug where production screen counted slots using given ground element, instead of actual units in the UNITS column.

33. Fixed a cosmetic bug where Lost Battles expansion's scenarios were not marked as such in the new multiplayer game scenario selection screen.

34. Fixed a bug with all destroyed and withdrawn German Infantry Divisions being converted to Volksgrenadier Divisions. Now only destroyed divisions will convert, with a 20% chance to do so.

35. Fixed a bug where Czech and Polish manpower was reduced to 8% after applying "other fronts" reduction. It will be now reduced to 10% before applying "other fronts" reduction.

36. Fixed a bug where it was possible for surrendered countries to transfer items from their pool to German pool.

37. Fixed a bug where Italian production percentage going to the East in 1943 was 20 instead of 30 as documented.

38. Fixed a bug where some captured factories (oil, resources and ports) were included in other areas on production screen.

39. Fixed a bug where industry in occupied Yugoslavia and friendly Bulgaria was not working for the Axis. They will now work, using Axis Allies production modifiers, with the exception that manpower won't be produced. Items that gather in national pool will be transferred to German pool.

40. Fixed a bug where German synthetic oil production was not reduced to 25% in 1945.

41. Fixed a bug with fragments of tooltips left on the screen in the CR editor functions by disabling them (engine limitation).

42. Fixed a bug where slightly different than specified in the manual percentage of disabled men returned to Axis Allies in case some countries surrendered.

43. Fixed a bug where 0.5% of Soviet disabled men disappeared each turn, without logging them as permanent casualties.

44. Fixed a bug where lost Hiwis were not included in the totals on the Victory Screen and in VP calculations.

45. Fixed a bug where units with "Fort" in name would be recognized as forts in some circumstances. Now forts are mostly recognized by TOE type and sometimes by "Fortified" in name.

46. Fixed "SET ALL CITY SUPPLY REQUIREMENTS" function in the editor, to take into account all special rules and production multipliers for various resources.

47. Fixed bugs and significantly improved Soviet air unit renaming procedures. Units in or moving to national reserve will now also be eligible for renames and resizes. Air battalions will no longer require "/" in their name to be able to upgrade to air regiments. SAP regiments will be correctly renamed after 1943-03-01 rather than before that date, and with 80% chance instead of 30% chance. Added reversed renames for all the obligatory renames to ShAP, LBAP, NBAP and LTAP (when aircraft is no longer of the required type). Night-fighter regiments will be properly set

to night fly by the AI.

48. Fixed a bug where leader hidden win/loss count (used for promotions) was not properly reset during automated promotion.

49. Fixed some minor bugs in the function calculating AP penalty for too low rank on appointment.

50. Fixed a bug where support units of Brigade size were reported twice in the logistics phase log on arrival.

51. Fixed bugs with sorting saved games and scenarios by name and by date. By default, scenarios will be sorted by name, while saved games by date.

52. Fixed a bug with "Non-Random Weather" and "Reduced Blizzard" game option headers having no effect when clicked on, unlike the other game option headers.

53. Fixed a bug where one or more elements were added for free (including manpower) to newly formed fort units, Soviet on-map units or airdropped to partisan units. The game will now attempt to take an existing element from active or transfer pool (or build it paying the armaments cost) first, before adding it for free. Manpower will be also taken from active or transfer pool first, before recruiting it for free. Newly built elements or recruited manpower will be properly recorded in "Built" stats (even if for free). The only exception to this rule are partisan squads recruited from cities or the countryside, which are always added for free (but now they will be recorded in "Built" stats).

54. Fixed a bug where daily Interception Air Doctrine setting of 0 would prevent nightly interception, even with nightly Interception Air Doctrine setting greater than 0.

55. Fixed bugs related to some units and leaders getting credits/blame more than once from winning/losing a single land combat or air mission (or not getting credits/blame at all).

56. Fixed a bug where the chance for Axis leaders to count a loss for dismissal purposes was 99% during First Winter instead of the intended 20%.

57. Fixed bugs related to incorrect AI front HQ unit selection for Finnish and Soviet HQs.

58. Fixed bugs related to Soviet air HQ assignment, where some fronts ended up with many air HQs, and some with none.

59. Fixed a bug where the area in which NKVD units were protected from being disbanded (near Finland) was incorrectly specified.

60. Fixed a bug where NKVD units didn't get +5 bonus to morale.

61. Fixed a bug where it was possible to reassign support units detached from cities (or from divided Soviet Rifle/Mountain/Cavalry corps) once more in the same turn.

62. Fixed a bug with three leader attributes missing from csv export/import: photo, hidden victory counter, and hidden loss counter.

63. Fixed a bug with delayed units being shown as present on the city screen.

Scenario changes

1. Factory setup changed to match new generic data, in campaigns factories moved to historic locations whenever possible.

2. Multiple units had some ground elements changed from far outdated or future versions to elements matching scenario date. This is usually limited to certain squad types but also wrong date version of 251/1 and 251/2 halftrack.

3. Schlesien/Jüterborg Panzer divisions have been disabled - existed for about

one month, then merged into other Panzer divisions.

4. All air units have been reloaded to use standard aircraft equipment, ensures any change to aircraft data arrives in units.

5. In all campaigns and relevant scenarios the SET 7K factory in Bucharest and the IAR 39 factory in Brasov have been removed. SET 7K was not in production and IAR 39 were only produced by SET in Bucharest, IAR was focussing on production of SM.79 and IAR 80/81.

6. The 43 campaign, Operation Typhoon and Moscow 41-42 had multiple airbases with misplaced supply and fuel dumps instead of AAA.

7. In certain scenarios Luftwaffenkommando Ost HQ renamed to Luftflotte 6, change to Luftwaffe unit and disable the later arriving Luftflotte 6 unit (LwKdo Ost was renamed to Luftflotte 6 in 1943).

8. In certain scenarios Luftflotte 2 and II. Fliegerkorps withdraw in 12/41 and/or Luftflotte 6 arrival moved forward by one year to 4/42.

9. In certain scenarios Expeditionary Ital. Corps will not withdraw and XXXV Ital. Corps will not arrive (was renamed in 42).

10. In certain scenarios 14/36 motorized division changed to new OB to ensure historic demotorization. Remove withdrawal date, disable reborn infantry division variants, transfer an existing withdrawal date from infantry division variant to parent unit.

11. Renamed locations (typically only in larger scenarios/campaigns): 0286 Kottbus to Cottbus, 0354 Olmütz to Olmuetz, 0359 Frankfurt an der Oder to Frankfurt/Oder, 0368 Elberswalde to Eberswalde, 0372 Lubben to Luebben, 0454 Cologne to Koeln, 0457 Frankfurt to Frankfurt/Main, 1125 Avgustov to Augustow, 1126 Grajevo - Grajewo, 1127 Kolmo to Kolno, 1128 Lomzha to Lomza, 1134 Osovets to Osowiec, 1155 Zaremby to Zambrow, 1191 Wlodava to Wlodawa, 1858 Koeniggratz to Koniggratz, 1870 Dieblin to Deblin, 1871 Zelenchow to Zelechow, 1876 Kamienna Skarzska to Skarzysko Kamienna, 1895 Lowiecz to Lowicz, 1920 Dzialozyce to Dzialoszyce, 1925 Nowy Targ to Nowy Targ, 1931 Uniejow to Uniejow, 1932 Kosolierzyna to Koscierzyna.

12. 1941 campaigns/scenarios: 100/101 Flammpanzer Battalions withdrawal set to last turn of December (to ensure new OB with reduced equipment comes into effect, units were disbanded or reformed into Panzer Battalions in reality).

13. 1941 campaigns/scenarios: 102nd Flammpanzer Btl withdraws on first turn of August 41, changed to new OB with French tanks (matches historical setup).

14. 1941 campaigns/scenarios: The Romanian 2nd Security division has been disabled, the 2nd Fortress infantry Brigade will now be reformed into the 2nd Security Division.

15. 1941 campaigns/scenarios: Armored cars in 7/20 Panzer divisions changed to Panhard 178, add 100 more to pool (only in 1941 campaigns).

16. 1941 campaigns/scenarios: 1st Fortress Rum. Infantry Brigade changed to other OB to reform it into a division in 1942.

17. 1942 campaigns/scenarios: Disable land unit 1241, duplicate of unit 172.

18. 1942 campaigns/scenarios: Fortress Rum. Security division reformed into a full infantry division.

19. Smolensk 1941, Road to Minsk, Road to Moscow, Road to Smolensk, Road to Leningrad, Road to Kiev, Road to Dnepopetrovsk, Operation Barbarossa: had 3 Soviet air units without player and/or nationality.

20. *Drama on the Danube, 1942 campaign, 1943 campaign: had Rumanian MG in 1 Hungarian unit.*
21. *Stalingrad to Berlin, Winter 42-43: had Rumanian MG in 2 Hungarian units and 1 Rumanian air unit with German aircraft.*
22. *Decision in the Ukraine: had 1 German air unit with Italian aircraft.*
23. *Operation Uranus: had 1 Rumanian air unit with German aircraft.*
24. *Battle for Kharkov: had 1 Rumanian air unit with Finnish aircraft.*
25. *1943 campaign: had Pe-2 in recon air units.*
26. *Updated city requirements in all scenarios.*
27. *Operation Konrad: Resolve OB type mismatch 6th Army and Flieger Fuhrer Hungary. 3x Flieger Division Air HQ changed to new OB 0708.*
28. *Smolensk 1941: HQ type fixed in 3x SAD airbases.*
29. *Red Army Resurgent: German aircraft in Romanian air unit. CSIR Ital. Air Bde set to proper Corps OB, reduce support to 500.*
30. *Decision in the Ukraine: HQ type fixed in Army Group Antonescu.*
31. *Road to Kiev: Carpathian Army Group set to proper Army OB, reduce support to 500, adjust available supply/fuel/vehicles. CSIR Ital. Air Bde set to proper Corps OB, reduce support to 500.*
32. *Road to Dnepropetrovsk: Carpathian Army Group set to proper Army OB, reduce support to 500, adjust available supply/fuel/vehicles. CSIR Ital. Air Bde set to proper Corps OB, reduce support to 500.*
33. *Winter 42/43: Romanian Air Command set to proper OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. CSIR Ital. Air Bde set to proper Corps OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. 4x Soviet Air Command HQs set to new Corps HQ version of their OB, reduce support and available supply/fuel/vehicles.*
34. *Stalingrad to Berlin: Romanian Air Command set to proper OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. CSIR Ital. Air Bde set to proper Corps OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. 4x Soviet Air Command HQs set to new Corps HQ version of their OB, reduce support and available supply/fuel/vehicles.*
35. *Operation Uranus: CSIR Ital. Air Bde set to proper Corps OB, reduce support to reasonable level, adjust available supply/fuel/vehicles.*
36. *Operation Kutuzov-Rumyantsev: 7x Soviet Air Command HQs set to new Corps HQ version of their OB, reduce support and available supply/fuel/vehicles.*
37. *Operation Blue: CSIR Ital. Air Bde set to proper Corps OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. Romanian Air Command set to proper OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. 8 IAK PVO Air Command set to proper OB, reduce support to reasonable level, adjust available supply/fuel/vehicles.*
38. *Operation Barbarossa: Carpathian Army Group set to proper Army OB, reduce support to 500, adjust available supply/fuel/vehicles. Rum. Combat Air Command changed from Army to Corps HQ type.*
39. *Operation Bagration: 2x soviet HQ set to new Corps HQ (modeled as Army HQ, may need CP restrictions).*
40. *1944 campaign: 2x soviet HQ set to new Corps HQ (modeled as Army HQ, may need CP restrictions).*
41. *1943 campaign: Rum. Combat Air Command changed from Army to Corps HQ*

type. 7x soviet Air HQ set to new Corps HQ OB.

42.1942 campaign: Romanian Air Command set to proper OB, reduce support to reasonable level, adjust available supply/fuel/vehicles. 5x soviet Air HQ set to new Corps HQ OB.

43.1941 campaigns: Rum. Combat Air Command changed from Army to Corps HQ type. Carpathian Army Group set to proper Army OB, reduce support to 500, adjust available supply/fuel/vehicles.

44.A bug introduced long ago caused 5 Soviet Military Districts to be already renamed and upgraded to Fronts in all scenarios starting in 1941. Those units are again Military Districts during German June 22nd turn.

45.Several scenarios had three Soviet air groups specified without proper type set. This caused a crash during Soviet logistics phase.

General device changes

1.Recalculation of aircraft gun data to match realworld rate-of-fire and muzzle velocity, some range reduction for known low-velocity guns.

2.Aircraft gun effects changed: 8mm class to 1 (from 2 for most), 12.7-13mm class to 2 (from 3), 15mm class to 3 (from 4), 20mm class to 4 (from 5); no changes to aircraft guns with 23mm or larger.

3.Aircraft drop tank values recalculated to a common base purely based on fuel content.

4.Several Flak and AA guns had their rate-of-fire and accuracy changed a bit to better match historic performance.

5.Several 7.9mm guns renamed to 7.92mm and some other minor name changes.

Specific device changes

1.[1] .303 Vickers 'K' MG, accuracy changed from 30 to 34, antiArmor changed from 4 to 3, rof changed from 23 to 30.

2.[2] .303 Vickers V MG, accuracy changed from 32 to 18, antiArmor changed from 4 to 3, rof changed from 24 to 18.

3.[3] .303 Vickers I MG, accuracy changed from 31 to 18, antiArmor changed from 4 to 3, rof changed from 25 to 18.

4.[4] .303 Lewis MG, accuracy changed from 31 to 17, antiArmor changed from 4 to 3, rof changed from 27 to 17.

5.[5] .303 Browning MG, effect changed from 2 to 1, accuracy changed from 34 to 35, antiArmor changed from 4 to 3, rof changed from 25 to 35.

6.[6] 7.5mm MAC-M39 MG, effect changed from 2 to 1, accuracy changed from 30 to 47, antiArmor changed from 4 to 3, rof changed from 25 to 42.

7.[7] 7.7mm SAFAT MG, effect changed from 2 to 1, accuracy changed from 24 to 27, antiArmor changed from 4 to 3, rof changed from 23 to 27.

8.[8] 7.92mm FN MG, effect changed from 2 to 1, accuracy changed from 33 to 38, antiArmor changed from 4 to 3, rof changed from 25 to 33.

9.[9] 7.9mm MG 17, name changed from 7.9mm MG 17 to 7.92mm MG 17, effect changed from 2 to 1, accuracy changed from 33 to 44, antiArmor changed from 4 to 3, rof changed from 32 to 36.

10.[10] 7.9mm MG 15, name changed from 7.9mm MG 15 to 7.92mm MG 15, effect changed from 2 to 1, accuracy changed from 33 to 31, antiArmor changed from 4 to 3, rof changed from 32 to 30.

11.[11] 7.9mm MG 81, name changed from 7.9mm MG 81 to 7.92mm MG 81, effect changed from 2 to 1, accuracy changed from 39 to 51, antiArmor changed from 4 to 3, antiAir changed from 59 to 57, rof changed from 42 to 48.

12.[12] 7.62mm PV-1 MG, effect changed from 2 to 1, accuracy changed from 45 to 24, antiArmor changed from 5 to 3, antiAir changed from 65 to 53, rof changed from 45 to 23.

13.[13] 7.62mm DA-1 MG, effect changed from 2 to 1, accuracy changed from 44 to 21, antiArmor changed from 5 to 3, antiAir changed from 64 to 53, rof changed from 44 to 18.

14.[14] 7.9mm Gebauer MG, name changed from 7.9mm Gebauer MG to 7.92mm Gebauer MG, effect changed from 2 to 1, accuracy changed from 32 to 30, antiArmor changed from 4 to 3, rof changed from 31 to 30.

15.[15] 7.7mm KM.Wz MG, effect changed from 2 to 1, accuracy changed from 25 to 21, rof changed from 24 to 21.

16.[16] 7.62mm ShKAS MG, effect changed from 2 to 1, accuracy changed from 54 to 58, antiArmor changed from 6 to 3, antiAir changed from 74 to 60, rof changed from 53 to 54.

17.[17] 7.7mm Type 89 MG, effect changed from 2 to 1, accuracy changed from 27 to 23, rof changed from 26 to 23.

18.[18] 7.7mm Type 97 MG, effect changed from 2 to 1, accuracy changed from 25 to 27, rof changed from 24 to 27.

19.[19] 7.7mm Type 92 MG, effect changed from 2 to 1, accuracy changed from 18 to 17, antiArmor changed from 2 to 3, rof changed from 20 to 17.

20.[20] 7.92mm Type 98 MG, effect changed from 2 to 1, accuracy changed from 33 to 31, antiArmor changed from 4 to 3, rof changed from 32 to 30.

21.[21] 13.2mm FN MG, effect changed from 3 to 2, accuracy changed from 24 to 26.

22.[22] 12.7mm SAFAT MG, effect changed from 3 to 2, accuracy changed from 24 to 22, rof changed from 24 to 21.

23.[23] .50 Browning MG, effect changed from 3 to 2, rof changed from 25 to 24.

24.[24] 13mm MG 131, effect changed from 3 to 2, accuracy changed from 29 to 27, rof changed from 25 to 27.

25.[25] 12.7mm BS MG, effect changed from 3 to 2, accuracy changed from 30 to 28, antiArmor changed from 5 to 4, rof changed from 26 to 24.

26.[26] 12.7mm UBS MG, effect changed from 3 to 2, accuracy changed from 30 to 34, antiArmor changed from 5 to 4, rof changed from 26 to 30.

27.[27] 12.7mm UBT MG, effect changed from 3 to 2, accuracy changed from 30 to 34, antiArmor changed from 5 to 4, rof changed from 26 to 30.

28.[28] 12.7mm Type 1 MG, effect changed from 3 to 2, accuracy changed from 27 to 29, rof changed from 24 to 27.

29.[29] 12.7mm Ho-103 MG, effect changed from 3 to 2, antiAir changed from 59 to 57, rof changed from 25 to 27.

30.[30] 15mm Cannon MG151, effect changed from 4 to 3, accuracy changed from 21 to 29, antiArmor changed from 4 to 5, rof changed from 30 to 21.

31.[31] 20mm HS404 Cannon, effect changed from 5 to 4, accuracy changed from 20 to 25, rof changed from 30 to 20.

32.[32] 20mm Cannon MG151, effect changed from 5 to 4, accuracy changed from 21 to 24, rof changed from 30 to 23.

33.[33] 20mm Cannon MG FF, name changed from 20mm Cannon MG FF to 20mm Cannon MG FF/M, effect changed from 5 to 4, accuracy changed from 16 to 15, range changed from 5000 to 4000, rof changed from 27 to 16.

34.[34] 20mm Hispano Cannon, effect changed from 5 to 4, accuracy changed from 26 to 25, rof changed from 32 to 21.

35.[35] 20mm Oerlikon Cannon, effect changed from 5 to 4, accuracy changed from 20 to 19, rof changed from 30 to 18.

36.[36] 20mm Solothurn Cannon, effect changed from 5 to 4, accuracy changed from 16 to 12, antiArmor changed from 4 to 5, rof changed from 27 to 11.

37.[37] 20mm ShVAK Cannon, effect changed from 5 to 4, accuracy changed from 24 to 26, rof changed from 31 to 24.

38.[38] 23mm VYa Cannon, accuracy changed from 18 to 24, antiArmor changed from 4 to 5, rof changed from 25 to 20.

39.[39] 20mm B-20 Cannon, effect changed from 5 to 4, accuracy changed from 24 to 25, rof changed from 31 to 24.

40.[40] 20mm Type 99 Cannon, name changed from 20mm Type 99 Cannon to 20mm Type 99-1 Cannon, effect changed from 5 to 4, accuracy changed from 22 to 13, antiArmor changed from 5 to 4, antiAir changed from 72 to 66, range changed from 5000 to 4000, rof changed from 30 to 16.

41.[41] 20mm Type 99 mod.2, name changed from 20mm Type 99 mod.2 to 20mm Type 99-2 Cannon, effect changed from 5 to 4, accuracy changed from 23 to 19, antiAir changed from 73 to 76, rof changed from 31 to 18.

42.[42] 20mm Cannon Ho-5, effect changed from 5 to 4, accuracy changed from 28 to 26, rof changed from 33 to 26.

43.[43] 20mm Cannon MG-FF, name changed from 20mm Cannon MG-FF to 20mm Cannon MG FF, effect changed from 5 to 4, accuracy changed from 16 to 13, range changed from 5000 to 4000, rof changed from 27 to 16.

44.[44] 20mm Hispano Cannon, effect changed from 5 to 4, accuracy changed from 26 to 25, rof changed from 32 to 21.

45.[45] 30mm Cannon MK108, accuracy changed from 18 to 15, range changed from 6000 to 5000, rof changed from 22 to 20.

46.[46] 30mm Cannon MK103, accuracy changed from 13 to 16, antiArmor changed from 5 to 6, antiAir changed from 73 to 78, rof changed from 21 to 13.

47.[47] 30mm Cannon Ho-105, name changed from 30mm Cannon Ho-105 to 30mm Cannon Ho-155, rof changed from 21 to 14.

48.[48] 37mm Cannon BK3.7, accuracy changed from 5 to 7, rof changed from 12 to 5.

49.[49] 37mm Cannon T9, accuracy changed from 5 to 4, rof changed from 12 to 4.

50.[50] 37mm M4 Cannon, accuracy changed from 5 to 4, rof changed from 12 to 4.

51.[51] 37mm Cannon Ho-203, accuracy changed from 4 to 3, rof changed from 12 to 4.

52.[52] WGr 210, effect changed from 10 to 15, range changed from 500 to 3000, blast changed from 0 to 5.

53.[53] 75mm Cannon, load cost changed from 0 to 500, effect changed from 0 to 10, range changed from 1500 to 5000.

54.[76] 100 litre Drop Tank, load cost changed from 150 to 176, effect changed from 10 to 12.

55.[77] 300 litre Drop Tank, load cost changed from 450 to 528, effect changed from 30 to 37.

56.[79] 300 litre Drop Tank, load cost changed from 450 to 528.

57.[82] 110 gal Drop Tank, effect changed from 50 to 52.

58.[84] 200 gal Drop Tank, effect changed from 90 to 94.

59.[85] 198 Gal Drop Tank, name changed from 198 Gal Drop Tank to 900 litre Drop Tank, load cost changed from 1500 to 1585.

60.[121] 20mm Flak38 AA Gun, rof changed from 90 to 110.

61.[122] 37mm Flak36 AA Gun, penetration changed from 46 to 47, rof changed from 60 to 50.

62.[123] 37mm Flak43 AA Gun, penetration changed from 46 to 47, rof changed from 60 to 75.

63.[124] 37mm 61-K AA Gun, rof changed from 50 to 34.

64.[126] 20mm Quad Flak38 AA Gun , accuracy changed from 750 to 600, blast changed from 1 to 0.

65.[129] Molotov Cocktail, accuracy changed from 600 to 10.

66.[130] Anti-Tank Grenade, accuracy changed from 600 to 5.

67.[131] Flamethrower, accuracy changed from 1250 to 20, antiArmor changed from 100 to 0, heat changed from 0 to 100.

68.[135] 7.9mm Gew 41/43 Rifle, name changed from 7.9mm Gew 41/43 Rifle to 7.92mm Gew 41/43 Rifle.

69.[174] 50mm Type 89 Grenade Launcher, accuracy changed from 1 to 20.

70.[175] Rifle-Grenade, accuracy changed from 100 to 15.

71.[176] Hand Grenade, accuracy changed from 50 to 5.

72.[178] 20mm Solothurn AT-Rifle, penetration changed from 30 to 38.

73.[180] 7.92mm PzB 39 AT-Rifle, range changed from 750 to 500, rof changed from 5 to 3.

74.[183] 50mm Type 89 Grenade Launcher, accuracy changed from 1 to 20.

75.[185] .55in Boys AT-Rifle, range changed from 750 to 500.

76.[187] 7.92mm wz 35 AT-Rifle, range changed from 750 to 500, rof changed from 10 to 7.

77.[190] 14.5mm PTRD AT-Rifle, range changed from 1000 to 500, rof changed from 4 to 2.

78.[195] Satchel Charge, accuracy changed from 50 to 5.

79.[235] 7.9mm Quad MG34 AAMG, name changed from 7.9mm Quad MG34 AAMG to 7.92mm Quad MG34 AAMG.

80.[239] 25mm AA-Gun, name changed from 25mm AA-Gun to 25mm AA Gun.

81.[240] 25mm Hotchkiss M39 AA-Gun, name changed from 25mm Hotchkiss M39 AA-Gun to 25mm Hotchkiss M39 AA Gun, rof changed from 60 to 80, blast changed from 1 to 0.

82.[241] 20mm vz.36 AA-Gun, name changed from 20mm vz.36 AA-Gun to 20mm vz.36 AA Gun.

83.[242] 20mm Oerlikon AA-Gun, name changed from 20mm Oerlikon AA-Gun to 20mm Oerlikon AA Gun, rof changed from 60 to 120.

84.[243] 20mm Flak38 AA-Gun, name changed from 20mm Flak38 AA-Gun to 20mm Flak38 AA Gun, rof changed from 90 to 110.

85.[244] 20mm Quad Flak38 AA Gun, accuracy changed from 750 to 600, blast

changed from 1 to 0.

86.[245] 37mm Flak36 AA-Gun, name changed from 37mm Flak36 AA-Gun to 37mm Flak36 AA Gun, penetration changed from 46 to 47, rof changed from 60 to 50.

87.[246] 37mm Flak43 AA-Gun, name changed from 37mm Flak43 AA-Gun to 37mm Flak43 AA Gun, penetration changed from 46 to 47, rof changed from 60 to 75.

88.[247] 37mm 61-K AA-Gun, name changed from 37mm 61-K AA-Gun to 37mm 61-K AA Gun, rof changed from 50 to 60.

89.[249] 40mm Bofors AA-Gun, name changed from 40mm Bofors AA-Gun to 40mm Bofors AA Gun.

90.[250] 40mm Twin Bofors AA Gun, accuracy changed from 600 to 625, ceiling changed from 18000 to 16500, rof changed from 80 to 75, blast changed from 2 to 1.

91.[251] 25mm Twin AA-Gun, name changed from 25mm Twin AA-Gun to 25mm Twin AA Gun, ceiling changed from 7000 to 6500, rof changed from 120 to 110.

92.[252] 20mm Twin Flak38 AA-Gun, name changed from 20mm Twin Flak38 AA-Gun to 20mm Twin Flak38 AA Gun, accuracy changed from 600 to 500, rof changed from 180 to 210.

93.[284] 7.9mm Besa BMG, name changed from 7.9mm Besa BMG to 7.92mm Besa BMG.

94.[295] 7.9mm Besa CMG, name changed from 7.9mm Besa CMG to 7.92mm Besa CMG.

95.[299] 20mm M35 Gun, penetration changed from 34 to 36.

96.[301] 20mm TNSH Gun, rof changed from 30 to 60.

97.[308] 37mm 37/40 Gun, penetration changed from 50 to 55.

98.[324] 47mm 47/40 Gun, penetration changed from 60 to 78.

99.[336] 75mm StuK37 L/24 Gun, rof changed from 10 to 12.

100.[338] 75mm StuK40 L/43 Gun, rof changed from 10 to 12.

101.[351] 76.2mm KT-28 Gun, antiSoft changed from 71 to 74.

102.[352] 76.2mm ZiS-3 Gun, antiSoft changed from 71 to 74, range changed from 2500 to 2250, heat changed from 75 to 73, hvap changed from 0 to 135.

103.[353] 76.2mm ZiS-3 Field Gun, heat changed from 75 to 73.

104.[355] 65mm L17 Gun, penetration changed from 0 to 37.

105.[367] 76.2mm F-34 Gun, antiSoft changed from 71 to 74, heat changed from 75 to 73.

106.[368] 76.2mm ZiS-5 Gun, antiArmor changed from 20 to 18, antiSoft changed from 80 to 74, heat changed from 75 to 73.

107.[369] 76.2mm PS-3 Gun, antiSoft changed from 71 to 74.

108.[370] 76mm M27/39 Gun, antiSoft changed from 71 to 74.

109.[371] 75mm Skoda L/48 AA Gun, effect changed from 26 to 5.

110.[372] 85mm KS-12 AA Gun, effect changed from 26 to 6.

111.[373] 83.5mm vz.22 AA Gun, effect changed from 26 to 6.

112.[374] 76mm M31/38 AA Gun, effect changed from 26 to 5, antiSoft changed from 71 to 74, antiAir changed from 71 to 74.

113.[375] 75mm AA Gun, effect changed from 26 to 5.

114.[383] 90mm M41 L/53 Gun, name changed from 90mm M41 L/53 Gun to 90mm 90/53 AA Gun, penetration changed from 150 to 206.

115.[391] 105mm 105/25 Gun, penetration changed from 0 to 76.

116.[574] 37mm Cannon NS-37, accuracy changed from 4 to 10, range changed from 3000 to 6000, rof changed from 15 to 8.

- 117.[577] 80mm Bofors AA-Gun, name changed from 80mm Bofors AA-Gun to 80mm Bofors AA Gun, effect changed from 26 to 6.
- 118.[578] 76.2mm F-22-USV Field Gun, range changed from 14900 to 14500.
- 119.[624] 40mm Cannon Vickers S, accuracy changed from 6 to 3, rof changed from 15 to 3.
- 120.New: [120] 1800kg GP Bomb
- 121.New: [610] 20mm Triple MG151 AA Gun - former Luftwaffe aircraft guns used in triple-mount as AAA.
- 122.New: [630] 20mm M35 AA Gun - Italian Flak.
- 123.New: [631] 47mm M35 Gun - Italian Pak.
- 124.New: [648] .30 Browning MG - Browning-MG in US .30 caliber.
- 125.New: [649] 7.7mm Type 89-2 MG - improved version of the 88-1 MG.
- 126.New: [650] 7.92mm MG 81Z - dual-barrel version of MG 81.
- 127.New: [651] 20mm Flak30 AA Gun - older version of Flak38.
- 128.New: [652] 8mm 35M Rifle.
- 129.New: [653] 7.92mm ZB 53 HMG.
- 130.New: [654] 8mm 31M Rifle.

General ground element changes

1. Some minor name changes, certain vehicles in foreign use have a country designator added behind element name.
2. Most squad types are converted to the next higher model at a small arm cost. Squad types with a conversion path have scrapping set to disabled. The upgrade speed is 10% of active pool per turn.
3. Czech LT-38 based vehicles have their reliability value decreased by 5 or 10 points (= better), they were praised for simple/robust mechanics, easy repair and high reliability.
4. All armored cars, SP Flak, SP Art, SP Inf, half-tracks have scrapping disabled.
5. New elements available for production within the timeframe of a campaign get a certain amount of initial builds.
6. Finnish elements imported from Germany have an end date of 8/44 set, Romanian elements imported from Germany have an end date of 7/44 set.
7. Some unit icon changes, especially artillery. Same class artillery uses the same icon on both sides, just pointing into opposite direction.
8. German-based Romanian equipment has the end date extended to 9/45, production will be disabled if Romania changes sides.
9. Romanian combat squads and 1943/1944 gun/MG secondary armament changed to 7.92mm vz.34 rifle, all other retain the old 6.5mm Mannlicher rifle.
10. Hungarian combat squads and 1942-1944 guns/MG MG secondary armament changed to new 8mm 35M rifle, all other changed from (wrong) Italian 7.35mm Mannlicher-Carcano rifle to a new 8mm 31M rifle.
11. Armament cost of mechanized Infantry and Engineers reduced to 20% of original value, the halftrack costs are already paid for by two vehicles per squad (0098, Panzer Grenadier Squad 41, from 83 to 17, 0099, Panzer Grenadier Squad 43, from 84 to 17, 0100, Panzer Grenadier Squad (-), from 85 to 17, 0101, Panzer Pioneer Squad 41, from 86 to 17, 0102, Panzer Pioneer Squad 43, from 88 to 18, 0103, Panzer Pioneer Squad, from 88 to 18, 0104, Panzer Pioneer Squad 44, from 88 to 18, 0776, Recon Squad, from 85 to 17).

12. Armament cost of cavalry squads reduced to 60% of original value, cost for horses way too high causing lots of problems, production is already limited per turn (0080, Cavalry Squad, Germany, from 65 to 39, 0118, Cavalry Squad (-), Germany, from 64 to 38, 0161, Cavalry Squad, Finland, from 58 to 35, 0202, Cavalry Squad, Italy, from 69 to 41, 0257, Cavalry Squad, Romania, from 57 to 34, 0301, Cavalry Squad, Hungary, from 57 to 34, 0801, Cavalry Squad, Soviet Union, from 69 to 41, 0802, Cavalry Squad 41, Soviet Union, from 69 to 41, 0803, Cavalry Squad 43, Soviet Union, from 70 to 42).

13. Infantry squads date overlap removed, with the exception of the early Soviet Cavalry Squad.

Specific ground element changes

1.[1] Panzer Ib, upgrade changed from 0 to [2] Panzer IIc.

2.[2] Panzer IIc, upgrade changed from 0 to [3] Panzer IIe, factory upgrade changed from 0 to [3] Panzer IIe, scrap policy changed from DEFAULT (1 YEAR) to NONE.

3.[3] Panzer IIe, last year changed from 1943 to 1942, last month changed from 2 to 6, build limit changed from 3 to 2, upgrade changed from [45] Wespe to [4] Panzer III Lynx, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [35] Marder II, scrap policy changed from DEFAULT (1 YEAR) to NONE.

4.[4] Panzer III Lynx, build limit changed from 2 to 3, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

5.[5] Flamm Panzer II, name changed from Flamm Panzer II to Flammpanzer II, upgrade changed from [34] Marder II (SdKfz-132) to [12] Flamm Panzer III, expansion rate changed from 0 to 1, weapon 0 changed from [264] 7.92mm MG34 TMG to [131] Flamethrower, weapon 1 changed from 0 to [264] 7.92mm MG34 TMG, weapon 2 changed from [131] Flamethrower to 0, weapon 3 changed from [131] Flamethrower to 0, weapon 0 number changed from 1 to 2, weapon 1 number changed from 0 to 1, weapon 2 number changed from 1 to 0, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 1800 to 80, weapon 1 ammo changed from 0 to 1800, weapon 2 ammo changed from 80 to 0, weapon 3 ammo changed from 80 to 0, weapon 0 face changed from TURRET to FWD, weapon 1 face changed from FWD to TURRET, factory upgrade changed from 0 to [12] Flamm Panzer III, scrap policy changed from DEFAULT (1 YEAR) to NONE.

6.[6] Panzer IIIe, upgrade changed from 0 to [9] Panzer IIIj L/60, factory upgrade changed from 0 to [7] Panzer IIIg, scrap policy changed from DEFAULT (1 YEAR) to NONE.

7.[7] Panzer IIIg, upgrade changed from 0 to [219] Panzer IIIj L/42, max import changed from 0 to ALL, import from changed from 0 to [6] Panzer IIIe, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1200, weapon 3 ammo changed from 1200 to 0, import cost changed from 0 to 30, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to [8] Panzer IIIh, scrap policy changed from DEFAULT (1 YEAR) to NONE.

8.[8] Panzer IIIh, upgrade changed from [219] Panzer IIIj to [9] Panzer IIIj L/60, max import changed from 0 to ALL, import from changed from 0 to [7] Panzer IIIg, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from

[265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1200, weapon 3 ammo changed from 1200 to 0, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 20%, factory upgrade changed from 0 to [219] Panzer IIIj L/42, scrap policy changed from DEFAULT (1 YEAR) to 3 YEARS.

9.[9] Panzer IIIj L/60, name changed from Panzer IIIj L/60 to Panzer IIII, last month changed from 6 to 4, front armor changed from 49 to 52, build limit changed from 23 to 8, max import changed from 0 to 800, import from changed from 0 to [219] Panzer IIIj L/42, expansion rate changed from 2 to 1, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1200, weapon 3 ammo changed from 1200 to 0, import cost changed from 0 to 20, minimum import changed from 0 to 2, import % changed from DEFAULT to 1%, factory upgrade changed from 0 to [10] Panzer IIIIm, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

10.[10] Panzer IIIIm, first month changed from 7 to 5, build limit changed from 8 to 13, upgrade changed from 0 to [22] Panther D, max import changed from 0 to ALL, import from changed from 0 to [9] Panzer IIIj L/60, expansion rate changed from 0 to 1, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1500, weapon 3 ammo changed from 1500 to 0, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 20%, factory upgrade changed from 0 to [22] Panther D, scrap policy changed from DEFAULT (1 YEAR) to NONE.

11.[11] Panzer IIIIn, weapon 2 changed from m MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1500, weapon 3 ammo changed from 1500 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

12.[12] Flamm Panzer III, name changed from Flamm Panzer III to Flammpanzer III, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1500, weapon 3 ammo changed from 1500 to 0, factory upgrade changed from 0 to [26] King Tiger, scrap policy changed from DEFAULT (1 YEAR) to NONE.

13.[13] Panzer 35(t), upgrade changed from 0 to [9] Panzer IIIj L/60, weapon 2 changed from 0 to [269] 7.92mm MG37 BMG, weapon 3 changed from [269] 7.92mm MG37 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 700, weapon 3 ammo changed from 700 to 0, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

14.[14] Panzer 38(t), reliability changed from 25 to 15, upgrade changed from 0 to [15] Panzer 38(t)E, weapon 2 changed from 0 to [269] 7.92mm MG37 BMG, weapon 3 changed from [269] 7.92mm MG37 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 900, weapon 3 ammo changed from 900 to 0, factory upgrade changed from 0 to [15] Panzer 38(t)E, scrap policy changed from DEFAULT (1 YEAR) to NONE.

15.[15] Panzer 38(t)E, reliability changed from 25 to 15, upgrade changed from [37] Panzerjager 38 to [221] Panzer IVg L/48, supply use changed from 156 to 216, max import changed from 0 to ALL, import from changed from 0 to [14] Panzer 38(t), weapon 2 changed from 0 to [269] 7.92mm MG37 BMG, weapon 3 changed from [269] 7.92mm MG37 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 42 to 72, weapon 2 ammo changed from 0 to 900, weapon 3 ammo changed from 900 to 0, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [37] Panzerjager 38(t), scrap policy changed from DEFAULT (1 YEAR) to NONE.

16.[16] Panzer IVc, upgrade changed from 0 to [18] Panzer IVf, factory upgrade changed from 0 to [17] Panzer IVe, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

17.[17] Panzer IVe, front armor changed from 51 to 48, side armor changed from 34 to 31, max import changed from 0 to ALL, import from changed from 0 to [16] Panzer IVc, import cost changed from 0 to 15, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [18] Panzer IVf, scrap policy changed from DEFAULT (1 YEAR) to NONE.

18.[18] Panzer IVf, build limit changed from 3 to 7, upgrade changed from [19] Panzer IVf2 to [11] Panzer IIIIn, max import changed from 0 to ALL, import from changed from 0 to [17] Panzer IVe, expansion rate changed from 0 to 1, import cost changed from 0 to 7, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [19] Panzer IVf2, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

19.[19] Panzer IVf2, build limit changed from 10 to 7, factory upgrade changed from 0 to [20] Panzer IVg L/43, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

20.[20] Panzer IVg L/43, name changed from Panzer IVg L/43 to Panzer IVg, load cost changed from 106 to 104, last year changed from 1943 to 1942, last month changed from 1 to 10, front armor changed from 74 to 51, build limit changed from 9 to 7, build cost changed from 292 to 287, max import changed from 0 to ALL, import from changed from 0 to [19] Panzer IVf2, expansion rate changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 50%, factory upgrade changed from 0 to [221] Panzer IVg L/48, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

21.[21] Panzer IVh, last year changed from 1945 to 1944, last month changed from 1 to 2, first month changed from 5 to 4, build limit changed from 14 to 13, max import changed from 0 to ALL, import from changed from 0 to [18] Panzer IVf, import cost changed from 0 to 30, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to [125] Panzer IVj, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

22.[22] Panther D, reliability changed from 50 to 40, build limit changed from 5 to 6, factory upgrade changed from 0 to [23] Panther A, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

23.[23] Panther A, reliability changed from 40 to 35, max import changed from 0 to ALL, import from changed from 0 to [22] Panther D, import cost changed from 0 to 20, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [24] Panther G, update TOE changed from NO to

YES.

24.[24] Panther G, build limit changed from 6 to 8, expansion rate changed from 0 to 1.

25.[25] Tiger, upgrade changed from 0 to [26] King Tiger, scrap policy changed from DEFAULT (1 YEAR) to NONE.

26.[28] Stug IIIb, build limit changed from 4 to 5, factory upgrade changed from 0 to [30] Stug IIIf, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

27.[29] StuH42, first year changed from 1942 to 1943, first month changed from 12 to 3, build limit changed from 9 to 10, expansion rate changed from 0 to 1.

28.[30] Stug IIIf, last month changed from 5 to 6, first month changed from 3 to 4, build limit changed from 5 to 8, upgrade changed from [31] Stug IIIg to 451, max import changed from 0 to ALL, import from changed from 0 to [28] Stug IIIb, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to 451, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

29.[31] Stug IIIg, first month changed from 6 to 12, build limit changed from 15 to 18, expansion rate changed from 2 to 1.

30.[32] Jagdpanzer IV (GE Assault Gun 1/44-1/45 -> [41] Jagdpanzer IV/70(V)), last year changed from 1945 to 1944, last month changed from 1 to 9, factory upgrade changed from 0 to [41] Jagdpanzer IV/70(V), scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

31.[33] Panzerjager I, upgrade changed from 0 to [37] Panzerjager 38(t), scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

32.[34] Marder II (SdKfz-132), last year changed from 1943 to 1942, last month changed from 9 to 5, build limit changed from 1 to 14, upgrade changed from 0 to [216] Panzerjager 38(t)H, max import changed from 0 to ALL, import from changed from 0 to [5] Flamm Panzer II, expansion rate changed from 0 to 1, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to [29] StuH42, scrap policy changed from DEFAULT (1 YEAR) to NONE.

33.[35] Marder II (SdKfz-131), last year changed from 1944 to 1943, last month changed from 3 to 2, first month changed from 6 to 7, upgrade changed from 0 to 348, max import changed from 0 to ALL, import from changed from 0 to [2] Panzer IIc, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to [45] Wespe, scrap policy changed from DEFAULT (1 YEAR) to NONE.

34.[36] Marder III, last year changed from 1945 to 1944, last month changed from 1 to 4, reliability changed from 25 to 15, front armor changed from 13 to 21, upgrade changed from [39] Jagdpanzer 38 to 0, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [39] Jagdpanzer 38(t) Hetzer, scrap policy changed from DEFAULT (1 YEAR) to NONE.

35.[37] Panzerjager 38(t), name changed from Panzerjager 38(t) to Panzerjager 38, last year changed from 1943 to 1942, last month changed from 1 to 10, reliability changed from 25 to 15, weapon 1 changed from 0 to [269] 7.92mm MG37 BMG, weapon 3 changed from [269] 7.92mm MG37 BMG to 0, weapon 1 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 1 ammo changed from 0 to 1200, weapon 3 ammo changed from 1200 to 0, factory upgrade changed from 0 to [216] Panzerjager 38(t)H, scrap policy changed from DEFAULT (1 YEAR) to NONE,

update TOE changed from NO to YES.

36.[38] Nashorn, build limit changed from 3 to 2.

37.[39] Jagdpanzer 38(t) Hetzer, name changed from Jagdpanzer 38(t) Hetzer to Jagdpanzer 38, reliability changed from 25 to 20, build limit changed from 19 to 14.

38.[40] Flammpanzer 38(t), name changed from Flammpanzer 38(t) to Flammpanzer 38, reliability changed from 25 to 20.

39.[41] Jagdpanzer IV/70(V), build limit changed from 21 to 19, expansion rate changed from 2 to 3.

40.[43] Elefant, name changed from Elefant to Ferdinand, load cost changed from 290 to 287, last month changed from 5 to 11, upgrade changed from [42] Jagdpanther to 350, factory upgrade changed from 0 to 350, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

41.[44] Jagdtiger, build limit changed from 1 to 2, expansion rate changed from 0 to 1.

42.[45] Wespe, first month changed from 3 to 2, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

43.[46] Hummel, scrap policy changed from DEFAULT (1 YEAR) to NONE.

44.[47] Lorraine, name changed from Lorraine to SdKfz-135/1 Lorraine, factory upgrade changed from 0 to [46] Hummel, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

45.[48] SdKfz-10/4 SP Flak, symbol changed from 0 to [127] SdKfz-6/2 SP Flak, last year changed from 1944 to 1942, last month changed from 1 to 3, upgrade changed from [90] SdKfz-251/17 SP Flak to 456, expansion rate changed from 0 to 1, weapon 0 changed from [243] 20mm Flak38 AA Gun to 651, factory upgrade changed from 0 to 456, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

46.[49] Flakpanzer 38(t), name changed from Flakpanzer 38(t) to Flakpanzer 38, last year changed from 1945 to 1944, last month changed from 1 to 2, reliability changed from 25 to 15, upgrade changed from [217] Aufklärungspanzer 38 to [51] Ostwind, factory upgrade changed from 0 to [217] Panzer 38(t) Aufklärer, scrap policy changed from DEFAULT (1 YEAR) to NONE.

47.[50] Wirbelwind, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [51] Ostwind, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

48.[51] Ostwind, upgrade changed from [51] Ostwind to 0.

49.[52] sIG33, name changed from sIG33 to sIG33 Pz I, upgrade changed from 0 to [218] sIG33, scrap policy changed from DEFAULT (1 YEAR) to NONE.

50.[53] sIG33 Grille, name changed from sIG33 Grille to sIG33 Grille K, last year changed from 1943 to 1944, last month changed from 6 to 9, reliability changed from 25 to 15, first month changed from 4 to 12, build limit changed from 8 to 5, upgrade changed from 0 to 410, photo changed from [218] sIG33 Grille H to 0, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

51.[54] SdKfz-221 Armored Car, type changed from Light Armored Car to Armored Car, last month changed from 1 to 12, front armor changed from 10 to 18, build limit changed from 0 to 1, upgrade changed from 0 to 453, expansion rate changed from 0 to 1, factory upgrade changed from 0 to 453, scrap policy changed from DEFAULT (1 YEAR) to NONE.

52.[55] SdKfz-222 Armored Car, last year changed from 1943 to 1941, last month changed from 6 to 12, front armor changed from 10 to 18, build limit changed from 1

to 2, upgrade changed from [349] SdKfz-250/9 Halftrack to 454, expansion rate changed from 0 to 1, factory upgrade changed from 0 to 454, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

53.[56] SdKfz-231 Armored Car, last year changed from 1944 to 1942, last month changed from 1 to 3, front armor changed from 18 to 22, upgrade changed from [57] SdKfz-234/1 Armored Car to 455, expansion rate changed from 0 to 1, factory upgrade changed from 0 to 455, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

54.[57] SdKfz-234/1 Armored Car, last year changed from 1944 to 1945, last month changed from 10 to 2, build limit changed from 1 to 2, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

55.[58] SdKfz-234/2 Armored Car, first year changed from 1944 to 1943, last month changed from 9 to 5, first month changed from 1 to 12, upgrade changed from 0 to [57] SdKfz-234/1 Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

56.[59] SdKfz-234/3 Armored Car, build limit changed from 3 to 2, weapon 1 changed from [227] 7.92mm MG34 AAMG to [229] 7.92mm MG42 AAMG, factory upgrade changed from 0 to [60] SdKfz-234/4 Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

57.[60] SdKfz-234/4 Armored Car, build limit changed from 6 to 4, upgrade changed from [60] SdKfz-234/4 Armored Car to 0, weapon 1 changed from [227] 7.92mm MG34 AAMG to [229] 7.92mm MG42 AAMG, scrap policy changed from DEFAULT (1 YEAR) to NONE.

58.[62] SdKfz-251/1 MG Carrier, symbol changed from 0 to [65] SdKfz-251/1 MG Carrier, factory upgrade changed from 0 to [65] SdKfz-251/1 MG Carrier, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

59.[63] SdKfz-251/10 Halftrack, upgrade changed from 0 to [107] SdKfz-251/22 Halftrack, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [107] SdKfz-251/22 Halftrack, scrap policy changed from DEFAULT (1 YEAR) to NONE.

60.[64] SdKfz-251/2 Mortar Carrier, factory upgrade changed from 0 to [220] SdKfz-251/2 Mortar Carrier, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

61.[65] SdKfz-251/1 MG Carrier, max import changed from 0 to ALL, import from changed from 0 to [62] SdKfz-251/1 MG Carrier, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%.

62.[66] SdKfz-233 Armored Car, upgrade changed from 0 to [59] SdKfz-234/3 Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

63.[67] 37mm Anti-tank Gun, update TOE changed from NO to YES.

64.[68] 50mm Anti-tank Gun, scrap policy changed from DEFAULT (1 YEAR) to NONE.

65.[69] 75mm Anti-tank Gun, initial build number changed from 0 to 34.

66.[70] 76mm Anti-tank Gun, last year changed from 1942 to 1945, last month changed from 12 to 9, build cost changed from 9999 to 26, max import changed from 0 to ALL, import from changed from 0 to [817] 76mm Anti-tank Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD.

67.[71] 88mm Anti-tank Gun, initial build number changed from 0 to 27.

68.[73] 88mm Anti-aircraft Gun, max import changed from 0 to ALL, import from changed from 0 to [806] 85mm Anti-aircraft Gun, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%.

69.[76] 50mm Mortar, last year changed from 1945 to 1943, last month changed from 9 to 12, scrap policy changed from DEFAULT (1 YEAR) to NONE.

70.[78] 120mm Mortar, max import changed from 0 to ALL, import from changed from 0 to [789] 120mm Mortar, photo changed from 0 to [77] 81mm Mortar, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, initial build number changed from 0 to 111.

71.[79] 7.92mm Machine Gun, name changed from 7.92mm Machine Gun to 7.92mm MG34 Machine Gun, last year changed from 1945 to 1943, last month changed from 9 to 12, scrap policy changed from DEFAULT (1 YEAR) to NONE.

72.[80] 7.92mm Machine Gun, name changed from 7.92mm Machine Gun to 7.92mm MG42 Machine Gun, first month changed from 5 to 9, initial build number changed from 0 to 250.

73.[81] Rifle Squad, name changed from Rifle Squad to Rifle Squad 39, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

74.[82] Rifle Squad, name changed from Rifle Squad to Rifle Squad 43, max import changed from 0 to ALL, import from changed from 0 to [81] Rifle Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 111.

75.[83] Rifle Squad (-), max import changed from 0 to ALL, import from changed from 0 to [87] Submachine Gun Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 100.

76.[84] Pioneer Squad, name changed from Pioneer Squad to Pioneer Squad 39, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

77.[85] Pioneer Squad, name changed from Pioneer Squad to Pioneer Squad 43, last month changed from 10 to 11, max import changed from 0 to ALL, import from changed from 0 to [84] Pioneer Squad, import cost changed from 0 to 1, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, initial build number changed from 0 to 90.

78.[86] Pioneer Squad, name changed from Pioneer Squad to Pioneer Squad 44, max import changed from 0 to ALL, import from changed from 0 to [85] Pioneer Squad, import cost changed from 0 to 1, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 90.

79.[87] Submachine Gun Squad (GE SMG Squad 1/43-10/44 -> [83] Rifle Squad (-)), last month changed from 10 to 11, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, initial build number changed from 0 to 111.

80.[88] Cavalry Squad, build cost changed from 65 to 39, turn build limit changed from NONE to 40 PER TURN.

81.[89] Motorcycle Squad, turn build limit changed from NONE to 25 PER TURN.

82.[90] SdKfz-251/17 SP Flak, symbol changed from 0 to [127] SdKfz-6/2 SP Flak, last year changed from 1945 to 1944, last month changed from 9 to 7, build limit changed from 3 to 4, upgrade changed from [90] SdKfz-251/17 SP Flak to 421,

expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

83.[91] 7.92mm Anti-tank Rifle, last year changed from 1944 to 1943, last month changed from 12 to 6, upgrade changed from 0 to [92] Panzerschreck, scrap policy changed from DEFAULT (1 YEAR) to NONE.

84.[92] Panzerschreck, first month changed from 1 to 9, initial build number changed from 0 to 500.

85.[93] 28mm Anti-tank Gun, symbol changed from [76] 50mm Mortar to [67] 37mm Anti-tank Gun, scrap policy changed from DEFAULT (1 YEAR) to NONE.

86.[94] Motorized Rifle Squad, name changed from Motorized Rifle Squad to Motorized Rifle Squad 39, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

87.[95] Motorized Rifle Squad (+), upgrade changed from 0 to [96] Motorized Rifle Squad, scrap policy changed from DEFAULT (1 YEAR) to NONE.

88.[96] Motorized Rifle Squad, name changed from Motorized Rifle Squad to Motorized Rifle Squad 43, max import changed from 0 to ALL, import from changed from 0 to [94] Motorized Rifle Squad, import cost changed from 0 to 3, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 83.

89.[97] Motorized Rifle Squad (-), max import changed from 0 to ALL, import from changed from 0 to [95] Motorized Rifle Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 80%, initial build number changed from 0 to 76.

90.[98] Panzer Grenadier Squad, name changed from Panzer Grenadier Squad to Panzer Grenadier Squad 41, last month changed from 6 to 7, build cost changed from 83 to 17, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

91.[99] Panzer Grenadier Squad, name changed from Panzer Grenadier Squad to Panzer Grenadier Squad 43, build cost changed from 84 to 17, max import changed from 0 to ALL, import from changed from 0 to [98] Panzer Grenadier Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 11.

92.[100] Panzer Grenadier Squad (-), build cost changed from 85 to 17, initial build number changed from 0 to 11.

93.[101] Panzer Pioneer Squad, name changed from Panzer Pioneer Squad to Panzer Pioneer Squad 39, last month changed from 6 to 7, build cost changed from 86 to 17, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

94.[102] Panzer Pioneer Squad, name changed from Panzer Pioneer Squad to Panzer Pioneer Squad 43, last month changed from 10 to 11, build cost changed from 88 to 18, max import changed from 0 to ALL, import from changed from 0 to [101] Panzer Pioneer Squad, import cost changed from 0 to 3, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, initial build number changed from 0 to 11.

95.[103] Panzer Pioneer Squad, last year changed from 1944 to 1943, upgrade changed from [104] Panzer Pioneer Squad 44 to [102] Panzer Pioneer Squad, build cost changed from 88 to 18, scrap policy changed from DEFAULT (1 YEAR) to INSTANT, update TOE changed from NO to YES.

96.[104] Panzer Pioneer Squad, name changed from Panzer Pioneer Squad to Panzer Pioneer Squad 44, build cost changed from 88 to 18, max import changed from 0 to ALL, import from changed from 0 to [102] Panzer Pioneer Squad, import cost changed from 0 to 1, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 11.

97.[105] 105mm Field Gun, symbol changed from [74] 75mm Infantry Gun to [109] 75mm Field Gun.

98.[107] SdKfz-251/22 Halftrack, build limit changed from 6 to 3, expansion rate changed from 0 to 1.

99.[109] 75mm Field Gun, symbol changed from [74] 75mm Infantry Gun to 0.

100.[110] 105mm Howitzer, symbol changed from [74] 75mm Infantry Gun to [109] 75mm Field Gun.

101.[111] 122mm Howitzer, symbol changed from [74] 75mm Infantry Gun to [109] 75mm Field Gun, first year changed from 1942 to 1938, first month changed from 0 to 1, upgrade changed from 0 to [110] 105mm Howitzer, build cost changed from 54 to 60, max import changed from 0 to ALL, import from changed from 0 to [786] 122mm Howitzer, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

102.[112] 150mm Howitzer, symbol changed from [108] 150mm Field Gun to [109] 75mm Field Gun.

103.[114] Fallschirmjager Squad, name changed from Fallschirmjager Squad to Fallschirmjager Squad 39, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

104.[115] Fallschirmjager Squad, name changed from Fallschirmjager Squad to Fallschirmjager Squad 43, last month changed from 10 to 11, max import changed from 0 to ALL, import from changed from 0 to [114] Fallschirmjager Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, initial build number changed from 0 to 83.

105.[116] Fallschirmjager Squad, name changed from Fallschirmjager Squad to Fallschirmjager Squad 44, max import changed from 0 to ALL, import from changed from 0 to [115] Fallschirmjager Squad, import cost changed from 0 to 1, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 83.

106.[117] Möbelwagen, scrap policy changed from DEFAULT (1 YEAR) to NONE.

107.[118] Cavalry Squad (-), build cost changed from 64 to 38, initial build number changed from 0 to 29, turn build limit changed from NONE to 30 PER TURN.

108.[119] 240mm Howitzer, first month changed from 0 to 1.

109.[121] 355mm Howitzer, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [108] 150mm Field Gun to 0, first month changed from 0 to 1, fuel use changed from 0 to 66, build flags changed from NONE to NO AUTO-BUILD.

110.[122] 305mm Howitzer, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [108] 150mm Field Gun to [121] 355mm Howitzer, first month changed from 0 to 1, fuel use changed from 0 to 66, build flags changed from NONE to NO AUTO-BUILD.

111.[124] 37mm Anti-aircraft Gun, last year changed from 1945 to 1944, last month changed from 9 to 3, upgrade changed from 0 to 450, scrap policy changed

from DEFAULT (1 YEAR) to NONE.

112.[125] Panzer IVj, first month changed from 7 to 3, build limit changed from 15 to 9.

113.[127] SdKfz-6/2 SP Flak, upgrade changed from 0 to [210] SdKfz-7/2 SP Flak, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

114.[130] Karl 600mm Siege Mortar, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [108] 150mm Field Gun to [121] 355mm Howitzer, first month changed from 0 to 1, fuel use changed from 0 to 66, build flags changed from NONE to NO AUTO-BUILD.

115.[131] 240mm Siege Gun, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [108] 150mm Field Gun to [121] 355mm Howitzer, first month changed from 0 to 1, fuel use changed from 0 to 66, build flags changed from NONE to NO AUTO-BUILD.

116.[134] FT-17, name changed from FT-17 to FT-17(F), build cost changed from 9999 to 73, build flags changed from NONE to NO AUTO-BUILD.

117.[135] T-28 M1932, name changed from T-28 M1932 to T-28 M1932(F), supply use changed from 1218 to 1215, build cost changed from 9999 to 353, max import changed from 0 to ALL, import from changed from 0 to [385] T-28 M1932, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

118.[136] T-26(F), name changed from T-26(F) to T-26 M1933(F), supply use changed from 485 to 484, build cost changed from 9999 to 121, max import changed from 0 to ALL, import from changed from 0 to [382] T-26 M1933, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

119.[137] BT-7(F) (FI Light Tank 1/37-12/44 -> [136] T-26 M1933(F)), name changed from BT-7(F) to BT-7 M1937(F), upgrade changed from [136] T-26 M1933(F) to 0, supply use changed from 824 to 822, build cost changed from 9999 to 199, max import changed from 0 to ALL, import from changed from 0 to [735] BT-7 M1937, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

120.[138] T-34 M1940, name changed from T-34 M1940 to T-34 M1940(F), supply use changed from 1461 to 1189, build cost changed from 9999 to 339, max import changed from 0 to ALL, import from changed from 0 to [744] T-34 M1940, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

121.[139] T-28 M1940, name changed from T-28 M1940 to T-28 M1940(F), type changed from Heavy Tank to Medium Tank, fuel use changed from 75 to 91, supply use changed from 1463 to 1201, build cost changed from 9999 to 399, max import changed from 0 to ALL, import from changed from 0 to [753] T-28 M1940, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

122.[140] Stug IIIg(F), first year changed from 1942 to 1943, last year changed from 1945 to 1944, last month changed from 9 to 8, first month changed from 12 to 7, supply use changed from 891 to 909, weapon 1 changed from 0 to [234] 7.62mm DT

AAMG, weapon 1 number changed from 0 to 1, weapon 1 ammo changed from 0 to 600, weapon 3 ammo changed from 470 to 0, weapon 1 face changed from FWD to SM, scrap policy changed from DEFAULT (1 YEAR) to NONE.

123.[141] Ski Jager Squad, initial build number changed from 0 to 55.

124.[142] Ski Sturm Squad, initial build number changed from 0 to 50.

125.[145] 75mm Anti-tank Gun, weapon 1 number changed from 6 to 8, initial build number changed from 0 to 17.

126.[148] 120mm Mortar, max import changed from 0 to ALL, import from changed from 0 to [789] 120mm Mortar, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, turn build % changed from DEFAULT to 41%.

127.[150] 7.62mm Machine Gun, first year changed from 1944 to 1943, build cost changed from 9999 to 3, max import changed from 0 to ALL, import from changed from 0 to [791] 7.62mm Machine Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

128.[151] Rifle Squad, name changed from Rifle Squad to Rifle Squad 44, max import changed from 0 to ALL, import from changed from 0 to [152] Rifle Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 55.

129.[152] Rifle Squad, name changed from Rifle Squad to Rifle Squad 39, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

130.[156] Panzerschreck, initial build number changed from 0 to 50.

131.[158] 75mm Infantry Gun, symbol changed from [74] 75mm Infantry Gun to 0, max import changed from 0 to ALL, import from changed from 0 to [784] 76mm Infantry Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, initial build number changed from 0 to 45.

132.[159] 105mm Howitzer, symbol changed from [147] 81mm Mortar to 0.

133.[160] 122mm Howitzer, symbol changed from [147] 81mm Mortar to [159] 105mm Howitzer, first year changed from 1940 to 1939, first month changed from 1 to 12, upgrade changed from 0 to [159] 105mm Howitzer, build cost changed from 9999 to 60, max import changed from 0 to ALL, import from changed from 0 to [786] 122mm Howitzer, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

134.[161] Cavalry Squad, build cost changed from 58 to 35, turn build limit changed from NONE to 8 PER TURN.

135.[162] 75mm Anti-aircraft Gun, max import changed from 0 to ALL, import from changed from 0 to [811] 76mm Anti-aircraft Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%.

136.[164] 150mm Howitzer, symbol changed from [147] 81mm Mortar to [159] 105mm Howitzer, first year changed from 1939 to 1938, build flags changed from NONE to NO AUTO-BUILD.

137.[165] 152mm Howitzer, symbol changed from [147] 81mm Mortar to 0, first month changed from 0 to 12, upgrade changed from 0 to [223] 155mm Howitzer, build cost changed from 9999 to 62, max import changed from 0 to ALL, import from changed from 0 to [809] 152mm Howitzer, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags

changed from NONE to NO AUTO-BUILD.

138.[166] Panzer IVj(F), last year changed from 1945 to 1944, last month changed from 9 to 8, scrap policy changed from DEFAULT (1 YEAR) to NONE.

139.[167] 45mm Anti-tank Gun, first year changed from 1940 to 1939, last year changed from 1944 to 1945, last month changed from 12 to 9, first month changed from 1 to 12, upgrade changed from 0 to [168] 50mm Anti-tank Gun, build cost changed from 9999 to 16, max import changed from 0 to ALL, import from changed from 0 to [780] 45mm Anti-tank Gun, weapon 0 changed from [322] 45mm M32/34 Gun to [321] 45mm M37/38 Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

140.[168] 50mm Anti-tank Gun, initial build number changed from 0 to 26.

141.[169] 76mm Field Gun, symbol changed from [147] 81mm Mortar to [159] 105mm Howitzer, first year changed from 1940 to 1939, first month changed from 1 to 12, build cost changed from 9999 to 41, max import changed from 0 to ALL, import from changed from 0 to [785] 76mm Field Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

142.[171] 210mm Nebelwerfer, initial build number changed from 0 to 55.

143.[172] 280/320mm Nebelwerfer, last month changed from 12 to 6, upgrade changed from 0 to [173] 300mm Nebelwerfer, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

144.[173] 300mm Nebelwerfer, max import changed from 0 to ALL, import from changed from 0 to [172] 280/320mm Nebelwerfer, import cost changed from 0 to 5, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, initial build number changed from 0 to 43.

145.[174] SdKfz-4 Panzerwerfer, type changed from Rocket to SP Rocket Launcher, scrap policy changed from DEFAULT (1 YEAR) to NONE.

146.[175] StulG33B, symbol changed from [27] Sturmpanzer IV to 0.

147.[176] BA-10 Armored Car, name changed from BA-10 Armored Car to BA-10(F) Armored Car, symbol changed from [774] BA-10 Armored Car to 0, first year changed from 1944 to 1939, first month changed from 1 to 12, max import changed from 0 to ALL, import from changed from 0 to [774] BA-10 Armored Car, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD.

148.[177] CV-33, upgrade changed from 0 to [178] L6/40, weapon 0 changed from 0 to [274] 8mm Twin Breda BMG, weapon 3 changed from [274] 8mm Twin Breda BMG to 0, weapon 0 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 0 to 2000, weapon 3 ammo changed from 2000 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

149.[178] L6/40, upgrade changed from [183] Semovente L40 da 47 to 0, factory upgrade changed from 0 to [183] Semovente L40 da 47.

150.[179] M-11/39, factory upgrade changed from 0 to [180] M-13/40, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

151.[180] M-13/40, speed changed from 11 to 20, weapon 0 rate of fire changed from -8 to -5, factory upgrade changed from 0 to [181] M-15/42.

152.[183] Semovente L40 da 47, factory upgrade changed from 0 to [188] Semovente M42 da 75, update TOE changed from NO to YES.

153.[184] Semovente M40 da 75, factory upgrade changed from 0 to [185] Semovente M43 da 105, update TOE changed from NO to YES.

154.[186] Semovente M41M da 90, scrap policy changed from DEFAULT (1 YEAR) to NONE.

155.[187] Autoblinda Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

156.[189] 75mm Anti-tank Gun, initial build number changed from 0 to 19.

157.[190] 20mm Anti-tank Gun, symbol changed from [197] 8mm Machine Gun to [189] 75mm Anti-tank Gun.

158.[191] 37mm Anti-tank Gun, build flags changed from NONE to NO AUTO-BUILD.

159.[193] 20mm Anti-aircraft Gun, weapon 0 changed from [242] 20mm Oerlikon AA Gun to 630.

160.[202] Cavalry Squad, build cost changed from 69 to 41, turn build limit changed from NONE to 10 PER TURN.

161.[203] Motorcycle Squad, symbol changed from [89] Motorcycle Squad to 0, turn build limit changed from NONE to 11 PER TURN.

162.[204] 75mm Field Gun, symbol changed from [195] 65mm Infantry Gun to [109] 75mm Field Gun.

163.[205] 100mm Howitzer, symbol changed from [195] 65mm Infantry Gun to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

164.[206] 105mm Howitzer, symbol changed from [195] 65mm Infantry Gun to [205] 100mm Howitzer.

165.[207] 149mm Howitzer, symbol changed from [195] 65mm Infantry Gun to [205] 100mm Howitzer.

166.[208] 210mm Howitzer, symbol changed from [195] 65mm Infantry Gun to 0, photo changed from [207] 149mm Howitzer to 0.

167.[209] SdKfz-7/1 SP Flak, symbol changed from [48] SdKfz-10/4 SP Flak to [127] SdKfz-6/2 SP Flak, last year changed from 1944 to 1945, last month changed from 10 to 9, expansion rate changed from 0 to 1, weapon 0 changed from [126] 20mm Quad Flak38 AA Gun to [244] 20mm Quad Flak38 AA Gun.

168.[210] SdKfz-7/2 SP Flak, last year changed from 1945 to 1944, last month changed from 1 to 2, upgrade changed from 0 to 452, scrap policy changed from DEFAULT (1 YEAR) to NONE.

169.[211] CV-33 Flame Tank, upgrade changed from 0 to [212] L6/40 Flame Tank, weapon 0 changed from 0 to [131] Flamethrower, weapon 3 changed from [131] Flamethrower to 0, weapon 0 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 0 to 100, weapon 3 ammo changed from 100 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

170.[216] Panzerjager 38(t)H, name changed from Panzerjager 38(t)H to Panzerjager 38 H, reliability changed from 25 to 15, build limit changed from 24 to 14, max import changed from 0 to ALL, import from changed from 0 to [15] Panzer 38(t)E, weapon 1 changed from 0 to [269] 7.92mm MG37 BMG, weapon 3 changed from [269] 7.92mm MG37 BMG to 0, weapon 1 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 1 ammo changed from 0 to 600, weapon 3 ammo changed from 600 to 0, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 3%, factory upgrade changed from 0 to [36] Marder III, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

171.[217] Panzer 38(t) Aufklärer, name changed from Panzer 38(t) Aufklärer to Aufklärungspanzer 38, reliability changed from 25 to 15, upgrade changed from [39] Jagdpanzer 38 to 0, factory upgrade changed from 0 to [39] Jagdpanzer 38(t) Hetzer, scrap policy changed from DEFAULT (1 YEAR) to NONE.

172.[218] sIG33 (SdKfz-138), name changed from sIG33 (SdKfz-138) to sIG33 Grille H, symbol changed from [53] sIG33 Grille K to 0, last month changed from 3 to 6, reliability changed from 25 to 15, build limit changed from 12 to 6, photo changed from [53] sIG33 Grille K to 0, factory upgrade changed from 0 to [53] sIG33 Grille, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

173.[219] Panzer IIIj L/42, name changed from Panzer IIIj L/42 to Panzer IIIj, symbol changed from [8] Panzer IIIh to 0, last month changed from 6 to 4, front armor changed from 49 to 52, build limit changed from 13 to 8, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1200, weapon 3 ammo changed from 1200 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

174.[220] SdKfz-251/2 Mortar Carrier, max import changed from 0 to ALL, import from changed from 0 to [64] SdKfz-251/2 Mortar Carrier, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%.

175.[221] Panzer IVg L/48, name changed from Panzer IVg L/48 to Panzer IVg '1943', symbol changed from [20] Panzer IVg to 0, first year changed from 1943 to 1942, last year changed from 1944 to 1943, last month changed from 1 to 3, first month changed from 2 to 11, build limit changed from 11 to 12, max import changed from 0 to ALL, import from changed from 0 to [20] Panzer IVg L/43, weapon 0 changed from [339] 75mm KwK40 L/48 Gun to [337] 75mm KwK40 L/43 Gun, weapon 2 changed from 0 to [265] 7.92mm MG34 BMG, weapon 3 changed from [265] 7.92mm MG34 BMG to 0, weapon 2 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 2 ammo changed from 0 to 1500, weapon 3 ammo changed from 1500 to 0, weapon 0 accuracy changed from 350 to 300, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 20%, factory upgrade changed from 0 to [21] Panzer IVh, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

176.[223] 155mm Howitzer, symbol changed from [147] 81mm Mortar to [165] 152mm Howitzer, first month changed from 0 to 1, build cost changed from 9999 to 64, build flags changed from NONE to NO AUTO-BUILD.

177.[224] 8in Mk 7 Howitzer, symbol changed from [147] 81mm Mortar to [165] 152mm Howitzer, first month changed from 0 to 1, build cost changed from 9999 to 96, build flags changed from NONE to NO AUTO-BUILD.

178.[225] OA vz.30 Armored Car, name changed from OA vz.30 Armored Car to OA vz.30(R) Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

179.[226] CKD-R1, factory upgrade changed from 0 to [228] CKD-R2.

180.[227] FT-17, name changed from FT-17 to FT-17(R), build cost changed from 9999 to 73, factory upgrade changed from 0 to [226] CKD-R1, build flags changed from NONE to NO AUTO-BUILD.

181.[228] CKD-R2 (RU Light Tank 1/39-9/45 -> [231] T-38E(R)), factory upgrade changed from 0 to [231] T-38(t)E.

182.[229] R-35, build cost changed from 9999 to 68, factory upgrade changed from 0 to [230] Vanatorul de care R-35, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD, update TOE changed from NO to YES.

183.[230] Vanatorul de care R-35, last month changed from 7 to 3, supply use changed from 212 to 140, build cost changed from 68 to 66, max import changed from 0 to ALL, import from changed from 0 to [229] R-35, weapon 1 changed from [255] 7.5mm Chatellerault Mle 31 CMG to 0, weapon 1 number changed from 1 to 0, weapon 1 ammo changed from 2400 to 0, weapon 1 face changed from TURRET to FWD, import cost changed from 0 to 15, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE.

184.[231] T-38(t)E, name changed from T-38(t)E to T-38E(R), last month changed from 12 to 7, reliability changed from 25 to 15, supply use changed from 135 to 216, weapon 0 ammo changed from 42 to 72, scrap policy changed from DEFAULT (1 YEAR) to NONE.

185.[232] T-3(n) (RU Medium Tank 10/42-11/42 -> [233] T-4(g)), factory upgrade changed from 0 to [233] T-4(g), scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

186.[233] T-4(g) (RU Medium Tank 12/42-12/43 -> [234] T-4(h)), import from changed from [20] Panzer IVg to [221] Panzer IVg L/48, factory upgrade changed from 0 to [234] T-4(h), scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

187.[234] T-4(h), last year changed from 1945 to 1944, last month changed from 9 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE.

188.[236] TA(g), last year changed from 1945 to 1944, last month changed from 9 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE.

189.[237] TACAM T-60, last month changed from 9 to 5, upgrade changed from 0 to [238] TACAM R-2, max import changed from 0 to ALL, import from changed from 0 to [740] T-60 M1941, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%, factory upgrade changed from 0 to [238] TACAM R-2, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

190.[238] TACAM R-2, last month changed from 5 to 3, max import changed from 0 to ALL, import from changed from 0 to [228] CKD-R2, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE.

191.[241] SdKfz-222(R) Armored Car, front armor changed from 10 to 18.

192.[243] 37mm Anti-tank Gun, upgrade changed from 0 to [245] 50mm Anti-tank Gun, turn build % changed from DEFAULT to 49%.

193.[244] 47mm Anti-tank Gun, weapon 0 changed from [324] 47mm 47/40 Gun to [323] 47mm 47/32 M35 Gun, weapon 0 accuracy changed from 250 to 100, turn build limit changed from NONE to 25 PER TURN.

194.[245] 50mm Anti-tank Gun, last year changed from 1944 to 1945, last month changed from 12 to 9, import from changed from 0 to [68] 50mm Anti-tank Gun, weapon 1 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import % changed from DEFAULT to 1%, initial build number changed from 0 to 26, turn build limit changed from NONE to 20 PER TURN.

195.[246] 75mm Anti-tank Gun, weapon 1 changed from [142] 6.5mm M1893

Rifle to [132] 7.92mm vz.24 Rifle, initial build number changed from 0 to 18, turn build limit changed from NONE to 15 PER TURN.

196.[249] 120mm Mortar, max import changed from 0 to ALL, import from changed from 0 to [789] 120mm Mortar, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, turn build % changed from DEFAULT to 41%.

197.[251] 7.92mm Machine Gun, last year changed from 1944 to 1945, last month changed from 12 to 9, import from changed from 0 to [79] 7.92mm Machine Gun, weapon 1 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import % changed from DEFAULT to 1%, initial build number changed from 0 to 125.

198.[252] 7.92mm Quad Anti-Aircraft MG, last year changed from 1944 to 1945, last month changed from 12 to 9, speed changed from 2 to 0, max import changed from 0 to ALL, import from changed from 0 to [814] 7.62mm Quad Anti-aircraft MG, weapon 1 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, initial build number changed from 0 to 50.

199.[253] Rifle Squad, name changed from Rifle Squad to Rifle Squad 44, last year changed from 1944 to 1945, last month changed from 12 to 9, import from changed from 0 to [82] Rifle Squad, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import % changed from DEFAULT to 1%, initial build number changed from 0 to 62.

200.[254] Rifle Squad, name changed from Rifle Squad to Rifle Squad 42, max import changed from 0 to ALL, import from changed from 0 to [255] Rifle Squad, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import cost changed from 0 to -4, minimum import changed from 0 to 5, import % changed from DEFAULT to 25%, initial build number changed from 0 to 71.

201.[255] Rifle Squad, name changed from Rifle Squad to Rifle Squad 39, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

202.[256] Assault Squad, symbol changed from [253] Rifle Squad 44 to 0, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle.

203.[257] Cavalry Squad, build cost changed from 57 to 34, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, turn build limit changed from NONE to 45 PER TURN.

204.[258] 37mm Anti-aircraft Gun, last year changed from 1944 to 1945, last month changed from 12 to 9, import from changed from 0 to [124] 37mm Anti-aircraft Gun, import % changed from DEFAULT to 1%.

205.[260] 14.5mm Anti-tank Rifle, build cost changed from 9999 to 1, max import changed from 0 to ALL, import from changed from 0 to [804] 14.5mm Anti-tank Rifle, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

206.[261] 7.92mm Anti-tank Rifle, last year changed from 1942 to 1943, last month changed from 12 to 6, import from changed from 0 to [91] 7.92mm Anti-tank Rifle, import % changed from DEFAULT to 1%, scrap policy changed from DEFAULT (1 YEAR) to NONE.

207.[262] 75mm Field Gun, symbol changed from [248] 81mm Mortar to 0, turn build limit changed from NONE to 10 PER TURN.

208.[263] 100mm Howitzer, symbol changed from [248] 81mm Mortar to [262] 75mm Field Gun, turn build limit changed from NONE to 10 PER TURN.

209.[264] 122mm Howitzer, symbol changed from [248] 81mm Mortar to [262] 75mm Field Gun, first year changed from 1944 to 1941, first month changed from 1 to 6, upgrade changed from 0 to [268] 105mm Howitzer, build cost changed from 9999 to 60, max import changed from 0 to ALL, import from changed from 0 to [786] 122mm Howitzer, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

210.[265] 13.2mm Anti-aircraft MG, speed changed from 2 to 4, weapon 1 ammo changed from 15 to 20.

211.[266] Motor Squad, name changed from Motor Squad to Motor Squad 44, last year changed from 1944 to 1945, last month changed from 12 to 9, import from changed from 0 to [96] Motorized Rifle Squad, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, import % changed from DEFAULT to 1%, initial build number changed from 0 to 55.

212.[267] Motor Squad, name changed from Motor Squad to Motor Squad 39, weapon 0 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle.

213.[268] 105mm Howitzer, symbol changed from [248] 81mm Mortar to [262] 75mm Field Gun, import from changed from 0 to [110] 105mm Howitzer, import % changed from DEFAULT to 1%, turn build limit changed from NONE to 10 PER TURN.

214.[269] 149mm Howitzer, symbol changed from [248] 81mm Mortar to [262] 75mm Field Gun, turn build limit changed from NONE to 10 PER TURN.

215.[271] 45mm Anti-tank Gun, first year changed from 1942 to 1941, first month changed from 1 to 6, upgrade changed from 0 to [245] 50mm Anti-tank Gun, build cost changed from 9999 to 16, max import changed from 0 to ALL, import from changed from 0 to [780] 45mm Anti-tank Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

216.[272] Labor Squad, weapon 1 changed from [176] Hand Grenade to 0.

217.[274] Hetzer(H), name changed from Hetzer(H) to Jagdpanzer 38(H), symbol changed from [39] Jagdpanzer 38 to 0, reliability changed from 25 to 20, first month changed from 4 to 8.

218.[276] 150mm Nebelwerfer, symbol changed from [113] 150mm Nebelwerfer to 0, first year changed from 1941 to 1943, first month changed from 6 to 1, supply use changed from 905 to 906, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, weapon 1 ammo changed from 15 to 20.

219.[277] CV-33, name changed from CV-33 to CV-33(H), weapon 0 changed from 0 to [274] 8mm Twin Breda BMG, weapon 3 changed from [274] 8mm Twin Breda BMG to 0, weapon 0 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 0 to 2000, weapon 3 ammo changed from 2000 to 0, factory upgrade changed from 0 to [278] Toldi II, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS, update TOE changed from NO to YES.

220.[278] Toldi II, factory upgrade changed from 0 to [303] Toldi IIa, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

221.[279] Turan-I, build limit changed from 2 to 1, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [280] Turan-II, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

222.[280] Turan-II, expansion rate changed from 0 to 1, scrap policy changed from DEFAULT (1 YEAR) to NONE.

223.[281] Panzer 38(t)E (HU Medium Tank 1/42-12/43 -> [283] Panzer IVf(H)), name changed from Panzer 38(t)E to T-38E(H), reliability changed from 25 to 15, men changed from 5 to 4, supply use changed from 135 to 216, weapon 0 ammo changed from 42 to 72, factory upgrade changed from 0 to [283] Panzer IVf(H), scrap policy changed from DEFAULT (1 YEAR) to NONE.

224.[282] Panzer IIIh (HU Medium Tank 10/42-12/43 -> [283] Panzer IVf(H)), name changed from Panzer IIIh to Panzer IIIh(H), factory upgrade changed from 0 to [283] Panzer IVf(H), scrap policy changed from DEFAULT (1 YEAR) to NONE.

225.[283] Panzer IVf(H) (HU Medium Tank 1/43-12/44 -> [284] Panzer IVh(H)), speed changed from 25 to 26, build cost changed from 292 to 278, factory upgrade changed from 0 to [284] Panzer IVh(H), scrap policy changed from DEFAULT (1 YEAR) to NONE.

226.[285] Tiger(H), max import changed from 12 to 0, import from changed from [25] Tiger to 0.

227.[286] Stug IIIg(H), last year changed from 1945 to 1944, last month changed from 9 to 10, first month changed from 1 to 6, scrap policy changed from DEFAULT (1 YEAR) to NONE.

228.[287] Nimrod, scrap policy changed from DEFAULT (1 YEAR) to NONE.

229.[288] 39M CSABA Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

230.[289] 37mm Anti-tank Gun, upgrade changed from 0 to [359] 40mm Anti-tank Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

231.[290] 47mm Anti-tank Gun, upgrade changed from 0 to [291] 75mm Anti-tank Gun, supply use changed from 206 to 228, weapon 0 changed from [324] 47mm 47/40 Gun to [323] 47mm 47/32 M35 Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

232.[291] 75mm Anti-tank Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, initial build number changed from 0 to 17.

233.[292] 40mm Anti-aircraft Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

234.[293] 50mm Mortar, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

235.[294] 81mm Mortar, symbol changed from [294] 81mm Mortar to 0, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

236.[295] 120mm Mortar, max import changed from 0 to ALL, import from changed from 0 to [789] 120mm Mortar, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, turn build % changed from DEFAULT to 41%.

237.[296] 8mm Machine Gun, last year changed from 1943 to 1945, last month changed from 12 to 9, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652.

238.[297] 7.92mm Machine Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, initial build number changed from 0 to 125.

239.[298] Rifle Squad, name changed from Rifle Squad to Rifle Squad 44, max import changed from 0 to ALL, import from changed from 0 to [299] Rifle Squad, weapon 0 changed from [141] 7.35mm M1938 Rifle to 652, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to

25%, initial build number changed from 0 to 62.

240.[299] Rifle Squad, name changed from Rifle Squad to Rifle Squad 39, last year changed from 1943 to 1944, last month changed from 12 to 1, weapon 0 changed from [141] 7.35mm M1938 Rifle to 652, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

241.[300] Combat Engineer Squad, weapon 0 changed from [141] 7.35mm M1938 Rifle to 652.

242.[301] Cavalry Squad, build cost changed from 57 to 34, weapon 0 changed from [141] 7.35mm M1938 Rifle to 652, turn build limit changed from NONE to 45 PER TURN.

243.[303] Toldi IIa, scrap policy changed from DEFAULT (1 YEAR) to NONE.

244.[304] 100mm Howitzer, symbol changed from [294] 81mm Mortar to 0, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

245.[305] 122mm Howitzer, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, first year changed from 1943 to 1941, first month changed from 7 to 6, upgrade changed from 0 to [311] 105mm Howitzer, supply use changed from 1553 to 1554, build cost changed from 9999 to 60, max import changed from 0 to ALL, import from changed from 0 to [786] 122mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654, weapon 1 ammo changed from 15 to 20, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

246.[306] 13.2mm Anti-aircraft MG, speed changed from 5 to 4, supply use changed from 112 to 114, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654, weapon 1 ammo changed from 0 to 20.

247.[308] 80mm Anti-Aircraft Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

248.[309] 149mm Howitzer, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

249.[310] 240mm Howitzer, symbol changed from [108] 150mm Field Gun to 0, first month changed from 0 to 1, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

250.[311] 105mm Howitzer, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

251.[312] 75mm Field Gun, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

252.[313] 75mm Howitzer, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

253.[314] Labor Squad, weapon 0 changed from [141] 7.35mm M1938 Rifle to 654, weapon 1 changed from [176] Hand Grenade to 0.

254.[315] Rifle Squad, name changed from Rifle Squad to Rifle Squad 43, max import changed from 0 to ALL, import from changed from 0 to [316] Rifle Squad, import cost changed from 0 to 3, minimum import changed from 0 to 5, import % changed from DEFAULT to 25%, initial build number changed from 0 to 27.

255.[316] Rifle Squad, name changed from Rifle Squad to Rifle Squad 39, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

256.[321] 45mm Anti-tank Gun, first year changed from 1943 to 1941, first month changed from 1 to 6, upgrade changed from 0 to [322] 50mm Anti-tank Gun, build cost changed from 9999 to 16, max import changed from 0 to ALL, import from

changed from 0 to [780] 45mm Anti-tank Gun, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

257.[322] 50mm Anti-tank Gun, initial build number changed from 0 to 13.

258.[323] 75mm Mountain Gun, symbol changed from [319] 81mm Mortar to 0.

259.[324] 80mm Field Gun, symbol changed from [319] 81mm Mortar to [323] 75mm Mountain Gun.

260.[325] 100mm Howitzer, symbol changed from [319] 81mm Mortar to [323] 75mm Mountain Gun.

261.[326] 100mm Howitzer, symbol changed from [319] 81mm Mortar to [323] 75mm Mountain Gun.

262.[327] 105mm Field Gun, symbol changed from [319] 81mm Mortar to [323] 75mm Mountain Gun.

263.[328] 149mm Howitzer, symbol changed from [319] 81mm Mortar to [323] 75mm Mountain Gun.

264.[331] OA vz.30 Armored Car, name changed from OA vz.30 Armored Car to OA vz.30(S) Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE.

265.[332] LT vz.35, factory upgrade changed from 0 to [333] LT-38.

266.[333] LT-38, reliability changed from 25 to 15, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

267.[334] LT-40 - MG, reliability changed from 25 to 15, weapon 0 changed from 0 to [266] 7.92mm vz.37 CMG, weapon 1 changed from [266] 7.92mm vz.37 CMG to [268] 7.92mm vz.37 BMG, weapon 3 changed from [268] 7.92mm vz.37 BMG to 0, weapon 0 number changed from 0 to 1, weapon 3 number changed from 1 to 0, weapon 0 ammo changed from 0 to 2000, weapon 1 ammo changed from 2000 to 1000, weapon 3 ammo changed from 1000 to 0, weapon 3 rate of fire changed from -20 to 0, weapon 1 face changed from TURRET to FWD, factory upgrade changed from 0 to [335] LT-40, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

268.[335] LT-40, last year changed from 1942 to 1941, last month changed from 4 to 12, reliability changed from 25 to 15, max import changed from 0 to ALL, import from changed from 0 to [334] LT-40 - MG, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 40%, scrap policy changed from DEFAULT (1 YEAR) to 3 YEARS.

269.[336] Marder III(S), symbol changed from [36] Marder III to 0, reliability changed from 25 to 15, front armor changed from 13 to 21.

270.[338] Theodore 240mm Gun, name changed from Theodore 240mm Gun to Theodor 240mm Gun, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [108] 150mm Field Gun to [121] 355mm Howitzer, first month changed from 0 to 1, fuel use changed from 0 to 66, build flags changed from NONE to NO AUTO-BUILD.

271.[353] Toldi I, factory upgrade changed from 0 to [278] Toldi II, scrap policy changed from DEFAULT (1 YEAR) to NONE.

272.[354] Motorcycle Squad, symbol changed from [89] Motorcycle Squad to 0, weapon 0 changed from [141] 7.35mm M1938 Rifle to 652, turn build limit changed from NONE to 11 PER TURN.

273.[355] 80mm Field Gun, symbol changed from [294] 81mm Mortar to [304] 100mm Howitzer, weapon 1 changed from [141] 7.35mm M1938 Rifle to 654.

274.[356] 45mm Anti-tank Gun, first year changed from 1942 to 1941, last year

changed from 1945 to 1942, last month changed from 9 to 12, first month changed from 1 to 6, upgrade changed from 0 to [69] 75mm Anti-tank Gun, supply use changed from 306 to 307, build cost changed from 9999 to 16, max import changed from 0 to ALL, import from changed from 0 to [780] 45mm Anti-tank Gun, weapon 1 ammo changed from 30 to 35, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD.

275.[357] 47mm Anti-tank Gun, last year changed from 1945 to 1942, last month changed from 9 to 12, supply use changed from 319 to 320, build cost changed from 9999 to 18, weapon 1 ammo changed from 30 to 35, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD.

276.[358] 50mm Anti-tank Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, initial build number changed from 0 to 26.

277.[359] 40mm Anti-tank Gun, weapon 1 changed from [141] 7.35mm M1938 Rifle to 652, initial build number changed from 0 to 31.

278.[360] 75mm Anti-tank Gun, import from changed from 0 to [69] 75mm Anti-tank Gun, weapon 1 changed from [142] 6.5mm M1893 Rifle to [132] 7.92mm vz.24 Rifle, weapon 0 accuracy changed from 350 to 250, import % changed from DEFAULT to 1%, update TOE changed from NO to YES, initial build number changed from 0 to 17, turn build limit changed from NONE to 15 PER TURN.

279.[369] 76mm Field Gun, symbol changed from [74] 75mm Infantry Gun to [109] 75mm Field Gun, first year changed from 1942 to 1941, first month changed from 1 to 6, upgrade changed from 0 to [109] 75mm Field Gun, supply use changed from 1126 to 1127, build cost changed from 9999 to 41, max import changed from 0 to ALL, import from changed from 0 to [785] 76mm Field Gun, weapon 1 ammo changed from 30 to 35, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

280.[370] 122mm Field Gun, symbol changed from [74] 75mm Infantry Gun to [109] 75mm Field Gun, first year changed from 1942 to 1941, first month changed from 1 to 6, upgrade changed from 0 to [105] 105mm Field Gun, supply use changed from 1598 to 1599, build cost changed from 9999 to 75, max import changed from 0 to ALL, import from changed from 0 to [824] 122mm Field Gun, weapon 1 ammo changed from 30 to 35, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, build flags changed from NONE to NO AUTO-BUILD.

281.[381] T-26 M1931, upgrade changed from 0 to [382] T-26 M1933, factory upgrade changed from 0 to [382] T-26 M1933, scrap policy changed from DEFAULT (1 YEAR) to 8 YEARS.

282.[382] T-26 M1933, upgrade changed from 0 to [737] T-26 M1937, factory upgrade changed from 0 to [737] T-26 M1937, scrap policy changed from DEFAULT (1 YEAR) to 5 YEARS.

283.[383] BT-2 M1932, upgrade changed from 0 to [734] BT-5 M1934, factory upgrade changed from 0 to [734] BT-5 M1934, scrap policy changed from DEFAULT (1 YEAR) to 9 YEARS.

284.[384] BT-2 M1931, upgrade changed from 0 to [734] BT-5 M1934, factory upgrade changed from 0 to [734] BT-5 M1934, scrap policy changed from DEFAULT (1 YEAR) to 10 YEARS.

285.[385] T-28 M1932, upgrade changed from 0 to [753] T-28 M1940, factory upgrade changed from 0 to [753] T-28 M1940, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

286.[386] BT-7M M1939, upgrade changed from 0 to [740] T-60 M1941.

287.[662] Matilda II, build cost changed from 0 to 275, build flags changed from NONE to LEND-LEASE.

288.[726] SU-57, build cost changed from 0 to 105, build flags changed from NONE to LEND-LEASE.

289.[727] 76mm Field Gun, name changed from 76mm Field Gun to 76mm Field Gun ZiS, symbol changed from [784] 76mm Infantry Gun to 0, max import changed from 0 to ALL, import from changed from 0 to [785] 76mm Field Gun, import cost changed from 0 to 5, minimum import changed from 0 to 5, import % changed from DEFAULT to 5%, initial build number changed from 0 to 25.

290.[729] 107mm Mortar, symbol changed from [784] 76mm Infantry Gun to 0, weapon 1 changed from [139] 7.62mm Mosin-Nagant Rifle to [157] 7.62mm M1938 Carbine, initial build number changed from 0 to 142.

291.[730] Flamethrower Squad, type changed from Engineer Squad to Flamethrower, initial build number changed from 0 to 100.

292.[731] SU-76M, weapon 0 changed from [368] 76.2mm ZiS-5 Gun to [352] 76.2mm ZiS-3 Gun.

293.[732] Partisan Squad, build flags changed from NONE to NO AUTO-BUILD.

294.[734] BT-5 M1934, upgrade changed from 0 to [735] BT-7 M1937, factory upgrade changed from 0 to [735] BT-7 M1937, scrap policy changed from DEFAULT (1 YEAR) to 6 YEARS.

295.[735] BT-7 M1937, upgrade changed from 0 to [386] BT-7M M1939, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

296.[736] BT-Artillery, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

297.[737] T-26 M1937, last year changed from 1940 to 1941, last month changed from 12 to 2, upgrade changed from 0 to [741] T-70 M1942, factory upgrade changed from 0 to [826] T-50 M1941.

298.[738] T-38 M1937, upgrade changed from 0 to [739] T-40 M1941, scrap policy changed from DEFAULT (1 YEAR) to 3 YEARS.

299.[739] T-40 M1941, factory upgrade changed from 0 to [740] T-60 M1941, update TOE changed from NO to YES.

300.[740] T-60 M1941, last month changed from 10 to 9, build limit changed from 36 to 50, upgrade changed from [765] SU-76 to [741] T-70 M1942, expansion rate changed from 3 to 1, weapon 0 rate of fire changed from -20 to -40, factory upgrade changed from 0 to [765] SU-76, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

301.[741] T-70 M1942, build limit changed from 50 to 30.

302.[742] M3 Stuart, fuel use changed from 55 to 46, build cost changed from 0 to 162, weapon 0 rate of fire changed from -5 to -8, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS, build flags changed from NONE to LEND-LEASE.

303.[743] OT-130/133, upgrade changed from 0 to [748] OT-34, factory upgrade changed from 0 to [748] OT-34, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

304.[744] T-34 M1940, last month changed from 12 to 1, factory upgrade changed from 0 to [745] T-34 M1941.

305.[745] T-34 M1941, last month changed from 12 to 7, build limit changed from 75 to 70, fuel use changed from 41 to 42, factory upgrade changed from 0 to [746] T-34 M1942, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

306.[746] T-34 M1942, last month changed from 12 to 1, build limit changed from 62 to 50, fuel use changed from 44 to 45, max import changed from 0 to ALL, import from changed from 0 to 840, expansion rate changed from 1 to 2, minimum import changed from 0 to 1, import % changed from DEFAULT to 100%, factory upgrade changed from 0 to [747] T-34/85 M1944, scrap policy changed from DEFAULT (1 YEAR) to NONE.

307.[748] OT-34, factory upgrade changed from 0 to [728] OT-34/85 M1944, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

308.[749] M3 Lee, upgrade changed from 0 to [751] M4A2 Sherman, fuel use changed from 104 to 88, build cost changed from 0 to 297, build flags changed from NONE to LEND-LEASE.

309.[750] KV-1s M1942, last month changed from 8 to 3, build limit changed from 11 to 20, upgrade changed from [763] IS-1 M1943 to [829] IS-2 M1943, fuel use changed from 71 to 80, factory upgrade changed from 0 to [763] IS-1 M1943, update TOE changed from NO to YES.

310.[751] M4A2 Sherman (SU Medium Tank 11/43-12/43 -> [752] M4A2(76)W Sherman), last year changed from 1943 to 1944, last month changed from 12 to 7, build limit changed from 17 to 25, fuel use changed from 123 to 69, build cost changed from 0 to 334, expansion rate changed from 1 to 2, factory upgrade changed from 0 to [752] M4A2(76)W Sherman, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to LEND-LEASE, update TOE changed from NO to YES.

311.[752] M4A2(76)W Sherman, first month changed from 1 to 8, build limit changed from 12 to 22, fuel use changed from 123 to 75, build cost changed from 0 to 334, build flags changed from NONE to LEND-LEASE.

312.[753] T-28 M1940, factory upgrade changed from 0 to [745] T-34 M1941.

313.[754] T-35 M1935, upgrade changed from 0 to [756] KV-1 M1941, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

314.[755] KV-1 M1940, last month changed from 12 to 4, fuel use changed from 71 to 81, factory upgrade changed from 0 to [756] KV-1 M1941.

315.[756] KV-1 M1941, last month changed from 12 to 7, build limit changed from 32 to 28, fuel use changed from 71 to 87, factory upgrade changed from 0 to [750] KV-1s M1942, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

316.[757] KV-85, speed changed from 26 to 23, men changed from 5 to 4, upgrade changed from 0 to [829] IS-2 M1943, fuel use changed from 65 to 85, supply use changed from 1516 to 1485, weapon 3 changed from [273] 7.62mm DT BMG to 0, weapon 3 number changed from 1 to 0, weapon 3 ammo changed from 1000 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

317.[758] KV-2 M1940, last month changed from 12 to 4, fuel use changed from 71 to 100, factory upgrade changed from 0 to [756] KV-1 M1941, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

318.[759] IS-2 M1944, factory upgrade changed from 0 to [760] IS-3 M1945, update TOE changed from NO to YES.

319.[761] Valentine III, build cost changed from 0 to 176, factory upgrade changed from 0 to [828] Valentine IX, build flags changed from NONE to LEND-

LEASE, update TOE changed from NO to YES.

320.[762] Churchill IV, build cost changed from 0 to 424, build flags changed from NONE to LEND-LEASE.

321.[763] IS-1 M1943, symbol changed from [757] KV-85 to 0, factory upgrade changed from 0 to [829] IS-2 M1943, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

322.[764] ZiS-30, upgrade changed from 0 to [765] SU-76, factory upgrade changed from 0 to [741] T-70 M1942, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS.

323.[765] SU-76, last month changed from 12 to 4, weapon 0 changed from [368] 76.2mm ZiS-5 Gun to [352] 76.2mm ZiS-3 Gun, factory upgrade changed from 0 to [731] SU-76M, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

324.[766] SU-85, type changed from Tank Destroyer to Assault Gun, fuel use changed from 44 to 47, factory upgrade changed from 0 to [830] SU-85M, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

325.[767] SU-100, type changed from Tank Destroyer to Assault Gun.

326.[768] SU-122, first year changed from 1942 to 1943, first month changed from 12 to 1, build limit changed from 20 to 22, factory upgrade changed from 0 to [766] SU-85, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

327.[770] SU-152, last month changed from 12 to 11, build limit changed from 18 to 21, factory upgrade changed from 0 to [771] ISU-152, update TOE changed from NO to YES.

328.[772] GAZ-AAMG, factory upgrade changed from 0 to [773] GAZ-AA-37, scrap policy changed from DEFAULT (1 YEAR) to NONE.

329.[773] GAZ-AA-37, max import changed from 0 to ALL, import from changed from 0 to [772] GAZ-AAMG, import cost changed from 0 to 15, minimum import changed from 0 to 1, import % changed from DEFAULT to 2%.

330.[774] BA-10 Armored Car, upgrade changed from 0 to [775] BA-64 Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

331.[775] BA-64 Armored Car, build limit changed from 30 to 25.

332.[776] Reconnaissance Squad, build cost changed from 85 to 17, initial build number changed from 0 to 11.

333.[779] BA-20 Armored Car, upgrade changed from 0 to [775] BA-64 Armored Car, factory upgrade changed from 0 to [775] BA-64 Armored Car, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

334.[780] 45mm Anti-tank Gun, name changed from 45mm Anti-tank Gun to 45mm Anti-tank Gun M37, upgrade changed from [781] 45mm Anti-tank Gun M42 to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

335.[781] 45mm Anti-tank Gun, name changed from 45mm Anti-tank Gun to 45mm Anti-tank Gun M42, initial build number changed from 0 to 62, turn build limit changed from NONE to 100 PER TURN.

336.[782] 57mm Anti-tank Gun, initial build number changed from 0 to 52, turn build limit changed from NONE to 100 PER TURN.

337.[783] 76mm Anti-tank Gun, name changed from 76mm Anti-tank Gun to 76mm Anti-tank Gun ZiS, max import changed from 0 to ALL, import from changed

from 0 to [817] 76mm Anti-tank Gun, import cost changed from 0 to 5, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, initial build number changed from 0 to 38.

338.[784] 76mm Infantry Gun, symbol changed from 0 to [729] 107mm Mortar.

339.[785] 76mm Field Gun, name changed from 76mm Field Gun to 76mm Field Gun F-22, symbol changed from [784] 76mm Infantry Gun to [727] 76mm Field Gun, upgrade changed from [727] 76mm Field Gun ZiS to 0, scrap policy changed from DEFAULT (1 YEAR) to NONE.

340.[786] 122mm Howitzer, symbol changed from [784] 76mm Infantry Gun to [727] 76mm Field Gun.

341.[788] 82mm Mortar, symbol changed from [784] 76mm Infantry Gun to [729] 107mm Mortar.

342.[789] 120mm Mortar, symbol changed from [784] 76mm Infantry Gun to [729] 107mm Mortar.

343.[790] 7.62mm Machine Gun, upgrade changed from 0 to [791] 7.62mm Machine Gun.

344.[791] 7.62mm Machine Gun, initial build number changed from 0 to 333.

345.[793] Rifle Squad, name changed from Rifle Squad to Rifle Squad 41, last month changed from 6 to 7, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

346.[794] Rifle Squad (-), last month changed from 12 to 6, initial build number changed from 0 to 125.

347.[795] Rifle Squad, name changed from Rifle Squad to Rifle Squad 42, last month changed from 8 to 9, max import changed from 0 to ALL, import from changed from 0 to [793] Rifle Squad, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, initial build number changed from 0 to 142.

348.[796] Rifle Squad (+), max import changed from 0 to ALL, import from changed from 0 to [794] Rifle Squad, import cost changed from 0 to 1, import % changed from DEFAULT to 10%, initial build number changed from 0 to 125.

349.[797] Rifle Squad, name changed from Rifle Squad to Rifle Squad 43, max import changed from 0 to ALL, import from changed from 0 to [795] Rifle Squad, import cost changed from 0 to 2, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 125.

350.[798] Submachine Gun Squad, initial build number changed from 0 to 111.

351.[799] Sapper Squad, name changed from Sapper Squad to Sapper Squad 41, max import changed from 0 to ALL, import from changed from 0 to [800] Sapper Squad, import cost changed from 0 to 1, import % changed from DEFAULT to 10%.

352.[800] Sapper Squad, name changed from Sapper Squad to Sapper Squad 39.

353.[801] Cavalry Squad, last month changed from 6 to 7, build cost changed from 69 to 41, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES, turn build limit changed from NONE to 200 PER TURN.

354.[802] Cavalry Squad, name changed from Cavalry Squad to Cavalry Squad 41, build cost changed from 69 to 41, max import changed from 0 to ALL, import from changed from 0 to [801] Cavalry Squad, import cost changed from 0 to 1, minimum import changed from 0 to 5, import % changed from DEFAULT to 10%, initial build number changed from 0 to 30, turn build limit changed from NONE to 200 PER TURN.

355.[803] Cavalry Squad, name changed from Cavalry Squad to Cavalry Squad 43, upgrade changed from [803] Cavalry Squad 43 to 0, build cost changed from 70 to 42, initial build number changed from 0 to 30, turn build limit changed from NONE to 200 PER TURN.

356.[804] 14.5mm Anti-tank Rifle, initial build number changed from 0 to 1000.

357.[805] 50mm Mortar, weapon 1 changed from [139] 7.62mm Mosin-Nagant Rifle to [157] 7.62mm M1938 Carbine.

358.[807] 107mm Field Gun, symbol changed from [784] 76mm Infantry Gun to [780] 45mm Anti-tank Gun, upgrade changed from 0 to [820] 100mm Anti-tank Gun, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS, update TOE changed from NO to YES.

359.[809] 152mm Howitzer, symbol changed from [784] 76mm Infantry Gun to [727] 76mm Field Gun, last year changed from 1941 to 1945, last month changed from 7 to 9, scrap policy changed from DEFAULT (1 YEAR) to NONE, build flags changed from NONE to NO AUTO-BUILD.

360.[810] BM-13-16 Rocket Launcher, initial build number changed from 0 to 15.

361.[811] 76mm Anti-aircraft Gun, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS, update TOE changed from NO to YES.

362.[812] 85mm Anti-tank Gun, weapon 0 face changed from SM to FWD, scrap policy changed from DEFAULT (1 YEAR) to 2 YEARS, update TOE changed from NO to YES.

363.[813] Motorcycle Squad, turn build limit changed from NONE to 37 PER TURN.

364.[815] Submachine Gun Squad (+), initial build number changed from 0 to 100.

365.[816] BM-30-4 Rocket Launcher, initial build number changed from 0 to 20.

366.[817] 76mm Anti-tank Gun, name changed from 76mm Anti-tank Gun to 76mm Anti-tank Gun F-22, scrap policy changed from DEFAULT (1 YEAR) to NONE.

367.[819] 160mm Mortar, initial build number changed from 0 to 66.

368.[820] 100mm Anti-tank Gun, type changed from AT Gun to Heavy AT Gun, fuel use changed from 6 to 22, initial build number changed from 0 to 27.

369.[823] 280mm Siege Mortar, type changed from Heavy Artillery to Super Heavy Gun, symbol changed from [808] 152mm Gun-Howitzer to 0.

370.[824] 122mm Field Gun, type changed from Heavy Artillery to Artillery, symbol changed from [784] 76mm Infantry Gun to [727] 76mm Field Gun.

371.[825] BM-31-12 Rocket Launcher, initial build number changed from 0 to 11.

372.[826] T-50 M1941, upgrade changed from [746] T-34 M1942 to [741] T-70 M1942, factory upgrade changed from 0 to [746] T-34 M1942, scrap policy changed from DEFAULT (1 YEAR) to NONE, update TOE changed from NO to YES.

373.[827] 152mm Howitzer, symbol changed from [784] 76mm Infantry Gun to [727] 76mm Field Gun, initial build number changed from 0 to 16.

374.[828] Valentine IX, symbol changed from [761] Valentine III to 0, build cost changed from 0 to 187, build flags changed from NONE to LEND-LEASE.

375.[829] IS-2 M1943, symbol changed from [759] IS-2 M1944 to 0, max import changed from 0 to ALL, import from changed from 0 to [763] IS-1 M1943, import cost changed from 0 to 35, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [759] IS-2 M1944, update TOE changed from NO to YES.

376.[830] SU-85M, type changed from Tank Destroyer to Assault Gun, symbol

changed from [766] SU-85 to 0, fuel use changed from 53 to 50, factory upgrade changed from 0 to [767] SU-100, update TOE changed from NO to YES.

377.New: [348] Marder II - conversion from Pz II.

378.New: [350] Elefant - upgraded version of Ferdinand.

379.New: [390] Panzer B-2 740(f) - former French tank, for 102nd Flammpanzer Btl.

380.New: [391] Flammpanzer B-2(f) - rebuilt former French tank, for 102nd Flammpanz Btl.

381.New: [410] sIG33/2 Grille - Jagdpanzer 38 based SP Inf Gun.

382.New: [413] Panhard P204(f) Armored Car - former French armored car.

383.New: [421] SdKfz-251/21 SP Flak.

384.New: [450] 37mm Anti-aircraft Gun - 37mm Flak 43 with higher rate-of-fire.

385.New: [451] Stug III F/8 - summer/autumn 1942 production version.

386.New: [452] SdKfz-7/2 SP Flak - updated 44 version with Flak43.

387.New: [453] SdKfz-223 Armored Car - missing 42-44 armored car.

388.New: [454] SdKfz-222B Armored Car - 42-43 production version with more armor.

389.New: [455] SdKfz-232 Armored Car - 42-43 version of 231 with more armor.

390.New: [456] SdKfz-10/5 SP Flak - updated 10/4, also includes other vehicles with 20mm Flak previously not represented.

391.New: [840] T-34 M1943 - for Chelyabinsk production only, will be imported by standard T-34 M1942.

392.New: [841] M3A1 White Scout Car - about 3k received, but only ~2k used as recons (others as artillery tractor).

General aircraft changes

1.Sortie Fuel recalculations to .75kg/l for standard fuel and .84kg/l for Jet/Diesel fuel, proper conversion to pounds.

2.Sortie Ammo recalculations: guns use a specific value per gun, 8mm class 20, 13mm class 30, 15mm and higher use 50; fighter-bombers use 75% of bomb/rocket load for Sortie Ammo.

3.Maneuver ratings (of mostly fighter or fighter-bomber types) have been changed/increased to match Spitfire with their Bf 109 counterparts and to better match historic aircraft performances.

4.Separate Ju 188E production from Ju 88A-4, He 177 from He 111H-6, Me 410A from Bf 110G-2, He 219 from Do 217N.

5.Bf 109 ranges increased, based on british endurance tests with and without drop tank.

6.Several German aircraft have their two MG 81 defensive guns replaced by dual-barrel MG 81Z were suitable.

7.Most recons and night fighters had their bombs removed.

8.Finnish aircraft to be imported from Germany end 8/44 now, Romanian import versions 7/44.

9.Multiple minor performance changes to aircraft.

10.Some minor name changes.

11.Review of reliability settings, standard settings for known reliable engine setups (1x liquid-cooled: 10, 2x liquid-cooled: 15 (turbo +4), 4x liquid-cooled: 22, 1x air-cooled: 5 (turbo +2), 2x air-cooled: 8, 3x air-cooled: 12, 4x air-cooled: 16 (turbo

+4), 6x air-cooled: 20).

12.Deleted incomplete aircraft records 503-641.

Specific aircraft changes

1.[3] Ar 234B, name changed from Ar 234B to Ar 234B-2, climb changed from 1500 to 4000, endurance changed from 130 to 120, range changed from 910 to 840.

2.[5] Bf 109E-3, cruise speed changed from 300 to 286, endurance changed from 80 to 90, range changed from 400 to 429, maneuver changed from 34 to 33, sortie ammo changed from 102 to 120, sortie fuel changed from 660 to 661, last year changed from 0 to 1940, last month changed from 0 to 7, weapon 0 changed from [33] 20mm Cannon MG FF/M to [43] 20mm Cannon MG-FF, factory upgrade changed from 0 to [7] Bf 109E-7, change to modifier changed from 0 to -20.

3.[6] Bf 109E-4B, max speed changed from 339 to 357, cruise speed changed from 280 to 276, range changed from 373 to 368, first year changed from 1939 to 1940, maneuver changed from 34 to 33, first month changed from 9 to 3, sortie ammo changed from 652 to 532, sortie fuel changed from 660 to 661, max import changed from 0 to ALL, import from changed from 0 to [5] Bf 109E-3, last year changed from 0 to 1942, last month changed from 0 to 5, import cost changed from 0 to 5, minimum import changed from 0 to 1, import % changed from DEFAULT to 2%, factory upgrade changed from 0 to [40] FW 190A.

4.[7] Bf 109E-7, cruise speed changed from 290 to 286, endurance changed from 80 to 90, range changed from 531 to 605, maneuver changed from 34 to 33, sortie ammo changed from 102 to 120, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1940, last month changed from 0 to 12, factory upgrade changed from 0 to [8] Bf 109F-2.

5.[8] Bf 109F-2, cruise speed changed from 311 to 305, climb changed from 3154 to 3021, endurance changed from 75 to 85, range changed from 544 to 620, first year changed from 1940 to 1941, maneuver changed from 35 to 34, first month changed from 8 to 1, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1941, last month changed from 0 to 6, factory upgrade changed from 0 to [9] Bf 109F-4.

6.[9] Bf 109F-4, cruise speed changed from 317 to 316, endurance changed from 75 to 83, range changed from 554 to 632, maneuver changed from 35 to 34, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1942, last month changed from 0 to 4, factory upgrade changed from 0 to [11] Bf 109G-2.

7.[10] Bf 109G-14, cruise speed changed from 325 to 314, climb changed from 4000 to 3938, endurance changed from 70 to 81, range changed from 541 to 617, sortie ammo changed from 120 to 110, sortie fuel changed from 1229 to 1227.

8.[11] Bf 109G-2, max speed changed from 404 to 407, cruise speed changed from 315 to 316, climb changed from 3500 to 3300, endurance changed from 70 to 81, range changed from 525 to 621, maneuver changed from 34 to 35, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1943, last month changed from 0 to 2, factory upgrade changed from 0 to [12] Bf 109G-6.

9.[12] Bf 109G-6, cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, sortie ammo changed from 120 to 110, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1944, last month changed from 0 to 5, factory upgrade changed from 0 to [10] Bf 109G-14.

10.[13] Bf 109G-6/R2, name changed from Bf 109G-6/R2 to Bf 109G-8, cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, upgrade changed from 0 to 442, sortie ammo changed from 120 to 110, sortie fuel changed from 1155 to 1156, build cost changed from 453 to 438, last year changed from 0 to 1944, last month changed from 0 to 7.

11.[14] Bf 109G-6/U4N, name changed from Bf 109G-6/U4N to Bf 109G-6/N, max altitude changed from 36748 to 38061, max speed changed from 385 to 400, cruise speed changed from 320 to 314, climb changed from 3000 to 3400, endurance changed from 70 to 81, range changed from 533 to 617, maneuver changed from 30 to 35, sortie ammo changed from 229 to 110, sortie fuel changed from 1155 to 1156, build cost changed from 473 to 433, last year changed from 0 to 1944, last month changed from 0 to 3, weapon 0 changed from [45] 30mm Cannon MK108 to [32] 20mm Cannon MG151, weapon 1 changed from [32] 20mm Cannon MG151 to [24] 13mm MG 131, weapon 2 changed from [24] 13mm MG 131 to [77] 300 litre Drop Tank, weapon 3 changed from [77] 300 litre Drop Tank to 0, weapon 2 number changed from 2 to 1, weapon 3 number changed from 1 to 0, weapon 2 face changed from FWD to EXT, weapon 3 face changed from EXT to FWD.

12.[15] Bf 109K-4, cruise speed changed from 350 to 330, endurance changed from 65 to 73, range changed from 554 to 605, maneuver changed from 40 to 38, sortie ammo changed from 92 to 110, sortie fuel changed from 1229 to 1227.

13.[17] Bf 110C, max speed changed from 336 to 342, cruise speed changed from 298 to 283, endurance changed from 120 to 135, range changed from 596 to 636, maneuver changed from 25 to 28, sortie ammo changed from 269 to 200, sortie fuel changed from 2096 to 2100, last year changed from 0 to 1940, last month changed from 0 to 7, weapon 0 changed from [33] 20mm Cannon MG FF/M to [43] 20mm Cannon MG-FF, factory upgrade changed from 0 to [22] Bf 110E-2.

14.[18] Bf 110C-4B, cruise speed changed from 275 to 273, range changed from 550 to 546, maneuver changed from 25 to 28, sortie ammo changed from 1369 to 1025, sortie fuel changed from 2096 to 2100, last year changed from 0 to 1940, last month changed from 0 to 7, factory upgrade changed from 0 to [22] Bf 110E-2.

15.[19] Bf 110C-5, max speed changed from 342 to 354, cruise speed changed from 305 to 292, climb changed from 2100 to 2299, endurance changed from 120 to 135, range changed from 610 to 657, first year changed from 1939 to 1940, maneuver changed from 26 to 29, first month changed from 9 to 6, upgrade changed from 0 to 445, sortie ammo changed from 143 to 100, sortie fuel changed from 2096 to 2100, build limit changed from 0 to 3, last year changed from 0 to 1941, last month changed from 0 to 1, expansion rate changed from 0 to 1, factory upgrade changed from 0 to 445.

16.[20] Bf 110D-1/R2, max speed changed from 336 to 342, endurance changed from 120 to 135, range changed from 1375 to 1443, maneuver changed from 25 to 28, sortie ammo changed from 269 to 200, sortie fuel changed from 5065 to 5076, last year changed from 0 to 1941, last month changed from 0 to 3, factory upgrade changed from 0 to [22] Bf 110E-2.

17.[21] Bf 110E-1/U1, max speed changed from 336 to 351, cruise speed changed from 285 to 283, endurance changed from 120 to 135, range changed from 570 to 636, maneuver changed from 25 to 28, sortie ammo changed from 269 to 200, sortie fuel changed from 2096 to 2100, last year changed from 0 to 1942, last month changed from 0 to 1, factory upgrade changed from 0 to [23] Bf 110F-4a.

18.[22] Bf 110E-2, max speed changed from 350 to 351, cruise speed changed

from 280 to 273, endurance changed from 120 to 135, range changed from 560 to 614, first year changed from 1941 to 1940, maneuver changed from 25 to 28, first month changed from 4 to 8, upgrade changed from [24] Bf 110G-2 to 447, sortie ammo changed from 2469 to 1850, sortie fuel changed from 2096 to 2100, build limit changed from 5 to 3, max import changed from 0 to ALL, import from changed from 0 to [18] Bf 110C-4B, last year changed from 0 to 1941, last month changed from 0 to 12, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 2%, factory upgrade changed from 0 to 447.

19.[23] Bf 110F-4a, name changed from Bf 110F-4a to Bf 110F-4, max altitude changed from 32811 to 29530, symbol changed from 25 to 0, cruise speed changed from 264 to 266, endurance changed from 120 to 130, range changed from 792 to 842, maneuver changed from 24 to 28, sortie ammo changed from 269 to 200, sortie fuel changed from 3086 to 9092, last year changed from 0 to 1942, last month changed from 0 to 12, factory upgrade changed from 0 to [25] Bf 110G-4.

20.[24] Bf 110G-2, cruise speed changed from 285 to 282, endurance changed from 120 to 125, range changed from 570 to 587, maneuver changed from 25 to 29, first month changed from 10 to 12, sortie ammo changed from 2909 to 2400, sortie fuel changed from 2096 to 2100, build limit changed from 6 to 7, photo changed from [22] Bf 110E-2 to 0, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 2 number changed from 2 to 1.

21.[25] Bf 110G-4, max altitude changed from 32811 to 29530, max speed changed from 315 to 333, cruise speed changed from 270 to 280, endurance changed from 120 to 125, range changed from 810 to 863, maneuver changed from 24 to 28, sortie ammo changed from 269 to 220, sortie fuel changed from 3086 to 3092, last year changed from 0 to 1943, last month changed from 0 to 12, photo changed from [24] Bf 110G-2 to 0, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 3 changed from [79] 300 litre Drop Tank to [104] FuG 202, weapon 4 changed from [104] FuG 202 to [79] 300 litre Drop Tank, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 1, weapon 4 number changed from 1 to 2, weapon 3 face changed from EXT to INT, weapon 4 face changed from INT to EXT, factory upgrade changed from 0 to [26] Bf 110G-4/U8.

22.[26] Bf 110G-4/U8, name changed from Bf 110G-4/U8 to Bf 110G-4 '1944', max altitude changed from 34452 to 31171, max speed changed from 320 to 333, maneuver changed from 25 to 28, upgrade changed from 0 to 448, sortie ammo changed from 420 to 320, sortie fuel changed from 3086 to 3092, build cost changed from 873 to 823, build limit changed from 5 to 4, max import changed from 0 to ALL, import from changed from 0 to [25] Bf 110G-4, last year changed from 1945 to 1944, last month changed from 2 to 5, weapon 0 changed from [45] 30mm Cannon MK108 to [32] 20mm Cannon MG151, weapon 1 changed from [32] 20mm Cannon MG151 to [9] 7.9mm MG 17, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 3 changed from [33] 20mm Cannon MG FF/M to [104] FuG 202, weapon 4 changed from [109] FuG 220 SN-2 to [79] 300 litre Drop Tank, weapon 5 changed from [79] 300 litre Drop Tank to 0, weapon 1 number changed from 2 to 4, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 1, weapon 4 number changed from 1 to 2, weapon 5 number changed from 2 to 0, weapon 3 face changed from SM to INT, weapon 4 face changed from INT to EXT, weapon 5 face changed from EXT to FWD, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%.

23.[28] Do 17P-1, upgrade changed from 0 to [77] Ju 88D-1, sortie ammo

changed from 150 to 60, sortie fuel changed from 2558 to 2546.

24.[29] Do 17Z-2, cruise speed changed from 230 to 210, endurance changed from 140 to 230, range changed from 536 to 805, sortie ammo changed from 2400 to 2320, sortie fuel changed from 2558 to 2546, last year changed from 0 to 1941, last month changed from 0 to 2, factory upgrade changed from 0 to [32] Do 217E-2.

25.[30] Do 215B-1, sortie ammo changed from 300 to 120, sortie fuel changed from 2454 to 2546, reliability changed from 10 to 15, factory upgrade changed from 0 to [77] Ju 88D-1.

26.[31] Do 215B-5, sortie ammo changed from 1180 to 1080, sortie fuel changed from 2454 to 2546, last year changed from 0 to 1942, last month changed from 0 to 2, reliability changed from 10 to 15, factory upgrade changed from 0 to [33] Do 217J.

27.[32] Do 217E-2, max speed changed from 317 to 320, cruise speed changed from 274 to 268, range changed from 1370 to 1340, upgrade changed from [93] Do 217K to 455, sortie ammo changed from 6850 to 6790, sortie fuel changed from 4884 to 4894, build limit changed from 5 to 4, last year changed from 0 to 1941, last month changed from 0 to 12, reliability changed from 13 to 8, factory upgrade changed from 0 to 455.

28.[33] Do 217J, sortie ammo changed from 400 to 310, sortie fuel changed from 4884 to 4894, last year changed from 0 to 1942, last month changed from 0 to 12, reliability changed from 13 to 8, factory upgrade changed from 0 to [34] Do 217N.

29.[34] Do 217N, max speed changed from 320 to 325, cruise speed changed from 264 to 267, endurance changed from 300 to 360, range changed from 1320 to 1602, sortie ammo changed from 400 to 280, sortie fuel changed from 4884 to 6812, last year changed from 0 to 1943, last month changed from 0 to 9.

30.[35] Do 335A, max speed changed from 466 to 463.

31.[37] Fi 156C, sortie ammo changed from 50 to 20, build limit changed from 8 to 6, last year changed from 0 to 1944, last month changed from 0 to 12.

32.[39] FW 189A, name changed from FW 189A to Fw 189A, endurance changed from 135 to 145, range changed from 454 to 488, upgrade changed from 0 to [13] Bf 109G-6/R2, sortie ammo changed from 150 to 120, sortie fuel changed from 743 to 726, build limit changed from 4 to 5, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1, weapon 2 number changed from 2 to 1.

33.[40] FW 190A, name changed from FW 190A to Fw 190A-4, max speed changed from 400 to 405, cruise speed changed from 308 to 298, endurance changed from 90 to 95, range changed from 462 to 471, sortie ammo changed from 1308 to 1065, sortie fuel changed from 865 to 866, build limit changed from 8 to 9, last year changed from 0 to 1943, last month changed from 0 to 12, factory upgrade changed from 0 to [90] Fw 190A-8.

34.[41] FW 190A-5/U2, name changed from FW 190A-5/U2 to Fw 190A-5/U2, max speed changed from 400 to 407, cruise speed changed from 320 to 308, endurance changed from 90 to 95, range changed from 800 to 867, durability changed from 32 to 33, sortie ammo changed from 239 to 240, sortie fuel changed from 1856 to 1858, last year changed from 0 to 1944, last month changed from 0 to 3.

35.[42] FW 190A-8/R2, name changed from FW 190A-8/R2 to Fw 190A-8/R8, range changed from 704 to 739, first year changed from 1942 to 1943, maneuver changed from 19 to 30, durability changed from 32 to 33, first month changed from 12 to 9, sortie ammo changed from 269 to 200, sortie fuel changed from 1551 to 1554, reliability changed from 10 to 8.

36.[43] FW 190D, name changed from FW 190D to Fw 190D-9, max speed changed from 432 to 435, cruise speed changed from 325 to 333, climb changed from 3125 to 3700, range changed from 677 to 732, maneuver changed from 38 to 37, upgrade changed from [88] Ta 152H to 0, sortie ammo changed from 208 to 160, sortie fuel changed from 1474 to 1469.

37.[44] FW 190F, name changed from FW 190F to Fw 190F, max altitude changed from 31171 to 32810, max speed changed from 382 to 398, cruise speed changed from 295 to 292, endurance changed from 90 to 95, range changed from 442 to 462, maneuver changed from 26 to 31, durability changed from 32 to 35, sortie ammo changed from 1308 to 1240, sortie fuel changed from 865 to 866, build limit changed from 8 to 7, last year changed from 0 to 1943, last month changed from 0 to 12, reliability changed from 10 to 5, factory upgrade changed from 0 to [91] Fw 190F-8.

38.[45] FW 190G, name changed from FW 190G to Fw 190G, max speed changed from 388 to 407, cruise speed changed from 305 to 298, endurance changed from 90 to 95, range changed from 762 to 769, durability changed from 32 to 33, first month changed from 2 to 1, upgrade changed from [43] Fw 190D-9 to [90] Fw 190A-8, sortie ammo changed from 1240 to 925, sortie fuel changed from 1856 to 1858, build limit changed from 7 to 9, last month changed from 6 to 5, reliability changed from 8 to 5, factory upgrade changed from 0 to [88] Ta 152H.

39.[46] Fw 200C-3/U4, max speed changed from 252 to 251, cruise speed changed from 208 to 190, endurance changed from 330 to 450, range changed from 1144 to 1425, build cost changed from 0 to 1903, build limit changed from 0 to 1, last year changed from 0 to 1944, last month changed from 0 to 1, reliability changed from 15 to 16, expansion rate changed from 0 to 1, weapon 1 changed from [10] 7.92mm MG 15 to [32] 20mm Cannon MG151, weapon 3 number changed from 2 to 1, weapon 4 number changed from 1 to 2, weapon 3 face changed from SIDE to BR, weapon 4 face changed from BR to SIDE.

40.[48] Go 145C, sortie ammo changed from 160 to 130, sortie fuel changed from 297 to 298.

41.[49] Go 244, max altitude changed from 24937 to 24609, cruise speed changed from 121 to 127, max load changed from 3309 to 5514, endurance changed from 160 to 150, range changed from 322 to 317, first month changed from 7 to 3, sortie ammo changed from 120 to 80, sortie fuel changed from 1139 to 1141, build limit changed from 0 to 6, reliability changed from 10 to 8, expansion rate changed from 0 to 1.

42.[51] He 111H-20/R2, max altitude changed from 26248 to 27890, max speed changed from 258 to 270, cruise speed changed from 236 to 233, endurance changed from 350 to 370, range changed from 1376 to 1436, first month changed from 10 to 12, sortie ammo changed from 250 to 130, sortie fuel changed from 5693 to 5704, build limit changed from 10 to 12, last year changed from 0 to 1944, last month changed from 0 to 8, weapon 2 changed from [11] 7.92mm MG 81 to [24] 13mm MG 131, weapon 3 changed from [11] 7.92mm MG 81 to 650, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 1.

43.[52] He 111H-3, max speed changed from 258 to 261, cruise speed changed from 224 to 204, endurance changed from 340 to 385, range changed from 1269 to 1309, sortie ammo changed from 4650 to 4550, sortie fuel changed from 5335 to 5704, build limit changed from 30 to 23, last year changed from 0 to 1940, last month changed from 0 to 12, photo changed from [54] He 111P to 0, weapon 4 changed

from [64] 250kg GP Bomb to [10] 7.9mm MG 15, weapon 5 changed from 0 to [64] 250kg GP Bomb, weapon 3 number changed from 2 to 1, weapon 4 number changed from 8 to 2, weapon 5 number changed from 0 to 8, weapon 1 face changed from TR to FWD, weapon 2 face changed from BR to TR, weapon 3 face changed from SIDE to BR, weapon 4 face changed from INT to SIDE, weapon 5 face changed from FWD to INT, factory upgrade changed from 0 to [53] He 111H-4, change to modifier changed from 0 to -20.

44.[53] He 111H-4, max speed changed from 258 to 261, cruise speed changed from 224 to 204, endurance changed from 340 to 385, range changed from 1269 to 1309, sortie ammo changed from 4650 to 4550, sortie fuel changed from 5335 to 5704, build limit changed from 30 to 23, max import changed from 0 to ALL, import from changed from 0 to [52] He 111H-3, last year changed from 0 to 1941, last month changed from 0 to 12, photo changed from [54] He 111P to 0, weapon 4 changed from [64] 250kg GP Bomb to [10] 7.9mm MG 15, weapon 5 changed from 0 to [64] 250kg GP Bomb, weapon 3 number changed from 2 to 1, weapon 4 number changed from 8 to 2, weapon 5 number changed from 0 to 8, weapon 1 face changed from TR to FWD, weapon 2 face changed from BR to TR, weapon 3 face changed from SIDE to BR, weapon 4 face changed from INT to SIDE, weapon 5 face changed from FWD to INT, minimum import changed from 0 to 1, import % changed from DEFAULT to 2%, factory upgrade changed from 0 to [95] He 111H-6.

45.[54] He 111P, sortie ammo changed from 150 to 100, sortie fuel changed from 5693 to 5704, photo changed from [53] He 111H-4 to 0, factory upgrade changed from 0 to [77] Ju 88D-1.

46.[55] He 112B, endurance changed from 140 to 130, range changed from 623 to 578, first year changed from 1941 to 1940, upgrade changed from [5] Bf 109E-3 to [7] Bf 109E-7, sortie ammo changed from 200 to 140, sortie fuel changed from 520 to 529, last year changed from 0 to 1940, last month changed from 0 to 7, factory upgrade changed from 0 to [7] Bf 109E-7.

47.[56] He 162A, climb changed from 1950 to 5000.

48.[57] He 170A, name changed from He 170A to He 70F, max speed changed from 224 to 236, cruise speed changed from 208 to 183, endurance changed from 180 to 205, range changed from 624 to 625, first year changed from 1941 to 1937, upgrade changed from 0 to [39] FW 189A, crew changed from 3 to 2, sortie ammo changed from 25 to 20, sortie fuel changed from 825 to 694, last year changed from 0 to 1939, last month changed from 0 to 12.

49.[58] He 177A-5, max altitude changed from 28874 to 29530, cruise speed changed from 258 to 216, endurance changed from 420 to 600, range changed from 1806 to 2160, first year changed from 1943 to 1944, first month changed from 7 to 1, sortie ammo changed from 9261 to 9040, sortie fuel changed from 17705 to 14551, build cost changed from 2296 to 2354, build limit changed from 10 to 7, last month changed from 9 to 8, reliability changed from 25 to 22, weapon 3 face changed from TURRET to TR.

50.[59] He 219A, name changed from He 219A to He 219A-0, max speed changed from 360 to 370, cruise speed changed from 310 to 286, endurance changed from 265 to 250, range changed from 1369 to 1191, upgrade changed from 0 to 471, sortie ammo changed from 448 to 300, build limit changed from 4 to 2, last year changed from 0 to 1944, last month changed from 0 to 5, weapon 2 changed from [45] 30mm Cannon MK108 to [32] 20mm Cannon MG151, weapon 3 changed from [109] FuG 220 SN-2 to [105] FuG 212, weapon 2 face changed from SM to

FWD.

51.[60] He 46C, max speed changed from 161 to 162, endurance changed from 220 to 275, range changed from 502 to 627, first year changed from 1941 to 1936, upgrade changed from 0 to [63] Hs 126B, sortie ammo changed from 490 to 20, sortie fuel changed from 616 to 617, last year changed from 0 to 1939, last month changed from 0 to 12, weapon 1 changed from [60] 50kg GP Bomb to 0, weapon 1 number changed from 4 to 0, weapon 1 face changed from EXT to FWD.

52.[62] Hs 123A, max altitude changed from 26248 to 22969, max speed changed from 218 to 193, cruise speed changed from 187 to 169, endurance changed from 120 to 125, range changed from 374 to 352, armor changed from 0 to 1, sortie ammo changed from 540 to 480, last year changed from 0 to 1941, last month changed from 0 to 11, factory upgrade changed from 0 to [64] Hs 129B.

53.[63] Hs 126B, name changed from Hs 126B to Hs 126B-1, first year changed from 1939 to 1938, first month changed from 9 to 1, upgrade changed from 0 to [39] FW 189A, sortie ammo changed from 320 to 40, last year changed from 0 to 1940, last month changed from 0 to 8, weapon 2 changed from [60] 50kg GP Bomb to 0, weapon 2 number changed from 2 to 0, weapon 2 face changed from EXT to FWD.

54.[64] Hs 129B, max speed changed from 253 to 264, cruise speed changed from 211 to 208, range changed from 422 to 416, sortie ammo changed from 470 to 430, sortie fuel changed from 1007 to 1009, build limit changed from 5 to 6, reliability changed from 15 to 8.

55.[66] Ju 188E, max speed changed from 323 to 330, cruise speed changed from 249 to 250, endurance changed from 300 to 280, range changed from 1245 to 1166, crew changed from 4 to 5, sortie ammo changed from 6850 to 6750, sortie fuel changed from 4785 to 4795, build limit changed from 3 to 5, weapon 0 changed from [32] 20mm Cannon MG151 to [24] 13mm MG 131, weapon 1 changed from [24] 13mm MG 131 to [32] 20mm Cannon MG151, weapon 3 changed from [11] 7.92mm MG 81 to 650, weapon 3 number changed from 2 to 1.

56.[67] Ju 52, name changed from Ju 52 to Ju 52/3m, max speed changed from 178 to 180, cruise speed changed from 134 to 146, endurance changed from 335 to 410, range changed from 748 to 997, sortie ammo changed from 50 to 40, sortie fuel changed from 3924 to 4051, build limit changed from 10 to 5, last year changed from 0 to 1944, last month changed from 0 to 7, reliability changed from 11 to 12.

57.[68] Ju 86C, symbol changed from 70 to 0, sortie ammo changed from 75 to 60, sortie fuel changed from 2033 to 1724, last year changed from 0 to 1940, last month changed from 0 to 12, photo changed from [69] Ju 86E-2 to 0.

58.[69] Ju 86K-2, name changed from Ju 86K-2 to Ju 86E-2, cruise speed changed from 196 to 176, range changed from 637 to 572, sortie ammo changed from 2275 to 2260, sortie fuel changed from 1815 to 1819, last year changed from 0 to 1940, last month changed from 0 to 12, photo changed from [70] Ju 86P-2 to 0, factory upgrade changed from 0 to [74] Ju 88A, change to modifier changed from 0 to -20.

59.[70] Ju 86P-2, symbol changed from 68 to 0, max speed changed from 249 to 233, sortie fuel changed from 4066 to 4074, last year changed from 0 to 1941, last month changed from 0 to 12, reliability changed from 15 to 10, photo changed from [68] Ju 86C to 0.

60.[71] Ju 87B, max speed changed from 236 to 238, cruise speed changed from 187 to 192, max load changed from 994 to 1545, endurance changed from 120 to 110, range changed from 374 to 352, upgrade changed from [72] Ju 87D-3 to 461,

sortie ammo changed from 1065 to 1600, sortie fuel changed from 825 to 794, build limit changed from 0 to 11, last year changed from 0 to 1941, last month changed from 0 to 7, expansion rate changed from 0 to 1, weapon 2 changed from [64] 250kg GP Bomb to [66] 500kg GP Bomb, factory upgrade changed from 0 to 461.

61.[72] Ju 87D, name changed from Ju 87D to Ju 87D-3, max altitude changed from 23953 to 24609, max speed changed from 249 to 257, cruise speed changed from 177 to 195, endurance changed from 200 to 180, range changed from 590 to 585, first year changed from 1941 to 1942, first month changed from 1 to 7, sortie ammo changed from 2740 to 2720, sortie fuel changed from 1320 to 1290, build limit changed from 15 to 17, last year changed from 0 to 1943, last month changed from 0 to 6, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1, factory upgrade changed from 0 to [92] Ju 87D-5.

62.[73] Ju 87G, cruise speed changed from 168 to 187, endurance changed from 200 to 180, range changed from 560 to 561, first month changed from 1 to 4, sortie ammo changed from 200 to 140, sortie fuel changed from 1320 to 1290, build limit changed from 5 to 4, last year changed from 0 to 1944, last month changed from 0 to 7, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1.

63.[74] Ju 88A, cruise speed changed from 241 to 226, range changed from 1325 to 1243, sortie ammo changed from 4525 to 4500, sortie fuel changed from 4785 to 4795, last year changed from 0 to 1941, last month changed from 0 to 12, factory upgrade changed from 0 to [94] Ju 88A-4.

64.[75] Ju 88C-2, max altitude changed from 29530 to 27890, max speed changed from 298 to 295, cruise speed changed from 258 to 243, range changed from 1419 to 1336, sortie ammo changed from 1350 to 1250, sortie fuel changed from 4785 to 4795, build limit changed from 0 to 1, last year changed from 0 to 1941, last month changed from 0 to 12, expansion rate changed from 0 to 1, factory upgrade changed from 0 to [76] Ju 88C-6.

65.[76] Ju 88C-6, max altitude changed from 29530 to 26906, max speed changed from 311 to 302, cruise speed changed from 263 to 258, range changed from 1315 to 1290, sortie ammo changed from 350 to 250, sortie fuel changed from 4785 to 4795, last year changed from 0 to 1944, last month changed from 0 to 2, factory upgrade changed from 0 to [78] Ju 88G.

66.[77] Ju 88D-1, max speed changed from 317 to 305, cruise speed changed from 274 to 252, endurance changed from 330 to 360, range changed from 1507 to 1512, sortie ammo changed from 150 to 100, sortie fuel changed from 5907 to 5919, last month changed from 12 to 3, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 3 changed from [11] 7.92mm MG 81 to 0, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 0, weapon 3 face changed from SIDE to FWD, factory upgrade changed from 0 to [96] Ju 188F.

67.[78] Ju 88G, max altitude changed from 31171 to 29530, max speed changed from 363 to 364, cruise speed changed from 286 to 270, endurance changed from 310 to 330, range changed from 1477 to 1485, first month changed from 6 to 3, sortie ammo changed from 350 to 330, sortie fuel changed from 4785 to 5258, reliability changed from 15 to 13, weapon 5 changed from 0 to [87] Flensburg, weapon 5 number changed from 0 to 1, weapon 5 face changed from FWD to INT.

68.[80] Me 163B, max altitude changed from 39373 to 49215, max speed changed from 595 to 596, cruise speed changed from 540 to 435, range changed from 144 to 116, sortie ammo changed from 76 to 100, sortie fuel changed from 2424

to 4467, build limit changed from 0 to 10, last year changed from 0 to 1945, last month changed from 0 to 2, expansion rate changed from 0 to 1.

69.[81] Me 210A-1, max altitude changed from 34452 to 31171, cruise speed changed from 285 to 275, climb changed from 2000 to 2200, range changed from 1140 to 1100, first year changed from 1942 to 1941, first month changed from 4 to 11, sortie ammo changed from 2450 to 1850, sortie fuel changed from 3960 to 4001, build limit changed from 6 to 4, last year changed from 0 to 1943, last month changed from 0 to 5, factory upgrade changed from 0 to [84] Me 410A.

70.[82] Me 262A, name changed from Me 262A to Me 262A-1a, max speed changed from 541 to 549, cruise speed changed from 497 to 404, climb changed from 2900 to 5463, endurance changed from 75 to 102, range changed from 621 to 686, sortie ammo changed from 227 to 200, sortie fuel changed from 4750 to 4759.

71.[83] Me 323, symbol changed from 46 to 0, max speed changed from 155 to 162, cruise speed changed from 145 to 137, max load changed from 22052 to 28668, endurance changed from 375 to 230, range changed from 906 to 525, first month changed from 1 to 9, sortie ammo changed from 250 to 230, sortie fuel changed from 10131 to 8830, last month changed from 2 to 4, reliability changed from 24 to 20.

72.[84] Me 410A, max altitude changed from 36092 to 34452, cruise speed changed from 321 to 307, climb changed from 2050 to 2600, range changed from 1070 to 1023, sortie ammo changed from 2450 to 1850, sortie fuel changed from 3960 to 4001, build limit changed from 5 to 7, last month changed from 9 to 8.

73.[86] Si 204A, max altitude changed from 21000 to 19688, symbol changed from 28 to 0, max speed changed from 200 to 224, cruise speed changed from 186 to 187, max load changed from 2207 to 1656, endurance changed from 200 to 300, range changed from 620 to 935, first year changed from 1942 to 1943, sortie fuel changed from 1023 to 1792, build limit changed from 0 to 4, last year changed from 0 to 1945, last month changed from 0 to 1, expansion rate changed from 0 to 1.

74.[88] Ta 152H, max speed changed from 465 to 463, cruise speed changed from 342 to 311, climb changed from 3445 to 4000, endurance changed from 140 to 160, range changed from 798 to 829, durability changed from 34 to 33, sortie ammo changed from 179 to 150, sortie fuel changed from 1918 to 1693.

75.[90] Fw 190A-8, max altitude changed from 33795 to 34452, symbol changed from 40 to 0, cruise speed changed from 308 to 295, endurance changed from 110 to 120, range changed from 564 to 590, upgrade changed from 0 to 469, sortie ammo changed from 1339 to 1085, sortie fuel changed from 1056 to 1058, build limit changed from 12 to 20, last year changed from 0 to 1944, last month changed from 0 to 12, reliability changed from 8 to 5, photo changed from [40] Fw 190A-4 to 0.

76.[91] Fw 190F-8, max altitude changed from 31171 to 32811, symbol changed from 44 to 0, max speed changed from 385 to 392, cruise speed changed from 289 to 288, climb changed from 2110 to 2300, endurance changed from 90 to 95, range changed from 433 to 456, maneuver changed from 27 to 32, sortie ammo changed from 1748 to 1700, sortie fuel changed from 865 to 866, build limit changed from 12 to 14, reliability changed from 10 to 5.

77.[92] Ju 87D-5, max altitude changed from 24609 to 25593, symbol changed from 72 to 0, max speed changed from 249 to 255, cruise speed changed from 177 to 198, endurance changed from 200 to 180, range changed from 590 to 594, sortie ammo changed from 3200 to 3220, sortie fuel changed from 1320 to 1290, build limit changed from 15 to 12, photo changed from [72] Ju 87D-3 to 0, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1.

78.[93] Do 217K, max altitude changed from 27890 to 29530, symbol changed from 32 to 0, max speed changed from 323 to 330, cruise speed changed from 277 to 279, endurance changed from 300 to 287, range changed from 1385 to 1334, sortie fuel changed from 4884 to 4894, build limit changed from 5 to 6, last year changed from 1943 to 1944, last month changed from 12 to 1, photo changed from [32] Do 217E-2 to 0.

79.[94] Ju 88A-4, symbol changed from 74 to 0, max speed changed from 311 to 298, cruise speed changed from 252 to 229, range changed from 1260 to 1145, upgrade changed from [66] Ju 188E to 458, sortie ammo changed from 4600 to 4530, sortie fuel changed from 4785 to 4795, build limit changed from 10 to 11, last month changed from 9 to 2, photo changed from [74] Ju 88A to 0, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 2 number changed from 2 to 1, factory upgrade changed from 0 to 458.

80.[95] He 111H-6, symbol changed from 54 to 53, max speed changed from 280 to 270, cruise speed changed from 239 to 210, endurance changed from 320 to 370, range changed from 1274 to 1295, upgrade changed from [58] He 177A-5 to 473, sortie ammo changed from 4650 to 4580, sortie fuel changed from 5335 to 5704, build limit changed from 30 to 25, last year changed from 1944 to 1943, last month changed from 9 to 11, photo changed from [54] He 111P to 0, weapon 1 changed from [24] 13mm MG 131 to [11] 7.9mm MG 81, weapon 2 changed from [11] 7.92mm MG 81 to [24] 13mm MG 131, weapon 3 changed from [11] 7.92mm MG 81 to 650, weapon 4 changed from [64] 250kg GP Bomb to [11] 7.9mm MG 81, weapon 5 changed from 0 to [64] 250kg GP Bomb, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 1, weapon 4 number changed from 8 to 2, weapon 5 number changed from 0 to 8, weapon 1 face changed from TR to FWD, weapon 2 face changed from BR to TR, weapon 3 face changed from SIDE to BR, weapon 4 face changed from INT to SIDE, weapon 5 face changed from FWD to INT, factory upgrade changed from 0 to 473.

81.[96] Ju 188F, max altitude changed from 34452 to 32811, symbol changed from 66 to 0, cruise speed changed from 286 to 274, endurance changed from 320 to 335, range changed from 1525 to 1529, crew changed from 4 to 5, sortie ammo changed from 250 to 150, sortie fuel changed from 5907 to 5919, build limit changed from 2 to 4, photo changed from [66] Ju 188E to 0, weapon 0 changed from [32] 20mm Cannon MG151 to [24] 13mm MG 131, weapon 1 changed from [24] 13mm MG 131 to [32] 20mm Cannon MG151, weapon 3 changed from [11] 7.92mm MG 81 to 650, weapon 3 number changed from 2 to 1.

82.[103] Bf 109G-2(F) (FI Fighter 8/42-0/0 -> [104] Bf 109G-6(F)), symbol changed from 11 to 0, max speed changed from 404 to 407, cruise speed changed from 315 to 316, climb changed from 3500 to 3300, endurance changed from 70 to 81, range changed from 525 to 621, maneuver changed from 34 to 35, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, max import changed from 48 to 49, last year changed from 0 to 1943, last month changed from 0 to 5, factory upgrade changed from 0 to [104] Bf 109G-6(F).

83.[104] Bf 109G-6(F), symbol changed from 12 to 0, cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, sortie ammo changed from 120 to 110, sortie fuel changed from 1155 to 1156, max import changed from 109 to 112, last year changed from 0 to 1944, last month changed from 0 to 8.

84.[106] Ju 88A(F), symbol changed from 74 to 0, max speed changed from 311

to 298, cruise speed changed from 249 to 229, max load changed from 6617 to 4412, endurance changed from 140 to 300, range changed from 581 to 1145, sortie ammo changed from 6800 to 4530, sortie fuel changed from 2772 to 4795, import from changed from [74] Ju 88A to [94] Ju 88A-4, last year changed from 0 to 1944, last month changed from 0 to 8, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 5 changed from [66] 500kg GP Bomb to 0, weapon 2 number changed from 2 to 1, weapon 5 number changed from 2 to 0, weapon 5 face changed from EXT to FWD.

85.[107] Do 17Z-2(F), symbol changed from 29 to 0, cruise speed changed from 230 to 210, endurance changed from 140 to 230, range changed from 536 to 805, sortie ammo changed from 2400 to 2320, sortie fuel changed from 2558 to 2546, last year changed from 0 to 1944, last month changed from 0 to 8.

86.[108] Fi 156C(F), symbol changed from 37 to 0, sortie ammo changed from 50 to 20, last year changed from 0 to 1944, last month changed from 0 to 8.

87.[110] Blenheim I(F), max altitude changed from 27280 to 27890, symbol changed from 119 to 0, cruise speed changed from 210 to 200, endurance changed from 320 to 350, range changed from 1120 to 1166, upgrade changed from 0 to [111] Blenheim IV(F), sortie ammo changed from 1100 to 1040, sortie fuel changed from 3050 to 2105, build limit changed from 0 to 1, last year changed from 0 to 1941, last month changed from 0 to 12, expansion rate changed from 0 to 1, weapon 0 changed from [5] .303 Browning MG to [1] .303 Vickers 'K' MG.

88.[111] Blenheim IV(F), max altitude changed from 22000 to 27267, symbol changed from 119 to 0, max speed changed from 266 to 295, cruise speed changed from 198 to 205, endurance changed from 440 to 540, range changed from 1452 to 1845, first year changed from 1944 to 1942, durability changed from 30 to 35, sortie ammo changed from 1100 to 1060, sortie fuel changed from 3050 to 3518, build limit changed from 0 to 1, last year changed from 0 to 1942, last month changed from 0 to 5, expansion rate changed from 0 to 1, weapon 0 changed from [5] .303 Browning MG to [1] .303 Vickers 'K' MG, weapon 1 changed from [1] .303 Vickers 'K' MG to [5] .303 Browning MG, factory upgrade changed from 0 to [131] VL Myrsky II.

89.[112] Brewster 239(F), sortie ammo changed from 200 to 120.

90.[113] Gladiator II(F), max speed changed from 245 to 260, endurance changed from 140 to 130, range changed from 494 to 459, upgrade changed from 0 to [103] Bf 109G-2(F), sortie ammo changed from 200 to 80, sortie fuel changed from 1100 to 526, last year changed from 0 to 1941, last month changed from 0 to 12, change to modifier changed from 0 to -20.

91.[114] Hawk 75A(F), max speed changed from 302 to 310, cruise speed changed from 248 to 215, climb changed from 2000 to 3000, endurance changed from 145 to 220, range changed from 599 to 788, maneuver changed from 30 to 33, armor changed from 1 to 0, sortie ammo changed from 300 to 140, weapon 0 changed from [5] .303 Browning MG to [23] .50 Browning MG, weapon 1 changed from 0 to [5] .303 Browning MG, weapon 0 number changed from 6 to 2, weapon 1 number changed from 0 to 4.

92.[115] Hurricane I(F), maneuver changed from 30 to 31, sortie ammo changed from 400 to 160.

93.[116] Lysander I(F), sortie ammo changed from 550 to 360, weapon 0 changed from [2] .303 Vickers V MG to [5] .303 Browning MG, weapon 1 changed from [3] .303 Vickers I MG to [1] .303 Vickers 'K' MG.

94.[117] Ripon IIF, endurance changed from 600 to 500, range changed from

1130 to 941, sortie ammo changed from 100 to 60, reliability changed from 10 to 5, weapon 0 changed from [2] .303 Vickers V MG to [5] .303 Browning MG, weapon 1 changed from [4] .303 Lewis MG to [1] .303 Vickers 'K' MG.

95.[119] F.K.52(F), symbol changed from 120 to 0, max speed changed from 230 to 236, cruise speed changed from 200 to 192, endurance changed from 140 to 215, range changed from 466 to 688, type changed from Fighter to Recon, sortie ammo changed from 160 to 60, sortie fuel changed from 1500 to 1422, build cost changed from 0 to 220, last year changed from 0 to 1942, last month changed from 0 to 7, weapon 0 changed from [36] 20mm Solothurn Cannon to [5] .303 Browning MG, weapon 1 changed from [8] 7.92mm FN MG to [1] .303 Vickers 'K' MG.

96.[120] Fokker C.V-E(F), sortie ammo changed from 450 to 20, weapon 1 changed from [59] 100 lb Bomb to 0, weapon 1 number changed from 4 to 0, weapon 1 face changed from EXT to FWD.

97.[121] Fokker C.X(F), sortie ammo changed from 100 to 40, weapon 0 changed from [2] .303 Vickers V MG to [5] .303 Browning MG.

98.[122] Fokker D.XXI(F), sortie ammo changed from 200 to 80, weapon 0 changed from [7] 7.7mm SAFAT MG to [5] .303 Browning MG.

99.[124] G.50bis(F), name changed from G.50bis(F) to G.50(F), max altitude changed from 32811 to 35108, max speed changed from 293 to 286, cruise speed changed from 240 to 236, endurance changed from 105 to 80, range changed from 420 to 314, sortie ammo changed from 26 to 60, sortie fuel changed from 583 to 523, build limit changed from 1 to 0, last year changed from 0 to 1941, last month changed from 0 to 9.

100.[125] M.S.406(F), sortie ammo changed from 150 to 90.

101.[127] I-153(F), max altitude changed from 32155 to 35108, symbol changed from 129 to 0, max speed changed from 275 to 266, climb changed from 3300 to 2890, endurance changed from 180 to 140, range changed from 540 to 420, maneuver changed from 28 to 32, sortie ammo changed from 75 to 80, sortie fuel changed from 736 to 513.

102.[128] Pe-2(F), symbol changed from 127 to 0, max speed changed from 336 to 330, cruise speed changed from 225 to 210, climb changed from 2343 to 1400, endurance changed from 250 to 200, range changed from 937 to 700, sortie ammo changed from 2320 to 1400, sortie fuel changed from 2352 to 2047, weapon 0 changed from [26] 12.7mm UBS MG to [16] 7.62mm ShKAS MG, weapon 2 changed from [27] 12.7mm UBT MG to [16] 7.62mm ShKAS MG, weapon 4 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 4 number changed from 4 to 6.

103.[129] SB-2(F), max altitude changed from 27890 to 29530, symbol changed from 127 to 0, max speed changed from 255 to 270, cruise speed changed from 186 to 210, climb changed from 2343 to 1000, max load changed from 2207 to 3309, endurance changed from 240 to 290, range changed from 744 to 1015, sortie ammo changed from 2305 to 1400, sortie fuel changed from 2646 to 2761, weapon 3 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 3 number changed from 4 to 6.

104.[131] VL Myrsky II, symbol changed from 128 to 0, sortie ammo changed from 560 to 120, build limit changed from 0 to 3, expansion rate changed from 0 to 1, weapon 1 changed from [61] 100kg GP Bomb to 0, weapon 1 number changed from 2 to 0, weapon 1 face changed from EXT to FWD.

105.[138] Ca.135bis, cruise speed changed from 230 to 210, range changed from 1226 to 1120, sortie ammo changed from 3428 to 3390.

106.[139] Ca.310 Libeccio, sortie ammo changed from 150 to 60.

107.[140] Ca.311, cruise speed changed from 200 to 180, range changed from 1016 to 915, sortie ammo changed from 1030 to 940.

108.[142] Cr.32bis, name changed from Cr.32bis to CR.32bis, max speed changed from 224 to 220, cruise speed changed from 155 to 173, endurance changed from 180 to 170, range changed from 465 to 490, sortie ammo changed from 128 to 60, sortie fuel changed from 578 to 579, weapon 1 changed from [7] 7.7mm SAFAT MG to 0, weapon 1 number changed from 2 to 0, factory upgrade changed from 0 to [145] G.50bis.

109.[143] Cr.42 Falco, name changed from Cr.42 Falco to CR.42 Falco, max altitude changed from 34450 to 33467, max speed changed from 280 to 283, sortie ammo changed from 508 to 390, sortie fuel changed from 799 to 744.

110.[145] G.50bis, name changed from G.50bis to G.50bis Freccia, max altitude changed from 32811 to 35108, max speed changed from 293 to 292, sortie ammo changed from 26 to 60, sortie fuel changed from 583 to 681, last year changed from 0 to 1943, last month changed from 0 to 2, factory upgrade changed from 0 to [146] G.55/I Centauro.

111.[146] G.55/I Centauro, max speed changed from 395 to 417, climb changed from 2734 to 3500, endurance changed from 150 to 145, range changed from 770 to 744, first year changed from 1942 to 1943, maneuver changed from 35 to 36, first month changed from 12 to 3, sortie ammo changed from 275 to 210, build limit changed from 3 to 2.

112.[148] MC.200 Saetta, max speed changed from 312 to 311, cruise speed changed from 283 to 230, endurance changed from 80 to 120, range changed from 377 to 460, sortie ammo changed from 283 to 280, sortie fuel changed from 517 to 551, last year changed from 0 to 1941, last month changed from 0 to 12, factory upgrade changed from 0 to [149] MC.202 Folgore.

113.[149] MC.202 Folgore, max speed changed from 370 to 372, sortie ammo changed from 98 to 100, last year changed from 0 to 1943, last month changed from 0 to 5, factory upgrade changed from 0 to [150] MC.205 Veltro.

114.[150] MC.205 Veltro, maneuver changed from 35 to 36, sortie ammo changed from 388 to 160.

115.[152] Re.2000 Falco I, symbol changed from 153 to 0, durability changed from 24 to 27, sortie ammo changed from 104 to 60, sortie fuel changed from 1056 to 1058, build cost changed from 372 to 354, build limit changed from 0 to 1, last year changed from 0 to 1942, last month changed from 0 to 5, reliability changed from 15 to 8, expansion rate changed from 0 to 1, weapon 1 changed from [7] 7.7mm SAFAT MG to 0, factory upgrade changed from 0 to [153] Re.2001 Falco II.

116.[153] Re.2001 Falco II, endurance changed from 120 to 140, range changed from 534 to 623, maneuver changed from 31 to 33, durability changed from 24 to 28, upgrade changed from 0 to 154, sortie ammo changed from 104 to 100, sortie fuel changed from 717 to 867, last year changed from 0 to 1943, last month changed from 0 to 4.

117.[155] SM.75, name changed from SM.75 to SM.75 Marsupiale, upgrade changed from 0 to 158, crew changed from 4 to 5, sortie ammo changed from 25 to 20, last year changed from 0 to 1940, last month changed from 0 to 12, reliability changed from 11 to 12.

118.[156] SM.79, name changed from SM.79 to SM.79 Sparviero, cruise speed changed from 229 to 203, endurance changed from 300 to 500, range changed from

1145 to 1691, sortie ammo changed from 2950 to 2860, sortie fuel changed from 5478 to 5490, reliability changed from 11 to 12.

119.[157] SM.81, name changed from SM.81 to SM.81 Pipistrello, sortie ammo changed from 200 to 120, reliability changed from 11 to 12, weapon 2 changed from 0 to [7] 7.7mm SAFAT MG, weapon 2 number changed from 0 to 2, weapon 1 face changed from BT to BR, weapon 2 face changed from FWD to SIDE.

120.[166] Bf 109E-3(R) (RU Fighter 1/39-0/0 -> [167] Bf 109G-2(R)), symbol changed from 5 to 0, cruise speed changed from 300 to 286, endurance changed from 80 to 90, range changed from 400 to 429, first year changed from 1939 to 1940, maneuver changed from 34 to 33, sortie ammo changed from 102 to 130, sortie fuel changed from 660 to 661, max import changed from 19 to 34, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 0 changed from [33] 20mm Cannon MG FF/M to [43] 20mm Cannon MG-FF, factory upgrade changed from 0 to [167] Bf 109G-2(R).

121.[167] Bf 109G-2(R) (RU Fighter 3/43-0/0 -> [168] Bf 109G-6(R)), symbol changed from 11 to 0, max speed changed from 404 to 407, cruise speed changed from 315 to 316, climb changed from 3500 to 3300, endurance changed from 70 to 81, range changed from 525 to 621, maneuver changed from 34 to 35, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, build limit changed from 1 to 0, max import changed from 90 to 58, last year changed from 0 to 1943, last month changed from 0 to 12, factory upgrade changed from 0 to [168] Bf 109G-6(R).

122.[168] Bf 109G-6(R), symbol changed from 12 to 0, cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, first month changed from 6 to 1, sortie ammo changed from 92 to 110, sortie fuel changed from 1155 to 1156, build limit changed from 1 to 2, max import changed from 100 to 112.

123.[170] Blenheim I(R), name changed from Blenheim I(R) to Blenheim I Rcn(R), max altitude changed from 27280 to 27890, symbol changed from 119 to 0, endurance changed from 320 to 350, range changed from 1120 to 1225, sortie ammo changed from 100 to 40, sortie fuel changed from 3050 to 2105, weapon 0 changed from [5] .303 Browning MG to [8] 7.92mm FN MG, weapon 1 changed from [1] .303 Vickers 'K' MG to [8] 7.92mm FN MG.

124.[171] Blenheim I(R), max altitude changed from 27280 to 27890, symbol changed from 119 to 0, cruise speed changed from 210 to 200, endurance changed from 320 to 350, range changed from 1120 to 1166, sortie ammo changed from 1100 to 1040, sortie fuel changed from 3050 to 2105, weapon 0 changed from [5] .303 Browning MG to [8] 7.92mm FN MG, weapon 1 changed from [1] .303 Vickers 'K' MG to [8] 7.92mm FN MG.

125.[172] Hurricane I(R), maneuver changed from 30 to 31, sortie ammo changed from 400 to 160, last year changed from 0 to 1942, last month changed from 0 to 12, factory upgrade changed from 0 to [188] IAR 81B.

126.[173] Bloch 210(R), upgrade changed from 0 to [203] Ju 88A(R), sortie ammo changed from 3670 to 3580, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 0 changed from [6] 7.5mm MAC-M39 MG to [8] 7.92mm FN MG, weapon 1 changed from [6] 7.5mm MAC-M39 MG to [8] 7.92mm FN MG, weapon 2 changed from [6] 7.5mm MAC-M39 MG to [8] 7.92mm FN MG.

127.[177] Do 17M(R), symbol changed from 29 to 0, first year changed from 1939 to 1942, sortie ammo changed from 300 to 120, sortie fuel changed from 2558 to 2546, import from changed from [29] Do 17Z-2 to [28] Do 17P-1, last year changed

from 0 to 1942, last month changed from 0 to 12.

128.[178] Fi 156C(R), symbol changed from 37 to 0, sortie ammo changed from 50 to 20, build limit changed from 1 to 0, max import changed from 15 to 32, last year changed from 0 to 1944, last month changed from 0 to 7.

129.[179] He 111H-3(R), symbol changed from 52 to 0, max speed changed from 258 to 261, cruise speed changed from 224 to 204, endurance changed from 340 to 385, range changed from 1269 to 1309, upgrade changed from 0 to 176, sortie ammo changed from 4650 to 4550, sortie fuel changed from 5335 to 5704, max import changed from 22 to 0, import from changed from [52] He 111H-3 to 0, last year changed from 0 to 1942, last month changed from 0 to 12, weapon 4 changed from [64] 250kg GP Bomb to [10] 7.9mm MG 15, weapon 5 changed from 0 to [64] 250kg GP Bomb, weapon 3 number changed from 2 to 1, weapon 4 number changed from 8 to 2, weapon 5 number changed from 0 to 8, weapon 1 face changed from TR to FWD, weapon 2 face changed from BR to TR, weapon 3 face changed from SIDE to BR, weapon 4 face changed from INT to SIDE, weapon 5 face changed from FWD to INT.

130.[180] He 112B(R) (RU Fighter 1/37-0/0 -> [167] Bf 109G-2(R)), endurance changed from 140 to 130, range changed from 623 to 578, sortie ammo changed from 200 to 140, sortie fuel changed from 520 to 529, last year changed from 0 to 1943, last month changed from 0 to 2, factory upgrade changed from 0 to [167] Bf 109G-2(R).

131.[181] Hs 129B(R), symbol changed from 64 to 0, max speed changed from 253 to 264, cruise speed changed from 211 to 208, range changed from 422 to 416, sortie ammo changed from 800 to 820, sortie fuel changed from 1007 to 1009, build limit changed from 1 to 0, max import changed from 140 to 54, last year changed from 0 to 1944, last month changed from 0 to 7, reliability changed from 15 to 8.

132.[183] IAR 37, max load changed from 1325 to 663, first year changed from 1941 to 1938, first month changed from 1 to 8, sortie ammo changed from 1420 to 720, last year changed from 0 to 1938, last month changed from 0 to 12, weapon 2 number changed from 12 to 6, factory upgrade changed from 0 to [185] IAR 39.

133.[184] IAR 38, first year changed from 1941 to 1939, sortie ammo changed from 920 to 720, last year changed from 0 to 1939, last month changed from 0 to 7, weapon 2 number changed from 8 to 6, factory upgrade changed from 0 to [185] IAR 39.

134.[185] IAR 39, first year changed from 1941 to 1939, first month changed from 1 to 8, upgrade changed from 0 to [202] Ju 87D(R), sortie ammo changed from 1420 to 720, max import changed from 0 to ALL, import from changed from 0 to [183] IAR 37, last month changed from 8 to 12, weapon 2 number changed from 12 to 6, import cost changed from 0 to 10, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%.

135.[186] IAR 80A, endurance changed from 170 to 150, range changed from 649 to 512, first year changed from 1941 to 1940, maneuver changed from 29 to 31, armor changed from 0 to 1, first month changed from 1 to 10, upgrade changed from [188] IAR 81C to [187] IAR 81A, sortie ammo changed from 90 to 120, sortie fuel changed from 1209 to 893, last year changed from 0 to 1942, last month changed from 0 to 3, weapon 1 changed from [76] 100 litre Drop Tank to 0, weapon 1 number changed from 2 to 0, weapon 1 face changed from EXT to FWD, factory upgrade changed from 0 to [187] IAR 81A.

136.[187] IAR 81A, cruise speed changed from 210 to 200, max load changed

from 994 to 500, endurance changed from 160 to 150, range changed from 560 to 500, first year changed from 1943 to 1942, maneuver changed from 28 to 31, first month changed from 1 to 4, upgrade changed from 0 to [188] IAR 81B, sortie ammo changed from 920 to 515, build limit changed from 1 to 3, last year changed from 0 to 1942, last month changed from 0 to 12, weapon 3 changed from [60] 50kg GP Bomb to 0, weapon 1 number changed from 2 to 4, weapon 3 number changed from 2 to 0, weapon 3 face changed from EXT to FWD.

137.[188] IAR 81B (RU Fighter 1/43-0/0 -> [168] Bf 109G-6(R)), name changed from IAR 81B to IAR 81C, cruise speed changed from 210 to 200, max load changed from 300 to 500, endurance changed from 160 to 150, range changed from 630 to 500, maneuver changed from 28 to 31, durability changed from 28 to 29, type changed from Fighter to Fighter Bomber, sortie ammo changed from 90 to 555, sortie fuel changed from 1209 to 893, build limit changed from 1 to 4, max import changed from 0 to ALL, import from changed from 0 to [186] IAR 80A, last year changed from 0 to 1943, last month changed from 0 to 12, weapon 2 changed from [76] 100 litre Drop Tank to [63] 500 lb Bomb, weapon 2 number changed from 2 to 1, import cost changed from 0 to 25, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%, factory upgrade changed from 0 to [168] Bf 109G-6(R).

138.[190] Ju 52(R), name changed from Ju 52(R) to Ju 52/3m(R), symbol changed from 67 to 0, max speed changed from 178 to 180, cruise speed changed from 134 to 146, endurance changed from 335 to 410, range changed from 748 to 997, sortie ammo changed from 50 to 40, sortie fuel changed from 3924 to 4051, build limit changed from 10 to 0, last year changed from 0 to 1944, last month changed from 0 to 6, reliability changed from 11 to 12, expansion rate changed from 1 to 0, weapon 0 changed from [10] 7.92mm MG 15 to [8] 7.92mm FN MG, weapon 1 changed from [10] 7.92mm MG 15 to [8] 7.92mm FN MG.

139.[191] Ju 86K-2(R) (RU Level Bomber 9/39-0/0 -> [203] Ju 88A(R)), symbol changed from 69 to 0, cruise speed changed from 196 to 176, range changed from 637 to 572, sortie ammo changed from 2275 to 2260, sortie fuel changed from 1815 to 1819, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 0 changed from [10] 7.92mm MG 15 to [8] 7.92mm FN MG, weapon 1 changed from [10] 7.92mm MG 15 to [8] 7.92mm FN MG, weapon 2 changed from [10] 7.92mm MG 15 to [8] 7.92mm FN MG, factory upgrade changed from 0 to [203] Ju 88A(R).

140.[192] Potez 63(R), name changed from Potez 63(R) to Potez 633B2(R), upgrade changed from 0 to [202] Ju 87D(R), crew changed from 3 to 2, sortie ammo changed from 804 to 1040, weapon 3 number changed from 6 to 8, weapon 1 face changed from REAR to TR, weapon 2 face changed from BR to REAR, weapon 3 face changed from EXT to INT.

141.[194] PZL 11F(R) (RU Fighter 1/40-0/0 -> [195] PZL 24E(R)), sortie ammo changed from 100 to 80, last year changed from 0 to 1941, last month changed from 0 to 12, factory upgrade changed from 0 to [195] PZL 24E(R).

142.[195] PZL 24E(R) (RU Fighter 1/40-0/0 -> [167] Bf 109G-2(R)), upgrade changed from [167] Bf 109G-2(R) to [187] IAR 81A, sortie ammo changed from 200 to 140, last year changed from 0 to 1942, last month changed from 0 to 3, weapon 0 changed from [33] 20mm Cannon MG FF/M to [35] 20mm Oerlikon Cannon.

143.[196] PZL 37B(R), upgrade changed from 0 to [203] Ju 88A(R), sortie ammo changed from 5650 to 5120, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 0 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, weapon 1 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, weapon 2

changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, weapon 4 changed from 0 to [61] 100kg GP Bomb, weapon 3 number changed from 10 to 2, weapon 4 number changed from 0 to 18, weapon 4 face changed from FWD to INT.

144.[198] SET 7K, first year changed from 1941 to 1934, sortie ammo changed from 100 to 40, last year changed from 0 to 1936, last month changed from 0 to 12, weapon 0 changed from [7] 7.7mm SAFAT MG to [8] 7.92mm FN MG, weapon 1 changed from [7] 7.7mm SAFAT MG to [8] 7.92mm FN MG.

145.[199] SM.79(R), name changed from SM.79(R) to SM.79B(R), symbol changed from 156 to 0, upgrade changed from 0 to [200] SM.79JR, sortie ammo changed from 2950 to 2870, sortie fuel changed from 5478 to 5490, last year changed from 0 to 1941, last month changed from 0 to 12.

146.[200] SM.79JR, sortie ammo changed from 3500 to 3420, sortie fuel changed from 5478 to 5490, max import changed from 60 to 0, import from changed from [156] SM.79 Sparviero to 0, last year changed from 0 to 1943, last month changed from 0 to 6, reliability changed from 11 to 15, photo changed from [199] SM.79B(R) to 0.

147.[202] Ju 87D(R), max altitude changed from 23953 to 24609, symbol changed from 72 to 0, max speed changed from 249 to 257, cruise speed changed from 177 to 195, endurance changed from 200 to 180, range changed from 590 to 585, sortie ammo changed from 2740 to 2720, sortie fuel changed from 1320 to 1290, build limit changed from 1 to 0, max import changed from 168 to 104, last year changed from 0 to 1944, last month changed from 0 to 7, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1.

148.[203] Ju 88A(R), symbol changed from 74 to 0, max speed changed from 311 to 298, cruise speed changed from 252 to 229, range changed from 1260 to 1145, sortie ammo changed from 4600 to 4530, sortie fuel changed from 4785 to 4795, build limit changed from 1 to 0, max import changed from 84 to 82, import from changed from [74] Ju 88A to [94] Ju 88A-4, last year changed from 0 to 1944, last month changed from 0 to 7, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 2 number changed from 2 to 1.

149.[204] Ju 88D-1(R), symbol changed from 77 to 0, max speed changed from 317 to 305, cruise speed changed from 274 to 252, endurance changed from 330 to 360, range changed from 1507 to 1512, sortie ammo changed from 150 to 100, sortie fuel changed from 5907 to 5919, build limit changed from 1 to 0, max import changed from 20 to 15, last year changed from 0 to 1944, last month changed from 0 to 7, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 3 changed from [11] 7.92mm MG 81 to 0, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 0, weapon 3 face changed from SIDE to FWD.

150.[205] Bf 110E-1/U1(R), name changed from Bf 110E-1/U1(R) to Bf 110G-4(R), max altitude changed from 32811 to 29530, symbol changed from 21 to 0, max speed changed from 336 to 333, cruise speed changed from 285 to 280, climb changed from 2100 to 2170, max load changed from 1104 to 2207, endurance changed from 120 to 125, range changed from 570 to 863, first year changed from 1942 to 1943, maneuver changed from 25 to 28, first month changed from 1 to 6, crew changed from 2 to 3, sortie ammo changed from 269 to 220, sortie fuel changed from 2096 to 3092, build cost changed from 759 to 823, max import changed from 20 to 8, import from changed from [21] Bf 110E-1/U1 to [25] Bf 110G-4, last year changed from 0 to 1944, last month changed from 0 to 3, weapon 0 changed from [33] 20mm Cannon MG FF/M to [32] 20mm Cannon MG151, weapon 2 changed from [10] 7.92mm MG 15 to 650, weapon 3 changed from [106] Spanner to [104] FuG 202,

weapon 4 changed from 0 to [79] 300 litre Drop Tank, weapon 4 number changed from 0 to 2, weapon 4 face changed from FWD to EXT.

151.[209] Bf 109F-4(H) (HU Fighter 10/42-0/0 -> [211] Bf 109G-2(H)), symbol changed from 9 to 0, cruise speed changed from 317 to 306, endurance changed from 75 to 83, range changed from 554 to 423, maneuver changed from 35 to 34, type changed from Fighter to Fighter Bomber, upgrade changed from [211] Bf 109G-2(H) to [231] Me 210Ca-1(H), sortie ammo changed from 100 to 502, sortie fuel changed from 1155 to 661, build limit changed from 1 to 0, max import changed from 20 to 66, last year changed from 0 to 1943, last month changed from 0 to 12, weapon 2 changed from [77] 300 litre Drop Tank to [64] 250kg GP Bomb, factory upgrade changed from 0 to [231] Me 210Ca-1(H).

152.[210] Bf 109G-14(H), symbol changed from 10 to 0, cruise speed changed from 325 to 314, climb changed from 4000 to 3938, endurance changed from 70 to 81, range changed from 541 to 617, first month changed from 6 to 7, upgrade changed from 0 to 208, sortie ammo changed from 120 to 110, sortie fuel changed from 1229 to 1227, build limit changed from 2 to 1, max import changed from 51 to 0, import from changed from [10] Bf 109G-14 to 0.

153.[211] Bf 109G-2(H) (HU Fighter 5/43-0/0 -> [212] Bf 109G-6(H)), symbol changed from 11 to 0, max speed changed from 404 to 407, cruise speed changed from 315 to 316, climb changed from 3500 to 3300, endurance changed from 70 to 81, range changed from 525 to 621, maneuver changed from 34 to 35, first month changed from 5 to 1, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, last year changed from 0 to 1943, last month changed from 0 to 7, factory upgrade changed from 0 to [212] Bf 109G-6(H).

154.[212] Bf 109G-6(H) (HU Fighter 8/43-0/0 -> [210] Bf 109G-14(H)), symbol changed from 12 to 0, cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, sortie ammo changed from 120 to 110, sortie fuel changed from 1155 to 1156, build limit changed from 2 to 1, max import changed from 73 to 0, import from changed from [12] Bf 109G-6 to 0, last year changed from 0 to 1944, last month changed from 0 to 6, factory upgrade changed from 0 to [210] Bf 109G-14(H).

155.[214] Ca.135bis(H), symbol changed from 138 to 0, upgrade changed from 0 to [228] Ju 88A(H), sortie ammo changed from 3428 to 3360, last year changed from 0 to 1942, last month changed from 0 to 12.

156.[215] Ca.310 (H), symbol changed from 139 to 0, upgrade changed from 0 to [219] FW 189A(H), sortie ammo changed from 150 to 60, build limit changed from 1 to 0, last year changed from 0 to 1943, last month changed from 0 to 5, expansion rate changed from 1 to 0.

157.[216] Cr.32bis(H), name changed from Cr.32bis(H) to CR.32bis(H), symbol changed from 142 to 0, cruise speed changed from 155 to 174, endurance changed from 180 to 170, range changed from 465 to 493, sortie ammo changed from 128 to 40, sortie fuel changed from 578 to 579, last year changed from 0 to 1941, last month changed from 0 to 7, weapon 0 changed from [22] 12.7mm SAFAT MG to [14] 7.9mm Gebauer MG, weapon 1 changed from [7] 7.7mm SAFAT MG to 0, weapon 1 number changed from 2 to 0, factory upgrade changed from 0 to [232] Re.2000(H).

158.[217] Cr.42(H) (HU Fighter Bomber 9/39-0/0 -> [231] Me 210Ca-1(H)), name changed from Cr.42(H) to CR.42(H), max altitude changed from 34450 to 33467, max speed changed from 280 to 283, sortie ammo changed from 508 to 390, sortie fuel changed from 799 to 744, build limit changed from 13 to 0, last year changed from 0

to 1943, last month changed from 0 to 3, expansion rate changed from 1 to 0, factory upgrade changed from 0 to [231] Me 210Ca-1(H).

159.[219] FW 189A(H), name changed from FW 189A(H) to Fw 189A(H), endurance changed from 135 to 145, range changed from 454 to 488, first month changed from 1 to 6, sortie ammo changed from 150 to 120, sortie fuel changed from 743 to 726, build limit changed from 1 to 0, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1, weapon 2 number changed from 2 to 1.

160.[220] FW 190F(H), name changed from FW 190F(H) to Fw 190F-8(H), max altitude changed from 31171 to 32811, max speed changed from 382 to 392, cruise speed changed from 295 to 288, climb changed from 2110 to 2300, max load changed from 1104 to 1545, endurance changed from 90 to 95, range changed from 442 to 456, maneuver changed from 26 to 32, durability changed from 32 to 33, type changed from Fighter Bomber to Tactical Bomber, sortie ammo changed from 1308 to 1700, sortie fuel changed from 865 to 866, build limit changed from 1 to 0, max import changed from 35 to 80, import from changed from [44] Fw 190F to [91] Fw 190F-8, reliability changed from 10 to 5, weapon 1 changed from [9] 7.92mm MG 17 to [24] 13mm MG 131, weapon 3 changed from 0 to [60] 50kg GP Bomb, weapon 3 number changed from 0 to 4, weapon 3 face changed from FWD to EXT.

161.[222] He 170A(H), name changed from He 170A(H) to He 170A, upgrade changed from 0 to [229] Ju 88D-1(H), last year changed from 0 to 1942, last month changed from 0 to 8, reliability changed from 10 to 5.

162.[223] He 46C(H), upgrade changed from 0 to [219] FW 189A(H), sortie ammo changed from 490 to 20, last year changed from 0 to 1943, last month changed from 0 to 5, weapon 0 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG, weapon 1 changed from [60] 50kg GP Bomb to 0, weapon 1 number changed from 4 to 0, weapon 1 face changed from EXT to FWD.

163.[225] Ju 52(H), name changed from Ju 52(H) to Ju 52/3m(H), max speed changed from 178 to 180, cruise speed changed from 134 to 146, endurance changed from 335 to 410, range changed from 748 to 997, sortie ammo changed from 50 to 40, sortie fuel changed from 3924 to 4051, build limit changed from 1 to 0, max import changed from 29 to 53, last year changed from 0 to 1944, last month changed from 0 to 6, reliability changed from 11 to 12, weapon 0 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG, weapon 1 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG.

164.[226] Ju 86K-2(H), cruise speed changed from 196 to 176, range changed from 637 to 572, upgrade changed from 0 to [228] Ju 88A(H), sortie ammo changed from 2275 to 2260, sortie fuel changed from 1815 to 1819, last year changed from 0 to 1942, last month changed from 0 to 12, weapon 0 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG, weapon 1 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG, weapon 2 changed from [10] 7.92mm MG 15 to [14] 7.9mm Gebauer MG.

165.[227] Ju 87D(H), max altitude changed from 23953 to 24609, max speed changed from 249 to 257, cruise speed changed from 177 to 195, endurance changed from 200 to 180, range changed from 590 to 585, first year changed from 1942 to 1943, first month changed from 6 to 1, upgrade changed from 0 to [220] FW 190F(H), sortie ammo changed from 2740 to 2720, sortie fuel changed from 1320 to 1290, build limit changed from 1 to 0, max import changed from 40 to 48, last year changed from 0 to 1944, last month changed from 0 to 10, weapon 1 changed from

[11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1.

166.[228] Ju 88A(H), max speed changed from 311 to 298, cruise speed changed from 252 to 229, range changed from 1260 to 1145, sortie ammo changed from 4600 to 4530, sortie fuel changed from 4785 to 4795, build limit changed from 1 to 0, max import changed from 40 to 53, import from changed from [74] Ju 88A to [94] Ju 88A-4, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 2 number changed from 2 to 1.

167.[229] Ju 88D-1(H), max speed changed from 317 to 305, cruise speed changed from 274 to 252, endurance changed from 330 to 360, range changed from 1507 to 1512, first month changed from 1 to 9, sortie ammo changed from 150 to 100, sortie fuel changed from 5907 to 5919, build limit changed from 1 to 0, max import changed from 40 to 35, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 3 changed from [11] 7.92mm MG 81 to 0, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 0, weapon 3 face changed from SIDE to FWD.

168.[231] Me 210Ca-1(H), cruise speed changed from 295 to 288, climb changed from 2037 to 2500, endurance changed from 225 to 220, range changed from 1106 to 1056, first year changed from 1942 to 1943, first month changed from 11 to 4, upgrade changed from 0 to [210] Bf 109G-14(H), sortie ammo changed from 2450 to 1850, sortie fuel changed from 3960 to 4001, build limit changed from 4 to 6, last month changed from 10 to 6.

169.[232] Re.2000(H), name changed from Re.2000(H) to Re.2000 Heja, max altitude changed from 34450 to 33467, symbol changed from 153 to 0, max speed changed from 329 to 326, cruise speed changed from 267 to 249, endurance changed from 130 to 150, range changed from 578 to 622, sortie ammo changed from 104 to 60, last year changed from 1943 to 1942, last month changed from 12 to 7, reliability changed from 10 to 8, weapon 1 changed from [7] 7.7mm SAFAT MG to 0, factory upgrade changed from 0 to [237] Re.2000 Heja II.

170.[234] SM.75(H) (HU Transport 9/39-0/0 -> [225] Ju 52/3m(H)), crew changed from 4 to 5, sortie ammo changed from 25 to 20, reliability changed from 11 to 12, weapon 0 changed from [7] 7.7mm SAFAT MG to [14] 7.9mm Gebauer MG, factory upgrade changed from 0 to [225] Ju 52(H).

171.[235] WM 21, sortie ammo changed from 75 to 60.

172.[237] Re.2000 Heja II (HU Fighter 8/42-3/44 -> [212] Bf 109G-6(H)), max altitude changed from 34450 to 32811, symbol changed from 153 to 0, max speed changed from 336 to 321, cruise speed changed from 270 to 245, range changed from 675 to 612, durability changed from 26 to 27, upgrade changed from [212] Bf 109G-6(H) to [210] Bf 109G-14(H), sortie ammo changed from 104 to 60, last month changed from 3 to 6, photo changed from [232] Re.2000 Heja to 0, weapon 1 changed from [7] 7.7mm SAFAT MG to 0, factory upgrade changed from 0 to [210] Bf 109G-14(H).

173.[241] B-534 (SL Fighter 1/37-0/0 -> [243] Bf 109E-7(S)), max altitude changed from 34776 to 34780, sortie ammo changed from 200 to 80, weapon 0 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, factory upgrade changed from 0 to [243] Bf 109E-3(S).

174.[243] Bf 109E-3(S) (SL Fighter 11/42-0/0 -> [244] Bf 109G-2(S)), name changed from Bf 109E-3(S) to Bf 109E-7(S), cruise speed changed from 300 to 286, climb changed from 2800 to 2700, max load changed from 0 to 552, endurance changed from 80 to 90, range changed from 400 to 605, maneuver changed from 34 to 33, sortie ammo changed from 102 to 120, sortie fuel changed from 660 to 1156,

build cost changed from 337 to 338, import from changed from [5] Bf 109E-3 to [7] Bf 109E-7, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 2 changed from 0 to [77] 300 litre Drop Tank, weapon 2 number changed from 0 to 1, weapon 2 face changed from FWD to EXT, factory upgrade changed from 0 to [244] Bf 109G-2(S).

175.[244] Bf 109G-2(S) (SL Fighter 3/43-0/0 -> [245] Bf 109G-6(S)), max speed changed from 404 to 407, cruise speed changed from 315 to 316, climb changed from 3500 to 3300, endurance changed from 70 to 81, range changed from 525 to 621, maneuver changed from 34 to 35, sortie ammo changed from 100 to 90, sortie fuel changed from 1155 to 1156, build limit changed from 1 to 0, last year changed from 0 to 1944, last month changed from 0 to 1, factory upgrade changed from 0 to [245] Bf 109G-6(S).

176.[245] Bf 109G-6(S), cruise speed changed from 325 to 314, endurance changed from 70 to 81, range changed from 541 to 617, sortie ammo changed from 120 to 110, sortie fuel changed from 1155 to 1156, build limit changed from 1 to 0.

177.[247] Bk-534 (SL Fighter 1/37-0/0 -> [243] Bf 109E-7(S)), max altitude changed from 31000 to 34780, max speed changed from 233 to 255, cruise speed changed from 210 to 215, range changed from 350 to 358, first year changed from 1937 to 1938, maneuver changed from 28 to 29, sortie ammo changed from 150 to 60, weapon 0 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, factory upgrade changed from 0 to [243] Bf 109E-3(S).

178.[249] Fi 156C(S), sortie ammo changed from 50 to 20, build limit changed from 1 to 0.

179.[251] FW 189A(S), name changed from FW 189A(S) to Fw 189A(S), endurance changed from 135 to 145, range changed from 454 to 488, sortie ammo changed from 150 to 120, sortie fuel changed from 743 to 726, build limit changed from 1 to 0, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 2 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1, weapon 2 number changed from 2 to 1.

180.[252] He 111H-3(S), max speed changed from 258 to 261, cruise speed changed from 224 to 204, endurance changed from 340 to 385, range changed from 1269 to 1309, sortie ammo changed from 4650 to 4550, sortie fuel changed from 5335 to 5704, build limit changed from 1 to 0, weapon 4 changed from [64] 250kg GP Bomb to [10] 7.9mm MG 15, weapon 5 changed from 0 to [64] 250kg GP Bomb, weapon 3 number changed from 2 to 1, weapon 4 number changed from 8 to 2, weapon 5 number changed from 0 to 8, weapon 1 face changed from TR to FWD, weapon 2 face changed from BR to TR, weapon 3 face changed from SIDE to BR, weapon 4 face changed from INT to SIDE, weapon 5 face changed from FWD to INT.

181.[253] Ju 87D(S), max altitude changed from 23953 to 24609, max speed changed from 249 to 257, cruise speed changed from 177 to 195, endurance changed from 200 to 180, range changed from 590 to 585, sortie ammo changed from 2740 to 2720, sortie fuel changed from 1320 to 1290, build limit changed from 1 to 0, weapon 1 changed from [11] 7.92mm MG 81 to 650, weapon 1 number changed from 2 to 1.

182.[255] S-328 (SL Tactical Bomber 1/41-0/0 -> [253] Ju 87D(S)), max altitude changed from 23622 to 23625, sortie ammo changed from 1300 to 740, last year changed from 0 to 1944, last month changed from 0 to 5, weapon 0 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, weapon 1 changed from [15] 7.7mm KM.Wz MG to [8] 7.92mm FN MG, weapon 2 changed from [64] 250kg GP Bomb to

[61] 100kg GP Bomb, weapon 3 changed from 0 to [60] 50kg GP Bomb, weapon 2 number changed from 2 to 1, weapon 3 number changed from 0 to 4, weapon 3 face changed from FWD to EXT, factory upgrade changed from 0 to [253] Ju 87D(S).

183.[272] I-15bis, max altitude changed from 35108 to 29858, climb changed from 2890 to 2486, max load changed from 332 to 222, endurance changed from 165 to 150, range changed from 478 to 435, armor changed from 1 to 0, upgrade changed from 0 to [281] MiG-3, sortie ammo changed from 700 to 245, sortie fuel changed from 610 to 513, last year changed from 0 to 1941, last month changed from 0 to 10, weapon 1 number changed from 3 to 2, change to modifier changed from 0 to -20.

184.[273] I-153, endurance changed from 154 to 140, range changed from 462 to 420, upgrade changed from 0 to [302] La-5, sortie ammo changed from 820 to 410, sortie fuel changed from 730 to 513, last year changed from 0 to 1941, last month changed from 0 to 11, change to modifier changed from 0 to -20.

185.[274] I-153BS, endurance changed from 154 to 140, range changed from 462 to 420, type changed from Fighter Bomber to Tactical Bomber, upgrade changed from 0 to [317] IL-2, sortie ammo changed from 720 to 500, sortie fuel changed from 736 to 513, last year changed from 0 to 1941, last month changed from 0 to 11, weapon 0 changed from [26] 12.7mm UBS MG to [25] 12.7mm BS MG.

186.[275] I-15bis, max load changed from 332 to 222, endurance changed from 161 to 150, range changed from 466 to 435, armor changed from 1 to 0, upgrade changed from 0 to [281] MiG-3, sortie ammo changed from 500 to 245, sortie fuel changed from 492 to 513, last year changed from 0 to 1941, last month changed from 0 to 10, weapon 1 number changed from 3 to 2, change to modifier changed from 0 to -20.

187.[276] I-16 Type 18, endurance changed from 140 to 105, range changed from 431 to 323, upgrade changed from 0 to [300] LaGG-3 '29 Series', sortie ammo changed from 670 to 410, sortie fuel changed from 715 to 430, last year changed from 0 to 1941, last month changed from 0 to 11, change to modifier changed from 0 to -20.

188.[277] I-16 Type 24, max altitude changed from 31827 to 32483, endurance changed from 140 to 100, range changed from 431 to 308, upgrade changed from 0 to [300] LaGG-3 '29 Series', sortie ammo changed from 524 to 410, sortie fuel changed from 715 to 430, last year changed from 0 to 1941, last month changed from 0 to 11, change to modifier changed from 0 to -20.

189.[278] I-16 Type 29, endurance changed from 140 to 100, range changed from 431 to 308, upgrade changed from 0 to [300] LaGG-3 '29 Series', sortie ammo changed from 822 to 137, sortie fuel changed from 715 to 430, last year changed from 0 to 1941, last month changed from 0 to 11, weapon 0 changed from [26] 12.7mm UBS MG to [25] 12.7mm BS MG.

190.[279] I-16 Type 5, max altitude changed from 30187 to 27890, endurance changed from 140 to 115, range changed from 431 to 354, upgrade changed from 0 to 298, sortie ammo changed from 801 to 370, sortie fuel changed from 715 to 430, last year changed from 0 to 1941, last month changed from 0 to 10, change to modifier changed from 0 to -20.

191.[281] MiG-3, max altitude changed from 36092 to 36748, max speed changed from 382 to 392, cruise speed changed from 194 to 292, endurance changed from 121 to 120, range changed from 391 to 584, first year changed from 1941 to 1940, maneuver changed from 30 to 31, first month changed from 5 to 11, upgrade changed from 0 to [284] Yak-1B, sortie ammo changed from 515 to 138,

sortie fuel changed from 1044 to 901, build limit changed from 24 to 36, reliability changed from 10 to 13, weapon 2 changed from [61] 100kg GP Bomb to [70] RS-82 Rocket, weapon 2 number changed from 2 to 6, factory upgrade changed from 0 to 282.

192.[283] Yak-1, endurance changed from 220 to 195, range changed from 561 to 497, sortie ammo changed from 512 to 420, sortie fuel changed from 648 to 885, reliability changed from 15 to 13, factory upgrade changed from 0 to [284] Yak-1B.

193.[284] Yak-1B, max altitude changed from 34124 to 32155, max speed changed from 350 to 360, cruise speed changed from 149 to 155, endurance changed from 165 to 185, range changed from 409 to 477, maneuver changed from 33 to 34, durability changed from 32 to 31, sortie ammo changed from 512 to 410, sortie fuel changed from 648 to 885, factory upgrade changed from 0 to [293] Yak-3.

194.[285] Yak-7A, max speed changed from 348 to 342, endurance changed from 100 to 105, range changed from 400 to 420, maneuver changed from 30 to 31, sortie ammo changed from 828 to 157, sortie fuel changed from 648 to 728, last month changed from 3 to 4, reliability changed from 15 to 13, factory upgrade changed from 0 to [286] Yak-7B.

195.[286] Yak-7B, max speed changed from 355 to 351, maneuver changed from 32 to 33, first month changed from 4 to 5, upgrade changed from 0 to [290] Yak-9M, sortie ammo changed from 828 to 440, sortie fuel changed from 648 to 728, build limit changed from 19 to 18, last month changed from 6 to 4, factory upgrade changed from 0 to [290] Yak-9M.

196.[287] Yak-9, upgrade changed from 0 to [288] Yak-9D, sortie ammo changed from 59 to 80, sortie fuel changed from 783 to 728, build limit changed from 13 to 11, last month changed from 7 to 3, factory upgrade changed from 0 to [288] Yak-9D.

197.[288] Yak-9D, climb changed from 2414 to 2791, endurance changed from 212 to 200, range changed from 848 to 800, maneuver changed from 32 to 33, sortie ammo changed from 59 to 80, sortie fuel changed from 783 to 1075, build cost changed from 375 to 380, last year changed from 1946 to 1945, last month changed from 5 to 9.

198.[289] Yak-9DD, endurance changed from 361 to 260, range changed from 1419 to 1022, maneuver changed from 29 to 33, sortie ammo changed from 59 to 80, sortie fuel changed from 783 to 1397, build cost changed from 375 to 385.

199.[290] Yak-9M, endurance changed from 148 to 160, range changed from 589 to 637, maneuver changed from 34 to 35, type changed from Fighter to Fighter Bomber, sortie ammo changed from 59 to 430, sortie fuel changed from 783 to 1075, weapon 2 changed from 0 to [61] 100kg GP Bomb, weapon 2 number changed from 0 to 2, weapon 2 face changed from FWD to EXT.

200.[291] Yak-9T, climb changed from 2985 to 2791, endurance changed from 116 to 120, range changed from 456 to 472, sortie ammo changed from 500 to 410, sortie fuel changed from 783 to 728.

201.[292] Yak-9U, max altitude changed from 32811 to 34780, climb changed from 3284 to 3612, endurance changed from 135 to 110, range changed from 670 to 546, maneuver changed from 34 to 36, sortie ammo changed from 59 to 110, sortie fuel changed from 783 to 838, weapon 1 number changed from 1 to 2.

202.[293] Yak-3, max speed changed from 402 to 404, cruise speed changed from 292 to 302, endurance changed from 83 to 80, range changed from 403 to 402, maneuver changed from 35 to 37, sortie ammo changed from 85 to 110, sortie fuel changed from 698 to 628, build limit changed from 25 to 22, last month changed from

12 to 9.

203.[295] Yak-2, max speed changed from 321 to 325, climb changed from 2132 to 2135, maneuver changed from 18 to 24, type changed from Tactical Bomber to Recon, upgrade changed from [296] Yak-4 to [331] Pe-2R, sortie ammo changed from 1150 to 40, sortie fuel changed from 2154 to 1323, last year changed from 0 to 1940, last month changed from 0 to 9, weapon 2 changed from [61] 100kg GP Bomb to 0, weapon 3 changed from [60] 50kg GP Bomb to 0, weapon 2 number changed from 4 to 0, weapon 3 number changed from 2 to 0, weapon 1 face changed from REAR to TR, weapon 2 face changed from INT to FWD, weapon 3 face changed from EXT to FWD, factory upgrade changed from 0 to [296] Yak-4.

204.[296] Yak-4, max altitude changed from 29530 to 31171, max speed changed from 332 to 335, cruise speed changed from 249 to 255, climb changed from 2053 to 2217, endurance changed from 139 to 135, range changed from 576 to 573, first year changed from 1941 to 1940, maneuver changed from 18 to 25, armor changed from 0 to 1, first month changed from 4 to 10, type changed from Tactical Bomber to Recon, upgrade changed from 0 to [331] Pe-2R, sortie ammo changed from 1150 to 40, sortie fuel changed from 2154 to 1620, last year changed from 0 to 1941, last month changed from 0 to 4, weapon 2 changed from [61] 100kg GP Bomb to 0, weapon 3 changed from [60] 50kg GP Bomb to 0, weapon 2 number changed from 4 to 0, weapon 3 number changed from 2 to 0, weapon 1 face changed from REAR to TR, weapon 2 face changed from INT to FWD, weapon 3 face changed from EXT to FWD.

205.[297] Yak-6, sortie ammo changed from 25 to 20, build limit changed from 4 to 6.

206.[299] LaGG-3, max speed changed from 342 to 336, cruise speed changed from 254 to 258, climb changed from 2299 to 2020, endurance changed from 128 to 125, range changed from 541 to 537, maneuver changed from 28 to 29, durability changed from 28 to 27, first month changed from 3 to 1, upgrade changed from 0 to [302] La-5, sortie ammo changed from 505 to 188, sortie fuel changed from 540 to 904, last month changed from 7 to 6, reliability changed from 15 to 13, factory upgrade changed from 0 to [302] La-5.

207.[300] LaGG-3 '29 Series', max altitude changed from 32811 to 29530, cruise speed changed from 250 to 261, endurance changed from 128 to 105, range changed from 533 to 456, maneuver changed from 28 to 31, first month changed from 8 to 5, sortie ammo changed from 505 to 410, sortie fuel changed from 540 to 750, factory upgrade changed from 0 to [301] LaGG-3 '66 Series'.

208.[301] LaGG-3 '66 Series', cruise speed changed from 250 to 270, endurance changed from 97 to 100, range changed from 404 to 450, maneuver changed from 30 to 32, upgrade changed from 0 to [293] Yak-3, sortie ammo changed from 505 to 410, sortie fuel changed from 540 to 750, last month changed from 5 to 4, factory upgrade changed from 0 to [293] Yak-3.

209.[302] La-5, max speed changed from 361 to 357, endurance changed from 170 to 105, range changed from 742 to 458, maneuver changed from 30 to 33, first month changed from 5 to 7, sortie ammo changed from 254 to 265, sortie fuel changed from 732 to 750, build limit changed from 13 to 18, last year changed from 1943 to 1942, last month changed from 2 to 11, expansion rate changed from 1 to 2, factory upgrade changed from 0 to [303] La-5F.

210.[303] La-5F, max speed changed from 373 to 367, climb changed from 2985 to 2988, endurance changed from 150 to 100, range changed from 665 to 443, first

year changed from 1943 to 1942, maneuver changed from 32 to 34, first month changed from 3 to 12, upgrade changed from [305] La-7 to [304] La-5FN, sortie ammo changed from 474 to 430, sortie fuel changed from 732 to 750, build limit changed from 19 to 36, max import changed from 0 to 750, import from changed from 0 to [302] La-5, last year changed from 1944 to 1943, last month changed from 4 to 8, expansion rate changed from 1 to 2, import cost changed from 0 to 1, minimum import changed from 0 to 1, import % changed from DEFAULT to 10%, factory upgrade changed from 0 to [304] La-5FN.

211.[304] La-5FN, max altitude changed from 35272 to 34452, max speed changed from 373 to 385, cruise speed changed from 298 to 274, climb changed from 3156 to 3202, endurance changed from 96 to 95, range changed from 476 to 433, maneuver changed from 33 to 35, durability changed from 31 to 32, first month changed from 4 to 9, upgrade changed from 0 to [305] La-7, sortie ammo changed from 474 to 430, sortie fuel changed from 732 to 750, build limit changed from 19 to 38, last month changed from 12 to 6, expansion rate changed from 1 to 2, factory upgrade changed from 0 to [305] La-7.

212.[305] La-7, max speed changed from 411 to 401, cruise speed changed from 298 to 302, climb changed from 3815 to 3612, endurance changed from 80 to 85, range changed from 397 to 427, maneuver changed from 35 to 37, first month changed from 5 to 7, upgrade changed from 0 to 306, sortie ammo changed from 491 to 430, sortie fuel changed from 732 to 750, build limit changed from 22 to 24, last year changed from 0 to 1944, last month changed from 0 to 12, reliability changed from 5 to 8, weapon 0 changed from [39] 20mm B-20 Cannon to [37] 20mm ShVAK Cannon, weapon 0 number changed from 3 to 2.

213.[307] R-5, sortie ammo changed from 87 to 40, last year changed from 0 to 1940, last month changed from 0 to 1, weapon 0 changed from [16] 7.62mm ShKAS MG to [12] 7.62mm PV-1 MG, weapon 2 changed from [64] 250kg GP Bomb to 0, weapon 3 changed from [60] 50kg GP Bomb to 0, weapon 2 number changed from 1 to 0, weapon 3 number changed from 2 to 0, weapon 2 face changed from EXT to FWD, weapon 3 face changed from EXT to FWD, change to modifier changed from 0 to -20.

214.[308] R-Z, sortie ammo changed from 1250 to 1140, last year changed from 0 to 1940, last month changed from 0 to 1, change to modifier changed from 0 to -20.

215.[309] R-10, max altitude changed from 22969 to 24609, sortie ammo changed from 75 to 60, sortie fuel changed from 746 to 595, last year changed from 0 to 1940, last month changed from 0 to 1, reliability changed from 10 to 5, weapon 2 changed from [60] 50kg GP Bomb to 0, weapon 2 number changed from 6 to 0, weapon 2 face changed from INT to FWD, change to modifier changed from 0 to -20.

216.[311] Su-2, upgrade changed from 0 to [318] IL-2M, sortie ammo changed from 1100 to 980, sortie fuel changed from 1690 to 1538, build limit changed from 15 to 12, last year changed from 1941 to 1942, last month changed from 12 to 3, weapon 1 face changed from TURRET to TR.

217.[313] SB-2, max altitude changed from 30515 to 29530, max speed changed from 280 to 270, cruise speed changed from 233 to 210, climb changed from 1955 to 1500, max load changed from 3530 to 3309, endurance changed from 370 to 290, range changed from 1436 to 1015, first year changed from 1939 to 1937, upgrade changed from 0 to [330] Pe-2, sortie ammo changed from 3600 to 1400, sortie fuel changed from 2646 to 2761, last year changed from 0 to 1941, last month changed from 0 to 10, weapon 4 changed from [64] 250kg GP Bomb to 0, weapon 4 number

changed from 4 to 0, weapon 4 face changed from EXT to FWD, change to modifier changed from 0 to -20.

218.[314] SB-2(recon), name changed from SB-2(recon) to SB-2 Rcn, cruise speed changed from 233 to 215, climb changed from 1955 to 1600, endurance changed from 370 to 290, range changed from 1436 to 1039, first year changed from 1941 to 1940, sortie ammo changed from 82 to 80, sortie fuel changed from 2646 to 2761, change to modifier changed from 0 to -20.

219.[315] Ar-2, max altitude changed from 34452 to 32811, max speed changed from 318 to 310, cruise speed changed from 295 to 220, climb changed from 2513 to 1800, endurance changed from 190 to 220, range changed from 934 to 806, first year changed from 1941 to 1940, maneuver changed from 20 to 22, first month changed from 1 to 10, upgrade changed from 0 to [322] Tu-2, sortie ammo changed from 3400 to 2260, sortie fuel changed from 4284 to 2546, last year changed from 0 to 1941, last month changed from 0 to 11, weapon 3 changed from [66] 500kg GP Bomb to [64] 250kg GP Bomb, weapon 4 changed from [66] 500kg GP Bomb to 0, weapon 0 number changed from 2 to 1, weapon 3 number changed from 1 to 4, weapon 4 number changed from 2 to 0, weapon 3 face changed from INT to EXT, weapon 4 face changed from EXT to FWD, change to modifier changed from 0 to -20.

220.[317] IL-2, max altitude changed from 19688 to 20344, max speed changed from 265 to 260, climb changed from 1118 to 1151, sortie ammo changed from 1233 to 1140, sortie fuel changed from 1038 to 1036, build limit changed from 50 to 44, expansion rate changed from 1 to 3, weapon 0 changed from [38] 23mm VYa Cannon to [37] 20mm ShVAK Cannon, weapon 3 face changed from EXT to INT, factory upgrade changed from 0 to [318] IL-2M.

221.[318] IL-2M, max altitude changed from 20344 to 19688, climb changed from 925 to 1053, endurance changed from 133 to 135, range changed from 427 to 434, sortie ammo changed from 1453 to 1110, sortie fuel changed from 1038 to 1036, weapon 4 face changed from EXT to INT, factory upgrade changed from 0 to [319] IL-2M3.

222.[319] IL-2M3, max altitude changed from 20344 to 19688, max speed changed from 258 to 249, cruise speed changed from 199 to 189, endurance changed from 115 to 135, range changed from 381 to 425, upgrade changed from 0 to [320] IL-10, sortie ammo changed from 1453 to 1250, sortie fuel changed from 1038 to 1036, weapon 4 face changed from EXT to INT.

223.[320] IL-10, maneuver changed from 22 to 23, sortie ammo changed from 1453 to 1470, sortie fuel changed from 1038 to 1207, reliability changed from 10 to 13.

224.[322] Tu-2, max load changed from 6617 to 4412, endurance changed from 275 to 300, range changed from 1260 to 1375, first month changed from 9 to 8, sortie ammo changed from 7034 to 4560, build limit changed from 5 to 4, last month changed from 12 to 1, weapon 3 changed from [66] 500kg GP Bomb to [64] 250kg GP Bomb, weapon 4 changed from [68] 1000kg GP Bomb to [66] 500kg GP Bomb, weapon 1 number changed from 3 to 2, weapon 2 number changed from 2 to 1, weapon 3 number changed from 2 to 4, factory upgrade changed from 0 to [323] Tu-2S.

225.[323] Tu-2S, max load changed from 6617 to 4412, endurance changed from 285 to 365, range changed from 1306 to 1672, first month changed from 12 to 11, sortie ammo changed from 7034 to 4590, sortie fuel changed from 4440 to 4630, build limit changed from 12 to 13, last month changed from 12 to 9, reliability changed

from 10 to 8, weapon 3 changed from [66] 500kg GP Bomb to [64] 250kg GP Bomb, weapon 4 changed from [68] 1000kg GP Bomb to [66] 500kg GP Bomb, weapon 3 number changed from 2 to 4.

226.[326] U-2 (recon), name changed from U-2 (recon) to U-2 Rcn, upgrade changed from [326] U-2 Rcn to 0, sortie ammo changed from 70 to 20.

227.[327] U-2 (transp) (SU Transport 1/39-0/0 -> [327] U-2 (transp)), upgrade changed from [327] U-2 (transp) to 0, sortie ammo changed from 70 to 20.

228.[328] U-2VS, upgrade changed from [328] U-2VS to 0, sortie ammo changed from 700 to 680, change to modifier changed from 0 to -50.

229.[330] Pe-2, max speed changed from 336 to 330, cruise speed changed from 225 to 210, range changed from 750 to 700, durability changed from 39 to 35, upgrade changed from 0 to 329, sortie ammo changed from 2320 to 1420, sortie fuel changed from 2352 to 2047, last year changed from 1945 to 1942, last month changed from 12 to 8, weapon 4 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 4 number changed from 4 to 6, weapon 4 face changed from EXT to INT.

230.[331] Pe-2R, max altitude changed from 28874 to 29530, max speed changed from 336 to 345, cruise speed changed from 225 to 230, climb changed from 1824 to 1922, endurance changed from 266 to 265, range changed from 997 to 1015, maneuver changed from 24 to 28, durability changed from 39 to 35, upgrade changed from 0 to 334, sortie fuel changed from 2352 to 2708, last year changed from 1945 to 1942.

231.[332] Pe-3, cruise speed changed from 225 to 215, endurance changed from 356 to 265, range changed from 1335 to 949, maneuver changed from 26 to 25, sortie ammo changed from 1649 to 760, sortie fuel changed from 3462 to 2708, last year changed from 1941 to 1942, last month changed from 12 to 3, weapon 0 changed from [25] 12.7mm BS MG to [26] 12.7mm UBS MG, weapon 3 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 2 face changed from BR to REAR, weapon 4 face changed from EXT to INT, factory upgrade changed from 0 to [333] Pe-3bis.

232.[333] Pe-3bis, max speed changed from 330 to 336, cruise speed changed from 225 to 218, climb changed from 1774 to 1856, endurance changed from 335 to 265, range changed from 1256 to 962, maneuver changed from 26 to 25, type changed from Fighter Bomber to Night Fighter, sortie ammo changed from 1649 to 130, sortie fuel changed from 3462 to 2708, build limit changed from 5 to 3, max import changed from 0 to ALL, import from changed from 0 to [332] Pe-3, last month changed from 8 to 12, weapon 3 changed from [16] 7.62mm ShKAS MG to 0, weapon 4 changed from [64] 250kg GP Bomb to 0, weapon 5 changed from [61] 100kg GP Bomb to 0, weapon 3 number changed from 1 to 0, weapon 4 number changed from 2 to 0, weapon 5 number changed from 2 to 0, weapon 3 face changed from BR to FWD, weapon 4 face changed from EXT to FWD, weapon 5 face changed from EXT to FWD, import cost changed from 0 to 5, minimum import changed from 0 to 1, import % changed from DEFAULT to 5%.

233.[335] Yer-2, cruise speed changed from 243 to 233, max load changed from 6617 to 4412, endurance changed from 630 to 700, range changed from 2551 to 2718, sortie ammo changed from 6778 to 4470, sortie fuel changed from 5500 to 8708, build limit changed from 0 to 2, expansion rate changed from 0 to 1, weapon 1 changed from [26] 12.7mm UBS MG to [27] 12.7mm UBT MG, weapon 4 changed from [66] 500kg GP Bomb to 0, weapon 4 number changed from 2 to 0, weapon 1

face changed from TR to TURRET, weapon 4 face changed from EXT to FWD, factory upgrade changed from 0 to [336] Yer-2 (1943).

234.[336] Yer-2 (1943), name changed from Yer-2 (1943) to Yer-2 '1943', max speed changed from 259 to 261, max load changed from 8822 to 6617, endurance changed from 995 to 1100, range changed from 3416 to 3776, sortie ammo changed from 8978 to 6710, sortie fuel changed from 5500 to 12037, build limit changed from 7 to 6, weapon 0 changed from [37] 20mm ShVAK Cannon to [26] 12.7mm UBS MG, weapon 1 changed from [26] 12.7mm UBS MG to [37] 20mm ShVAK Cannon, weapon 2 changed from [26] 12.7mm UBS MG to [27] 12.7mm UBT MG, weapon 4 changed from [68] 1000kg GP Bomb to 0, weapon 3 number changed from 4 to 6, weapon 4 number changed from 2 to 0, weapon 1 face changed from TR to TURRET, weapon 4 face changed from EXT to FWD.

235.[338] DB-3B, max speed changed from 249 to 258, max load changed from 5514 to 2207, endurance changed from 611 to 750, range changed from 1904 to 2337, sortie ammo changed from 5590 to 2260, sortie fuel changed from 3168 to 4729, build cost changed from 798 to 900, last year changed from 0 to 1941, last month changed from 0 to 11, weapon 3 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 4 changed from [66] 500kg GP Bomb to 0, weapon 3 number changed from 6 to 10, weapon 4 number changed from 2 to 0, weapon 3 face changed from EXT to INT, weapon 4 face changed from INT to FWD, change to modifier changed from 0 to -20.

236.[339] IL-4, cruise speed changed from 199 to 211, max load changed from 5514 to 2207, endurance changed from 700 to 875, range changed from 2321 to 3077, upgrade changed from 0 to 340, sortie ammo changed from 5628 to 2270, sortie fuel changed from 3168 to 6374, build limit changed from 7 to 5, last year changed from 0 to 1942, last month changed from 0 to 12, weapon 3 changed from [64] 250kg GP Bomb to [61] 100kg GP Bomb, weapon 4 changed from [66] 500kg GP Bomb to 0, weapon 3 number changed from 6 to 10, weapon 4 number changed from 2 to 0, weapon 3 face changed from EXT to INT, weapon 4 face changed from INT to FWD.

237.[341] TB-3, cruise speed changed from 143 to 133, max load changed from 11027 to 4412, endurance changed from 705 to 750, range changed from 1680 to 1662, sortie ammo changed from 11113 to 4520, sortie fuel changed from 9923 to 12897, last year changed from 0 to 1941, last month changed from 0 to 10, weapon 3 changed from [61] 100kg GP Bomb to [64] 250kg GP Bomb, weapon 4 changed from [64] 250kg GP Bomb to 0, weapon 5 changed from [68] 1000kg GP Bomb to 0, weapon 0 number changed from 2 to 1, weapon 1 number changed from 2 to 4, weapon 2 number changed from 2 to 1, weapon 3 number changed from 20 to 8, weapon 4 number changed from 4 to 0, weapon 5 number changed from 2 to 0, weapon 1 face changed from TR to TURRET, weapon 4 face changed from EXT to FWD, weapon 5 face changed from EXT to FWD, change to modifier changed from 0 to -20.

238.[342] TB-3G-2, max load changed from 11027 to 6617, endurance changed from 705 to 750, range changed from 1680 to 1787, sortie ammo changed from 50 to 60, sortie fuel changed from 9923 to 12897, last year changed from 0 to 1941, last month changed from 0 to 11, weapon 0 changed from [13] 7.62mm DA-1 MG to [16] 7.62mm ShKAS MG, weapon 1 changed from [13] 7.62mm DA-1 MG to [16] 7.62mm ShKAS MG, weapon 2 changed from [13] 7.62mm DA-1 MG to [16] 7.62mm ShKAS MG, weapon 0 number changed from 2 to 1, weapon 1 number changed from 2 to 1,

weapon 2 number changed from 2 to 1, weapon 1 face changed from TR to TURRET, change to modifier changed from 0 to -20.

239.[344] Pe-8, max altitude changed from 30515 to 31171, max speed changed from 275 to 277, max load changed from 6617 to 4412, endurance changed from 860 to 1030, range changed from 2795 to 3347, sortie ammo changed from 6805 to 6800, sortie fuel changed from 13438 to 20594, reliability changed from 23 to 22, weapon 5 changed from [66] 500kg GP Bomb to 0, weapon 4 number changed from 4 to 8, weapon 5 number changed from 4 to 0, weapon 5 face changed from EXT to FWD.

240.[347] Li-2, max altitude changed from 29858 to 21000, max speed changed from 240 to 199, cruise speed changed from 187 to 146, climb changed from 1130 to 1479, max load changed from 6400 to 6617, endurance changed from 400 to 600, range changed from 1246 to 1460, upgrade changed from [347] Li-2 to 0, sortie ammo changed from 25 to 60, sortie fuel changed from 5022 to 5142, weapon 1 changed from 0 to [16] 7.62mm ShKAS MG, weapon 1 number changed from 0 to 2, weapon 1 face changed from FWD to SIDE.

241.[348] Li-2VP, name changed from Li-2VP to Li-2VV, max altitude changed from 23200 to 21000, max speed changed from 229 to 199, cruise speed changed from 170 to 146, climb changed from 1130 to 1479, max load changed from 3309 to 6617, endurance changed from 400 to 600, range changed from 1133 to 1460, first year changed from 1941 to 1942, first month changed from 7 to 1, sortie ammo changed from 3400 to 4460, sortie fuel changed from 5022 to 5142, weapon 2 changed from [16] 7.62mm ShKAS MG to [64] 250kg GP Bomb, weapon 3 changed from [64] 250kg GP Bomb to 0, weapon 4 changed from [66] 500kg GP Bomb to 0, weapon 1 number changed from 1 to 2, weapon 2 number changed from 2 to 4, weapon 3 number changed from 2 to 0, weapon 4 number changed from 2 to 0, weapon 0 face changed from FWD to TURRET, weapon 1 face changed from TURRET to SIDE, weapon 2 face changed from REAR to EXT, weapon 3 face changed from EXT to FWD, weapon 4 face changed from EXT to FWD.

242.[350] A-20B, endurance changed from 180 to 150, range changed from 834 to 695, sortie ammo changed from 2250 to 2110, sortie fuel changed from 2500 to 2242, build cost changed from 0 to 1360, last year changed from 0 to 1943, last month changed from 0 to 2, weapon 2 changed from [5] .303 Browning MG to 648, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [351] A-20G.

243.[351] A-20G, endurance changed from 220 to 240, range changed from 898 to 980, upgrade changed from 0 to [354] B-25J, sortie ammo changed from 4450 to 2270, sortie fuel changed from 3397 to 3072, build cost changed from 0 to 1360, weapon 4 changed from [63] 500 lb Bomb to 0, weapon 4 number changed from 4 to 0, weapon 4 face changed from EXT to FWD, build flags changed from NONE to LEND-LEASE.

244.[353] B-25D, cruise speed changed from 233 to 213, endurance changed from 385 to 400, range changed from 1495 to 1420, sortie ammo changed from 3300 to 3180, sortie fuel changed from 6084 to 6165, build cost changed from 0 to 1352, last year changed from 0 to 1943, last month changed from 0 to 12, reliability changed from 5 to 8, weapon 0 number changed from 3 to 2, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [354] B-25J.

245.[354] B-25J, cruise speed changed from 230 to 210, endurance changed from 460 to 430, range changed from 1763 to 1505, sortie ammo changed from 3300 to 3330, sortie fuel changed from 7426 to 7442, build cost changed from 0 to 1352,

reliability changed from 5 to 8, build flags changed from NONE to LEND-LEASE.

246.[356] Hurricane IIB, maneuver changed from 33 to 32, durability changed from 26 to 29, sortie ammo changed from 1200 to 990, build cost changed from 0 to 383, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [357] Hurricane IIC.

247.[357] Hurricane IIC, sortie ammo changed from 1200 to 950, build cost changed from 0 to 383, build flags changed from NONE to LEND-LEASE.

248.[359] P-39D, max altitude changed from 31450 to 31500, max speed changed from 364 to 360, cruise speed changed from 230 to 220, endurance changed from 155 to 160, range changed from 594 to 586, maneuver changed from 29 to 31, sortie ammo changed from 760 to 485, sortie fuel changed from 750 to 759, build cost changed from 0 to 368, weapon 0 changed from [49] 37mm Cannon T9 to [50] 37mm M4 Cannon, weapon 2 changed from [5] .303 Browning MG to [63] 500 lb Bomb, weapon 3 changed from [63] 500 lb Bomb to 0, weapon 2 number changed from 4 to 1, weapon 3 number changed from 1 to 0, weapon 2 face changed from FWD to EXT, weapon 3 face changed from EXT to FWD, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [360] P-39N.

249.[360] P-39N, max altitude changed from 38500 to 33000, max speed changed from 376 to 380, cruise speed changed from 245 to 225, endurance changed from 100 to 115, range changed from 408 to 431, maneuver changed from 30 to 32, durability changed from 31 to 30, sortie ammo changed from 760 to 485, sortie fuel changed from 534 to 545, build cost changed from 0 to 368, weapon 0 changed from [49] 37mm Cannon T9 to [50] 37mm M4 Cannon, weapon 1 number changed from 4 to 2, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [361] P-39Q.

250.[361] P-39Q, max altitude changed from 35000 to 32500, max speed changed from 377 to 376, cruise speed changed from 250 to 225, range changed from 645 to 581, maneuver changed from 29 to 33, durability changed from 32 to 31, upgrade changed from 0 to [362] P-63A, sortie ammo changed from 760 to 485, sortie fuel changed from 750 to 759, build cost changed from 0 to 368, weapon 1 number changed from 4 to 2, build flags changed from NONE to LEND-LEASE.

251.[362] P-63A, climb changed from 3425 to 3500, endurance changed from 170 to 125, range changed from 708 to 520, maneuver changed from 31 to 35, durability changed from 33 to 32, sortie ammo changed from 1760 to 1235, sortie fuel changed from 850 to 625, build cost changed from 0 to 440, weapon 1 number changed from 4 to 2, build flags changed from NONE to LEND-LEASE.

252.[364] P-40B, max speed changed from 352 to 355, cruise speed changed from 270 to 231, climb changed from 2654 to 2500, endurance changed from 178 to 175, range changed from 801 to 673, durability changed from 29 to 28, sortie ammo changed from 82 to 60, sortie fuel changed from 1250 to 839, build cost changed from 0 to 414, weapon 1 changed from [5] .303 Browning MG to 0, weapon 1 number changed from 4 to 0, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [365] P-40E.

253.[365] P-40E, max speed changed from 354 to 365, cruise speed changed from 268 to 223, climb changed from 2103 to 2600, endurance changed from 150 to 190, range changed from 670 to 706, maneuver changed from 31 to 33, sortie ammo changed from 743 to 435, sortie fuel changed from 1250 to 926, build cost changed from 0 to 414, weapon 0 number changed from 6 to 2, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [366] P-40K.

254.[366] P-40K, max altitude changed from 28000 to 30000, max speed changed from 362 to 368, cruise speed changed from 290 to 225, climb changed from 2162 to 2700, max load changed from 1500 to 700, endurance changed from 145 to 190, range changed from 700 to 712, maneuver changed from 31 to 34, sortie ammo changed from 743 to 435, sortie fuel changed from 1250 to 926, build cost changed from 0 to 414, weapon 0 number changed from 6 to 2, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [367] P-40N.

255.[367] P-40N, max speed changed from 378 to 370, cruise speed changed from 282 to 230, climb changed from 2240 to 2700, endurance changed from 140 to 190, range changed from 658 to 728, maneuver changed from 31 to 34, durability changed from 30 to 31, upgrade changed from 0 to [369] P-47D Thunderbolt, sortie ammo changed from 1743 to 1185, sortie fuel changed from 1250 to 983, build cost changed from 0 to 414, weapon 0 number changed from 6 to 2, build flags changed from NONE to LEND-LEASE.

256.[369] P-47D Thunderbolt, max speed changed from 433 to 435, cruise speed changed from 340 to 210, climb changed from 2780 to 2800, endurance changed from 160 to 265, range changed from 906 to 927, sortie ammo changed from 2204 to 1740, sortie fuel changed from 1905 to 2316, build cost changed from 0 to 719, reliability changed from 5 to 10, build flags changed from NONE to LEND-LEASE.

257.[371] Spitfire IX, cruise speed changed from 324 to 228, range changed from 648 to 456, maneuver changed from 37 to 35, sortie ammo changed from 126 to 180, sortie fuel changed from 858 to 584, build cost changed from 0 to 396, build flags changed from NONE to LEND-LEASE.

258.[372] Spitfire Vb, max speed changed from 378 to 382, cruise speed changed from 322 to 201, endurance changed from 120 to 140, range changed from 644 to 469, durability changed from 26 to 28, sortie ammo changed from 126 to 180, sortie fuel changed from 858 to 573, build cost changed from 0 to 330, build flags changed from NONE to LEND-LEASE, factory upgrade changed from 0 to [371] Spitfire IX.

259.[374] C-47, build cost changed from 0 to 906, build flags changed from NONE to LEND-LEASE.

260.New: [89] SM.82(GE) - Italian SM.82 bought or acquired by Germany.

261.New: [118] Gladiator II Rcn(F) - Gladiator II (F) relegated to recon duties in 1/42.

262.New: [154] Re.2005 Sagittario - missing Italian series-5 fighter.

263.New: [158] SM.82 Canguro - missing Italian transport.

264.New: [176] He 111H-6(R) - missing Rumanian variant.

265.New: [182] IAR 38 Rcn - IAR 38 relegated to recon duties in 1/42.

266.New: [208] Bf 109G-10(H) - Hungary received them in 44/45.

267.New: [213] Bf 109G-8(H) - Hungary received them in 44/45.

268.New: [218] Bf 110G-4(H) - Hungary received them in 44/45.

269.New: [282] MiG-3 '1942' - for transformation of MiG-3 production into Il-2.

270.New: [298] LaGG-3 '11 Series' - for Taganrog/Tbilisi production.

271.New: [306] La-7 '1945' - 1945 3-gun production version.

272.New: [329] Pe-2 '1943' - updated 1943 version.

273.New: [334] Pe-2R '1943' - updated 1943 version.

274.New: [340] IL-4 '1943' - updated 1943 version.

275.New: [442] Bf 109G-6/R2 - higher-performing version of the G-8.

276.New: [445] Bf 110E-3 - missing 41 recon version.

277.New: [446] Bf 110G-3 - missing 42/43 recon version, unit upgrade to Me

410A-3.

278.New: [447] Bf 110F-2 - missing 42 FB version.

279.New: [448] Bf 110G-4/R8 - moved from 0026, autumn 44 version with Schräge Musik.

280.New: [450] Me 210Ca-1 - German re-import from Hungarian production.

281.New: [451] Me 410A-3 - missing 43/44 recon version.

282.New: [455] Do 217E-4 - 42 production version.

283.New: [458] Ju 88S - 44 production version.

284.New: [461] Ju 87D-1 - 41 production version.

285.New: [467] Fw 190A - first production version.

286.New: [469] Fw 190A-9 - higher performing A-8, 45 production.

287.New: [470] He 177A-3 - 43 production version.

288.New: [471] He 219A-2 - higher performing summer 44 production version.

289.New: [472] He 177A-1 - troublesome first production version.

290.New: [473] He 111H-20 - late 43/44 production bomber version.

291.New: [478] Ar 234B-1 - recon conversion of B-2 bomber.

292.New: [479] Hs 126B-2 - surviving recons converted in 1944 to tac bombers for night harassment bombing units.

293.Deleted: [175] D.520 - none in Rumanian service.

General TOE changes

1.Ensure proper use of some date-specific equipment (squad types, some guns, 251/1 and 251/2 halftracks).

2.The Panzer Pioneer squad 103 has been replaced by either 102 or 104, depending on OB date.

3.Half of the cavalry squads in German infantry divisions replaced by rifle squads.

4.Added OBs and upgrade paths to handle unit-specific OB changes without having to withdraw them and replace by different ones (like two German motorized divisions).

5.Added OBs and upgrade paths to handle Italian 7/43 reorganization.

6.Added OBs to handle some exotic equipment like StuH42, Sturmpanzer IV and flame tanks.

7.Fixed some problems caused by conflicts between HQ OB type and unit HQ type.

Specific TOE changes

1.[24] 41a Infantry Division, squad number 0 changed from 333 to 342, squad number 1 changed from 18 to 9.

2.[41] 41 Stug Battalion, last month changed from 1 to 6, upgrade changed from 103 to 355.

3.[65] 42 Hun. Armored Division, first month changed from 5 to 1.

4.[69] 43 SS Infantry Division, squad 0 changed from 82 to 81, squad 1 changed from 85 to 84.

5.[70] 43 Static Division, squad 0 changed from 82 to 81, squad 1 changed from 85 to 84.

6.[74] 42 Motorized Division, last month changed from 5 to 6.

7.[83] 43 Elite Panzergrenadier Division, squad 0 changed from 96 to 94, squad 1

changed from 99 to 98, squad 3 changed from 85 to 84, squad 4 changed from 102 to 101, squad 22 changed from 53 to 218.

8.[96] 43a Panzer Division, squad 0 changed from 96 to 94, squad 2 changed from 99 to 98, squad 3 changed from 102 to 101, squad 4 changed from 85 to 84, squad 17 changed from 53 to 218.

9.[97] 43a Elite Panzer Division, squad 18 changed from 53 to 218.

10.[98] 43 Panzergrenadier Division, first month changed from 6 to 7.

11.[103] 43a Stug Battalion, first month changed from 2 to 7, last month changed from 1 to 5, squad number 0 changed from 30 to 31.

12.[108] 43 Airborne Brigade, squad 0 changed from 797 to 795.

13.[114] 44 Elite Panzer Division, squad 4 changed from 103 to 102.

14.[115] 44d SS Panzer Division, squad 4 changed from 103 to 102, squad 25 changed from 24 to 23.

15.[116] 44b Elite Panzergrenadier Division, squad 4 changed from 103 to 102, squad 24 changed from 24 to 23.

16.[117] 44 SS Panzergrenadier Division, squad 4 changed from 103 to 102.

17.[126] 44 Infantry Division, squad 1 changed from 88 to 0, squad number 0 changed from 288 to 297, squad number 1 changed from 9 to 0.

18.[131] 44 Panzer Division, upgrade changed from 155 to 0, squad 3 changed from 103 to 102.

19.[137] 44 Stug Brigade, squad 1 changed from 103 to 102.

20.[138] 44 Heavy Panzer Battalion, squad 3 changed from 103 to 102.

21.[146] 41 Mountain Division, last year changed from 1944 to 1942, last month changed from 5 to 12, upgrade changed from 152 to 732.

22.[158] 45 Jager Division, squad 1 changed from 83 to 87, squad 2 changed from 86 to 85.

23.[236] 41 Panzer Pioneer Battalion, upgrade changed from 0 to 703.

24.[257] 42 Ski Brigade, squad 4 changed from 781 to 780.

25.[266] 43 Rocket Launcher Division, last year changed from 1943 to 1944, last month changed from 12 to 2.

26.[267] 44 Rocket Launcher Division, first month changed from 1 to 3.

27.[273] 41 Rum. Security Division, squad number 0 changed from 237 to 245, squad number 1 changed from 24 to 16.

28.[277] 41 Flamm Panzer Battalion, suffix changed from Flamm Panzer Battalion to Flammpanzer Battalion, last month changed from 12 to 11, upgrade changed from 0 to 704, squad number 0 changed from 42 to 36, squad number 1 changed from 25 to 24.

29.[284] 44 Panzer Brigade, squad 2 changed from 103 to 102.

30.[297] 41a Ital. Infantry Division, last year changed from 0 to 1943, last month changed from 0 to 6, upgrade changed from 0 to 670.

31.[299] 42b Ital. Infantry Division, last year changed from 0 to 1943, last month changed from 0 to 6, upgrade changed from 0 to 670.

32.[300] 41c Ital. Infantry Division, last year changed from 0 to 1943, last month changed from 0 to 6, upgrade changed from 0 to 670.

33.[302] 42 Ital. Mountain Division, last year changed from 0 to 1943, last month changed from 0 to 6, upgrade changed from 0 to 671.

34.[305] 42 Ital. Motorized Division, last year changed from 0 to 1943, last month changed from 0 to 6, upgrade changed from 0 to 674.

35.[310] 41a Ital. Heavy Howitzer Battalion, squad number 0 changed from 9 to

12, squad number 1 changed from 13 to 14.

36.[313] 41 Ital. Assault Engineer Battalion, squad number 0 changed from 27 to 48, squad number 1 changed from 23 to 24.

37.[336] 41c Infantry Division, squad number 0 changed from 333 to 342, squad number 1 changed from 18 to 9.

38.[337] 43 Sturm Division, squad 1 changed from 88 to 0, squad number 0 changed from 228 to 237, squad number 1 changed from 9 to 0.

39.[339] 42 Infantry Division, squad number 0 changed from 336 to 345, squad number 1 changed from 18 to 9.

40.[340] 43 Infantry Division, squad 0 changed from 82 to 81, squad 1 changed from 88 to 0, squad 2 changed from 85 to 84, squad number 0 changed from 336 to 345, squad number 1 changed from 9 to 0.

41.[355] 43b Stug Battalion, first month changed from 2 to 7, last month changed from 1 to 5, squad number 1 changed from 21 to 22.

42.[356] 44 Stug Brigade, name changed from 44 to 44a, first month changed from 2 to 6, last year changed from 1944 to 1945, last month changed from 10 to 9, upgrade changed from 357 to 0, squad 0 changed from 99 to 29, squad 1 changed from 103 to 31, squad 2 changed from 106 to 1490, squad 3 changed from 31 to 0, squad 4 changed from 1490 to 0, squad number 0 changed from 2 to 12, squad number 1 changed from 3 to 33, squad number 2 changed from 3 to 31, squad number 3 changed from 36 to 0, squad number 4 changed from 29 to 0.

43.[357] 45 Stug Brigade, name changed from 45 to 44b, last year changed from 0 to 1945, last month changed from 0 to 9, squad 3 changed from 31 to 29, squad 4 changed from 1490 to 31, squad 5 changed from 0 to 1490, squad number 3 changed from 45 to 12, squad number 5 changed from 0 to 37.

44.[390] 44a SS Panzer Division, squad 3 changed from 103 to 102, squad 22 changed from 53 to 218.

45.[391] 44b SS Panzer Division, squad 3 changed from 103 to 102, squad 22 changed from 53 to 218.

46.[392] 44a Elite Panzergrenadier Division, squad 22 changed from 53 to 218.

47.[401] Soviet Partisan Battalion, last month changed from 12 to 9.

48.[413] 41 Naval Infantry Brigade, upgrade changed from 0 to 731.

49.[414] 41 TD Battery, upgrade changed from 0 to 248.

50.[417] 42 Mountain Corps, last year changed from 1944 to 1942, last month changed from 5 to 12, upgrade changed from 418 to 733.

51.[467] 42 Security Division, squad 1 changed from 88 to 0, squad number 0 changed from 292 to 238, squad number 1 changed from 16 to 0, squad number 10 changed from 36 to 108.

52.[470] 44c SS Panzer Division, squad 3 changed from 103 to 102, squad 23 changed from 53 to 218.

53.[487] 43b Panzer Division, squad 17 changed from 53 to 218, squad 19 changed from 64 to 220.

54.[488] 43b Elite Panzer Division, squad 18 changed from 53 to 218, squad 20 changed from 64 to 220.

55.[489] 43d SS Panzergrenadier Division, squad 26 changed from 20 to 21.

56.[490] 43e SS Panzergrenadier Division, squad 26 changed from 20 to 21.

57.[494] 43a SS Sturm Brigade, squad 0 changed from 96 to 94, squad 2 changed from 85 to 84, squad 11 changed from 92 to 91.

58.[496] 44a Panzergrenadier Brigade, squad 2 changed from 103 to 102.

- 59.[511] 44 FJ Reconnaissance Battalion, squad 1 changed from 103 to 102.
- 60.[540] HQ Air Command, type changed from 9 to 10.
- 61.[556] HQ, name changed from HQ to HQ Ital. Air Bde.
- 62.[560] HQ Fin. Air Command, type changed from 11 to 10.
- 63.[575] HQ Slov. Air Command, type changed from 11 to 10.
- 64.[582] Eisenbahn, first month changed from 9 to 6.
- 65.[585] 41a AC Infantry Division, squad number 0 changed from 333 to 342, squad number 1 changed from 18 to 9.
- 66.[586] 41 AC Sturm Division, squad number 0 changed from 333 to 342, squad number 1 changed from 18 to 9.
- 67.[587] 41b AC Infantry Division, squad number 0 changed from 252 to 261, squad number 1 changed from 18 to 9.
- 68.New: [670] 43 Ital. Infantry Division - 7/43 reorganization.
- 69.New: [671] 43 Ital. Mountain Division - 7/43 reorganization.
- 70.New: [674] 43a Ital. Motorized Division - 7/43 reorganization.
- 71.New: [700] 41a Motorized Division - demotorization path for two german mot divisions.
- 72.New: [701] 42a Motorized Division - demotorization path for two german mot divisions.
- 73.New: [702] 43a Infantry Division - demotorization path for two german mot divisions.
- 74.New: [703] 43 Panzer Pioneer Battalion - upgrade for 41 version with newer equipment.
- 75.New: [704] 41a Flammpanzer Battalion - downgrade from large 41 version.
- 76.New: [705] 41b Flammpanzer Battalion - unit-specific variant with french tanks.
- 77.New: [706] 41a Panzer Division - for units with 4x light tank companies (instead of 6).
- 78.New: [707] 43 Sturmpanzer Battalion - for Sturmpanzer IV units in 43 campaign.
- 79.New: [708] HQ Flieger-Division - copy of HQ Fliegerkorps with support cut in half to 250.
- 80.New: [710] 41 Fortress Rum. Infantry Brigade - special path for 2nd Romanian fortress infantry brigade.
- 81.New: [711] 42 Rum. Security Division - special path for 2nd Romanian fortress infantry brigade.
- 82.New: [712] 41a Rum. Infantry Brigade - special OB for 1st Romanian Fortress Brigade (became a division in 42).
- 83.New: [720] 41a Hun. Motorized Brigade - special path for 2nd Hungarian Motorized Brigade.
- 84.New: [721] 41b Hun. Motorized Brigade - special path for 2nd Hungarian Motorized Brigade.
- 85.New: [722] HQ Hun. Army - for Carpathian Group, same as regular HQ Hun. Army but without suffix.
- 86.New: [730] 41 Garrison Brigade - overstrength fort unit for the Hanko garrison.
- 87.New: [731] 42 Naval Infantry Brigade - 2x 39 Sappers replaced by two more 41 Sappers.
- 88.New: [732] 43 Mountain Division - intermediate OB for 41 Mountain Division, 36x 1939 Sappers replaced by 29x 1941 Sappers and 7x Flamethrower.
- 89.New: [733] 43 Mountain Corps - intermediate OB for 42 Mountain Corps, 108x

1939 Sappers replaced by 88x 1941 Sappers and 22x Flamethrower.

90.New: [734] HQ Air Command - copy of Soviet Air Command HQ, but as Corps HQ with reduced support.

91.New: [735] HQ Air Army - copy of Soviet Air Army HQ, but as Corps HQ with reduced support.

92.New: [736] HQ Mechanized Corps - as existing type, but as Army HQ.

93.Deleted: [17] 41 Hun. Army Corps - outdated and unused.

General Leader changes

1.Minor name changes (transcription of Umlauts).

2.Some missing promotion dates added.

Specific Leader changes

1.[2] Erich Abraham, promo2 year changed from 0 to 1945, promo2 month changed from 0 to 1, promo2 day changed from 0 to 3.

2.[4] Maximilian Angelis, name changed from Angelis to de Angelis.

3.[5] Helge Auleb, promo1 year changed from 0 to 1943, promo1 month changed from 0 to 12, promo1 day changed from 0 to 1, promo1 rank changed from 0 to 12.

4.[14] Herbert Bockmann, name changed from Bockmann to von Bockmann.

5.[20] Rudolf von Bunau, name changed from von Bunau to von Buenau.

6.[31] Sepp Dietrich, special changed from SS ONLY to SS AND GROUND.

7.[37] Hans Freiherr von Falkenstein, first name changed from Hans Freiherr to Hans.

8.[40] Hermann Florke, name changed from Florke to Floerke.

9.[42] Sigismund Forster, name changed from Forster to von Forster.

10.[55] Walther Grassner, name changed from Grassner to Graessner, lastYear changed from 1944 to 1943, lastMonth changed from 6 to 8, promo1 year changed from 1942 to 1941, promo1 month changed from 4 to 10, promo2 year changed from 1944 to 1942, promo2 month changed from 5 to 6.

11.[80] Gustav Hohne, name changed from Hohne to Hoehne.

12.[110] Walter Kruger, name changed from Kruger to Krueger.

13.[111] Ludwig Kubler, name changed from Kubler to Kuebler.

14.[132] Friedrich Muller, name changed from Muller to Mueller.

15.[133] Vinzenz Muller, name changed from Muller to Mueller.

16.[134] Ludwig Muller, name changed from Muller to Mueller.

17.[154] Wolfram Freih von Richthofen, first name changed from Wolfram Freih to Wolfram.

18.[176] Felix Steiner, special changed from SS ONLY to SS AND GROUND.

19.[196] Walter Graf von Brockdorff-Ahlefeldt, first name changed from Walter Graf to Walter.

20.[209] Smilo Freiher von Luttwitz, name changed from von Luttwitz to von Luettwitz, first name changed from Smilo Freiher to Smilo.

21.[226] Walther von Seydlitz-Kurzback, name changed from von Seydlitz-Kurzback to von Seydlitz-Kurzback.

22.[228] Hans Graf von Sponeck, first name changed from Hans Graf to Hans.

23.[249] Rolf Wuthman, name changed from Wuthman to Wuthmann.

24.[276] Wilhelm Stemmerman, name changed from Stemmerman to

Stemmermann.

V1.07.15 – April 2, 2014

- **New Features and Rule Changes**

1. Split Soviet Tank and Mechanized Corps retain their attached support units (one per brigade) like German regiments.

- **Bug Fixes**

1. Fixed critical bug with combat values going below 0 (integer overflow) resulting in easiest capture of strongest hexes.
2. Fixed important bug with too small impact of FOW on combat values.
3. Hopefully fixed important bug with Corps Artillery Regiments being recognized as Corps units (which resulted in wrong support unit assignment besides other undesired effects).
4. Fixed bug with support units attached to fort units, divided German divisions and divided Soviet corps not getting any supplies.
5. Fixed bug in assignment of support unit to fort units (display corruption, assignment failed).
6. Fixed display bug with initial combat values going below 0 (integer overflow) - unfortunately this will cause display mismatch (x10) when looking at battles fought under old version.
7. Fixed display bug with dense terrain modifier being not included in initial combat values (as it was supposed to be since 1.7.12).
8. Normalized all unit size detection functions to work correctly for high command HQs (XXXXX), "Corps" (XXX), "Fortified Region" (X), split "Corps" (X), "Group" (III), "Legion" (III), "Fortified Zone" (II), and "Detachment" (II) units.

V1.07.14– March 17, 2014

- **Bug Fixes**

1. Fixes a bug with the supply system which was being more restrictive than it should be by requiring that HQs have to be within 25 hexes / 100 MP of their supply dump city. It now

- correctly requires that HQs be within 25 hexes / 100 MP of the railhead.
2. Vastly reduced the surplus supply needs reported by HQs. Prior to this fix these surplus needs could cause supply shortages for some units when the global supply stock was below 300% of real needs.

V1.07.12– December 10, 2013

- **New Features and Rule Changes**

1. New Interface - It is now possible to see chances to succeed various leader rolls (Morale, Initiative and Admin rolls for all units; Mech and Infantry rolls for non-partisan, non-construction combat and support units; Air rolls for airbases) in the Supply Details window.

2. Interface Change - Improved accuracy and relevance of the information about last supply phase in the Supply Details window, including addition of general supply and fuel handed by HQ units to subordinate units (in parentheses next to “HQ Supply” and “HQ Fuel” percentages). Some elements of supply information are now also available for support units attached to cities and partisan units. The method of rounding values from pounds to short tons was changed to round up positive values, and to round down negative values. For example 1lbs becomes 1t (2000lbs), 2000lbs becomes 1t (2000lbs), 2001lbs becomes 2t (4000lbs), -1lbs becomes -1t (-2000lbs). The method of rounding percentages was also improved, so that for a/b when a=b the percentage will be 100%, not 99%. This change applies to all supply-related information displayed in the game.

3. Formula Change - Improved the formula which decides whether a unit should be motorized or not. By default all armor, mechanized, motorized, SP artillery, HQ and airbase units will be motorized. Support units attached to motorized combat units will be also motorized (such units will be demotorized when attached back to HQ, unless it's their natural state). Units containing “Motorized “ or “SP “ in their TOE suffix will be also motorized (this is for flavor, to make units like “Motorized Flak Battalion” or “LW Motorized Flak Battalion” or “LW SP Light Flak Battalion” show up as motorized). It may require advancing to the next turn for the motorized status to adjust properly. Previously, support units attached to motorized combat units had requirements like motorized units, but their motorized status was still showing up as non-motorized.

4. Interface Change - Supply status soft factor now includes ammunition status as well, as there is no separate ammunition status soft factor.

5. Rule Change - HQs and support units assigned to HQs may receive beachhead supply.

6. Formula Change - Partisan units will now use ammunition when attacking rail lines.

7. Formula Change - With the “reduced blizzard effect” option turned on, ground element disruption before combat will be halved.

8. Rule Change - Disabled too high level attachment penalty (introduced in 1.7.11) for fort units, construction units and units that are within 4 hexes of the HQ they are attached to.

9. Hardcoded Data Change - Made extensive review of ground element types’ traction type, support requirements, CV, default ammo type, ground class, method of production, target type and general type. Some less used types had these values set to incorrect values. Introduced 6 new ground element types: Carrier-Inf Squad, SP Rocket Launcher, SP AT Gun, CDL Tank, Recon Halftrack and Flamethrower for use by modders. Full list of changes is located in Appendix A.

10. Rule Clarification (section 7.1.1.) - Dense terrain modifier is applied to ground element’s CV during combat (attacker and defender alike) in mountain, rough, swamp and heavy wood terrain as well as in cities with population greater than 14. Ground elements of class “infantry”, “mech infantry”, and “infantry weapons” have their CV doubled. Ground elements of class “SP Weapon”, “Armored Car”, “SP Artillery”, and “AFV” have their CV halved.

11. Rule Clarification (section 17.1.1.) - Once 7 air drops to partisans will be made out of VVS airbases in a single logistics phase, non-VVS airbases will not be used for partisan resupply at all (for smaller number of drops there is a random test, whether to use non-VVS airbases or no).

12. Rule Clarification (section 22.3.2.1.) - The value used in morale and experience tests is 130 in December 1941, 110 in January 1942 and 90 in February 1942, instead of 125 all the time.

13. Detailed battle messages now show when an already damaged armored ground element is damaged for a second time and destroyed (as was shown for unarmored ground elements).

14. Ammunition used to hit armored targets is shown in detailed battle messages. AP - regular AP ammo (Penetration), HV - HVAP ammo (HVAP Pen.), HE - regular HE ammo (Anti-Armor), HT - HEAT ammo (HEAT Pen.).

15. Combat rolls will be always using leader’s mech skill for armor, mechanized, motorized and SP gun units (TOE type), while leader’s infantry skill will be used for all other units. Previously checks done when firing and First Winter CV reduction checks were always using leader’s infantry skill.

16. Fixed tooltip for frozen units so it will show CV with greater precision (as for unfrozen units).

17. Disabled additional First Winter damage at start of turn and when moving Finnish, Mountain and Ski units. Disabled First Winter morale loss

after lost battle for Finnish, Mountain and Ski units.

18.Reduced Blizzard modifiers changed. Minimum CV changes as follows: attacking in any weather from February to April from 52% to 65% (closer to the original /1.5), defending in blizzard in February from 84% to 80% (closer to the original /1.33). Defensive reserves benefit from defensive bonuses. No penalty to Axis fire effectiveness. Details in Appendix B.

- **Bug Fixes**

1.Fixed a bug with some support units attached to HQ units being resupplied nearly for free. For example a support unit had 132 tons of supply added at a cost of just 1 supply dump from the HQ; also all needs below 1 ton (2000lbs) were resupplied for free.

2.Fixed a bug with HQ units reporting their supply needs as fuel needs. When the supply stock was above 100% of supply needs, this generated negative fuel need and reduced global cost of moving supplies in vehicles and fuel.

3.Fixed a bug with support units attached to combat units, and construction units attached to FBD/NKPS units, not reporting their needs to proper HQ unit, causing said HQ to have supply shortages when it shouldn't.

4.Fixed a bug with support units attached to combat units not being able to return excess fuel.

5.Fixed a bug with support units attached to combat units to always require fuel (even when full), if another support unit created earlier, attached to the same combat unit, required fuel.

6.Fixed a bug with support units attached to combat units to generate higher vehicle need (1/10 of their parent unit vehicles, instead of 1/10 of their own vehicles) and with support units attached to HQs to generate lower vehicle need (0 instead of 1/10 of their own vehicles).

7.Improved fighter-bomber mission checks, of which only the "bomber" mission was stable, while "fighter" mission was overwritten, when the air group was used in escort or sweep role for the first time.

8.Improved fighter-bomber training checks, where air groups trained as fighters were not properly marked as such by game versions older than 1.7.09.

9.Made sure fighter-bombers on "fighter" mission are treated in the same way as fighters (allowed to bomb in the same way, allowed to escort recon planes, allowed to be selected for standard air mission), while fighter-bombers on "bomber" mission are treated as (light) level bombers (not counting as possible escorts).

10.Made sure that all functions selecting when to set fighter-bomber air groups to "bomber" mission and training are identical.

11. Made sure that when changing tactical bombers to fighter-bombers and fighters to fighter-bombers, training and mission type is correctly set, for both automatic and manual changes.

12. Fixed bug with support units attached to combat units being counted twice in initial combat CV, once as part of parent unit, once as a standalone unit.

13. Fixed bug with dense terrain modifier not being included in initial combat CV.

14. Fixed bug with AI evacuating factories to cities not connected to the rail network (eg. Naberezhnye Chelny), possibly rendering them inoperable.

15. Fixed bug with partisan air supply logic out of non-VVS airbases trying to count transport aircraft in partisan unit instead of an airbase.

16. Morale growth higher than 10 points for partisan units supplied from non-VVS air bases will now be correctly disabled, as is for partisan units supplied from VVS air bases.

17. All fighter groups (defined as fighters, fighter-bombers not on "bomber" mission, night-, jet- and float- fighters) not on bombing flight have now chance to evade flak better, where previously only fighters and fighter-bombers not on bombing flight had this chance.

18. Included often forgot float fighter aircraft type in various fighter-related checks. Currently there is no such aircraft in the database.

19. Included night-, jet- and float- fighters in IAP airbase needs for automatic Soviet airbase creation purposes. Currently there are no such aircraft.

20. Fixed a bug with one flight-related loop to be going outside of flight data range.

21. Fixed AI attachment of Soviet support units to corps units, as the game was trying to attach "Pioneer Battalion" units (no such Soviet TOE exists), instead of correct "Sapper Regiment" units.

22. Updated AI decision process when to build various Soviet support units to account for ground element type changes since the release. This mostly affected building assault gun/tank destroyer units.

23. Updated AI decision process what support units to build for Soviet Army HQ units, as the game was trying to build units with TOEs that no longer exist (for example "Heavy AA Regiment") or to build units with TOEs that are designated as combat units (for example "Mortar Brigade"), which caused those ghost units to take up unit slots and perhaps affect some other parts of the game.

24. Fixed multiple cases of starting element experience, supply, motorized, and guards status being not set or being improperly set, when a unit was created, depending on which method was used (manual or automatic). Most of

these problems were gone in the next turn, but now such units are initialized properly on the turn of creation.

25.Disabled adding supply to units created by the AI, as the function does not work correctly (takes 1000 tons of supply and possibly fuel out of the nearest city, instead of just 1 ton) and was disabled in several other cases of forming new units. Such units get supply in the next logistics phase.

26.Rail construction units will now follow regular units' rules instead of HQ units' rules in their vehicle/supply/fuel needs.

27.Fixed a bug with units not on buildup and having trucks equal to their need not to respond to truck shortage by giving up their vehicles.

28.Fixed problem in editor reset formation supply level function to zero vehicle number in units instead of setting correct value.

29.Fixed problem with battle details tooltip text lacking description and having participant's strength and losses printed twice for partisan and interdiction attacks.

30.Fixed some spacing problems and added missing comas to battle details tooltip text.

31.Fixed problem when opening inventory list caused a blank window to appear after exiting from CR.

32.Fixed problem when exiting from supply details window by using Esc key caused a blank window to appear.

33.Fixed many cases where units being 99 or 100 MP from the railhead would be counted as being out of supply.

34.Partisan supply status and related icon highlight will now be properly set in all cases, and either will be "isolated" or in "air supply", no longer using Axis off-rail values for some partisan units.

35.Improved detection when to attempt to air drop fuel and added a fail-safe that will revert to supply drop mode if a previous attempt to drop fuel in the same hex failed because of lack of aircraft.

36.Hiwis and pilots in airbases and soldiers in damaged elements will now eat.

37.Hiwis will now require trucks to carry them in motorized units.

38.Horses will now eat half of fodder even when stationary, with the other half reserved for paying for movement.

39.Infantry elements in cavalry units will now require horse wagons to carry them.

40.Fixed problems with airhead supply going to wrong units when those units that should have been resupplied from the airhead were still connected to the main rail grid, but more than 100MP away from it, rather than being completely isolated. This includes a fix for wrong highlight of such units (yellow instead of orange) once resupplied.

41. Fixed several small bugs with air and airhead supply, including a situation when an enemy airbase in neighbouring hex (possible when stacked with a combat unit) would help with air drop penalty, and a situation where cargo stocks were improperly set when doing an airhead supply.

42. Improved how air cargo delivery works (from the individual plane to the units in hex), to ensure units are getting what they really need. Unless there is just one unit in the hex (or a single unit was selected manually), the game will divide cargo proportionally between units, depending on their needs (including support units attached to those units). In case a player wants to add supply dumps to a HQ, it's better to select it manually, as the above method won't assign much cargo to a HQ (unless it has many starved support units). Combat units will immediately transfer part of their supplies to attached support units. Supplies and ammo dropped are subtracted from source airbase's supply storage, with ammo being paid for in ARM points and subjected to Soviet Ammo Loss rule. Fuel dropped is subtracted from source airbase's fuel storage.

43. Fixed first winter combat disruption formula to follow rules as written. This should cause 21%-75% CV loss when attacking (0%-36% when defending, including defensive reserves), instead of 99% common with the old implementation.

44. Fixed a bug with AI evaluation of best attack moves that compared wrong values when trying to find out whether the Soviet side has global offensive CV advantage to press more recklessly with assaults (offensive CV of the O.K.H. unit was checked rather than sum total of Soviet offensive CVs; in three places).

45. Support units attached to HQs will be included in global offensive CV for AI advantage evaluation, so the strength balance will be more accurate.

46. Added missing Ski units CV multiplier to AI CV evaluation.

47. AI CV evaluation will now use expected values of all possible CV modifiers (morale, experience, leader rolls, isolation, attack), with some adjustments done to protect the AI from making more failed attacks because of some important rolls (single roll giving a huge bonus to CV).

48. For isolation-related modifiers to CV, proper fort and dense terrain value will be used for support units and units other than defenders in hex (values from their own hex will be used).

49. On-counter CV evaluation will now use expected values of isolation-related CV modifiers.

50. Combat (random), on-counter and AI (non random) CV evaluation were aligned to match in all places, with the exception of necessary differences that had to remain.

51. Accuracy of CV calculations was improved by doing all calculations on

number of elements times 100, divided at the end by 100. This increases the strength of smaller units, for which the penalty of doing divisions on integer numbers could be very high (for example $15 / 8 * 8$ is 8 instead of 15, which means a 53% loss; with the new method it would be 14, “only” a 6.6% loss).

52.Fixed a bug where AI was using wrong fort value modifiers for terrain in some cases.

53.Fixed a bug where weapons with HEAT penetration greater than zero, but with zero Anti-Armor (HE penetration) were ineffective against armored targets when firing HE shots (affects the following devices: RS-82 Rocket, RP-3 Rocket, 5 inch Rocket, RS-132 Rocket, Molotov Cocktail, Anti-Tank Grenade, Rifle-Grenade, Panzerfaust, Bazooka, PIAT, Bazooka, Panzerschreck, Satchel Charge).

54.Fixed a bug with ammo selection for AP shots where Axis units used Soviet special ammo availability table, and Soviet units used Axis special ammo availability table from the next year.

55.Fixed a bug with secondary (other than in first slot) weapons in ground elements that belong to infantry and mechanized infantry classes having much reduced chance to fire. The idea behind the rule was to limit effectiveness of secondary weapons, like machine guns on tanks and side arms of gun crews, but it doesn't look realistic when a 10-man squad armed with 8 rifles, a single SMG and a single LMG is severely limited in using that SMG and LMG, which are actually operated by dedicated soldiers.

56.Fixed a bug where large blast weapons (blast 10 and above) were limited from hitting more than one target with a single shot due to ammo expenditure check being made before large blast allowed another hit from that shot (and usually due to rate of fire less than 2, they were already limited to just a single shot at given range).

57.Fixed a bug where penetration reduction from range to target could be applied to HE ammo instead of intended AP and HVAP ammo.

58.Fixed a bug with standard First Winter CV reduction not working for Snow turns in February.

59.Airborne Engineer and Engineer Tank will be recognized as an engineer ground element type.

Appendix A (ground element types changes)

Traction type changes:

- Cavalry Squad from foot to horse
- Naval Gun from horse to none
- Motor-Inf Squad from foot to motorized (in 1 case out of 4)

- AAMG from motorized to horse (in 3 cases out of 4)
- MSW Tank from none to motorized
- Engineer Tank from none to motorized
- Motorcycle Squad from foot to motorized
- Ski Squad from none to foot
- Security Squad from none to foot
- Partisan Squad from none to foot
- Naval Rifle Squad from none to foot
- Heavy Mortar from none to horse
- Support from none to foot

Support requirements changes:

- Naval Gun from 0 to 1
- Special Forces from 6 to 0
- Marine Commando from 6 to 0
- Airborne Engineer from 6 to 5
- Air Landing Section from 0 to 5

CV changes:

- Assault Gun from 5 to 7
- Tank Destroyer from 5 to 8
- Hvy Tank Destroyer from 5 to 9
- Hvy Assault Gun from 6 to 8
- Lt Tank Destroyer from 5 to 7

For AI global offensive CV advantage evaluation all artillery types have a CV of 1 instead of 0.

Default ammo type changes:

- HT CS-Howitzer from AP to HE
- SP AAMG from AP to HE
- Heavy AT Gun from HE to AP
- Light AT Gun from HE to AP
- Partisan Squad from none to HE
- Naval Rifle Squad from none to HE
- Heavy Mortar from none to HE
- Lt Tank Destroyer from HE to AP
- CS Cavalry Tank from AP to HE
- CS Infantry Tank from AP to HE
- Support from none to HE

Ground class changes:

- Assault Gun from SP Artillery to AFV
- MSW Tank from none to AFV (in 4 cases out of 5)
- Engineer Tank from none to AFV (in 4 cases out of 5)
- Ski Squad from none to infantry (in 3 cases out of 5)
- Security Squad from none to infantry (in 3 cases out of 5)
- Partisan Squad from none to infantry (in 3 cases out of 5)
- Naval Rifle Squad from none to infantry (in 3 cases out of 5)
- Tank Destroyer from SP Artillery to AFV
- Hvy Tank Destroyer from SP Artillery to AFV
- Hvy Assault Gun from SP Artillery to AFV
- Lt Tank Destroyer from SP Artillery to AFV

Method of production changes:

- Motor-Inf Squad from ARMAMENTS+VEHICLES to ARMAMENTS (in 1 case out of 3)
- HT AT-Gun from ARMAMENTS to FACTORY
- HT MG/Mor from ARMAMENTS to FACTORY
- HT CS-Howitzer from ARMAMENTS to FACTORY
- MSW Tank from none to FACTORY
- Engineer Tank from none to FACTORY
- Ski Squad from none to ARMAMENTS (in 2 cases out of 3)
- Security Squad from none to ARMAMENTS (in 2 cases out of 3)
- Partisan Squad from none to ARMAMENTS (in 2 cases out of 3)
- Naval Rifle Squad from none to ARMAMENTS (in 2 cases out of 3)
- Heavy Mortar from none to ARMAMENTS (in 2 cases out of 3)
- Support from none to ARMAMENTS (in 1 case out of 3)

Target type changes:

- Motor-Inf Squad from none to infantry
- Special Forces from vehicle to infantry
- Marine Commando from vehicle to infantry
- Airborne Engineer from vehicle to infantry
- Heavy Artillery from none to artillery
- Light Flak from vehicle to artillery
- Heavy Flak from vehicle to artillery
- Airborne Squad from none to infantry
- Air Landing Section from vehicle to infantry
- Heavy AT Gun from vehicle to artillery
- Light AT Gun from none to artillery
- Heavy Infantry Gun from infantry to artillery
- Light Artillery from vehicle to artillery

- Airborne Tank from none to vehicle
- Partisan Squad from none to infantry
- Naval Rifle Squad from none to infantry
- Light Mortar from none to artillery
- Heavy Mortar from none to artillery
- Hvy Assault Gun from none to vehicle
- Lt Tank Destroyer from none to vehicle
- CS Cavalry Tank from none to vehicle
- CS Infantry Tank from none to vehicle
- Light Armored Car from none to vehicle

General type changes:

- Mortar from direct gun to indirect gun
- Naval Gun from infantry to indirect gun
- HT AT-Gun from none to direct gun
- HT MG/Mor from AFV to indirect gun
- HT CS-Howitzer from none to indirect gun
- SP AAMG from none to direct gun
- AAMG from none to direct gun
- Heavy Artillery from none to indirect gun
- Light Flak from none to direct gun
- Heavy Flak from none to direct gun
- DD Tank from none to AFV
- MSW Tank from none to AFV
- Engineer Tank from none to AFV
- SP Inf-Gun from AFV to indirect gun
- Heavy AT Gun from none to direct gun
- Light AT Gun from none to direct gun
- Heavy Infantry Gun from none to indirect gun
- Light Artillery from none to indirect gun
- Airborne Tank from none to AFV
- Recon Jeep from none to AFV
- Light Mortar from none to indirect gun
- Heavy Mortar from none to indirect gun
- Cavalry Tank from none to AFV
- Hvy Cavalry Tank from none to AFV
- Hvy Assault Gun from none to AFV
- Lt Tank Destroyer from none to AFV
- CS Cavalry Tank from none to AFV
- CS Infantry Tank from none to AFV
- Light Armored Car from none to AFV

Map popup order changes:

- Assault gun from 9 (sp/ht) to 0 (afv)
- Special Forces from 0 (afv) to 4 (airborne)
- Marine Commando from 0 (afv) to 4 (airborne)
- Airborne Engineer from 0 (afv) to 10 (engineer)
- Air Landing Section from 0 (afv) to 4 (airborne)
- Heavy AT Gun from 0 (afv) to 7 (at gun)
- Tank Destroyer from 9 (sp/ht) to 0 (afv)
- Hvy Tank Destroyer from 9 (sp/ht) to 0 (afv)
- Hvy Assault Gun from 9 (sp/ht) to 0 (afv)
- Lt Tank Destroyer from 9 (sp/ht) to 0 (afv)

New ground element types:

- Carrier-Inf Squad (like Mech-Inf Squad; replaces Barge)
- SP Rocket Launcher (like SP Artillery, with support need of 12; replaces Ammo Truck)
- SP AT Gun (like HT AT-Gun, with support need of 12 and CV 5)
- CDL Tank (like Medium Tank, with CV 8)
- Recon Halftrack (like Armored Car)
- Flamethrower (like Infantry-AT, with support need of 2 and HE ammo)

Appendix B (updated Reduced Blizzard effect CV reduction rules)

Combat Value of non-Finnish, non-mountain and non-ski Axis units during Blizzard or Snow weather between December 1941 and April 1942 in the First Winter Zone is reduced to 36% plus 4% for each point scored when checking the following conditions (to a maximum of 100% - 16 points):

Month is:

- January +4
- February, March, April +7

Weather Zone of the battle hex is:

- Europe +3
- Southern Soviet +2
- Central Soviet +1

When the unit is in or next to the battle's hex and the unit's hex contains:

- Terrain:
 - Heavy Urban +5
 - Light Urban +4

- City +3
- Any terrain with a Town +1
- Fort +1 (for each level)

When the unit defends (includes defensive reserves):

- Always +4
- Weather is Snow or month is March, April +5
- Terrain:
 - Heavy Urban +5
 - Light Urban +4
 - City +3
 - Any terrain with a Town +1
 - Light Woods, Heavy Woods, Rough, Mountain, Swamp terrain without a town +1

V1.07.11– October 3, 2013

- **New Features and Rule Changes**

1. New Game Option - Added "reduced blizzard effect" option. It can be enabled in Game Options for a new game. When using this option some of the First Winter rules are altered. Simply put Combat Value Modifications are no longer random, in worst case they should be equivalent to the old rules' best case or slightly better, and the player can mitigate those effects to a certain degree by using forts and cities of all sizes.

The detailed rules are as follows:

- The automatic loss of 1 morale for non-Finnish Axis units whenever they are attacked and the final end of combat odds are greater than 1:2 mentioned in patch notes "v1.04.10 - April 18, 2011" is disabled.
- Combat Value of non-Finnish, non-mountain and non-ski Axis units during Blizzard or Snow weather between December 1941 and April 1942 in the First Winter Zone is reduced to 36% plus 4% for each point scored when checking the following conditions (to a maximum of 100% - 16 points):

Month is:

- January, February, March, April +4

Weather Zone of the battle hex is:

- Europe +3
- Southern Soviet +2
- Central Soviet +1

When the unit is in or next to the battle's hex and the unit's hex contains:

- Terrain:
 1. Heavy Urban +5
 2. Light Urban +4

- 3. City +3
- 4. Any terrain with a Town +1
- Fort +1 (for each level)

When the unit defends in the battle hex (is not a reserve unit):

- Always +4
- Month is February +4
- Month is March, April +8
- Weather is Snow +6
- Terrain:
 - 1. Heavy Urban +5
 - 2. Light Urban +4
 - 3. City +3
 - 4. Any terrain with a Town +1
 - 5. Light Woods, Heavy Woods, Rough, Mountain terrain without a town +1
- The displayed CV values for Finns, Soviets, and Axis mountain and ski units are no longer doubled during first winter blizzard turns.

Example: A German division in January '42 (+4) located in Central Soviet Weather Zone (+1) in a town in clear terrain (+1) with a level 2 fort (+2) is defending (+4, +1 from town again). The score is 13, so the CV will be reduced to $36 + 13 * 4 = 88\%$ of the original CV value. The same division would attack a neighboring hex with 68% of the original CV value.

Note: The player has to remember that CV is also reduced by damage to ground elements when taking part in combat (rule 22.3.2), so the units are weaker than they seem from the values on counters. However, preparing a proper defensive line based on cities, forts and reserves (perhaps at a cost of reduced gains in November '41), should allow for holding it successfully in most parts of the front, and the units should be in much better shape for a summer offensive.

2. Rule Change – Air transport of fuel and supplies is changed as follows: 1) Level bombers may not transport fuel. 2) Only 25-75% of supplies are dropped successfully, while only 16-50% of fuel is dropped successfully (was 33-100% for both). 3) Hexes that contain or are adjacent to a friendly air base unit (that is in a valid hex for air operations) will receive all of the supplies and fuel that are dropped (no drop attrition as stated in item 2 occurs).
3. Interface Change - Added the ability to sort units properly according to their Arabic and/or Roman numerals, including subunit designations before “/” sign.
4. New Interface - Added detailed CV attack and defend values under the counter in the unit detail window.
5. Editor - Added the ability to specify individual division numbers and their guard status for Soviet Cavalry and Mountain Corps in the Scenario Editor.
6. Improved AI - Added missing "march madness" rule to AI evaluation functions. Fixed minor mismatch in an AI evaluation function concerning value of ground elements in support units attached to combat units as opposed to ground elements in their parent units.

- **Bug Fixes**

1. Added proper handling of Soviet mountain corps units. Its subunits (mountain divisions) retain their number, guard status and victory/defeat counters, and the corps can now build up again after breaking down.
2. Fixed the detection of a nearby (in or next to target hex) airbase on air supply drop, that was meant to prevent cargo reduction (waste) but was never working.
3. Fixed the way vehicles, vehicle need, ammo, ammo need, supply, supply need, fuel, fuel need, support, support need and air supply tons are divided between subunits when breaking down a Division or a Corps, so that no items are lost (in case the original number did not divide by 3 without remainder) and support is displayed properly.
4. Fixed the way support, support need and air supply tons are pooled from subunits when building up a Division or a Corps, so that support is displayed properly.
5. Fixed experience loss when building up an existing Soviet Corps from subunits containing ground elements not present in Corps TOE, for example newer or alternate equipment.
6. Fixed evaluation of artillery ground elements in units having less than 75% of required ammo, whose value was doubled rather than halved.
7. Added missing fatigue calculations when merging or building up units.
8. Improved several functions to work correctly for support units by properly detecting their location.
9. Fixed problems with Soviet air army renames not working, when a similarly named air army was present (for example 16th Air Army blocks rename to 6th Air Army).
10. Fixed problems with Soviet front renames affecting other units, when a similarly named air army was present (for example Southern Ural M.D. was renamed together with Southern Front).
11. Fixed bug in morale formula when merging units, where one unit was weighted as if having 100% TOE instead of actual number.
12. Improved movement formula when merging units.
13. Fixed a bug where subunits of two different Soviet corps with the same number and of the same type (but with different Guards status) could be used for building up, clearing corps allegiance from remaining subunits.
14. Fixed a bug that would clear corps allegiance from subunits of a Soviet Corps when corps merge failed.
15. Fixed a bug when recombining a non-Guards Soviet Corps eligible for Guards status (due to majority of its subunits achieving Guards status when operating alone), would clear corps allegiance from subunits of a Guards Soviet Corps with the same number and type.
16. Fixed a bug when recombining a non-Guards Soviet Corps eligible for Guards status (due to majority of its subunits achieving Guards status when operating alone), would not trigger an immediate rename, resulting in duplicate corps names.
17. Fixed a bug when a message about not enough AP was shown when building up an existing Soviet Cavalry Corps if there was less than 5 AP available.
18. Fixed a bug with modified combat value being 100 times higher than it should (invisible to the user).
19. Fixed a crash bug in Debug mode (and possible memory corruption) when opening unit

- detail window for a Soviet Cavalry Corps.
20. Fixed a crash bug in Debug mode (and possible memory corruption) when displaying attached support unit that has moved in unit detail window.
 21. Fixed a crash bug when AI tried to pull back its units.
 22. Fixed many bugs causing leader rolls to fail for support units.
 23. Allowed airhead supply to reach HQs and airbases.
 24. Fixed command point bonus for O.K.H. to be unlimited (instead of 900).
 25. Fixed bug causing Soviet motorized units not to have +10 bonus to NM as documented in the manual/patch notes.
 26. Fixed picking new HQ to work correctly for units in airhead supply (in a limited way as for isolated units, instead as for fully supplied).
 27. Fixed automated support unit detach (using [X] button) to work in the same way as picking new HQ manually (will work for isolated and airhead supply units if a path can be traced between them; the support unit will be properly blocked from being reassigned again this turn).
 28. Fixed x,y unit detection to work for cities, and support units attached to combat units or cities.
 29. Fixed bug in path tracing between units not working for off-map units and units in the same hex.
 30. Enabled display of support unit supply status (only airhead supply tonnage was displayed previously).
 31. Updated CV for ground element types: Special Forces, Marine Commando, Airborne Engineer, Air Landing Section and Light Armored Car from 0 to 3; CS Cavalry Tank and CS Infantry Tank from 0 to 9.
 32. Defined motorized unit for combat CV and Admin roll rules as being non-HQ, permanently motorized and/or having an Armor, Mechanized, Motorized or SP GUN TOE type.
 33. Fixed a bug with units on buildup being treated as isolated during next friendly logistics phase (and for the remainder of the turn in case of support units). Made sure that support unit's supply situation will update in sync with parent's supply situation.
 34. Fixed memory leak in air code, preventing the game from running long AI vs AI games.

- **Data and Scenario Changes**

Scenario Updates

1. Fixed. 1941 campaigns, Operation Barbarossa, Road to Kiev, Road to Leningrad
Finnish units 1st/2nd Command Bn with Italian support squads
Romanian High command with Hungarian support squads
VI Rum. Corps with German support squads
2. Fixed. 654th Heavy Panzerjager Bn (1376) uses wrong OB and equipment, should be OB 280 with Elefant, not 281 with Nashorn in TOE and equipped with future Jagdpanther
3. Various data fixes

Data Changes

1. 88mm Field Gun (0071) – Increased Fuel Use from 6 to 22; to be consistent all guns size

- 2 and larger now require a prime mover (except rail only guns whose fuel use is 0).
2. 75mm Anti-aircraft Gun (0162) – Increased Load Cost from 16 to 22; Increased Fuel Use from 6 to 22.
 3. 76mm Field Gun (0169) – Changed Device from ZiS-3 gun to more probable F-22 gun.
 4. 75mm Anti-aircraft Gun (0213) – Increased Fuel Use from 6 to 22.
 5. 75mm Anti-aircraft Gun (0273) – Increased Size to 2; increased Fuel Use from 6 to 22.
 6. 80mm Anti-aircraft Gun (0308) – Increased Size to 2; increased Fuel Use from 6 to 22.
 7. 122mm Field Gun (0370) – Increased Size to 2; increased Fuel Use from 6 to 22.
 8. 3.7in Anti-aircraft Gun (2068) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 9. 4.5in Field Gun (2098) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 10. 5.5in Field Gun (2100) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 11. 7.2in Howitzer (2101) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 12. 8in Howitzer (2102) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 13. 240mm Howitzer (2116) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 14. 155mm Field Gun (2120) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 15. 155mm Howitzer (2587) – Increase Fuel Use to 18.
 16. 4.5in Field Gun (2588) – Decrease Fuel Use to 18.
 17. 149mm Howitzer (2639) – Decrease Fuel Use to 18 (for WitW assumes use of American halftrack as towing vehicle).
 18. Some minor corrections to fuel use by ground elements to further consistency of treatment.
 19. Renamed the Hetzer to the Jagdpanzer 38(t) Hetzer.
 20. 0003 Ar 234B - remove rear cannon armament as this was never used in production aircraft, re-calculate ammo cost
 21. 0177 Do 17M(R) - remove empty equipment slot
 22. 0307 R-5 - upgrade to 0326 U-2 (recon)
 23. 0308 R-Z - upgrade to 0317 Il-2
 24. 0307 R-10 - upgrade to 0326 U-2 (recon)
 25. 0314 SB-2(recon) - upgrade to 0331 Pe-2R
 26. 0342 TB-3G-2 - upgrade to 0347 Li-2

V1.07.10– August 12, 2013

- **New Features and Rule Changes**

1. Rule Change (section 9.1.1) – Possible morale gains for a unit being at least 10 hexes from an enemy unit (in refit or not) will now only happen if the unit's morale is below its national morale, or 50, whichever is lowest. Note it is possible to receive up to 0-2 morale

points from this when not in refit mode, and 0-4 points when in refit mode (this has not changed).

2. Rule Change (section 8.4.3) – The air group unit commitment system will only allow the transfer of recon air groups to Wehrmacht airbases.
3. Rule Change/Errata (section 3.3.2) – There was an undocumented +1 morale bonus from victories whenever the morale help level was set >100. Similarly, there was one less loss of morale due to a lost combat when the morale help was set >100. These have now been changed so that these bonuses only apply when the morale help level is set >109. We have also fixed a bug that could cause a unit with morale help level >100 to potentially gain one morale point from a lost battle.
4. Rule Change (section 23.3.1)– If the Rumanian front areas is still frozen, Axis movement into Hungary is no longer allowed on turn 2 of scenarios starting on June 22, 1941. More accurately, movement is not allowed in the area both south of hex row 86 and west of column 45. This has always been true for turn 1, but has been extended to turn 2 as described above. The Axis AI may ignore this rule in order to defend its territory.
5. Formula Change (section 9.1.1) – Reduced the chance that a unit below its national morale will receive the die(10% of national morale) increase in morale. The chance is now 10% (was 15%).
6. Rule Errata (section 9.1.1) – Units that are below 40 automatically gain one morale point in the logistics phase.
7. Rule Errata (section 9.1.3) – The Finnish National Morale is 70 for the entire war.
8. Rule Errata (section 15) – There are a maximum number of units that may participate in a combat. The absolute maximum is 40 units per side (including HQs, on-map and support units). The system will try to include all on-map units if possible, but as the number of units gets large (over 25-30), there is a chance that some support units will be left out of the battle even before reaching the 40 unit maximum.

- **Bug Fixes**

1. Fixed a bug that was causing the number of victories and defeats to be credited to leaders to only work for 3 levels of command (causing OKH and Stavka not to be properly credited in all cases).
2. Fixed a bug that could prevent some Fighter-Bomber air groups from upgrading.
3. Fixed a bug where combat units with an attached support unit could get credit for 2 victories or defeats from one battle.

- **Data and Scenario Changes**

Data Files

1. 37mm Anti-tank Gun (67) – Added upgrade path to 75mm Anti-tank Gun (69) and changed Last Month from 12 to 10. 75mm Anti-tank Gun (69) – Introduction date changed to 2/42.
2. Changed the upgrade dates of WitE German infantry and pioneer squads and Slovakian infantry squads.
3. Added the missing accuracy modifier to the Slovakian (322) and Hungarian (358) 50mm anti-tank guns and added a German-made 75mm anti-tank gun for the Rumanians.
4. Changed the domestic Rumanian 75mm anti-tank gun start to a more accurate date of

- 3/44 and added a German-made 75mm anti-tank gun for the Rumanians.
5. Corrected production period of 39M Csaba Armored Car (288) armored car.
 6. Maultier (174) – Renamed to SdKfz-4 Panzerwerfer.
 7. SdKfz-250/9 – Added this vehicle as an armored car type in WitE (no picture/no symbol) and as a Recon Halftrack (new ground type 73) in WitW. It's an upgrade from the SdKfz-222 armored car and needs 3 factories (initial size 1) in WitW; it uses the SdKfz-222's orphan factories in WitE.
 8. Fixed spelling of leader von Edelsheim, Maximilian. Changed Leader 1189: Demidov, Aleksandr from Ground only to Air only.
 9. Fixed an error in the 42c SS Motorized Division (OB 463) that had its 75mm infantry guns entered twice.
 10. 42a Guards Tank Corps (OB 404) – Added missing upgrade path to 42b Guards Tank Corps (OB 402).
 11. 43 Assault Engineer-Sapper Brigade (OB 446) – Added missing upgrade path to 44 Assault Engineer-Sapper Brigade (OB 486).
 12. 44 Airlanding Division (OB 133) – Renamed to 44b Airlanding Division (WitW only change).
 13. 41b Infantry Division (OB 338) – Corrected upgrade path from 41 Jager Division (OB 32) to 42 Jager Division (OB 335).
 14. 42 Rum. Armored Division (OB 75) – changed 75mm Anti-tank gun from Rumanian produced to (246) to imported German (360).
 15. 42 Rum. Infantry Division (OB 77) – changed 75mm Anti-tank gun from Rumanian produced to (246) to imported German (360).
 16. 43 Rum. Infantry Division (OB 136) – changed 75mm Anti-tank gun from Rumanian produced to (246) to imported German (360).
 17. Hungarian 75mm Anti-tank Gun (291) – decreased accuracy from 350 to 250.
 18. Rumanian 75mm Anti-tank Gun (360) – corrected gun crew rifles from Hungarian (141) to Rumanian (142).

Scenario Files

1. Some minor changes to arrivals including strength and experience were made to the Stalingrad to Berlin Campaign and the Winter 1942-43 scenario based on Matrix forum feedback.
2. In all campaigns and scenarios starting June 22, 1941, moved 2 Rumanian units back from the border near Chernovtsy. This allows Soviet units to use the rail next to the border on turn 2 if it is not cut by German units from the north. This was done to reduce the effectiveness of the German Super Lvov Pocket strategy. Also reduced the fort level of Hanko to 3.

V1.07.08– May 6, 2013

• New Features and Rule Changes

1. Formula Change - Greatly reduced the chance that a unit below its national morale will

receive the die(10% of national morale) increase in morale.

- **Bug Fixes**

1. Fixed a bug that was allowing non-recon air groups to transfer to German Army Airbases (the new rule created in 1.07.07 was not working correctly).
2. Fixed a bug where the “Restore ground element upgrade paths” question was not showing up properly during Multiplayer games.

- **Data and Scenario Changes**

1. In games where the AI is playing the Axis side, the Soviet player will be asked whether to restore ground element upgrade paths per the change in version 1.07.07. Also, in games started with version 1.07.07 or later, the restore question will not be asked (as the upgrade paths have already been reinstated in the data).
2. Correction for the 1.07.07 readme:
Restored 2 ground element upgrade paths listed below (these are restored along with the German upgrade paths in existing games if the player answers yes to the question):
0299 Rifle Squad (Hungarian) to 0298 Rifle Squad (Hungarian)
0316 Rifle Squad (Slovakian) to 0315 Rifle Squad (Slovakian)

V1.07.07– April 29, 2013

- **New Features and Rule Changes**

1. New Rule - Only recon air groups may be transferred to German Army Airbases. No air groups may be assigned directly from the National Reserve to German Army Airbases.

- **Data and Scenario Changes**

3. Restored four German ground element upgrade paths listed below. In existing games, the German player will be asked once whether they wish to “Restore Ground Element Upgrade Paths”. If yes, then the upgrade paths below will be set, otherwise the ground elements will remain with no upgrade path and the player will not be asked again.
0081 Rifle Squad upgrades to 0082 Rifle Squad
0084 Pioneer Squad upgrades to 0085 Pioneer Squad
0094 Motorized Rifle Squad upgrades to 0096 Motorized Rifle Squad
0114 Fallschirmjager Squad upgrades to 0115 Fallschirmjager Squad
4. Corrected start date of the Soviet 42 Flamethrower Company (OB 383) from 5/42 to 7/42.
5. Minor changes to recently added German leaders.
6. Restored 2 ground element upgrade paths listed below:
0298 Rifle Squad (Hungarian) to 0299 Rifle Squad (Hungarian)
0315 Rifle Squad (Slovakian) to 0316 Rifle Squad (Slovakian)

V1.07.06– April 12, 2013

- **New Features and Rule Changes**

1. Rule Clarifications – HQ and airbase units do not receive the motorized bonus to national morale. Units do not gain morale while routed. Units may only gain morale outside of combat if their morale is less than 10 points above their national morale, or less than 50, whichever is greater.

- **Bug Fixes**

1. Fixed a bug that prevented a part of rule 9.1.1 from functioning correctly. Units that were below their national morale were not getting the chance to gain morale simply due to the fact that they were below the national morale. Now they get the chance, and if they go up (they must pass various checks), they will receive an increase of die(10% of their national morale), but not to exceed the national morale.
2. Fixed a bug that prevented Soviet players from being able to create new flak units at cities.

V1.07.04– April 4, 2013

- **New Features and Rule Changes**

1. Rule Change – Ground combat in a hex can no longer cause damage to a port in the hex.

- **Bug Fixes**

1. Fixed a bug that prevented Don to the Danube scenarios from being playable in Multiplayer.

- **Data and Scenario Changes**

Updated WitE Campaigns and many smaller scenarios

1. German airgroups updated to the latest versions of aircraft
2. Soviet partisan MPs zeroed out
3. Hungarian 39M Armored Car Factory removed

V1.07.03– March 15, 2013

- **New Features and Rule Changes**

1. Change in Save Game Structure – Games that are saved using a 1.07.00 version or later are saved in such a way that they may only be loaded successfully by a 1.07.00 or later version. This change was made to eliminate the potential of players using earlier versions

of the game to take advantage of possible exploits..

2. New Rule – The maximum MPs for Soviet Tank and Motorized Divisions in 1942 are 25.
3. AI Improvements – Made several AI adjustments, including improvements to the AI's line forming function, improvements to its use of support units (getting them out of rear HQ's and into active HQs), and improvements to its overuse of counterattacks that put the AI's units in dangerous situations.

- **Bug Fixes**

1. Fixed a bug that allowed fort units to attach an unlimited number of construction support units.
2. Fixed a rare AI bug that could cause units from both sides to temporarily occupy the same hex.
3. Fixed a bug that could prevent a destroyed German unit from returning to the game to be rebuilt.
4. Fixed a bug that could prevent the save game screen from closing when the ESC key was pressed.
5. Fixed a bug with the set production usage interface in the editor screen.
6. Fixed a bug with highlighting of Soviet Corps breakdown units.
7. Fixed a bug that caused an attempt to build a Gun Artillery Division in 1943 to instead build a Heavy Artillery Division.

- **Data and Scenario Changes**

1. Changed frontal armor of IS-1 and early IS-2 and side armor of IS-3.
2. Corrected the Italian Labor Squad's speed and size and the SU-76's fuel use.
3. Corrected the availability date of several Soviet leaders to June 1941. These leaders are commanding Corps in June 1941 but were incorrectly listed in the game data as not being available until later.
4. Corrected the missing build cost for Rumanian, Hungarian and Soviet Labor Squads.
5. Changed 41b Tank Division end date to 12/41.

V1.06.27 – January 22, 2013o

- **New Features and Rule Changes**

1. Production Change – Size 0 factories will now expand if they are past their start date.
2. Formula Change – Adjusted the way staging bases are selected for providing ground support aircraft to ground battles.
3. Editor – Improved the Upgrade all OB function. This function should be used only at the beginning of building a scenario (once the unit list has been created), as it often requires units to be rebuilt.
4. AI Improvement – Made a small improvement in how the AI builds lines in small scenarios.
5. PBEM - A possible exploit in PBEM games was identified and removed from the game. We suggest players use the latest version when playing PBEM.

- **Bug Fixes**

1. Fixed a bug causing the end game screen not to appear properly in small scenarios.
2. Fixed a bug where destroyed German units that were rebuilt were coming back with 10 less morale than they should have.
3. Fixed a bug where the CSV export could get corrupted if a name field is at the maximum value of 40 characters.

- **Data and Scenario Changes**

1. Red Army Resurgent 42-43 Scenario - Corrected the starting MPs of the 1st Gds Mech Corps by setting it to 0 as the unit is frozen at the start.

V1.06.25 – December 28, 2012

- **New Features and Rule Changes**

1. Rule Change – Frozen support units are now reset during the logistics phase so they are not frozen. The intention is that support units should not be frozen.
2. Rule Change – Soviet factories no longer rise to their build limit on the turn they become active. Axis were already not rising starting with version 1.06.22. Both Soviet and Axis factories will not increase in size before their start date.

- **Bug Fixes**

1. Fixed a bug where Unready/depleted support units were not filtered correctly in the CR screen.
2. Fixed a bug in the data table for the support needs of certain ground element types. Heavy AT Guns now require 10 support (instead of 0), Light AT Guns require 2 support (instead of 0) and Heavy Infantry Guns require 12 support (instead of 1). These numbers are the amount of support required by 10 elements of the given type of ground element.
3. Fixed a bug where in some cases, mouse clicks on certain areas of the CR screen were not being recognized.
4. Fixed a bug where the number of available support units was not always displayed correctly (when assigning/forming support units).
5. Fixed a rare crash bug caused by using the Prev TOE(OB) option in the TOE window.
6. Fixed a bug that could cause prevent fighters from flying escort for air transport missions.
7. Fixed a bug causing the Demjansk scenario, and possibly other very small scenarios to end prematurely.

- **Data and Scenario Changes**

1. Made minor corrections in the wrob.dat and wrdevice.dat files to improve the flow of production into units.

V1.06.23 – December 16, 2012

- **New Features and Rule Changes**

1. Rule Change - Generic factories (ARM, HI, etc) with a non zero build limit and with factory size above it were being reduced to the build limit starting with version 1.06.22. Now, these factories are not affected by the reduction rule added in 1.06.22.
2. Formula Change – Adjusted Dive bombers accuracy when bombing cities.
3. Formula Change - Adjusted night bombing accuracy.
4. Formula Change - Adjusted city bombing routine.

- **Bug Fixes**

1. Fixed a bug where aircraft factories above the build limit were not being reduced to the build limit as intended by the changes in 1.06.22.
2. Fixed a bug where Soviet numbered air armies could get renamed.

V1.06.22 – November 29, 2012

- **New Features and Rule Changes**

1. New Rule – Air transport missions may only be flown by air groups that are located on airbases within 5 MPs of a supply source (rail net).
2. New Rule – Factories that are moved may not be moved again for twenty turns. The turn when it will be able to move again is shown on the city display when in rail transfer mode.
3. New Rule – Heavy Tank Brigades may not be used to form Soviet Corps.
4. Changes to Production Formulas
 - a) Axis factories no longer rise to their build limit on the turn they become active.
 - b) Factories with a size of 0 that have an expansion rate greater than 0 will no longer receive damage of 1 when they reach their availability date.
 - c) Factories that are set to values larger than their build limit will be set to their build limit during the next production cycle.
5. Changes to Equipment Scrapping, Swapping and Upgrading Formulas
 - a) Scrapping of ground equipment now begins exactly 12 months after the last month/year availability date, instead of at the start of the next calendar year after the last year of availability.
 - b) AFVs are no longer scrapped if they are being used by any units in the game.
 - c) Ground elements below 10 in the pool can be scrapped at a rate of 1 per turn so the pool will eventually be emptied.
 - d) Modified ground element and aircraft swapping to give priority to newer equipment.
 - e) Increased the chance to swap aircraft. Depleted groups still have a higher chance to swap.
 - f) Captured equipment will no longer upgrade to other captured equipment using the upgrade routines. They may swap out the captured equipment for other captured or

normal equipment.

6. Changes to Combat Formulas
 - a) Reduced the fire of artillery elements during bombardment (2-hex) combat (primarily reduced the fire of defending artillery).
 - b) Defensive fire will be reduced to conserve ammunition if the attacker is relatively very small (roughly less than half the size of the defender).
 - c) If an artillery element is firing with its non-main gun devices only, 1/10 of the standard ammunition is used.
 - d) Removed very large ammo usage spikes by artillery ground elements in battle.
7. New Feature – Added event log messages when air groups withdraw.
8. Code Optimization – Optimized support unit assignment interface code.

- **Bug Fixes**

1. Fixed a bug where air groups that flew missions to the same hex that their airbase was located in were not being charged miles flown. Now a nominal amount of miles flown is charged to the air group. This will prevent heavy bombers from being able to fly repeated air transport missions in the same turn when flying to their same hex.
2. Fixed a bug that was preventing support units from receiving supplies when attached to units involved in a HQ buildup. This bug was causing the support units to lose morale and gain fatigue.
3. Fixed a bug that was causing partisan units to erroneously lose morale.
4. Fixed a bug in the editor where clicking on a location ID performed an unintended delete of the location.
5. Fixed a bug that was causing mountain units to pay 4 MP's when moving through a mountain pass instead of the intended 3 MPs (since mountain units pay 3 MPs for any mountain hex).
6. Fixed a bug that made changing the HQ attachment of a broken down Soviet corps cost less APs than it should have. As of version 1.05.53 it should have followed these rules: When a broken down unit from a Soviet Corps of any kind changes its HQ attachment, all broken down units that are a part of that Corps will also change their HQ attachment. The cost for this change in HQ will be equal to the cost of changing the Corps.
7. Fixed a bug where an artillery unit attacking across an impassable river hexside could end up with negative movement points.
8. Fixed a bug that prevented the Soviet player from building new regular Mortar Brigades and Tank Brigades at times during 1944/45.
9. Fixed a bug in the AI where it could warp a unit into an overstack situation inside a pocket.
10. Fixed a bug where the game could freeze when all Soviet supply centers were captured. The game will now end if all supply centers of one side are captured.
11. Fixed two bugs with partisan units. In the first bug the partisan unit could end up with MPs, in the second it could end up stacked with an enemy unit.
12. Fixed a bug that prevented support units from getting ground element upgrades.
13. Fixed a bug preventing units attached to a city from upgrading/swapping ground elements.
14. Fixed a bug preventing artillery support units directly attached to a unit defending in a

bombardment combat from being able to commit to the battle.

- **Data and Scenario Changes**

An update was made to the campaign scenario files and OB and Device data files. Going along with this data update, several programming changes were made to improve production. The logic behind the changes and the changes themselves are detailed below.

Developer's Notes by Jim Wirth: The primary focus of this data update was to correct Axis production for errors and omissions resulting from scenario changes and developments introduced after production was originally setup as well as from missing or erroneous data. In addition a few changes were made to some of the German armor ratings not resulting from new information but rather due to either applying a more consistent methodology to calculating the values or incorporating data previously ignored, such as the pre-Barbarossa armor upgrade of the Panzer IIc. In some cases to get game production as close to historical as possible Production Start and End Dates were shifted a month or two in either direction. Finally to compensate as much as possible for the effect of using the production period for the service life when determining if a particular ground element (primarily AFVs) is subject to scrapping, the Production End Date was extended to the first month of a subsequent year. For example, the Panzer Ib which actually went out of production in June, 1937 has a Production End Date of January, 1941. Panzer Ibs will now not start being scrapped until 1942. Unfortunately this work-a-round can only be used for elements either not in production before June, 1941 or which upgrade in the course of the game. The one area of Axis production which was not changed was factory locations. It was the decision of the design and development team to defer those changes to subsequent games in the series.

Detailed changes to the Axis AFVs are as follows:

1. Panzer Ib (0001) – Production End Date changed from 6/37 to 1/41.
2. Panzer IIc (0002) – Frontal Armor increased by 15 (Note: All Panzer IIcs had additional armor added prior to Barbarossa); Production End Date changed from 4/40 to 1/42.
3. Panzer IIIf (0003) – Initial Factory Size decreased by 2; Build Limit decreased by 2. Production End Date changed from 12/42 to 2/43.
4. Panzer IIIL (0004) – Build Limit reduced by 1.
5. Flammpanzer II (0005) – Production End Date changed from 3/42 to 1/42.
6. Panzer IIIe (0006) – Production End Date changed from 7/40 to 1/41.
7. Panzer IIIj L/60 (0009) – Build Limit increased by 2.
8. Panzer IIIIm (0010) – Build Limit decreased by 1.
9. Panzer IIIIn (0011) – Build Limit decreased by 1.
10. Flammpanzer III (0012) – Build Limit increased by 10.
11. Panzer 35(t) (0013) – Production End Date changed from 12/38 to 1/41.
12. Panzer 38(t) (0014) – Production End Date changed from 10/40 to 1/41.
13. Panzer 38(t)E (0015) – Side Armor decreased by 4; Build Limit increased by 4; Expansion Rate increased by 1.
14. Panzer IVg L/43 (0020) – Build Limit decreased by 1.
15. Panzer IVh (0021) – Production End Date changed from 6/44 to 1/45; Expansion Rate decreased by 1.
16. Panther A (0023) – Production End Date changed from 4/44 to 1/45. Expansion Rate decreased by 2.

17. Panther G (0024) – Build Limit decreased by 2
18. Tiger (0025) – Production Start Date changed from 7/42 to 8/42; Production End Date changed from 12/44 to 8/44; Build Limit increased by 1.
19. King Tiger (0026) – Frontal Armor increased by 5; Production Start Date changed from 1/44 to 2/44.
20. Brummbär (0027) – Name changed to Sturmpanzer IV; Reliability Rating changed from 25 to 30.
21. Stug IIIb (0028) – Build Limit decreased by 2.
22. StuH42 (0029) – Production Start Date changed from 10/42 to 12/42; Production End Date changed from 2/45 to 9/45. (Note: Rate of production based on historical.)
23. Stug IIIf (0030) – Frontal Armor decreased by 23; Production End Date changed from 11/42 to 5/42; Build Limit decreased by 4. (Note: See Note to Stug IIIg.)
24. Stug IIIg (0031) – Bow (actually coaxial) Machinegun removed; Frontal Armor increased by 7; Production Start Date changed from 12/42 to 6/42; Ammo Use decreased by 18; Build Cost decreased by 2; Build Limit decreased by 2; Expansion Rate increased by 1. (Note: Historically half the Stug IIIfs did not receive an armor upgrade and all of these were armed with the 75mm L/43 gun. The remainder of Stug IIIfs and all Stug IIIf/8s had the additional armor and 31 of the Stug IIIfs and all of the Stug IIIf/8s had the 75mm L/48 gun. Previously in the game the Stug IIIfs and the Stug IIIf/8s were combined and all had the additional armor and the 75mm L/43 gun. Historically only some (amount unknown) late production Stug IIIgs had the coaxial machinegun, the only feature that in game terms distinguished them from the Stug IIIfs/f8s with additional armor and the 75mm L/48 gun. By removing the coaxial machinegun from the Stug IIIg its production could be combined with that of the late model Stug IIIf and Stug IIIf/8 resulting in game production within 2% of historical.)
25. Jagdpanzer IV (0032) – Frontal Armor increased by 11; Side Armor increased by 2; Top Armor Increased by 4; Build Limit increased by 3; Production End Date changed from 9/44 to 1/45.
26. Marder II (SdKfz-132) (0034) – Production End Date changed from 6/43 to 9/43; Build Limit decreased by 1; Expansion Rate decreased by 1.
27. Marder II (SdKfz-131) (0035) – Expansion Rate increased by 1.
28. Marder III (0036) – Build Limit decreased by 2; Production End Date changed from 4/44 to 1/45.
29. Panzerjäger 38(t) (0037) – Build Limit decreased by 1; Expansion Rate decreased by 1; Production End Date changed from 10/42 to 1/43.
30. Nashorn (0038) – Production Start Date changed from 2/43 to 3/43.
31. Hetzer (0039) – Frontal Armor decreased by 4; Build Limit reduced by 5; Expansion Rate decreased by 1.
32. Jagdpanzer IV/70(V) (0041) – Frontal Armor decreased by 10; Side Armor decreased by 6; Top Armor decreased by 1; Build Limit decreased by 2; Expansion Rate decreased by 1.
33. Jagdpanther (0042) – Initial Factory size decreased by 1; Frontal Armor decreased by 7; Top Armor increased by 2; Production Start Date changed from 1/44 to 2/44.
34. Elefant (0043) – Side Armor decreased by 8; Reliability Rating changed from 40 to 45.
35. Jagdtiger (0044) – Frontal Armor increased by 15; Top Armor increased by 2; Production Start Date changed from 7/44 to 8/44.
36. Hummel (0046) – Build Limit increased by 3.
37. SdKfz-10/4 (0048) – Initial Factory Size increased by 2; Build Limit increased by 2;

Production End Date changed from 12/44 to 1/44.

38. Flakpanzer 38(t) (0049) – Frontal Armor increased by 4; Build Limit increased by 2; Expansion Rate increased by 1; Production End Date changed from 2/44 to 1/45.

39. Wirbelwind (0050) – Initial Factory Size increased by 1; Build Limit decreased by 2; Expansion Rate decreased by 3; Production End Date changed from 11/44 to 1/45.

40. Ostwind (0051) – Crew Size reduced by 1; Expansion Rate increased by 1.

41. sIG33 (0052) – Production End Date changed from 2/40 to 1/42.

42. sIG33 Grille (0053) – Crew Size decreased by 1; Build Limit decreased by 8; Expansion Rate decreased by 1. (Note: This vehicle “swapped” data base slots with the sIG33 (SdKfz-138) to reduce scenario edits.)

43. SdKfz-221(0054) – Production End Date changed from 5/40 to 1/41.

44. SdKfz-231 (0056) – Production End Date changed from 9/43 to 1/44.

45. SdKfz-234/1 (0057) – Production End Date changed from 1/45 to 10/44.

46. SdKfz-234/2 (0058) – Production Start Date changed from 9/43 to 1/44.

47. SdKfz-234/3 (0059) – Production End Date changed from 11/44 to 1/45.

48. SdKfz-234/4 (0060) – Build Limit increased by 1.

49. SdKfz-251/1 (0062) – Initial Factory Size decreased by 2; Build Limit decreased by 6; Expansion Rate decreased by 1; Production End Date changed from 8/43 to 1/44. (Note: All the SdKfz-251 variants were being over-produced and corrected to not exceed 40% of total production.)

50. SdKfz-251/10 (0063) – Initial Factory Size increased by 2; Build Limit decreased by 13; Expansion Rate decreased by 1.

51. SdKfz-251/2 (0064) – Initial Factory Size decreased by 6; Build Limit decreased by 6; Production End Date changed from 8/43 to 1/44.

52. SdKfz-251/1 (0065) – Build Limit decreased by 10.

53. SdKfz-233 (0066) – Build Limit decreased by 1.

54. SdKfz-251/17 (0090) – Build Limit decreased by 9.

55. SdKfz-251/22 (0107) – Build Limit decreased by 6; Expansion Rate decreased by 1.

56. Möbelwagen (0117) – Build Limit decreased by 1; Expansion Rate decreased by 1.

57. Panzer IVj (0125) – Build Limit increased by 3; Expansion Rate increased by 1.

58. SdKfz-251/9 (0126) – Build Limit decreased by 12.

59. SdKfz-6/2 (0127) – Production End Date changed from 12/43 to 5/42.

60. Stug IV (0170) – Build Limit increased by 1; Expansion Rate decreased by 1.

61. CV-33 (0177) – Production End Date changed from 12/41 to 1/42.

62. L6/40 (0178) – Production End Date changed from 9/42 to 1/43.

63. M-11/39 (0179) – Production End Date changed from 11/40 to 1/41.

64. M-13/40 (0180) – Initial Factory Size decreased by 1; Build Limit decreased by 1; Production End Date changed from 12/42 to 1/43.

65. M-15/42 (0181) – Production End Date changed from 9/45 to 8/43.

66. Semovente L40 da 47 (0183) – Production End Date changed from 2/43 to 4/43; Build Limit increased by 7.

67. Semovente M40 da 75 (0184) – Production End Date changed from 12/42 to 1/43.

68. Semovente M43 da 105 (0185) – Production End Date changed from 9/45 to 8/43.

69. Autoblinda (0187) – Initial Factory Size decreased by 1; Production Start Date changed from 1/40 to 1/41; Production End Date changed from 9/45 to 8/43; Build Limit decreased by 1.

70. Semovente M42 da 75 (0188) – Production Start Date changed from 3/43 to 5/43;

Production End Date changed from 9/45 to 8/43; Build Limit increased by 1.

71. SdKfz-7/1 (0209) – Initial Factory Size decreased by 1; Production Start Date changed from 6/41 to 4/40; Production End Date changed from 9/43 to 10/44; 26 vehicles in 1941 pool; Expansion Rate decreased by 1.

72. SdKfz-7/2 (0210) – Initial Factory Size decreased by 2; Crew Size decreased by 3; Build Limit increased by 3.

73. Panzerjager 38(t)H (0216) – Build Limit increased by 1; Production End Date changed from 3/43 to 1/44.

74. Panzer 38(t) Aufklärer (0217) – Build Limit decreased by 2; Expansion Rate decreased by 1.

75. sIG33 (SdKfz-138) (0218) – Build Limit decreased by 3; Expansion Rate decreased by 1. (Note: See 42 above.)

76. Panzer IIIj L/42 (0219) – Build Limit increased by 2.

77. SdKfz-251/2 (0220) – Build Limit decreased by 10.

78. Panzer IVg L/48 (0221) – Build Limit increased by 1; Expansion Rate increased by 1; Production End Date changed from 4/43 to 1/44.

79. OA vz.30 (0225) – Production End Date changed from 12/41 to 1/42.

80. CKD-R1 (0226) – Production End Date changed from 12/42 to 1/43.

81. Vanatorul de care R-35 (0230) – Production End Date changed from 12/44 to 7/44.

82. TACAM T-60 (0237) – Production Start Date changed from 7/43 to 2/43; Production End Date changed from 9/45 to 9/43.

83. TACAM R-2 (0238) – Production Start Date changed from 7/44 to 1/44; Production End Date changed from 9/45 to 5/44.

84. Toldi II (0278) – Initial Factory Size decreased by 3; Production End Date changed from 6/42 to 2/42; Build Limit decreased by 1.

85. Turan-I (0279) – Initial Factory Size decreased by 1; Production Start Date changed from 9/41 to 11/41; Production End Date changed from 6/43 to 1/43; Build Limit decreased by 1.

86. Turan-II (0280) – Production Start Date changed from 7/43 to 2/43; Production End Date changed from 12/44 to 5/44.

87. Nimrod (0287) – Production End Date changed from 12/42 to 11/42; Build Limit increased by 2; Expansion Rate increased by 1.

88. 39M CSABA (0288) – Production End Date changed from 9/45 to 1/45; Build Limit decreased by 1; (Note: All CSABAs were produced prior to Barbarossa.)

89. Toldi IIa (0303) – Production Start Date changed from 1/43 to 7/42; Production End Date changed from 10/43 to 12/43; Build Limit decreased by 1.

90. Zrinyi II (0307) – Production Start Date changed from 1/43 to 5/43; Production End Date changed from 12/44 to 6/44.

91. LT-38 (0333) – Production End Date changed from 12/42 to 12/41.

92. LT-40 (0335) – Production End Date changed from 12/42 to 4/42.

Other Data Changes:

1. Renamed OB 336 from 41 Sturm Division to 41c Infantry Division. It will upgrade to a Sturm division (OB 337) in 1943.
2. Fixed several problems with German Cavalry brigades in all the Campaign scenarios and the Decision in the Ukraine scenario by using new Cavalry Brigade OBs.
3. The French Volunteer Regiment now uses the 44 Infantry Regiment OB in the 44 Campaign.

4. Changed Soviet rocket launchers to single device elements with adjusted ROF.
5. Changed 41 Infantry Regiment OB to upgrade to the 43 Infantry Regiment.

V1.06.19 – September 12, 2012o

- **New Features and Rule Changes**

1. Rule change - All Italian units will be removed from the map by August 1, 1943 and Italian production will cease on August 1, 1943. It is assumed that all Italian production is thereafter focused on the Western Front.
2. Formula change - Changed the amount of Hiwis generated each turn from captured Manpower centers from 10 to 3. This was done to counteract the impact of a bug fix involving Hiwi generation. Also, it should be noted that manpower generation from cities is reduced by the percentage of German production that is being sent to the Western Front.
3. Interface Change – The CV values shown on counters of units that include ski units will now reflect the modified CV value of the ski units, when they are in snow or blizzard hexes.

- **Bug Fixes**

1. Fixed a bug where Hiwi generation was being inversely impacted by damage to manpower centers (i.e. the more damage to manpower centers, the more Hiwis generated).
2. Fixed a bug where off-map cities could be destroyed by movement along the edge of the map.
3. Fixed a bug where the AI was changing the status of some human controlled from refit to ready.

- **Data and Scenario Changes**

1. OBs 42a Guards Rifle Corps (OB 395) and the 42b Guards Rifle Corps (OB 199) have been expanded to consist of five (5) rather than four (4) Guards rifle brigades. This corresponds to the expansion that was previously done to the regular early war Rifle Corps.

V1.06.15 – August 10, 2012

- **New Features and Rule Changes**

1. New Interface - Added an extra confirmation dialog when setting the support level in the commander's report screen.
2. Rule Correction (Section 14.1.1) – The minimum MPs for non-motorized units is eight, not six as originally detailed in the manual.

- **Bug Fixes**

1. Fixed a bug that prevented support units from receiving support help from HQs within range.

- **Data and Scenario Changes**

1. Made changes to the 900th Lehr Brigade in the Road to Smolensk, Road to Moscow, Road to Minsk and Operation Barbarossa scenarios.

V1.06.14 – July 8, 2012

- **Bug Fixes**

1. Fixed a bug where the AI was changing formation attachments of some human player controlled armies between Army Groups A and B in 1942.
2. Fixed a discrepancy between the in-game victory screen and the one displayed in the Multiplayer lobby (the Multiplayer lobby was wrong).
3. Fixed a bug where units that were not intended to arrive in a limited map scenario were arriving as reinforcements. Now, any unit set in the editor to arrive on a hex outside the playable map area will not enter the scenario.
4. Fixed a bug where non-isolated empty units could get disbanded (and would create looping disband messages).

- **Data and Scenario Changes**

1. Corrected the build limit of the SdKfz-251/2 Mortar Carrier (64) to agree with the initial factory size.
2. Cleaned up the device file by removing many duplicate weapons.

V1.06.13 – June 5, 2012

- **New Features and Rule Changes**

1. Rule Change (Section 18.1.1) – Reinforcements that do not have a specific entry hex set and do not have a valid city/town of their nationality to appear at may appear at a city/town of a different nationality as long as it is friendly controlled and connected to a supply source.
2. Rule Change (Section 20.4.4) – Excess supplies will be sent back to friendly cities instead of to HQs.
3. Rule Change (Section 20.1.1) - In limited map scenarios, rail hexes outside of the limited area can provide supply. This may prevent some units along the map edge from being isolated, and will also allow OKH and other HQs positioned outside the play area to be considered in supply. This should allow arriving reinforcements that are attached to out of play HQ's to receive supplies on the turn of arrival.
4. Code Optimization - Optimized game memory usage, reducing memory usage by map art.

5. Code Optimization – Optimized HHQ selection code.

- **Bug Fixes**

1. Fixed a bug where inactive air groups could appear on the air transfer screen.

- **Data and Scenario Changes**

1. OBs 42a Rifle Corps (OB 394) and the 42b Rifle Corps (OB 195) have been expanded to consist of five (5) rather than four (4) rifle brigades. Soviet players can now create these corps by first combining 4 rifle brigades into two rifle divisions then combining those divisions with another rifle brigade to form a corps based primarily on rifle brigade TOEs (although this is not necessary).

V1.06.11 – May 11, 2012

- **New Features and Rule Changes**

1. Rule Change (Section 20.6) – Several changes have been made to the HQ Build up rules as follows:
 - a) The amount of supplies and fuel delivered to a HQ conducting HQ Buildup is now equal to the total needs of all of the on map units attached to the HQ (supplies/fuel already on hand do not alter this calculation). This replaces the old method of basing supplies/fuel delivered on the AP cost of the buildup. These will then be distributed to bring the units up to 100% of their need with the unused remainder remaining in the HQ.
 - b) For each 2 tons of supplies or fuel sent to the HQ, 1 vehicle will be damaged and 1 vehicle will be sent to the HQ. The number of vehicles destroyed remains unchanged.
2. Rule Change (Sections 14.1.4 and 23.3.4.5) – Axis Brigade and Regiment sized units must pay the standard 2 additional movement points when entering enemy controlled hexes on 22 June 1941 (in addition to the special +1 cost).
3. Rule Change (Section 17.2.1) - A Soviet player with FOW on will no longer be able to see the garrison percentage in Axis held cities.
4. Rule Change (Section 16.3.6) – Airborne units may only be dropped within 8 hexes of a supplied friendly unit. See the next item for the interface change that has been made for airborne drops.
5. Interface Change (Section 5.3.9.3) – To airdrop a unit, now you must go to air transport mode and then left click on the hex containing the airbase and airborne unit. Make sure the airborne unit(s) you wish to drop are selected in the unit bar. Next, shift-left click on a hex near the airfield. This will cause the pick air units mission window to be displayed. Close this window and you will now see the hexes where you may conduct an airdrop lit up, while those that are not possible will be displayed in. Shift-left click on the hex you wish to drop the airborne unit and the pick air units mission window will appear. Due to

some issues with the interface, the only way to indicate the valid hexes to airdrop in is to click on a valid hex. If you click on an invalid hex it will not bring up the air window nor will it indicate the valid hexes. This is why we suggest you click somewhere near the airbase. Whenever the air window appears, you can execute the air drop. It is important that you select the airborne unit after you have entered air transport mode (previously the airborne unit was supposed to be selected while still in movement mode).

6. Formula change (Sections 15.5.3 and 15.9) – The limitation that a unit will not be eligible to rout if it passes a check where it's morale is greater than $40 + \text{Die}(15)$ is now $40 + \text{Die}(30)$ for any brigade or regiment sized unit that is defending alone in a battle (no other units in the hex or committed from reserve are participating in the battle). Thus, a regiment or brigade defending alone with morale between 41 and 55 will be more likely to rout, and between 56 and 70 will now have a chance to rout.
7. Formula change (Section 15.9.2) – The chance of men in shattering units being captured has been increased (by at least double).

- **Bug Fixes**

1. Fixed a bug that caused partisan units to disappear from the map when in show battle sites mode.
2. Fixed a bug in the AI that were the AI was moving fortified region (most obviously moving them north of the Svir River line).
3. Fixed a bug where HQs arriving as reinforcements could arrive without a valid leader.
4. Fixed a bug that was causing brigades from broken down Soviet Mech and Tank Corps were counting as 4 command points instead of 1.
5. Fixed a bug in the AP cost of HQ buildup where sub units of broken down divisions and corps were each being counted as a division or corps instead of as regiments or brigades.
6. Fixed a bug where the broken down brigades from Soviet Mech and Tank Corps were being treated in the CR screen as if they were corps size instead of brigade size.

- **Data and Scenario Changes**

- Changes in Device and OB files

1. Renamed 41 Hungarian Security Brigade (23) to 41a Hungarian Security Brigade.
2. Renamed 41 Rumanian Mountain Brigade (39) to 41a Rumanian Mountain Brigade.
3. Added 41b Hungarian Security Brigade (363).
4. Added 41b Rumanian Mountain Brigade (372).
5. Changed IS-2 model in TOE 247 to the IS-2 M1943.
6. Changed the GAZ-AAMG (772) from SPAAMG to SP Flak to relieve SP Flak shortage issues.
7. Revised the ROF modifiers to be consistent across all ground elements. The actual changes amount to an increase or decrease of the ROF modifier for an element (where applicable) by 1 or 2 at most so these changes are primarily to standardize the methodology of the ROF modifier and will have only a minor game effect.

- Don to the Danube Scenario Changes

1. Drama on the Danube

- * Rebuilt Rumanian Construction Battalions with the proper OB
 - * Rumanian Mountain Brigades now use a new OB that does not automatically upgrade to divisions
2. Decision in the Ukraine
 - * Removed German aircraft from the Rumanian equipment pool
 - * Hungarian Security Brigades changed to Hungarian Border Guard Brigades
 - * 14th Panzer Division now has a proper arrival location
 3. Red Army Resurgent
 - * 1st Rum. Armored Division rebuilt to use the latest OB
 4. Operation Kutuzov-Rumyantsev
 - * 113th Infantry Division and 8th Army now have proper arrival locations

V1.06.08 – May 1, 2012

- **Bug Fixes**

1. Fixed a crash bug that occurred when scrolling the screen to the south edge of the map.

V1.06.07 – April 28, 2012

- **New Features and Rule Changes**

1. Improved the map redrawing routines which should speed up game play on slower systems.

- **Bug Fixes**

1. Fixed a bug where all units with a new TOE available would upgrade immediately, instead of it being a 20% chance per turn. We think this bug was introduced at some point in the past three months but we're not sure exactly when.
2. Fixed a rare crash bug in the AI that could occur in a small map scenario when the lines were pushed to the edge of the map.
3. Fixed a bug in the AI causing it to warp units into a pocket near Leningrad.
4. Fixed a bug in the airborne drop loss function which was causing excessive losses to the airborne units.

V1.06.06 – April 4, 2012

- **Bug Fixes**

1. Made a change to the AI that eliminates some AI cheat moves out of positions in partial pockets that they should not be able to move out of. We still think there may be other unintended cheat moves remaining. If you see a situation that looks suspect and can provide a save just before the illegal move so we can repeat the move, please send it to

2by3@2by3games.com. We would like to eliminate all of these cheat moves but there are many different AI functions so this can only be done via saves. The fix just made was possible because we had a player save that allowed us to repeat the problem.

- **Data and Scenario Changes**

Changes in Device, OB and Leader files

1. The 42 Separate Tank Battalion (OB 241) now upgrades to the 43 Separate Tank Regiment (OB 243); a new 43 Separate Tank Battalion (OB 270) has been added for use by scenario designers. Note that the 42 Separate Tank Battalion upgrade skips over the 42 Separate Tank Regiment (OB 242) allowing separate tank battalions and tank regiments to both exist in late 1942.
2. Revised the penetration of the American 75mm & 76mm guns (Devices 362, 363, 364 & 607). Increased the rate of fire of the following devices: 358, 362, 363, 364, 365, & 377.
3. Corrected the name of von Both (194) from Hans-Kuno von Both to Kuno-Hans von Both.

V1.06.05 – March 20, 2012

- **New Features and Rule Changes**

1. New Scenario – Added an alternate 1941-45 Campaign scenario with adjusted victory conditions. The scenario is titled 1941-45 Campaign – Alt VC260. This is identical to the normal 1941-45 Campaign except that it ends at the start of turn 212 (5 July 1945). The Axis Decisive Victory level (Automatic Victory) is 260 instead of 290. The Soviet Major Victory timeframe ends on 31 March 1945 (instead of 31 May 1945) and the Soviet Minor Victory timeframe between 1 April 1945 and 30 June 1945. A draw occurs if Germany does not surrender by 1 July 1945 and the Axis has less than 142 victory points. Note for scenario modders: These altered victory conditions will apply to any scenario that is set to end on turn 212.
2. New Interface – When the auto assign button (or g hotkey) is used, a message will now appear if the Leader has made a successful leader role and reduced the AP expenditure. Per the item above, all transfers will now cost a minimum of 1 point.
3. AI Improvements – Improved the German AI with regards to operations to secure the Leningrad area and capture Odessa. Sped up Soviet AI, especially when dealing with its units that are isolated. Fixed a bug preventing the AI when at an advantage from attacking as much as it should (especially for the Soviet AI).
4. Rule Correction (sections 6.2.2 and 14.1.5) – The movement cost for both Motorized and Non-Motorized units to move into a mountain pass hex, if moving along the rail, is 4 MPs (not 8 or 3). Also, the presence of any enemy zone of control does not prevent the use of the mountain pass movement rate (although units must pay all normal ZOC movement costs).
5. Rule Correction (section 12.2) – The following sentence in the manual should be deleted as there is a minimum cost of 1 for any unit transfer: “A successful leader admin check that normally costs one point will reduce the admin cost of transferring that unit to zero.”
6. Rule Correction (section 22.2.2) – There will be at most one mud turn per weather zone

during turns from 01 December to 29 February (not 31 March as stated in the manual).

- **Bug Fixes**

1. Fixed a bug that could cause excessive rotation of elements during the replacement phase.
2. Fixed the Insert/Delete functions for air groups in the editor.
3. Fixed a bug where factories could be ordered to move to invalid (off rail) cities.
4. Fixed a bug where withdrawing units were not set to be frozen for 6 turns when destroyed and were showing up as retreated in the battle report when in fact they had been destroyed.
5. Fixed the display of supplies available for units involved in an HQ build up.
6. Fixed a crash bug in the AI line forming function that appeared in the Road to Leningrad scenario.

- **Data and Scenario Changes**

- War in the East Scenario Changes

1. Added new 1941-45 Campaign – Alt VC260 scenario. See New Feature item #1 for details.
2. General Updates
 - * Varazdin is now a Yugoslavian city
 - * Minor factory changes
3. 1944 Campaign
 - * Cleared some erroneous equipment in the Finnish Pool

- Don to the Danube Scenario Changes

1. General Updates for RAR, DitU, RFL and DotD scenarios
 - * Minor factory changes
 - * Rumanian Air Bases Rebuilt to use latest OB changes
2. Decision in the Ukraine
 - * 1st Rum. Armored Division rebuilt for recent OB updates
3. Drama on the Danube
 - * Rumanian bomber airgroups upgraded to SM79JR
 - * Fixed a few minor naming inconsistencies in Hungarian airgroups
 - * 1st Rum. Armored Division rebuilt for recent OB updates
4. Red Army Resurgent and Operation Uranus
 - * 1st Guards Mech Corps assigned to 1st Guards Army, frozen and given 0 MPs.

- Changes in Device, OB and Leader files

1. Corrected the upgrade path on (Panzer Pioneer Squad 102).
2. Cleaned up outstanding errors and omissions and make some corrections based on better understanding of the game system to hopefully make the games work better data wise.
Some highlights:

- Removed all circular references (things upgrade to themselves);
- Restored the German divisional artillery to full strength in 44 Infantry Division in WitE;

- Reversed the allocation of BA-20 and BA-64 armored cars in all Soviet units using both to correct shortage problem;
 - Changed the default 76mm Field gun in most Soviet units from the F-22 to the ZiS-3 from 1942 on;
 - Removed most overlapping upgrades where a ground element is supposed to continue in production after it upgrades in order to allow production to continue to last date; hopefully this will reduce mass upgrades occurring;
 - Fixed any omissions/errors in upgrade paths which hopefully will stop weird messages in the event log.
3. Corrected yet again the upgrade path of the SS Motorized Brigades (OB 44 & 283) and fixed a file copy error that had the Hungarian Motorcycle Squad (0354) erroneously upgrading to a Rifle Squad. Both the 41 SS Motorized Brigade (OB 44) and the 43 SS Motorized Brigade now have end dates of January, 1945 and no upgrade paths.
 4. Fixed the amount of Support elements in the Rumanian Air Base TOE (OB 570).
 5. 42 Separate Tank Battalion (OB 241) no longer upgrades to Tank Regiment and Last Year/Last Month changed to 43/12 (historically these battalions were disbanded or used to form tank brigades).
 6. Changed Eugen von Schobert's rank to Generaloberst
 7. Corrected the Maximum Command Level of Ivan Chernyakhovsky to Front.
 8. Corrected Morale rating of Fyodor Krasovsky to 5.

Changes in AC file

1. Some minor changes like maxload or max alt rounding not noted, other changes below:

GERMANY

- Ar 234B bombs set to external and changed to single 1000kg bomb, fuel increased to 7004 (1800+1990l *0.84kg per liter) endurance down to 130 min, maxload down to 2207, sortie ammo down to 2340
- Bf 109E-3 MG FF changed to device 33, sortie ammo down to 102 (sync with E-7)
- Bf 109E-4/B MG FF changed to device 33, upgrade to Fw 190A, maxspeed up to 339 mph
- Bf 109E-7 MG FF changed to device 33, drop tank to device 0077, maneuver +1 to 34 (same as E-3)
- Bf 109F-2 drop tank changed to device 77, ammo up to 90
- Bf 109F-4 drop tank changed to device 77, ammo up to 100, build cost +20 to 388
- Bf 109G-14 build limit down to 30, build cost down to 458
- Bf 109G-6 main gun changed to MG 151/20, ammo up to 120, build cost down to 433
- Bf 109G-6/R2 main gun changed to MG 151/20, remove underwing gondola guns, performance data changed to Bf 109G-6 level cost down to 453 (G-6 + 20), ammo down to 120
- Bf 109G-6/U4Nmax alt down to 36748, maneuver +2 to 30 (impact of -5 is more than enough), build cost -100 to 473
- Bf 109K-4 main gun changed to MK 108, add missing droptank, fuel up to 1229, build cost up to 478, ammo down to 92
- Bf 110C MG FF changed to device 0033
- Bf 110C-4B MG FF changed to device 0033
- Bf 110D-1 MG FF changed to device 0033
- Bf 110E-2 MG 15 to TR position, bombs to 2x500kg, ammo up to 2469, build limit reduced to 5

- Bf 110F-4a MG 151 to MG FF, add missing droptanks, fuel up to 3086, add build limit of two and expansion rate of 1
- Bf 110G-2 MG 81 to TR position, 2x250kg -> 2x500kg, ammo up to 2909, add end date of 3/1944 build cost down to 740, max speed up to 367mph
- Bf 110G-4 MG FF to MG 151/20, MG 15 -> 2x MG 81 in TR, drop tanks changed to device 79, build cost -50 to 823, maxspeed up to 315mph
- Bf 110G-4/U8 MG 151 (SM) changed to MG FF, remove Naxos, drop tanks changed to device 79, build cost -70 to 873, maxspeed down to 320mph
- Do 17Z-2 ammo reduced by 100 to 2400
- Do 215B-1 reliability +2 to 10
- Do 215B-5 MG FF changed to device 0033, add MG 15 in TR, change Spanner and bombs to internal, reliability +2 to 10
- Do 217E-2 bombs changed to 2x1000 + 2x500 (all internal), maxload down to 6617, ammo down to 6850, add upgrade to new Do 217K, MG 151 -> MG 151/20, +1 MG 15 side gun, MG 131 TR -> turret (360 degree ring mount), endurance up to 300, cruise speed up to 274 mph, build cost -100 to 1452 (my previous increase was too harsh)
- Do 217J add missing MG 131 turret, add build limit of 2 and expansion rate of 1, endurance up to 300, max alt down to 26906, build cost -100 to 1529
- Do 217N max alt up to 29530, endurance up to 300, durability up to 44, build cost -100 to 1567
- Do 335A MG 151 -> MG 151/20
- Fi 156C max alt -90 to 5000m (16407ft)
- FW 189A ends 3/1944
- FW 190A remove drop tanks, fwd guns changed to two each MG 151/20, MG FF and MG 17; bomb changed to 500kg, upgrade to new Fw 190A-8, fuel down to 865, ammo up to 1308, availability date to 6/42 (from 8/42)
- FW 190A-5/U2 +1 drop tank, fuel up to 1856
- FW 190A-8/R2 remove MG 17 (weight saving), add drop tank, fuel up to 1551, endurance to 110 min
- Fw 190D build limit reduced to 10 to account for the additional Fw 190G factories
- FW 190F MG 131 to MG 17, 2x250 to 1x500kg bomb, add upgrade to new Fw 190F-8
- FW 190G 2x250 -> 500kg bomb, droptanks to external, fuel +1 to 1856, maneuver +5 to 35, tactical bomber -> fighter-bomber (was called JaBo-Rei - FB with extended range), upgrade to Fw 190D, not enough Fw 190D production in-game
- Fw 200C-3/U4 guns changed to MG 151/20 fwd, one MG 15 and one MG 131 Turret, two MG 15 side, one MG 15 BR
- He 111H-20/R2 Guns changed to MG 131 fwd+turret, two MG 81 each in BR and side, build limit down to 10, expansion rate of 1 added, first date set to 10/1943
- He 111H-3 add build limit of 30 and expansion of 1, fuel down to 5335 (2425kg with full internal bombload)
- He 111H-4 fwd MG 15 -> MG FF, bombs changed to 8x250kg internal, upgrades to new He 111H-6, build cost down to 1044 (as H-3), fuel down to 5335
- He 111P add two MG 15 side
- He 112B MG FF to fwd position
- He 170A (actually the He 70F), change guns to single MG 15 in TR, reduce ammo to 25
- He 177 change bombs to 4x1000kg, maxload down to 8822, ammo down to 9261, endurance up to 420min, fuel up to 17705, guns changed to MG 151/20 fwd, 2x MG 131 turret, 1 MG 131 turret, 1 MG 131 BR, 1 MG 151/20 rear, build limit up to 10, ends 12/1944
- He 219 remove MK 103

- He 46C TR MG 17 -> TR MG 15, bombs from fwd to external
- Hs 123A remove 250kg bomb, ammo down to 540
- Hs 126B max alt slightly down to 26906
- Hs 129B remove 250kg bomb, ammo down to 470, ends 9/1944

- Ju 188E bombs changed to 2x1000+2x500, only one MG 131 in TR but two MG 81 in BR, end date set to 9/1944
- Ju 52 guns changed to 2x1 MG 15 turret, ammo down to 50
- Ju 86K-2 bombs changed to internal, ammo down to 2275, upgrade to Ju 88A added
- Ju 87B bombs changed to the typical 250kg + 4x50kg, ammo reduced to 1065, maxload down to 994
- Ju 87D bombs changed to 1x1000 + 4x50kg, maxload down to 2648, ammo down to 2740, add upgrade to new Ju 87D-5
- Ju 87G maxload removed - carried no bombs, build cost up to 544
- Ju 88A guns changed to one MG 15 each in fwd+TR+BR and 2x MG 15 side, ammo down to 4525, upgrade to new Ju 88A-4, build cost -50 to 1217
- Ju 88C-2 MG FF changed to device 0033, bombs changed to internal, ammo reduced to 1350, build cost +50 to 1255
- Ju 88C-6 MG 15 BR changed to two MG 81 TR, build cost +20 to 1269
- Ju 88D-1 guns changed to MG 81, TR/BR now has two guns, add two MG 81 side guns, ammo increased to 150, ends 12/1943, upgrade to new Ju 188F
- Ju 88G MG 131 BR -> TR, build cost +50 to 1339

- Me 210A max speed up to 357mph
- Me 323 guns changed to two MG 131 fwd/TR + one MG 131 turret + four MG 81 side, add build limit and expansion rate of 1; fuel up to 10131 (6x690l + 4x500l aux tanks), endurance up to 375min
- Me 410A add end date 9/1944
- Si 204A fuel up to 1023 (620l), max load to 2207, max alt to 21000, use air symbol from Do 17P
- Ta 152H fuel down to 1918 (172+268 kg fuselage, 296 kg in wing tanks, 104 kg GM1, 64 kg MW-50 (counted with 50%)), build limit raised to 10, reliability raised to 15 (=less reliable, problems with the second stage engine supercharger), cruise speed down to 342 mph, endurance down to 140 min, max alt up to 48559 ft, add max load of 250kg (drop tank option), build limit down to 5 to account for the additional Fw 190G factories
- Fw 190A-8 New 1/1944 model, upgrade path from Fw 190A
 - ➔ upgraded armament, more internal fuel, a bit faster and more durable than Fw 190A, higher production
- Fw 190F-8 New 1/1944 model, upgrade path from Fw 190F
 - ➔ increased armament, a bit more bombs, performance, maneuver, durability, higher production
- Ju 87D-5 New 7/1943 model, upgrade path from Ju 87D
 - ➔ changed back from ground strafing version to bomb-equipped variant, ends 9/44
- Do 217K New 1/1943 model, upgrade path from Do 217E-2
 - ➔ slightly improved performance (same engines but better aerodynamic form), improved armament, ends 12/43
- Ju 88A-4 New 1/1942 model, upgrade path from for Ju 88A and to Ju 188, ends 9/1944
 - ➔ improved armament/performance
- He 111H-6 New 1/1942 model, upgrade path from He 111H-4 and to He 177, ends 9/1944

- improved armament/performance
- Ju 188F New 3/1943 model, upgrade path from Ju 88D-1
 - Ju 188 version to the then out-of-production Ju 88D series

FINLAND

- Bf 109G-6(F) equipment and data adjusted to match German Bf 109G-6
- Ju 88A(F) equipment/data changed to Ju 88A-4, modified/adapted to 3t bombload and short range, bombs to 2x1000 + 2x500, import source kept at Ju 88A
- Do 17Z-2(F) ammo reduced by 100 to 2400
- Fi 156C(F) Data sync
- Hurricane fuel reduced to 705 (94 imp gals)
- Pe-2(F) maxload down to 2207 to match bombs
- SB-2(F) maxload fixed at 1t (2207)
- VL Myrsky II maxload adjusted to 443 to match bombs, bombs fwd -> ext

ITALY

- Ca.135bis maxload down to 3309 to match bombs
- Ca.311 bombs fwd -> int
- G.55 Centauro maneuver rating +3 to 35 - way underrated with 32, comparable to other 5-series fighters and Bf 109G series
- Re.2001 add build limit of 3 and expansion rate of 1
- SM.75 added 7.7mm Breda turret + 25 ammo, maxload down to 3000kg, fuel quadrupled to 4452, endurance down to 330min
- SM.79 bombs reduced from 6 to 5, ammo and maxload adjusted accordingly, guns (except side) changed to 12.7mm SAFAT
- SM.81 fuel doubled to 3970, maxload down to 1500kg, endurance down to 350min

ROMANIA

- Bf 109E-3(R) Equipment/Data sync
- Bf 109G-2(R) Data sync, increase imports by 42
- Bf 109G-6(R) equipment/data sync, reduce imports by 42
- Blenheim I recon remove empty equipment slot and maxload (no bombs)
- Hurricane fuel reduced to 705 (94 imp gals), upgrade to IAR 81B
- Do 17M(R) maxload removed
- Fi 156C(R) Data sync
- He 112B(R) MG FF in TR -> fwd, upgrade to Bf 109G-2(R)
- Hs 129B(R) Equipment/Data sync, MK 103 removed and replaced by four more 50kg bombs, ammo up to 800
- IAR 37-39 fuel up to 1312 (540+130+125l), guns changed to 7.92mm FN MG
- IAR 37 bombs changed to 12x50kg
- IAR 38 bombs changed to 8x50kg, maxload down to 400kg, ammo down to 920, maxspeed up to 168mph, cruise speed up to 125mph, endurance up to 200min
- IAR 39 bombs changed to 12x50kg, maxload up to 600kg, ammo up to 1420, ends 8/1944 now
- IAR 80A maxspeed up to 320mph
- IAR 81A built limit and expansion rate of 1 added, bombs changed to 1x500lbs + 2x50kg,

ammo down to 920

- IAR 81B maxload reduced to 300 (just for drop tanks)
- Ju 52(R) Equipment/Data sync
- Ju 86K-2(R) Equipment/Data sync, bombs fwd -> int, upgrade to Ju 88A(R)
- Potez 63 end date to 2/1943, shall be auto-upgraded to better aircraft then
- PZL 11F guns changed to 4x 7.92mm FN MG
- PZL 24E cannon changed to MG FF (closest match, Oerlikon gun in-game modeled as newer variant), upgrade to Bf 109G-2(R)
- SET 7K maxload removed (no bombs)
- SM.79(R) equipment/Data sync with adaption to the twin-engined SM.79B data, guns changed to 7.92/13.2mm FN MG (two side guns)
- SM.79JR guns changed to 7.92/13.2mm FN MG (two side guns)
- , add Italian SM.79 as import source with 60 aircraft (pending a better solution with local factory)
- Ju 87D(R) Equipment/Data sync
- Ju 88A(R) Equipment/Data sync to Ju 88A-4, import source kept at Ju 88A
- Ju 88D-1(R) Equipment/Data sync

HUNGARY

- Bf 109F-4(H) Data sync
- Bf 109G-14(H) Data sync
- Bf 109G-6(H) Equipment/Data sync, build limit +1 to 2, delayed from 6/43 to 8/43
- CR.32 Upgrade to Re.2000
- CR.42 upgrade to Me 210
- Fw 189A(H) Equipment/Data sync
- Fw 190F(H) Equipment/Data sync
- He 170A(H) guns rear -> TR
- He 46C(H) bombs fwd -> ext, TR gun changed to MG 15

- Ju 52(H) Equipment/Data sync
- Ju 86K-2(H) Equipment/Data sync, bombs fwd -> int
- Ju 87D(H) Equipment/Data sync
- Ju 88A(H) Equipment/Data sync to Ju 88A-4, import source kept at Ju 88A, removed empty equipment slots
- Ju 88D-1(H) Equipment/Data sync
- Me 210Ca-1(H) Equipment/Data sync with adaption to DB605 engines, bombs fwd -> int
- Re.2000 Upgrade to Re.2000 Heja II
- SM.75(H) Equipment/Data sync
- WM 21 ammo reduced to 75, fuel reduced to 900, removed maxload
- Re.2000 Heja II new late 1942 model, upgrades to Bf 109G-6(H)
 - ➔ License-built version of the Re.2000 with higher performance, more range and more reliable engine
 - ➔ uses Italian Re.2000 as import source with 120 aircraft (pending a better solution with local factory)

SLOVAKIA

- Bf 109E-3(S) Equipment/Data sync

- Bf 109G-6(S) Equipment/Data sync
- Fw 189A(S) Equipment/Data sync
- Ju 87D(S) Equipment/Data sync
- S-328 bombs fwd -> ext

SOVIET

- General: Most self-update paths removed
- I-16 T18 Bombs fwd -> ext
- I-16 T24 Bombs fwd -> ext
- MiG-3 Bombs fwd -> ext
- Yak-9T add two 100kg bombs, ammo up to 500
- Yak-2 maxload down to 500kg to match bombs, ammo down to 1150
- Yak-4 maxload down to 500kg to match bombs, ammo down to 1150
- Yak-2 maxload down to 500kg to match bombs, ammo down to 1150
- LaGG-3 29 add two 100kg bombs, ammo up to 505
- LaGG-3 66 add two 100kg bombs, ammo up to 505
- SB-2 recon maxload removed
- U-2 recon maxload removed
- U-2VS maxload down to 300kg to match bombs and ammo
- Pe-2 maxload down to 1000kg to match bombs
- Pe-2R maxload removed (no bombs)
- Yer-2 43 maxload down to 4000kg to match bombs
- Pe-8 maxload down to 3000kg to match bombs
- Li-2 fuel up to 5022(804 US gals), crew +1 to 3, maxload reduced to 6400 (max overload weight at 29k lbs with max fuel), maxspeed reduced to 240mph, endurance down to 400min
- Li-2VP maxload reduced to 1500kg to match bombs, fuel up to 5022(804 US gals), endurance down to 400min, cruise speed down to 170mph
- A-20B two .303 rear changed into single BR, fuel reduced to 2500 (400 US gallons), endurance down to 180min
- A-20G replace 2cm guns with .50 (unreliable, only 250 built (out of 2500+ A-20G)), fuel down to 3397 (544 US gal, one bomb bay tank), bombs changed to 4x500 int and 4x500 ext, cruise speed down to 245mph, endurance down to 220min
- B-25D fuel up to 6085 (974 US gal in main and aux wing tanks), +1 fwd .50 gun
- B-25J fuel up to 7426 (974 US gal in main and aux wing tanks + 215 US gals above bombbay), guns changed to 5 fwd + two each Turret/Rear/side, bombs down to 6x500lb, ammo down to 3300, endurance up to 460
- Hurri IIB armor changed to one - not a heavily armored variant, maneuver +2 to 33, minor maxspeed reduction, fuel reduced to 705 (94 imp gals), cruise speed down to 256mph, endurance up to 105min
- Hurri IIC armor changed to one - not a heavily armored variant, durability +3 to 29 (some protection against ground fire), fuel reduced to 705 (94 imp gals), maneuver +1 to 32, minor maxspeed reduction, endurance down to 105min, cruise speed up to 245mph
- P-39D remove droptank, fuel up to 750 (120 us gals), cruise speed down to 230mph, endurance up to 155min
- P-39N remove droptank, fuel up to 534 (86 us gals), maneuver +1 to 30, cruise speed to 240mph, endurance to 100min

- P-39Q remove droptank, fuel up to 750 (120 us gals), armor 2 > 1, maneuver +1 to 29, cruise speed to 250mph, endurance to 155min
- P-63 remove droptank, Fuel up to 850 (136 us gals), cruise speed down to 250mph, endurance up to 170min, max alt up to 40k, ammo up to 1760, maneuver +1 to 31, armor 2 -> 1, bombs to 3x500lb
- P-40B fuel to 1250
- P-40E remove droptank, fuel to 1250
- P-40K remove droptank, fuel to 1250, 100lb bombs removed, ammo down to 743, maxload down to 500, maxspeed down to 362mph
- P-40N remove droptank, fuel to 1250, bombs changed to 3x500lb, endurance down to 140min, maxload up to 1500, ammo up to 1743, maxspeed up to 378mph
- P-47D remove droptank, bomb changed to two 1000lb, maxload up to 2000, ammo up to 2204, fuel to 1905 (305 us gals fuselage), endurance up to 160min, cruise speed down to 340 to account for bombs
- Spit IX bombs/maxload removed, ammo reduced to 126
- Spit Vb bombs/maxload removed, ammo reduced to 126
- C-47 fuel up to 5022(804 US gals), crew +1 to 3, maxload reduced to 6400 (max overload weight at 29k lbs with max fuel), max alt up to 26k ft, endurance down to 400min

V1.06.04 – February 24, 2012

- **Bug Fixes**

1. Fixed a bug where divided units that get destroyed are not able to recombine when rebuilt.
2. Fixed a bug where units may fail to arrive if their arrival hex is invalid.
3. Fixed a bug where destroyed units could get withdrawn earlier than scheduled.
4. Fixed an AI bug where the Soviet AI could move German units not attached to front line HQs.
5. Fixed an AI bug where the Axis AI could unfreeze frozen Soviet units.

V1.06.03 – February 21, 2012

- **New Features and Rule Changes**

1. New Feature - Added ground element replacement information into the Event log. It is sorted by ground element class and type as in the production screen.

- **Bug Fixes**

1. Fixed several bugs that could prevent captured and non-producible (build cost 9999) ground elements in pools from being used as replacements.
2. Fixed several bugs having to do with the rotation of ground elements in the replacement phase.
3. Fixed a bug so now Hiwis will add back to the pool when a unit is disbanded.
4. Fixed a bug preventing OB upgrades for AA units attached to cities.
5. Fixed city starvation code so it matches the manual – an enemy unit must be within 4

- hexes of a city in order for starvation to be possible.
6. Fixed a few problems with non-OB empty element slots on the unit detail display.
 7. Fixed a bug that could cause captured equipment to be used prior to October 1941.
 8. Added code to fix broken unit HHQ assignments.
 9. Fixed the air range check for transport missions so it matches the air fly map shading.
 10. Fixed a minor supply bug and increased the supplies/fuel requirements for city supply dumps in order to rectify some replacement fluctuations.

V1.06.00 – February 17, 2012

- **New Features and Rule Changes**

1. Rule Clarification – The interface change made in 1.05.63 will not prevent HQ's and airbases, not stacked with a combat unit with a positive CV, from making a forced displacement move if an enemy combat unit retreats adjacent to their hex.

- **Bug Fixes**

1. Fixed a bug that was keeping AA units attached to cities from receiving replacements.

- **Data and Scenario Changes**

1. Corrected the name of the 43 Slov. Infantry Division to eliminate the Slovakian Slov. duplication in the name.
2. Rationalized the upgrade path of German Panzer Pioneer Squads (102).

V1.05.63 – February 14, 2012

- **New Features and Rule Changes**

1. Rule Change – Isolated on map units can now be reassigned only to HQs inside the pocket with them, and only if within 100 MPs. Previously, no on map units could be assigned to isolated HQs. Support units attached to isolated HQs can only be reassigned to other HQs in the pocket and within 100 MPs.
2. Rule Change – The Soviet player may not build a new on map unit in an isolated area.
3. Interface Change – Friendly non combat units (HQs and air bases) and routed units will no longer displace automatically during their movement phase. These units will be outlined in red as a warning, and will displace automatically in the next logistics phase if they are still next to an enemy unit and not stacked with a unit with a positive CV.
4. Rule Correction (section 18.1.1.2) – German Infantry Divisions destroyed on or after August 1, 1944 will always return to the map as a Volksgrenadier Division (not just 20% of the time as originally detailed in the manual).

- **Bug Fixes**

1. Fixed a bug that had allowed support units attached to isolated HQs to receive

- replacements.
2. Fixed a bug that was could prevent starvation from happening in isolated Manpower centers that were at 100% damage.
 3. Fixed typo in word Difference (originally misspelled Differennce).
 4. Fixed a bug in the AI that had the AI assigning some on map ground units to air command HQs.
 5. Fixed a bug where a withdrawing Axis unit could get stuck on the map edge in withdrawal mode for the rest of the game. It now will set the MAX TOE of the unit to 100 which will prevent this from happening.
 6. Fixed a crash bug caused by refitting AA units attached to cities.

V1.05.61 – February 8, 2012

- **New Features and Rule Changes**

1. Rule Change – Soviet Cavalry Corps HQ will now disband immediately in January 1942. Although the manual said they would disband by November 1941, until this version they were disbanding in April 1942.

- **Bug Fixes**

1. Fixed a bug where the defending force during an AI ground attack could automatically lose a battle, having its CV incorrectly set to 0. No shooting would take place but the defending force would suffer retreat losses even though the display indicated there were no men/guns/AFVs in the battle.
2. Fixed a bug where depleted units could get committed to battle.
3. Fixed a bug where port cities might not get supplies/fuel if the port was not connected to an active rail line.
4. Fixed a bug where isolated units could upgrade their TOE(OB).
5. Fixed a bug where Cavalry Corps HQ could get converted to Guards.
6. Fixed a bug where partisan resupply missions were not doing a proper range check.
7. Fixed a bug where the combat display for an air transport mission could be displayed too long when using combat display level 3.

- **Data and Scenario Changes**

Changes in Device and OB files

1. To help address the issue of SS Motorized Brigades upgrading to divisions prematurely the following changes have been made to the TOE data bases:
 - 41 SS Motorized Brigade (OB 44) Last Year/Last Month changed from 9/43 to 1/44;
 - 43 SS Motorized Brigade (OB 283) Last Year/Last Month changed from 9/44 to 10/44 and upgrade path changed from 43 SS Grenadier Division (OB 71) to 45 SS Grenadier Division (OB 119).
2. Correction made to 44 Jagdpanzer Battalion (OB 522) to remove upgrade path copied over in error.

3. Changed Soviet 122mm Field Gun (Ground Element 824) unit type to Heavy Artillery to prevent it from being used in divisional artillery.

V1.05.60 – February 6, 2012

- **New Features and Rule Changes**

1. Formula Change - Decreased flak losses for the dive bombers and fighter bombers.
2. AI Improvements – Improved and adjusted Soviet attacking AI.

- **Bug Fixes**

1. Fixed a crash bug that may occur due to combat reporting problem.
2. Fixed the editor so that setting the fort level in a hex will now remove any fort in the hex instead of leaving a fort level of 0 (10%).
3. Fixed a bug where a scenario could begin with objective victory points already awarded unintentionally to one side.
4. Fixed a problem where the screen was going black when the game was inactive.

V1.05.59 – January 31, 2012

- **New Features and Rule Changes**

1. New Rule - During any Snow turns between December 1941 and April 1942 (inclusive), and any blizzard turns in March or April 1942, German attack CV factors are divided by 1.5. Any missed check (admin or combat skill) causes the attack CV to be further divided by 2. The displayed on counter attack CV will be divided by 1.5 during these turns.
2. New Rule - Soviet units attached to a Military District may change their HQ attachment at no admin point cost (same as units attached to Stavka).
3. New Rule - The Axis player may disband German units that are frozen if they have an x coordinate less than 20.
4. New Rule – Air HQ will share their support for ground elements at air bases under their control. Note: Air HQs have never provided support for aircraft at airbases under their control.
5. New Rule – Artillery (using on demand production) elements will not be produced for replacements if the element is not in a unit's OB. Example: If a unit with 37mm AT guns changes it's OB to one that requires a 47mm AT gun, no new 37mm AT guns will be produced to use as replacements (only 37mm AT guns already in the pool will be used). This will reduce the amount of production of soon to be obsolete equipment.
6. New Rule – Tank Army leaders get +1 added to their Mechanized rating in combat rolls involving motorized units under their command.
7. Rule Change (section 9) - Changes to National Morale rules:
 - a. All Soviet units of size Brigade or smaller have a minimum national morale of 50.
 - b. The elite bonus for SS units is now only +5 in 1941, +10 in 1942, +15 1943 and later.
 - c. Shock Armies and Guards Armies no longer provide a morale bonus to units that

- report to them (instead they provide a bonus of +1 to their leader's admin rating).
- d. National Morale of Soviets in 1942 is now 45. Starting with January 1943, the Soviet National Morale increases by 1 each month, until it reaches 60 in March 1944.
8. Rule Change (section 7.6.2.2) - Changes to Command Capacity:
 - α. Stavka and OKH now have infinite command capacity (they will never be considered overloaded). This is shown on screen as a command limit of 999.
 - β. Soviet Army Command Capacity is changed as follows: 6/41-8/41 – 24 9/41-3/42 – 21 4/42-9/45 – 18
 - γ. Soviet Tank Army Command Capacity is changed to 15.
 9. Rule Change (section 21.1.10.1) - The Soviet Manpower Multipliers in 1943, 44 and 45 are reduced by 5 (so they are now 35, 30 and 15 respectively). Including changes in previous versions, the Soviet manpower multiplier table should now read 50,40,35,30 and 15.
 10. Rule Change (section 7.6.4) - The Command Range of Soviet Army HQs is now 10 (was 15).
 11. Rule Change (section 20.4.3.2) - The formula used to determine the Axis Rail Supply Modifier has been changed. The 168 in the formula has been changed to 165, slightly further reducing German supply deliveries due to this modifier.
 12. Rule Change (section 18.1.1.2) - Destroyed German units that return to play are given a morale equal to $30+(NM/4)+\text{random}(NM/4)$. The formula used to be $20+\dots$. There is no change in the formula that sets their initial experience.
 13. Rule Change (section 20.6.3) – The number of vehicles damaged and destroyed due to an HQ Buildup has been increased by 25%.
 14. Rule Change (section 18.3) - Static units that are below 60% of their TOE will automatically be treated as if they are in refit mode during the logistics phase. Players that do not want a unit to accept a lot of replacements should use the MAX TOE setting to limit the size of the static unit.
 15. Formula Change – Altered engineer values so that they are divided by 4 during a hasty attack and are 0 if the attack is changed to a scouting attack.
 16. Formula Change – Altered the ratio of vehicles damaged/destroyed due to supply operations from 80% damaged/ 20% destroyed to 75% damaged/25% destroyed.
 17. Formula Change – Changed the formula for exporting of ground and air equipment to Axis Allies so exports are 5% of the current pool instead of 50%.
 18. Formula Change – Reacting units (reserve and support units) can now get river/winter/first turn disruption effects.
 19. Formula Change – Improved support need calculation for air base units.
 20. New Interface – Added air mission composition information to the battle site (F11) Show Details display. For each side the number of aircraft performing the functions of bombing (or reconnaissance if a recon mission), escort, sweep and CAP are listed. Since version 1.05.18, a portion of escort may be assigned to the sweep function, which allows those fighters to attack enemy CAP first in order to gain air superiority prior to the mission.
 21. New Interface – The current required support for aviation units in an air base is now shown on the air base unit detail screen on the Support/Need line. Example: Support/Need 240/120 (AV 116). This is the portion of the support need that is needed for aircraft (as opposed to ground elements). Unlike the Support and Need numbers which are only updated during the logistics screen, the AV number will continually update during a

- player's turn. This is intended to allow players the ability to better track the aviation support needed as they transfer aircraft to and from air bases.
22. Interface Change – The game now switches to normal mode (F1) before the logistics phase. Also, the game turns off the map popups during the logistics phase.
 23. Interface Change – When displaying a unit's current supply needs, the consumption need is now subtracted from the general supply need.
 24. AI Improvements – Many AI changes including reactivating and improving routines that look to create encirclements. Improved some cases where the defensive line forming routine was breaking down. Improved the AI's calculation of possible attacks it could make. Improved the ability of the AI to track down and neutralize weak enemy units in its rear area. Improved routine that determines whether the AI player is on the strategic offensive or the strategic defensive.
 25. Formula Change – Increased the chance of equipment getting upgraded/swapped out if it is not in the current OB.

- **Bug Fixes**

1. Fixed a bug in moving oil from off map locations.
2. Fixed an HQ resupply bug and a potential overflow bug in the supply function.
3. Fixed some bugs in the unit bombing routine. Tactical bombers and FB can attack targets with their forward weapons (low alt attacks). High alt attacks can use only GP bombs/rockets and fire (incendiary) bomb types.
4. Fixed a bug that allowed escorting fighters on recon missions to take recon photos.
5. Fixed a bug where the recon value provided by air flights could get incorrectly reduced. This should provide a more even distribution of recon results among units in or near the recon target hex.
6. Fixed a few interface bugs where mouse clicks were not being recognized on the aircraft reserve filter dropdown and the right unit bar.
7. Fixed a bug that was preventing units from surrendering during the logistics phase. Surrender is now possible if the nearest supplied friendly unit is greater than 25 hexes away.
8. Fixed a bug in the Editor that was preventing the AI objective circles from appearing during the "set AI objectives mode".
9. Fixed a bug where the recon CV value was displayed on the unit counter even when Fog of War was turned off.
10. Fixed a bug where escorts for ground support missions could get reduced in number in cases where a large amount of units were involved in the battle. Also fixed some air mission formation bugs.
11. Fixed a bug where HQ units with 0 MPs (example: Military Districts) were not sharing their support.
12. Fixed a bug where support units attached to combat units did not appear in the CR HQ chain and were not adding to the men/gun/afv totals on the CR screen.
13. Fixed a bug where the ammo requirement was incorrectly calculated when flying transport missions.
14. Fixed a bug where the production pools were not clearing when a nation surrendered.
15. Fixed a crash bug in the Axis attack AI.
16. Fixed a bug where some aircraft were glide bombing when they should have been dive

bombing.

17. Fixed a bug where the TOE of units could go above 100% when taking replacements.
18. Fixed a bug where air interdiction of reacting reserve units could corrupt battle reports and statistics.
19. Fixed a bug where destroyed units were not shown correctly in the battle reports.

- **Data and Scenario Changes**

- Scenario Changes

- 1) Added a new small scenario, Demjansk Pocket 1942. This scenario is used as an example in the editor manual which will be released within the next 45 days.
- 2) Changes made in the 4 campaign scenarios:
 - Updated the Panzerjager OBs in the order of battle to work with latest OB updates. Most significant change is that there is now a Marder Battalion that upgrades to Hetzers.
 - Added six JagdPanzer Battalions (1st-6th) that were formed in the late war for defense of Germany (Jan 45). They are Hetzer shell battalions that will get filled out with any assault guns.

- Changes in Device and OB files

- 1) Miscellaneous facing changes for some ground element weapons.
- 2) Miscellaneous changes to fuel and ammo costs for some devices.
- 3) TOE(OB) changes:
 - 43a Guards Mechanized Corps (OB 84) renamed to 43 Guards Mechanized Corps;
 - 43b Guards Mechanized Corps (OB 85) renamed to 44 Guards Mechanized Corps and Last Year/Last Month changed from 43/12 to 44/10;
 - 43a Mechanized Corps (OB 91) renamed to 43 Mechanized Corps;
 - 43b Mechanized Corps (OB 92) renamed to 44 Mechanized Corps;
 - 44 Mechanized Corps (OB 120) renamed to 45 Mechanized Corps and First Year/First Month changed from 43/11 to 44/11;
 - 44 Guards Mechanized Corps (OB 143) renamed to 45 Guards Mechanized Corps and First Year/First Month changed from 44/1 to 44/11.
 - 43c Panzerjager Battalion (281) renamed to 43c Heavy Panzerjager Battalion and service life extended to end of War (no upgrade);
 - 41 Jagdpanzer Battalion (225) renamed to 41a Jagdpanzer Battalion (change made to add new Jagdpanzer Battalion upgrade path);
 - 42 Jagdpanzer Battalion (278) renamed to 42a Jagdpanzer Battalion and service life extend to 3/44;
 - 44 Jagdpanther Battalion (123) renamed to 44 Heavy Jagdpanzer Battalion with composition changed to 17 Jagdpanthers and 28 Jagdpanzer IVs and service life from 4/44 to end of the War;
 - TOE 075 - Changed 105mm howitzer from German (110) to Rumanian (268);
 - TOE 102 – Changed AAMG from Quad 7.92mm (252) to 13.2mm (265);
 - TOE 134 - Changed 105mm howitzer from German (110) to Rumanian (268);
 - TOE 167 – Changed from Mortar type to Artillery type;
 - TOE 273 - Changed AAMG from Quad 7.92mm (252) to 13.2mm (265);

- TOE 282 – Changed from Armor type to SPA type to be consistent with other Assault Gun TOEs;
 - TOE 356 – Changed Panzer Pioneer Squad from 102 to 103;
 - TOE 357 – Changed Panzer Pioneer Squad from 103 to 104.
- 4) Added to TOE(OB) file:
- 41b Jagdpanzer Battalion (520) identical to 41a Jagdpanzer Battalion and upgrades to 42b Jagdpanzer Battalion;
 - 42b Jagdpanzer Battalion (521) identical to 42a Jagdpanzer Battalion except service life extended to 6/44 and upgrades to 44 Jagdpanzer Battalion;
 - 44 Jagdpanzer Battalion (522) identical to 42b Jagdpanzer Battalion except equipped with Hetzers and service life from 7/44 to end of the War.
- 5) Added the IS-2 M1943 (basically an IS-1 with 122mm gun) (0829) and SU-85M (basically an SU-100 with 85mm gun) (0830) and adjusted production dates and build limits and upgrade paths accordingly of IS-1 M1943 (0763), IS-2 M1944 (0759) and SU-85 (0766).
- 6) To address the shortage/overage problems cited on the forum the following ground element changes/additions have been made (these should reduce build ups of Hetzers and Jagdpanzer IVs in the pool and reduce shortages of Nashorns and Jagdpanthers):
- Jagdpanzer IV (32) changed from Tank Destroyer to Assault Gun;
 - Hetzer (39) changed from Tank Destroyer to Assault Gun;
 - Jagdpanzer IV/70(V) (41) changed from Tank Destroyer to Assault Gun;
 - Nashorn (38) changed from Heavy Tank Destroyer to Tank Destroyer;
 - Jagdpanther (42) changed from Heavy Tank Destroyer to Tank Destroyer, these last two changes to prevent Nashorns and Jagdpanthers from intermingling with Elefants and Jagdtigers.

Changes in AC file

Many changes to aircraft data as follows:

GERMANY

- Bf 109E-3 max alt up to 10.5km/34452ft, endurance down to 80min
- Bf 109E-4/B upgrade path from Bf 109F-2 to Fw 190A, maneuver rating up to 34 (same as E-3, will be down by bomber mission), endurance down to 80min, max load up to 552lbs, max alt down to 32811ft
- Bf 109E-7 max alt up to 10.5km/34452ft, endurance down to 80min, max load up to 552lbs
- Bf 109F-2 max load up to 552lbs, max alt up to 11.2km/36748ft, cruise speed down to 500km/h/311mph
- Bf 109F-4 max load up to 552lbs, cruise speed down to 510km/h/317mph
- Bf 109G-14 remove update path to itself, reduce build limit to 30, max load up to 552lbs, endurance up to 70min
- Bf 109G-2 max load up to 552lbs, cruise speed down to 315mph, endurance up to 70min
- Bf 109G-6 max load up to 552lbs, endurance up to 70min
- Bf 109G-6/R2 remove update path to itself, endurance up to 70min, max load up to 552lbs
- Bf 109G-6/U4N endurance up to 70min, max load up to 552lbs, max speed up to 385mph, climb down to 3000ft

- Bf 109K-4 endurance up to 65min, max load up to 1104lbs, max alt up to 41013ft
- Bf 110C max alt down to 32811ft, endurance down to 120min, cruise speed up to 298mph, max speed down to 336mph
- Bf 110C-4/B add upgrade path to Bf 110E-2, endurance down to 120min, cruise speed up to 275mph, max speed down to 333mph, maneuver rating up to 25, max alt down to 32155ft, climb rate up to 1600ft, max load up to 1104lbs
- Bf 110C-5 max speed down to 342mph, endurance down to 120min, cruise speed up to 305mph, max load of 1104lbs added
- Bf 110D-1/R2 max load up to 2206lbs, cruise speed up to 275mph, maxspeed down to 336mph, maneuver +1 to 25, max alt down to 32811ft
- Bf 110E-1/U2 maxspeed down to 336 mph, cruise speed up to 28 5mph, max alt down to 32811, endurance down to 120min, maxload of 1104lbs added
- Bf 110E-2 change upgrade path from Me 410 to Bf 110G-2, reduce build limit to from 8 to 5, max load up to 2207lbs, cruise speed up to 280 mph, max alt down to 34452, endurance down to 120 min
- Bf 110F-4a maxload of 1104 lbs added, maxspeed down to 311 mph, cruise speed up to 264 mph, climb rate down to 2000 ft, max alt up to 32811
- Bf 110G-2 add build limit of 6 and expansion rate of 1, change first date from 6/1942 to 10/1942, use image from Bf 110 E-2, max load up to 2648lbs, endurance down to 120 min, max alt up to 36092, max speed up to 357 mph, cruise speed up to 285 mph
- Bf 110G-4 use image from Bf 110G-2, max load up to 2207lbs, endurance down to 120min, cruise speed down to 270mph, max alt up to 32811
- Bf 110G-4/U8 add build limit of 5 and expansion rate of 1, max load up to 2207lbs, max alt up to 34452ft, endurance down to 120min, maxspeed down to 330mph, cruise speed up to 280mph
- Do 17Z-2 max load up to 2207 lbs
- Do 215B-5 maxload up to 1104 lbs, reliability +2 to 10
- Do 217E-2 endurance down to 225 (1 ton above max load with standard fuel and 4t bombs), cruise speed up to 261 mph,, maxload up to 8822 lbs, build limit +1 to 5, maneuver -5 to 15, durability +4 to 44, reliability +5 to 13, build cost +300 to 1552 - way too cheap for such a big bomber (was at Ju 88 level), add end date of 12/1943
- Do 217J durability +3 to 42, reliability +5 to 13, build cost +300 to 1629, durability +2 to 44
- Do 217N built +1 to 3, durability +3 to 42, reliability +7 to 15, build cost +300 to 1667, durability +2 to 44
- Do 335A maxload up to 1104 lbs, endurance down to 250min, maxspeed down to 466 mph, add build limit of 2 and expansion rate of 1
- Fi 156C endurance up to 160min, cruise speed up to 94 mph
- Fw 189 fuel up to 743 (450 l), add max load of 443 lbs, cruise speed up to 202 mph, maxspeed up to 224 mph, add end date of 12/1944
- Fw 190A remove update path to itself, max load up to 1104 lbs, max alt down to 33795 ft, cruise speed up to 320 mph, endurance down to 90 min, reliability +3 to 8
- Fw 190A-5/U2 max load up to 1104, max alt down to 33795 ft, cruise speed up to 320mph, endurance down to 90 min, reliability +3 to 8
- Fw 190A-8/R2 max load up to 553, fuel up to 1056 (524+115 l), endurance down to 90 min, reliability +5 to 10, max alt down to 31171, max speed up to 379 mph, cruise speed up to 302 mph, add end date of 2/1945
- Fw 190D add expansion rate of 1, max load up to 1104, maxspeed up to 432 mph, cruise speed up to 325 mph, endurance down to 95 min, reliability +5 to 10
- Fw 190F remove update path to itself, max load up to 1104, cruise speed up to 298 mph,

- max speed up to 382 mph, endurance down to 85 min, max alt down to 31171, remove end date, reliability +5 to 10
- Fw 190G max load up to 2207, maneuver up to 30, max speed up to 392 mph, max alt up to 33795, endurance down to 90 min, cruise speed up to 305 mph, end date from 1/1945 to 6/1944 (end of production), reliability +3 to 8
 - Fw 200 remove update path to itself, endurance down to 330min, max alt up to 27890, max load up to 7719, max speed up to 252mph, cruise speed up to 208mph
 - Go 244 remove update path to itself, reliability +2 to 10
 - He 111 H-20 remove update path to itself, max load up to 4412, fuel up to 5693 (2x700 + 2x1025l wing tanks), endurance down to 350min, cruise speed up to 236 mph, max alt up to 26248 ft, endurance down to 350 min, durability -1 to 41
 - He 111H-3 max load up to 4412, fuel up to 5693 (2x700 + 2x1025l wing tanks), endurance up to 340 min, cruise speed up to 224 mph, max alt up to 26248, use image from He 111P, durability -2 to 40
 - He 111H-4 reduce build limit from 39 to 30, add expansion rate of 1, max load up to 4412, fuel up to 5693, endurance up to 340 min, max alt up to 26248ft, use image of He 111P, durability -2 to 40
 - He 111P fuel up to 5693 (2x700 + 2x1025l wing tanks, no aux tanks in bomb bay), durability -2 to 40, cruise speed up to 230 mph, climb raised to 987ft/min, max alt up to 26248ft, use image of He 111H-4
 - He 112 cruise speed up to 267 mph, endurance down to 140 min, add upgrade path to Bf 109E-3, reliability -5 to 10
 - He 162A add build limit of 10 and expansion rate of 1, fuel up to 1814 (640+330l), max alt down to 39373
 - He 170A (actually He 70F), ammo down to 50, , fuel down to 825 (500 l), max speed down to 224 mph, cruise speed down to 208 mph, max alt down to 22312, endurance up to 180 min
 - He 177A-5 max load up to 13232, max alt up to 28874, maneuver +5 to 14 (not a slow/big beast like the B-17), first date from 2/1943 to 7/1943, build limit +2 to 7, durability +4 to 46, reliability -20 to 25 - engine fire problems were cured with modified engine installations
 - He 219A build limit of 4 and expansion rate of 1 added, first date delayed from 6/1943 to 10/1943, reliability +7 to 15, max alt down to 31171, endurance up to 265 min
 - He 46 max load up to 443
 - Hs 123 max load up to 1104, fuel down to 446 (270l), max speed up to 218 mph, endurance down to 120 min, max alt down to 26248, durability +6 to 30 - was not bullet-proof but very resistant to shot damage, cruise speed down to 187 mph
 - Hs 126 cruise speed up to 193 mph, endurance down to 165 min
 - Hs 129 max load up to 1325, fuel down to 1007 (610l), endurance down to 120 min, reliability raised to 15 - engines were always a source of problems, cruise speed up to 211 mph
 - Ju 188E max load to 6614, crew -1 to 4, fuel up to 4785 (2900l), cruise speed up to 249 mph, endurance down to 300 min, max speed up to 323 mph, maneuver +2 to 14, reliability +5 to 13, build limit raised to 5 to counteract the ahistorical early stop of Ju 88A production, max alt up to 31171
 - Ju 52 fuel up to 3960 (2400 l), max load down to 3309, cruise speed down to 134 mph, endurance down to 335 min, max alt up to 19688
 - Ju 86C sortie ammo down to 75 (no bombs), use air symbol from Ju 86P and image from Ju 86K, max load to 2207, maxspeed down to 199 mph, cruise speed up to 174 mph, endurance down to 320 min, fuel down to 2033 (1500l tanks filled with just 1100l Diesel)
 - Ju 86K-2 max load to 2207, max speed up to 233mph, cruise speed up to 196 mph, climb rate up to 1151, use image from Ju 86P, fuel down to 1815 (1500l tanks filled with just 1100 l fuel (not Diesel)), max alt up to 22641, endurance down to 195 min

- Ju 86P use air symbol and image from Ju 86C, fuel down to 4066 (2x1100l (Gasöl = Diesel at 0.84kg/l)), endurance up to 390 min, max alt down to 45278, max speed down to 249 mph, cruise speed down to 149mph
- Ju 87B fuel down to 825 (500l), endurance down to 120 min, cruise speed down to 187 mph, max alt up to 26248, max speed down to 236 mph
- Ju 87D durability +2 to 32 (armor protection was increased and hull strengthened over the Ju 87B), fuel down to 1320 (800l), max alt up to 23953, cruise speed up to 168 mph, endurance down to 200 min, max speed down to 249mph, max load up to 3967
- Ju 87G durability +4 to 34 (armor protection was further increased for better protection from ground fire), max load down to 1104, fuel down to 1320 (800l), max alt down to 22969, cruise speed up to 171 mph, endurance down to 200 min, max speed down to 233 mph, climb rate down to 750ft
- Ju 88A remove empty equipment slots, maxload down to 4412, max speed up to 289 mph, cruise speed up to 261 mph, fuel Data from A-4/D-1 manual, using Rüstzustand B (medium fuel, wing tanks and aux tank in forward bomb bay), fuel up to 4785 (2900l), endurance down to 330 min, max alt up to 27890 (performance data for Ju 88 A-5)
- Ju 88C-2 Rüstzustand B (wing tanks and aux tank in forward bomb bay), fuel up to 4785 (2900l), endurance down to 300 min, max load up to 1104, max alt down to 29530, cruise speed up to 258 mph, max speed down to 298 mph, crew -1 to 3, maneuverability + 10 to 19, reliability +7 to 15
- Ju 88C-6 Rüstzustand B (medium fuel, wing tanks and aux tank in forward bomb bay), fuel up to 4785 (2900l), endurance up to 300 min, max alt down to 29530, maxspeed up to 311 mph, reliability +7 to 15, durability +1 to 42
- Ju 88D-1 Rüstzustand C (max fuel, wing tanks and both bomb bays aux tanks), fuel up to 5907 (3580l), endurance down to 330 min, max speed up to 317 mph, cruise speed up to 274 mph, max alt up to 29530, ammo down to 100
- Ju 88G fuel up to 4785 (2900l), max alt down to 31171, cruise speed up to 286 mph, climb rate up to 1600, reliability +7 to 15, add factory expansion rate of 1, add build limit of 5, build cost -400 to 1289 (way too expensive with 1789)
- Me 210A-1 reduce build limit from 6 to 2 (low production in GER, many more built in Hungary), max load up to 2207, fuel down to 3960 (2400l), max alt up to 34452
- Me 262 fuel up to 4750 (2570l), maxspeed -1 to 541 mph, max alt up to 37732, cruise speed down to 497 mph, endurance up to 75 min, build limit reduced from 15 to 10
- Me 323 use Fw 200 air symbol, max load up to 22052, max alt down to 14767, fuel up to 8811 (6x890 l), endurance down to 300 min
- Me 410A raise build limit from 3 to 5, remove update path to itself, max load up to 2207, fuel down to 3960 (2400l), max alt up to 36092, cruise speed down to 321 mph, endurance down to 200 min, ammo down to 2450
- Si 204A fuel up to 1023 (620l), max load to 2207, max alt to 21000, use air symbol from Do 17P
- Ta 152H fuel down to 1918 (172+268 kg fuselage, 296 kg in wing tanks, 104 kg GM1, 64 kg MW-50 (counted with 50%)), build limit raised to 10, reliability raised to 15 (=less reliable, problems with the second stage engine supercharger), cruise speed down to 342 mph, endurance down to 140 min, max alt up to 48559 ft, add max load of 250kg (drop tank option)
- Fw 190A-8 New 1/1944 model, intended as replacement for Fw 190A/G; not yet integrated into upgrade paths -> upgraded armament, more internal fuel, a bit faster and more durable than Fw 190A, no drop tanks (misplaced on the A), higher production
- Fw 190F-8 New 1/1944 model, intended as replacement for Fw 190F; not yet integrated into upgrade paths -> increased armament (original 190F shall not have MG 131), a bit more bombs, performance, maneuver, durability, higher production

- Ju 87D-5 New 7/1943 model, intended as replacement for Ju 87D; not yet integrated into upgrade paths -> intended as ground straffer version with under wing MG pods and reduced bomb load, ends 12/44 -> other option: a slightly higher performing Ju 87D with a max load of 1.4t (1.8t with reduced fuel only, original has too many bombs)
- Do 217K New 1/1943 model, intended as replacement for Do 217E-2; not yet integrated into upgrade paths -> slightly improved performance, improved armament, ends 12/44
- Ju 88A-4 New 1/1942 model, intended as replacement for Ju 88A; not yet integrated into upgrade paths
- He 111H-6 New 1/1942 model, intended as replacement for He 111H-4; not yet integrated into upgrade paths

FINLAND

- Bf 109G-2(F) upgrade path changed to Bf 109G-6(F), first date delayed to 8/1942, Data sync
- Bf 109G-6(F) remove update path to itself, Data sync
- Ju 88A(F) remove update path to itself, Data sync and update to modified Finnish stats:, Rüstzustand A (max load, only wing tanks in use), fuel up to 2772 (1680 l), endurance reduced to 140 min, cruise speed up to 261 mph
- Do 17Z-2(F) remove update path to itself, Data sync
- Fi 156C(F) first date delayed to 10/1941, Data sync
- GladiatorII(F) remove update path to itself
- Hurricane I(F) remove update path to itself
- F.K.52(F) remove update path to itself
- Fokker C.V-E(F) remove update path to itself
- Fokker D.XXI(F) remove update path to itself
- G.50bis(F) remove update path to itself, data sync
- I-153(F) remove update path to itself
- Pe-2(F) wrong upgrade path to soviet Pe-2 removed
- SB-2(F) remove update path to itself

ITALY

- CR.32 fuel down to 578 (325+25 l)
- CR.42 maxload to 443 lbs
- G.50 fuel up to 583 (265 kg), max alt down to 32811 (practical, not absolute, ceiling)
- G.55/I Centauro: delay first date to 5/1943, raise build limit from 1 to 3, fuel down to 924 (560 l), max alt down to 39373 (max practical alt), endurance down to 150 min (internal fuel), cruise speed down to 308 mph, max speed up to 395 mph (previous value for 30min engine rating)
- MC.200 Saetta build limit of 3 and expansion rate of 1 added, fuel up to 517 (313 l), endurance down to 80 min, maxload to 222 lbs
- MC.202 Folgore availability date moved from 8/1942 to 1/1942, fuel up to 710 (270+40+40+80l), cruise speed down to 267 mph, endurance up to 110 min
- MC.205 fuel up to 710 (assumed same fuel capacity as MC.202), endurance down to 90 min, max alt up to 37732
- Re.2000 fuel down to 1056 (640 l), cruise speed down to 267 mph, endurance down to 130 min, reliability raised to 15 (bad engine), upgrade path to Re.2001
- Re.2001 fuel down to 717 (240+77+77 l), cruise speed down to 267 mph, endurance down to 120 min
- SM.79 fuel down to 5478 (3320 l), max speed up to 267 mph, max alt up 21328,

cruise speed up to 223 mph

ROMANIA

- Bf 109G-2(R) build limit down to 1, Data sync
- Bf 109G-6(R) build limit down to 1, remove upgrade path to German Bf 109 G-14
- Hurricane I(R) remove upgrade path to German Bf 109 G-2, reliability +2 to 10 (matching Finnish stats)
- D.520 fuel reduced to 1056 (640l), endurance up to 165 min
- Do 17M(R) remove update path to itself, max load up to 2207
- Fi 156C(R) first date delayed to 10/1941, Data sync
- He 111H-3(R) remove update path to itself, Data sync
- IAR 81B set upgrade path to Bf 109G-6(R) to enable license production established at IAR
- Hs 129B(R) Data sync, max import from 241 down to 140 (~40 for 3 Squadrons + reserve; at minimum 30 more as replacements, excluding captured)
- Ju 52(R) first date delayed to 10/1941, Data sync
- Ju 86K-2(R) Data sync
- SM.79(R) reduce build limit to 1 (no license production), max speed up to 261 mph, fuel down to 5478 (3320 l), max alt down to 20344
- SM.79JR add build limit and expansion rate of 1 (was license-produced), change image to SM.79(R) as both are twin-engined, fuel down to 5478 (3320 l), max speed up to 277 mph, cruise speed up to 227 mph, endurance down to 250 min, maxload down to 1500kg (all other SM.79 have one 250kg bomb too much), max alt up to 24609 (1200/1340PS Jumo engines)
- Ju 87D(R) first date delayed to 3/1943 (delivery to Romania), Data sync
- Ju 88A(R) remove upgrade path to German Ju 188E, first date delayed to 3/1943 (delivery to Romania), Data sync
- Ju 88D-1(R) first date delayed to 3/1943 (delivery to Romania), Data sync
- Bf 110E-1/U1(R) first date delayed to 1/1942, Data sync

HUNGARY

- Bf 109F-4(H) change upgrade path from Bf 109 G-14(H) to Bf 109G-2(H), Data sync
- Bf 109G-14(H) remove upgrade path to itself, reduce imports by 100 to 51 (local production), Data sync, build limit from 3 to 2
- Bf 109G-2(H) Data sync
- Bf 109G-6(H) reduce imports by 100 to 73 (local production), Data sync
- Cr.32bis(H) invalid upgrade path removed, data sync
- Fw 189A(H) Data sync
- Fw 190F(H) remove self-update, Data sync
- He 170A(H) fuel down to 825 (500 l), max speed up to 270 mph, cruise speed up to 249 mph, endurance down to 120 min, ammo down to 50
- Ju 52(H) first date delayed to 10/1941, Data sync
- Ju 86K-2(H) Data sync
- Ju 87D(H) wrong upgrade path to Ju 88D-1(H) removed, first date delayed to 6/1942, Data sync
- Ju 88A(H) Data sync, first date moved forward to 1/1943 (were present at Kursk)
- Ju 88D-1(H) Data sync
- Me 210Ca-1(H) reduce build limit to 4, add end date of 10/1944, remove update path to itself, reduce imports to 24 (about 400 built by Danubian aircraft works), Data sync

- Re.2000(H) end date of 12/1943, reduce imports to 70 (185-200 license-built), some data sync, reliability to 10 - not as much engine trouble as the Italians had (better fuel?)
- Re.2000 Heja II new 1942 model, replacing the Re.2000 -> License-built version of the Re.2000 with higher performance, more range and more reliable engine

SLOVAKIA

- Bf 109E-3(S) upgrade path changed from Bf 109G-6(S) to Bf 109G-2(S), Data sync
- Bf 109G-2(S) Data sync
- Bf 109G-6(S) remove update path to itself, Data sync
- Fi 156C(S) first date delayed to 10/1941, Data sync
- Fw 189A(S) first date delayed to 1/1942, Data sync
- He 111H-3(S) remove update path to itself, Data sync
- Ju 87D(S) Data sync

MISC

- Cleared data leftover in position 0176

V1.05.53 – January 4, 2012

- **New Features and Rule Changes**

- 1) Rule Change – Arriving air groups won't have their planes swapped/upgraded on their turn of arrival. This allows the player time to set the air groups to Manual upgrade.
- 2) Rule Change – Now when a broken down unit from a Soviet Corps of any kind changes its HQ attachment, all broken down units that are a part of that Corps will also change their HQ attachment. The cost for this change in HQ will be equal to the cost of changing the Corps.
- 3) Rule Change – In order for an air unit to participate in a daylight airfield attack mission, it must have flown no more than 1/3 of its available miles.
- 4) Rule Change – All eligible leaders are now displayed and are available when performing a manual leader change.
- 5) Rule Change – Soviet DD, Flame and Cavalry tanks may now substitute for light tanks in units in 1941.
- 6) Interface change – Added a message indicating the arrival of air groups that are located on delayed air bases.
- 7) Interface Change – Disabled top menu buttons and shortcuts during the logistics phase. Removed the AP and vehicle pool values from the screen during the logistics phase.
- 8) Interface Change – The save game screen now defaults to sorting the save list by date (most recent to oldest).
- 9) Interface Change – Added one digit after the decimal point for CV info on the hex pop-up for friendly units.
- 10) Interface Change – Added sortable air group morale column to the “select air group unit from national reserve window”.
- 11) Formula Change - Air group morale now grows slower than it used to if the morale is

- greater than the experience of the group.
- 12) Formula Change – Added group experience into the equation that calculates the max miles the air group can travel and reduced importance of morale. It was changed from $10 + (\text{morale}/2)$ to $10 + (\text{morale}/4) + (\text{experience}/4)$.
 - 13) Formula Change – Isolated HQ units which were not getting any supply from adjacent cities were not sending any of their existing supply dumps to subordinate units in the same pockets. Now they will distribute their supply dumps if they can trace a supply path to the units.
 - 14) Formula Change – Made a small adjustment to the flak attack function.
 - 15) Formula Change - Changed automatic leader assignment. Reduced randomness of the ratings factoring and added rank into the weighting factor calculation (i.e. more chances that higher rank leaders with better ratings will be assigned).
 - 16) Rule Correction – Section 15.9.4.1 – In order for a routed unit to rally, the range test to its HQ must be less than 6, not 2. All HQ's in the unit's change are tested, and if any passes this test, then a normal leader morale check is made to determine whether the unit rallies.
 - 17) Rule Correction (Omission) – Section 9.1.1 – Each logistics phase there is chance that a unit can lose a morale point due to fatigue. The higher the fatigue and the lower the morale of the unit, the greater the chance that the unit must make a leader morale check to avoid a morale loss.
 - 18) Rule Correction (Omission) – Attack CV values are divided by 8 on mud turns.
 - 19) AI Changes – Improved AI to be more aggressive attacking victory objectives in later turns of smaller scenarios. Improved the AI command and control so that it tries to assign areas for each German Army or Soviet Front, and keep the units within those areas attached to appropriate HQs. Ongoing improvements in attack selection AI. Improved AI use of ground support especially when attacking fortified units. Improved defensive line routine (greatly reduced chance of failure in line building) and increased Soviet attack aggressiveness in mid/late war. Improved AI rail repair.
 - 20) Optimization – Several routines were optimized to increase game speed. Improved the accuracy of the air availability shadow map. Improved the automatic selection of staging air bases.

- **Bug Fixes**

- 1) Fixed a bug where Corps artillery units were being treated as Corps sized units in the Commander's Report screen. Also, Italian CCNN Legions are now treated as Regiment sized units.
- 2) Fixed a bug where Soviet Corps HQ could be incorrectly split into 3 parts using the breakdown function.
- 3) Fixed a bug that prevented AG South in some cases from splitting to AG A and AG B.
- 4) Fixed another case in which Soviet Guard Corps names could be duplicated.
- 5) Fixed a bug where once Slovakia or Hungary surrenders, units of other nationalities that were reporting to HQs of the surrendering country were not altered to report to OKH (they are now).
- 6) Fixed a bug where air groups located on delayed air bases were arriving with no aircraft.
- 7) Fixed a bug where the AI could merge units that allowed the combined unit to be over 100% of TOE.
- 8) Fixed type “infantry air is reduced to” to “air rating is reduced to”.

- 9) Fixed the editor interface so the “Symbol From Id” text does not appear as clickable on the aircraft editor tab.
- 10) Fixed a bug with the selection of air recon staging bases.
- 11) Fixed a bug that was preventing expected limits on the amount of CAP that would intercept.
- 12) Fixed a bug where a player could end up in his opponent’s PBEM turn after ending his own turn. Also fixed another PBEM security issue.
- 13) Fixed a bug where Hiwis could prevent a ground element slot in a unit from being cleared correctly, which could prevent the ground element from receiving replacements.
- 14) Fixed a bug with flak fire for fighters, fighter bombers and high speed bombers (max speed>200mph).
- 15) Fixed a display bug on the unit detail screen (wrong column was marked as "clickable").
- 16) Fixed a bug that caused fighter bombers switched to fighter mission when set in the editor to bomber.
- 17) Fixed a bug that could cause the game to crash when accessing unit details for an AA unit attached to a city.
- 18) Fixed a bug that allowed Air groups transferred by automatic movement from the NR to fly missions during the same turn.

- **Data and Scenario Changes**

- 1) Added several new leaders to the German and Soviet leader database.
- 2) In the 1.05.23 version, and in all versions thereafter, there was a change made to the Operation Typhoon scenario. The scenario was changed to start a few days later and no German units are now frozen on turn 1. There were many other changes made to the scenario. This change has not previously been documented.
- 3) Made a temporary fix to correct the problems with the 107mm Field Gun (807) as follows:
 - In the Device data base, the 107mm M60 Gun (388) now has a range of 3000;
 - In the Ground data base, the 107mm Field Gun (807) no longer upgrades to the 122mm Field Gun, now has an Accuracy of 100, and is re-defined from Heavy Infantry Gun to Heavy Anti-tank Gun;
 - In the TOE(OB) data base, the 42 Heavy AT Regiment (183) is no longer buildable after November, 1942 (stopping then allows a month to fill out any regiments built in November before gun goes out of production at the end of December).
- 4) Fixed the upgrade path of the Hungarian 50mm AT-Gun (now does not upgrade).
- 5) TOE(OB) file – in 44 Hun. Hussar Division corrected 7.92mm Machine gun from 0251 (Rumanian) to 0297 (Hungarian)
- 6) Corrected the Rumanian Rifle Squads in OB 78, 102, & 136 from ground element 255 to 254.
- 7) Made the following changes in the TOE(OB) data base relating to Soviet Sappers:
 - TOE(OB) 43 Assault Engineer-Sapper Brigade (446) revised to eliminate 12 Sapper Squads with flamethrowers and replace with 10 Rifle Squads, increased Support and brigade upgrades to 44 Assault Engineer-Sapper Brigade (486) in 5/44;
 - Added TOE(OB) 44 Assault Engineer-Sapper Brigade (486) with addition of 24 Flamethrower Squads (240 FLAMETHROWERS!) and 9 anti-tank rifles;

- Added TOE(OB) 41 Engineer-Sapper Brigade (499) as Construction type support unit which upgrades (actually gets smaller) to 43 Engineer-Sapper Brigade (500) in 6/43.

8) **Many scenario changes as follows:**

General Changes

- * Hungarian Construction Battalions now have their own OB and have been rebuilt
- * Production pool maintenance

1941 Campaign

- * Fixed the name of III/LG 1
- * Starting and reinforcing ZG groups now properly equipped with non-night fighter Bf110E-2s
- * NSGr.1 Now set to arrive in Oct 43
- * All NSGr units are set to Gruppe strength (was squadron)
- * Fixed a small number of reinforcing Axis minor airgroups were using German planes instead of the localized versions
- * Staffels equipped with Bf-109E-7 Airframe replaced by the Bf109E-4B airframe
- * 9th and 10th Fallschirmjager Divisions are no longer motorized

1942 Campaign

- * Rebuilt Hiwis
- * Fixed the name of III/LG 1
- * Starting ZG Groups now properly equipped with non-nighter fighter Bf110E-2s.
- * 20 x Fw190Ds in starter pool zeroed out
- * Fixed a small number of Axis minor airgroups were using German planes instead of the localized versions
- * All NSGr units are set to Gruppe strength (was squadron)
- * Staffels equipped with Bf-109E-7 Airframe replaced by the Bf109E-4B airframe
- * Panzer 38t replaced by Panzer 38t(E) in Panzer Divisions
- * Increased German manpower
- * Unit 2159 name has been corrected
- * 3rd Rum. LR Recon Sqn now uses the Rumanian Blenheim
- * Duplicate 'NN TD Artillery Battalion' removed
- * All German fighter bomber airgroups equipped with the Bf109E-7 have been replaced by the Bf109E-4B
- * Rebuilt Rum. Mountain Divisions to use latest OB changes

1943 Campaign

- * Rebuilt Hiwis
- * 15./JG 52 now equipped with Bf-109G2
- * 2nd Fallschirmjager Division morale/experience corrected
- * Rebuilt Rumanian Infantry and Mountain Divisions to use latest OB changes

1944 Campaign

- * Rebuilt Hiwis

- * Rumanian Construction Battalions now use their own OB
- * 1st Hun. Hussar now uses proper MG device
- * 17th Fin. Heavy Artillery Battalion now uses proper artillery device
- * Soviet Assault Engineer Sapper Brigades have been divided into two separate OBs - OB 486 (Assault Engineer-Sapper Brigade) and OB 500 (Engineer-Sapper Brigade). Units that use OB 500 are now off-map support construction units. Result is no more duplicate engineer brigades.
- * Removed a couple of duplicate Soviet units.
- * Rebuilt Rumanian Infantry and Mountain Divisions to use latest OB changes

Operation Typhoon

- * Added Northwest Front Air Command (was missing)
- * Unit 3111 and 3119 now use the proper OB
- * Pavel Artemev placed as commander of Moscow Defense Zone
- * Duplicate Soviet units removed

Operations Blue

- * Rebuilt Hiwis
- * Fixed a small number of Axis minor airgroups were using German planes instead of the localized versions
- * 20 x Fw190Ds in starter pool zeroed out
- * Staffels equipped with Bf-109E-7 Airframe replaced by the Bf109E-4B airframe
- * Fixed the name of III/LG 1
- * Increased German manpower
- * Unit 2159 name has been corrected
- * 3rd Rum. LR Recon Sqn now uses the Rumanian Blenheim
- * Duplicate 'NN TD Artillery Battalion' removed
- * All German fighter bomber airgroups equipped with the Bf109E-7 have been replaced by the Bf109E-4B
- * Rebuilt Rum. Mountain Divisions to use latest OB changes

Operation Barbarossa

- * Some duplicate Soviet airgroups corrected

Road to Kiev

- * Unit 1800 and 1801 duplicate names fixed

Road to Smolensk, Road to Moscow, and Road to Minsk

- * Starting ZG Groups now properly equipped with non-night fighter Bf110E-2s.
- * Konstantin Rakutin put in command of 31st Army
- * Duplicate I/36th LW Mixed Flak Battalion removed

9) Many changes to aircraft data as follows (thanks to Dennis Schulz for joining the data team and making this extensive aircraft review):

---GERMAN aircraft---

Ar 234B: Max alt increased to 11km, fuel increased to 6050 (carried 2,75t of fuel)
Bf 109E-3: maxspeed reduced to 354mph/570kph, fuel reduced to 660 (400l/300kg)
Bf 109E-4B: fuel reduced to 660 (400l/300kg)
Bf 109E-7: maxspeed reduced to 354mph/570kph, fuel reduced to 1155 (400+300l), maxload increased to 550lbs
Bf 109F-2: fuel reduced to 1155 (400+300l), max alt increased to 11km, maxspeed increased to 615kph/382mph
: build limit raised to 10, reliability raised to 15 (=less reliable), maxload increased to 550lbs
Bf 109F-4: fuel reduced to 1155 (400+300l), max alt increased to 11.6km, maxspeed increased to 650kph/404mph
: build limit raised to 10, maxload increased to 550
Bf 109G-14: fuel reduced to 1229 (400+300l + 75l MW-50), endurance reduced to 65 min (G-14 = G-6 with methanol injection),
: max alt decreased to 11.6km, max speed decreased to 664kph/413mph, maxload increased to 550lbs
Bf 109G-2: fuel reduced to 1155 (400+300l), maxload increased to 550lbs, reliability raised to 15 (=less reliable), max alt decreased to 11.6km
: maxspeed increased to 650kph/404mph
Bf 109G-6: fuel reduced to 1155 (400+300l), maxspeed increased to 643kph/400mph, maxload increased to 550lbs, max alt decreased to 11.6km
: climb rate increased to 3400
Bf 109G-6/R2: fuel reduced to 1155 (400+300l), maxspeed increased to 380mph, cruise speed increased to 320mph, max alt decreased to 11.6km
: endurance reduced to 65min, maxload increased to 550lbs
Bf 109G-6/U4N: fuel reduced to 1155 (400+300l), max alt increased to 11.6km, climb rate increased to 3100, endurance reduced to 65min
: maxload increased to 550lbs, maneuver increased by one to 28
Bf 109K-4: fuel reduced to 734 (400l + 75l MW-50), maxload increased to 550lbs, maxspeed decreased to 712kph/443mph

Bf 110C: fuel increased to 2096 (1270l), maxspeed reduced to 342mph, max alt increased to 34000ft
Bf 110C-4B: fuel increased to 2096 (1270l)
Bf 110C-5: fuel increased to 2096 (1270l), max alt increased to 10500m, endurance reduced to 180min
Bf 110D-1/R2: fuel increased to 5065 (1270+1800l), endurance increased to 180min, maneuver +1 to 24, maxload increased to 2200lbs
Bf 110E-1/U2: fuel increased to 2096 (1270l), maxspeed reduced to 350mph, cruise speed reduced to 230mph, climb rate reduced to 2100ft
: max alt reduced to 34000ft
Bf 110E-2: fuel increased to 2096 (1270l), sortie ammo reduced to 1809, max speed reduced to 350mph, cruise speed reduced to 230mph
: max alt reduced to 34000ft
Bf 110F-4a: fuel increased to 2096 (1270l), uses aircraft symbol from Bf 110G-4
Bf 110G-2: fuel decreased to 2096 (1270l), sortie ammo increased to 1810, endurance reduced to 180min, maxload increased to 2200lbs
: maneuver +1 to 25, cruise speed reduced to 278mph, max alt increased to 26250ft
Bf 110G-4: fuel increased to 3086 (1270+600l), endurance decreased to 180min, crew increased to 3, maxload increased to 2200lbs
: maneuver +1 to 24
Bf 110G-4/U8: fuel increased to 3086 (1270+600l), max alt increased to 26250ft, crew increased

to 3, maxload increased to 2200lbs
:endurance reduced to 180min, maxspeed reduced to 330mph, cruise speed reduced to 278mph

Do 17P-1: fuel increased to 2558 (2x775l), maxspeed increased to 261mph, max alt increased to 7500m, endurance increased to 260min

Do 17Z-2: fuel increased to 2558 (2x775l), crew reduced to 4

Do 215B-1: fuel increased to 2558 (2x775l), maxspeed increased to 500kph/311mph, cruise speed decreased to 410kph/255mph, max alt reduced to 9200m

: endurance reduced to 260min

Do 215B-5: fuel increased to 2558 (2x775l), max alt increased to 9200m, endurance reduced to 260min

: cruise speed decreased to 408kph/254mph, crew reduced to 3, maneuver +11 to 20, maxspeed increased to 498kph/310mph

Do 217E-2: fuel reduced to 4884 (2960l standard load), maxspeed reduced to 510kph/317mph, max alt reduced to 8500m

: endurance reduced to 250 (standard fuel load, overloaded with bombs)

Do 217J: fuel reduced to 4884 (2960l standard load), crew reduced to 3,

Do 217N: fuel reduced to 4884 (2960l standard load), climb rate increased to 1700ft

Do 335: max alt increased to 11.9km, fuel reduced to 4092 (1230l main + 2x375l secondary + 500l in bomb bay)

Fi 156C: fuel reduced to 248 (150l internal fuel), cruise speed increased to 149kph/93mph

: endurance reduced to 155min to keep the range below 400km

Fw 189A: fuel reduced to 729 (440l), max speed increased to 350kph, cruise speed increased to 320kph, endurance reduced to 135min

Fw 190A: fuel increased to 1855 (524l+2x600l), ammo increased to 789 (payment for bomb), maxload increased to 1100

: maxspeed reduced to 400mph, max alt reduced to 10.6km

Fw 190 A-5/U2: fuel increased to 1360 (524+300l), max load to 1100, maneuver +1 to 35, max alt reduced to 10.6km

Fw 190A-8/R2: fuel increased to 865 (524l), maxload to 550, convert from drone to manned aircraft (+1 crew)

Fw 190D: fuel increased to 1474 (524l + 115l MW-50), maxspeed increased to 426mph, max alt increased to 11.6km

Fw 190F: fuel increased to 865 (524l), ammo increased to 1308 (payment for bombs)

Fw 190G: fuel increased to 1855 (524l + 2x300l), armor reduced to one (no additional protection like in Fw 190F)

Fw 200C-3/U4: fuel increased to 5775 (only wing fuel tanks and one main fuselage tank), endurance cut down to 400min

: increase max load to 3000kg, sortie ammo reduced to 300 (no bombs), max speed increased to 249mph

Go 145C: fuel reduced to 297 (180l), endurance reduced to 210min

Go 244: fuel reduced to 1139 (690l), ammo reduced to 120, cruise speed reduced to 121mph, endurance reduced to 160min, max load reduced to 1500kg

He 111H-20/R2: ammo reduced to 250 (no bombs)

He 111H-3: fuel reduced to 3825 (2550l), endurance reduced to 250min,

He 111H-4: fuel reduced to 3825 (2550l), endurance reduced to 250min

He 111P: endurance increased to 350min - max fuel + no bombs = long range, climb rate increased to 902ft - no reason to be lower than H-version

He 112B: fuel reduced to 520 (115l +2x100l wing)
He 177A: fuel reduced to 14520 (8800l standard load), cruise speed reduced to 415kph, max speed increased to 550kph, max alt increased to 7.7km
: endurance down to 200min = ~1400km (Heinkel docs specify 1100km with 7t bombload)
He 219A: fuel reduced to 5577 (2600l+780l), maxspeed reduced to 360mph (with antenna and flamedampers), max alt reduced to 10.5km
He 46C: fuel reduced to 616 (280kg), endurance reduced to 220min to get 800km range

Hs 123A: maxload to 1000lbs
Hs 126B: fuel reduced to 867 (525l)

Ju 188E:
Ju 86C: ammo reduced to 150 - no bombs
Ju 88A: ammo reduced to 4650 (uses only 2t of bombs)
Ju 88C-2: crew increased to 4
Ju 88G: crew reduced to 3

Me 163A:
Me 210A-1: maxload increased to 2200lbs, ammo increased to 2450 (payment for bombs)
Me 323: ammo reduced to 250 (no bombs)
Me 410A:

---FINNISH aircraft---

Bf 109G-2(F): data synced with German version, use air symbol from German version
Bf 109G-6(F): data synced with German version, use air symbol from German version
Ju 88A(F): data synced with German version as far as other loadout permits, use air symbol from German version
Do 17Z-2(F): data synced with German version, use air symbol from German version
Fi 156C(F): data synced with German version, use air symbol from German version
Blenheim I(F): use air symbol from 0119, first year changed from 1900 to 1/1939
Blenheim IV(F): use air symbol from 0119
F.K.52(F): use air symbol from 0120
Fokker C-V-E(F): ammo increased to 450 (payment for bombs)
I-153(F): use air symbol from 0129
Pe-2(F): use air symbol from 0127, armor reduced to 1
SB-2(F) : use air symbol from 0127
VL Myrsky II : use air symbol from 128, ammo increased to 560 (payment for bombs), maxload increased to 450lbs

---ITALIAN aircraft---

Cr.42 Falco: maxload to 450lbs
MC.200 Saetta: maxload increased to 220lbs, ammo increased to 283
Re.2000 Falco I: use air symbol from 0153

---ROMANIAN aircraft---

Bf 109E-3(R): data synced with German version, use air symbol from German version
Bf 109G-2(R): data synced with German version, use air symbol from German version
Bf 109G-6(R): data synced with German version as far as other loadout permits, use air symbol from German version
Blenheim I(R) - recon: use air symbol from 0119, ammo reduced to 100 (no bombs), first year

from 1900 to 1/1939

Blenheim I(R): use air symbol from 0119, first year changed from 1900 to 1/1939

Do 17M(R): data synced with German version where possible, crew increased to 4, ammo reduced to 300, use air symbol from 029

Fi 156C(R): data synced with German version, use air symbol from German version

He 111H-3(R): data synced with German version, use air symbol from German version

He 112B(R): data synced with German version, use air symbol from German version

Hs 129B(R): data synced with German version, use air symbol from German version

Ju 52(R): data synced with German version, use air symbol from German version

Ju 86K-2(R): data synced with German version, use air symbol from German version

Potez 63(R): maxload increased to 660 to match bombs

SM.79(R): use air symbol from 0156

SM.79JR: use air symbol from 0156

Ju 87D(R): data synced with German version, use air symbol from German version

Ju 88A(R): data synced with German version, use air symbol from German version

Ju 88D-1(R): data synced with German version, use air symbol from German version

Bf 110E-1/U1(R): data synced with German version, use air symbol from German version

---HUNGARIAN aircraft---

Bf 109F-4(H): data synced with German version, use air symbol from German version

Bf 109G-14(H): data synced with German version, use air symbol from German version

Bf 109G-2(H): data synced with German version, use air symbol from German version

Bf 109G-6(H): data synced with German version, use air symbol from German version

Ca.135bis(H): use air symbol from 0138

Ca.310 (H): use air symbol from 0139

Cr.32bis(H): use air symbol from 0142

Cr.42(H): maxload increased to 450lbs

FW 189A(H): data synced with German version

FW 190F(H): data synced with German version

He 46C(H): data synced with German version

Ju 88A(H): data synced with German version

Me 210Ca-1(H): data synced with German version

---SLOVAKIAN aircraft---

Bf 109E-3(S): data synced with German version

Bf 109G-2(S): data synced with German version

Bf 109G-6(S): data synced with German version

Fi 156C(S): data synced with German version

FW 189A(S): data synced with German version

He 111H-3(S): data synced with German version

---SOVIET aircraft---

I-15bis: ammo increased to 500 to account for bombload

I-16 Type 18: ammo increased to 670 to account for bombload

I-16 Type 24: ammo increased to 524 to account for bombload

MiG-3: ammo increased to 515 to account for bombload

Yak-1: ammo increased to 512 to account for bombload

Yak-1B: ammo increased to 512 to account for bombload

Yak-9T: add maxload of 443lbs

Yak-2: ammo decreased to 1350 to account for bombload

Yak-4: ammo decreased to 1350 to account for bombload

Yak-6: ammo increased to 25 - MG needs some ammo
 LaGG-3: ammo increased to 505 to account for bombload, aircraft no longer upgrades
 La-5: ammo increased to 254 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 La-5F: ammo increased to 474 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 La-5FN: ammo increased to 474 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 La-7: ammo increased to 491 to account for bombload, armor reduced to 1 - not a heavily armored aircraft

 Su-2: ammo decreased to 1100 to account for bombload
 SB-2: ammo increased to 3600 to account for bombload
 IL-2M: Changed bombload
 IL-2M3: Changed bombload
 Tu-2: ammo increased to 7034 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 Tu-2S: ammo increased to 7034 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 Pe-2: armor reduced to 1 - not a heavily armored aircraft
 Pe-2R: armor reduced to 1 - not a heavily armored aircraft
 Pe-3: ammo increased to 1649 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 Pe-3bis: ammo increased to 1649 to account for bombload, armor reduced to 1 - not a heavily armored aircraft
 Yer-2: ammo increased to 6778 to account for bombload
 Yer-2 (1943): ammo increased to 8978 to account for bombload
 DB-3B: ammo increased to 5590 to account for bombload
 IL-4: ammo increased to 5628 to account for bombload
 TB-3: ammo increased to 11113 to account for bombload
 TB-3G-2: ammo increased to 50 - MGs need some ammo
 Pe-8: ammo decreased to 6805 to account for bombload
 Li-2: ammo increased to 25 - MG needs some ammo, crew reduced to two, max load increased to 10k lbs
 Li-2VP: ammo increased to 3400 to account for bombload, crew increased to 4, maxload decreased to 2500kg
 B-25J: ammo increased to 4400 to account for bombload
 P-47D Thunderbolt: fuel increased to 2000 to account for drop tank
 Spitfire IX: fuel increased to 858 (85+ 29 imp gallon), endurance down to 120 min
 Spitfire Vb: fuel increased to 858 (85+ 29 imp gallon), endurance down to 120 min

V1.05.45 – November 30, 2011

- **New Features and Rule Changes**

- 1) Formula Change – Reduced the impact of damage to an air base on the chance an aircraft will crash on landing. This will reduce losses to intercepting fighters that are having their air base attacked.
- 2) AI Change – In the later war period, the AI will now consider merging unready units

together to create a larger ready unit.

- **Bug Fixes**

- 1) Fixed a bug where incorrect rail capacity could be added back if the target city has no slots to move all selected factories.
- 2) Fixed a bug where the Soviet Polish army could be incorrectly activated prior to 1944.
- 3) Fixed a minor bug where reverse logic was being applied to the blast device parameter when bombing ground elements in an air base.
- 4) Fixed a bug where the number of HQ units involved in a battle could be displayed incorrectly.
- 5) Fixed a bug where the battle display could get corrupted when the number of units plus HQs in the battle was very high.
- 6) Fixed a bug where ground units when bombed could gain very high disruption which was causing a negative modifier to be used in some routines. One of the side effects of this was that multiple leaders could get killed in a single attack.
- 7) Fixed a bug where zero factory id slots with non-zero values were adding to the number of evacuating factories.
- 8) Fixed a display bug where when inputting a new aircraft cruise speed in the editor, the pop-up for input was incorrectly asking for mph instead of kmh.
- 9) Fixed a bug where some ground elements that were no longer called for after a TOE change were having extra elements sent to the pool (more than actually existed in the units that no longer needed them).

- **Data and Scenario Changes**

- 1) Changed the German 20mm Flak guns (Devices 121, 126, 243, & 244) AA ceiling to 6,500 feet.
- 2) Device 0120 AA Machine Gun removed (zeroed out); this device was a legacy device imported from another data base and never used in the game system.
- 3) Device 0128 128mm Flak40 AA Gun Range changed to 11,700 yards.
- 4) Device 0252 20mm Twin Flak38 AA Gun ROF changed to 180.

V1.05.42 – November 21, 2011

- **New Features and Rule Changes**

- 1) Rule Change - In order for an air unit to participate in a daylight airfield attack mission, it must have flown no more than half of its available miles.
- 2) Formula Change - Changed the way air leaders receive win/loss credits. Now only elements destroyed/damaged/disrupted by air are counted. Damaged men divided by 2, disrupted by 10. Element value is the same - AFV 10, Guns 5, Inf 1 (Vehicles 1).
- 3) Formula change - Reduced air transport op-losses.
- 4) Formula change - Tripled the losses during air recon missions.
- 5) AI Changes – Continued improvements for late war Soviet AI and Axis 1941 AI. Reduced Axis AI aggressiveness during the first winter. Improved Soviet AI use of rail

repair units.

- **Bug Fixes**

- 1) Fixed a bug preventing AA units from being shown in the city detail display.
- 2) Fixed a bug where Corps combat units could break down into static divisions, which couldn't be merged back together.
- 3) Fixed a bug where the SMP was not reduced proportionally to MP immediately after a battle.
- 4) Fixed a bug where after an amphibious attack a brigade could incorrectly take control of adjacent hexes.
- 5) Fixed a bug where after an amphibious landing, adjacent Depleted enemy units were not automatically displacing.
- 6) Fixed a typo - "tons of OIL are consumed by oil production" is now "tons of oil are consumed by fuel production".
- 7) Fixed a bug where the search strings in the H(elp) dialog can get reset when cycling through the various search types (radio buttons).
- 8) Fixed a bug where if the hex pop up delay and mouseover delays were different (hex<mouse) then the hex pop up would not remain on the screen.
- 9) Fixed a bug in the Army Group renaming functions that prevented German southern army groups from renaming to AG North Ukraine and AG South Ukraine.
- 10) Fixed a bug with rail repair units where the RRV was not being properly checked to see how many hexes could be repaired by the unit.
- 11) Fixed a bug causing aircraft ranges not to be properly calculated for aircraft with multiple drop tanks.

- **Data and Scenario Changes**

- 1) Corrected device (423 changed to 582) of Finnish 152mm Howitzer (ground element 165) from tank howitzer version to artillery howitzer version.
- 2) Changes made to the four Campaign scenarios:
 - * 1st SS Panzer Division now withdraws properly
 - * 9th and 10th SS Panzer Divisions now withdraw around 22 June 1944
 - * 1943 and 1944 Lend Lease factories are now properly set to "Soviet" control which should allow for the Lend Lease equipment to be produced
 - * 3rd Rum. Army now has proper leader in 1944 Campaign - Petre Dumitrescu.

V1.05.40 – November 10, 2011

- **New Features and Rule Changes**

- 1) Formula Change – Made adjustments to air combat during air transport missions, including increasing the intensity of escort vs. interceptor combat.
- 2) AI Change – More improvements in the AI including the defensive line building function.

- **Bug Fixes**

- 1) Fixed a bug where creation of Guards cavalry units were limited when they should not have been.
- 2) Fixed a bug where Heavy Mortar support requirement was set to 0.
- 3) Fixed incorrect information in the detailed battle report having to do with the number of disrupted and damaged elements.
- 4) Fixed a bug that allowed rail repair units to repair further than 4 hexes away from a valid supply source.
- 5) Fixed a bug where support units attached directly to a withdrawing combat unit were incorrectly getting withdrawn along with the combat unit.
- 6) Fixed a bug where the city picked by an HQ as its supply source could cause a problem if the city was cut off from supply. The HQ will now switch to a reachable destination.
- 7) Fixed the fort decay rate to match the table previously published in the 1.05.18 readme notes (decay rate was running a little higher than it should have been):

Extra decay percentage:

Fort	Weather		
Level	clear	snow	mud/blizzard
0	20	40	80
1	12	24	48
2	4	8	16

- **Data and Scenario Changes**

- 1) Stug-H42 (0029) renamed to StuH42 and frontal armor reduced to 82 from 90.
- 2) Nashorn (0038) accuracy rating reduced to 450 from 650 to correspond to Elephant and King Tiger equipped with same gun; Nashorn gun retains its 1,000 yard range advantage to reflect its higher elevation ability.
- 3) Hyphens removed from the names of the Stug vehicles (0028, 0030, 0031, 0140, 0170, 0286).
- 4) Added the Panzer IVg with L/48 gun (0221) as Panzer IVg2 with a production start date of 2/43. Panzer IVg now upgrades to Panzer IVg2 which in turn upgrades to Panzer IVh. Panzer IVg2 uses picture and symbol of Panzer IVg.
- 5) The Karl Siege Mortar Battery (OB 172) was renamed to Siege Mortar Battery.

V1.05.39 – November 2, 2011

- **New Features and Rule Changes**

- 1) Formula Change – Increased the randomness when a new scenario is loaded.
- 2) Formula Change – Reduced the possible MP reduction due to interdiction attacks.
- 3) AI Change – Additional improvements in both attacking AI and defensive line formation including fixing a bug in the computer's combat calculations.

- **Bug Fixes**

- 1) Fixed a bug where multiple leaders can get killed in one air attack.

- 2) Fixed a bug where newly build units can be assigned to Air HQs.
- 3) Fixed a bug where a leader could be appointed to command but not promoted in rank per the rules.
- 4) Fixed a bug with the display of the air HQ in combat reports.
- 5) Fixed a bug where accessing a support unit could bring up the HQ buildup window.
- 6) Fixed a bug so that now all HQs and airbases are always on refit (as stated in the manual).
- 7) Fixed a bug where 0 CV units could be shown in combat reports (and theoretically on the map) with very high combat values (just a display issue).
- 8) Fixed a bug where non-combat units were preventing fort decay (only combat units should prevent fort decay).

V1.05.37 – October 27, 2011

- **New Features and Rule Changes**

- 1) New Rule – The air doctrine settings for city/airfield/ground unit attack are now locked for the turn after any one of these missions is launched. These settings will be unlocked at the beginning each turn until the first one of these missions is flown.
- 2) Rule Change – For a city to be considered controlled for purposes of causing the surrender of an Axis Allied country, the Soviet player must be able to trace a supply path of no more than 30 MPs from that city to a rail (if the city is a capital city, the supply path may be up to 100 MPs).
- 3) Rule Change - Restricted support unit auto assignment for frozen HQs and frozen support units.
- 4) Rule Change - Units which are more than 20 MP away from their HQ but are within 1 hex of the HQ will receive supply from the HQ unit.
- 5) Rule change - Mountain units when in a mountain hex use the foot mountain movement costs to trace path to HQ or to the rail. The path to the rail for a Mountain unit located in mountain hex without rail is equal to the one which is smaller:
 - a) foot path to HQ + off rail value of the hex the HQ is located.
 - b) normal off rail value
- 6) Rule Change – The NDVD regiments on the Finnish border will no longer be disbanded while they are still frozen.
- 7) AI Change – Improvements to AI attacks against river/fort defenses, and also improvements to the early 1941 German AI.
- 8) Formula Change – Optimized the air command HQ selection routines.
- 9) Editor Change – The armaments/vehicles/manpower national pools may now be set on the production screen in the editor.
- 10) Editor Change – Now allows the setting (clearing) of the foreign equipment in national pools (ex. German planes in the Rumanian pool).

- **Bug Fixes**

- 1) Fixed a bug where partisans can attack inactive areas in limited map scenarios.
- 2) Fixed a bug causing air losses during transport missions to sometimes be reported incorrectly.

- 3) Fixed a bug that could cause Hungary to surrender whenever any Hungarian city was Soviet controlled.
- 4) Fixed a bug where the CR air group reserve function wasn't completely clearing the link between the air group moved and the air base.
- 5) Fixed a bug where the function which checks the ammo usage for the planes when calculating required support wasn't checking for the delay/NR flag.
- 6) Fixed a bug where HQ information was not displayed on the battle report.
- 7) Fixed a bug where the air command HQ may not have been displayed correctly.
- 8) Fixed a bug with incorrect movement path calculations.
- 9) Fixed a bug where Guards units can get duplicate names upon their conversion to Guards.
- 10) Fixed a bug causing the hex overlay to be misaligned when at the max zoom in level.
- 11) Fixed a bug where units could lose withdrawal information when using cut/copy/paste functions in the editor.

- **Data and Scenario Changes**

- 1) Fixed the 41 BM Howitzer Regiment (OB 196) to move BM from prefix to suffix.
- 2) Made a few leader changes.
- 3) Removed elite status from a few outstanding units of the Axis minor countries.
- 4) Adjusted the starting manpower and armament pools at scenario start to be more consistent
- 5) Removed static status from all units in the 43 and 44 Campaign. Replaced with a rolling unfreeze of the line.
- 6) Removed a few duplicate units.

V1.05.32 – October 6, 2011

- **New Features and Rule Changes**

- 1) Rule Change – Hungarian units may now enter Rumania once it surrenders, and Axis Rumanian units may enter Hungary once Hungary surrenders.
- 2) AI Change – Additional minor improvements in getting the AI to build better defensive lines in small map scenarios.
- 3) Formula Change - Optimized city supply delivery routines so they should be much more efficient with small stocks, and with fewer cases of missed requirements. Also optimized production supply requirement generation (fewer cases of missed requirements). Made it so that off map ports do not generate supply/fuel requirements.
- 4) Formula Change - Optimized the way limited production modifiers work. Now the roll will happen if the amount to be produced would be zero after applying all modifiers. The scenario production modifier is used to roll small production items.
- 5) Editor Change - Enabled the factory overlay display in edit mode.
- 6) Editor Change - Axis factories in Polish and Czech cities will use the German scenario production modifier.

- **Bug Fixes**

- 1) Fixed a bug where the AI assigned the 101st RHG HQ to STAVKA.
- 2) Fixed a bug where support units attached to a unit may disappear when the on map unit is merged into another unit.
- 3) Fixed a bug where the manpower pool could go negative when units with hiwis return support squads to the pool.
- 4) Fixed a bug where Polish and Czech "built" values were not zeroed resulting in double figures to get displayed when "All Areas" was selected.

- **Data and Scenario Changes**

- 1) Increased the build limit of the Panther A (Element 23) from 8 to 11 and the expansion rate from 1 to 3.
- 2) Added the 40mm Cannon Vickers S (Device 624).
- 3) Renamed the 42 Panzer Division (0035) to 42a Panzer Division and changed its service dates from 4/42 to 1/43 to 4/42 to 8/42. Added the 42b Panzer Division (0498) with service dates of from 9/42 to 1/43, upgrading the Panzer IIIj L/60, Panzer IVf and Panzer IVf2 to Panzer IIIIm, Panzer IIIIn and Panzer IVg respectively.
- 4) Reduced the Build Limit of Hetzer (0039) from 48 to 24.

V1.05.30 – October 3, 2011

- **New Features and Rule Changes**

- 1) New Rule - Ground elements that have a build cost of 9999 will no longer add armaments to the pool when scrapped.
- 2) AI Change – Minor improvements in getting the AI to build better defensive lines in small map scenarios.

- **Bug Fixes**

- 1) Fixed a bug with the city supply fuel change in 1.05.28 that was causing some units to not get fuel and/or supply.
- 2) Fixed a bug where port city supply/fuel requirements could be reset incorrectly.
- 3) Fixed a bug where impassable river hex sides were not being treated as frozen at ice level 8.
- 4) Fixed a bug where major river freezes weren't working as they should have been with the recent rule changes.
- 5) Fixed a bug where NBAD air bases were not counting correctly when determining whether to create additional Soviet airbases.

V1.05.28 – September 29, 2011

- **New Features and Rule Changes**

- 1) New Rule – Poorly supplied units can lose morale. If at the end of the logistics phase a unit has less than 20% of needed supplies, it has a chance of losing 1 morale point. If the value is less than 10% there is a chance of losing 2 morale points.
- 2) New Rule – Supplies and fuel will now be moved to cities closer to HQ's before being sent to the HQ's and units.
- 3) New Rule – When Rumania surrenders, hexes that convert to Soviet control will only have their rails damaged if they are adjacent to a German unit.
- 4) New Rule – Ground elements that have a build cost of 9999 will never be produced (this was always intended but was never added to the code until now).
- 5) Rule Change – Reduced front line attrition by 30-50%. In addition, Static units will now only suffer half of the normal front line attrition.
- 6) Rule Change – Partisan attacks are now allowed in hexes adjacent to combat units).
- 7) Rule Change – Fighter sweeps will now sometimes get attack bonuses when attacking enemy CAP.
- 8) Formula Change – Removed change #42 in 1.05.18 version which had increased the impact of pilot fatigue.
- 9) Formula change – Increased the MP/SMP loss due to interdiction attacks.
- 10) Editor Change – Completely reworked the withdrawal system. Old games should be unaffected. Withdrawal lists are obsolete. Withdrawals are now set by setting withdraw turn for the individual units. Divided (sub units) should be set to the same withdraw turn automatically. Soviet units can now be set to be withdrawn. Soviet units that are withdrawing may not be used to “build-up” to another unit. Soviet Corps set to withdraw may not be broken down. Added the ability to filter all withdrawing units in the CR screen.
- 11) Editor Change – Removed the TacBomber and LevelBomber experience penalty when setting pilot quality or rebuilding air units.
- 12) Improved AI – Improved the German AI garrisoning of Budapest in the later stages of the war.

- **Bug Fixes**

- 1) Fixed a bug preventing fort levels from being built over level 2 when in a hex with a Fort unit.
- 2) Fixed a naming bug when creating new Soviet Air Bases.
- 3) Fixed a bug that was causing production not to be working properly in off rail cities. Also, made a change to prevent off rail cities from starving.
- 4) Fixed a bug where Air Command HQ's were used incorrectly in some calculations.
- 5) Fixed a bug where the Air HQ information in the battle reports was not being reported correctly.
- 6) Fixed a bug where fort values were not always reset upon capture.

- **Data and Scenario Changes**

- 1) Added some new German unit OBs.
- 2) Reduced starting German Armaments pool to 100k (from 500k) to offset the impact of the change with ground elements that have a cost of 9999.

V1.05.23 – September 15, 2011

- **New Features and Rule Changes**

- 1) Interface Change – Restricted mouse clicking on the jump map during the AI turn resolution.
- 2) Editor Change - Added ability to lock scenario data.
- 3) Editor Change - Added ability to update particular generic data inside scenario data.
- 4) Editor Change - Delayed units can be displayed on the CR screen in the editor.
- 5) Editor Change - Added tools to display and setup sub-unit links in the editor.
- 6) Editor Change – Changed Adjust unit function name to Set Motorized Flag. Now it only sets the motorization flag based on the formation type.
- 7) Editor Change - Removed editor functions "SET ALL UNIT MPs" and "RESUPPLY ALL UNITS". These should be done in the CR screen.
- 8) Editor Change - Added method to delete victory city from victory points screen in editor.

- **Bug Fixes**

- 1) Fixed a bug where divided units can't be merged if the parent unit was set with a different order in the editor.
- 2) Fixed a bug where ownership of hexes could be impacted by improper tracing over water hexes.
- 3) Fixed a bug where support units attached to construction HQ (FBD/NKPS) were incorrectly treated by some routines as off map (inactive) units.
- 4) Fixed a bug where FBD/NKPS HQ units were being treated as Support units.
- 5) Fixed a bug with automatic night airstrikes where all possible air units were being assigned automatically to any night airstrike.
- 6) Fixed a bug on the CR screen involving air group filters.
- 7) Fixed a bug where the AI was moving air groups in/out of delayed (off map) air bases.
- 8) Fixed a bug when building/assigning new support units where units were being built when not intended.
- 9) Fixed a bug that was limiting defensive ground support missions and another causing too many aircraft to be assigned to ground support missions.

- **Data and Scenario Changes**

OB and Leader File Changes

- 1) Added 42 German Cavalry Regiment (410) and 42 Cossack Regiment (449). Note that the German Cavalry Regiment is how these units were ultimately equipped; they would not have been that well equipped initially.
- 2) Added Kurt Waeger and Erich von dem Bach-Zelewski to the German leader list.

Scenario Changes

- 1) Duplicate 628th Karl Siege Battalion removed
- 2) Removed XXXIV Corps' withdrawal date from 1941 Campaign

- 3) Removed Army Group E from play
- 4) 27th Panzer Division is reduced to the strength of kampfguppe upon arrival
- 5) Some minor leader changes. HQs will only have leaders if the HQ arrives within six months of the scenario start. This is to prevent leaders from being pulled out of the available leader pool.
- 6) Added Soviet fortified regions in 1941 to ports with high fortification levels.
- 7) Converted German support and labor squads into Hiwi squads to all scenarios after 1941 at the rate of 25% (Support) and 40% (labor)
- 8) Morale adjustments across all scenarios to keep them in line with the adjusted morale rule changes
- 9) 1942 Campaign morale changes. Soviet regular units dropped about 5 morale points to an average of 50 while Guards units were dropped about 10-20 points to an average of 50. German units unchanged.
- 10) 1943 Morale changes. Decreased German average morale to 70 (was 75). Decreased Average Soviet morale to 50 (was 55). Decreased Average Guards Soviet morale to 55 (was 60). Soviet and German motorized units (and motorized Guards) stayed about the same.
- 11) 1944 Morale Changes. German average morale increased to 67 (was 60). Increased German motorized morale to 77 (was 60). Soviet morale reduced to 60 (was 65). Soviet motorized morale reduced to 70 (was 75). Soviet Guards morale reduced to 65 (was 70).
- 12) 9th Army and 4th Panzer Army supplies increased up to 150% in 1943 Campaign
- 13) Adjusted the II and III Luftwaffe Field Corps withdrawal dates
- 14) Ran Pavel's Fort fix
- 15) Various minor unit adjustments for all scenarios (proper OBs for unit arrivals)
- 16) Additional units added to German OOB.
 - 600th Russian Infantry Division
 - 650th Russian Infantry Division
 - North Cavalry Brigade
 - Middle Cavalry Brigade
 - 1st Cossack Cavalry Division
 - 287th Arab Motorized Brigade
 - Steinbauer Georgian Infantry Regiment
 - Freikorps Denmark Infantry Regiment
 - French Volunteer Infantry Regiment
 - Netherlands SS Infantry Regiment
- 17) Implemented Jyri's massive works into the 1943 Campaign
- 18) Gen. Waegner now commands XXVII Corps in all 41 Scenarios
- 19) SS Gen. Bach-Zelewski now commands the X SS Corps

V1.05.18 – September 6, 2011

- **New Features and Rule Changes**

- 1) Default Change – Changed some of the air doctrine default values.
- 2) New Rule - Air groups in the national reserve may now be disbanded.
- 3) New Rule - Unit counters no longer show SS/Elite/LW/Guards status (coloring) if their

- detection level is lower than 5.
- 4) New Rule - Air recon will not increase an enemy air base's detection level above 5.
 - 5) New Rule - Static units no longer lose their static status when they are retreated or routed.
 - 6) New Rule - Units may not enter static mode in 1941.
 - 7) New Rule – Ports are now unusable for naval transport on the turn they are captured.
 - 8) New Rule – Admin and Initiative checks are twice as hard to make for isolated units.
 - 9) New Rule –Soviet aircraft reliability decreases in 1942-1943 (the reliability rating is treated as higher than shown due to the quality drop resulting from factory evacuations).
 - 10) New Rule – The reliability of old (out of production) aircraft decreased (reliability rating is treated as higher than shown).
 - 11) New Rule – NKVD Border Regiments never get replacements.
 - 12) New Rule – NKVD Border Regiments check for disbanding each friendly logistics phase starting in July 1941. The chance the unit will be disbanded is as follows:
 - July 1941 – 100% - %TOE of the unit
 - August 1941 – 80%
 - September 1941 and later – 95%
 - 13) New Rule – Airhead supply. Isolated air units may be changed to beach/air supply status (same as old beachhead status) under certain conditions. If a player flies in supplies to an air base in a pocket, the supplies will immediately be distributed amongst all of the isolated units that can trace to the air base. If the amount received during the turn at some point equals 5% or more of the total needs of the unit, then the unit will be immediately set to beach/air supply status (it will display in orange instead of red when toggle unsupplied units is toggled on). The total needs are the supply+fuel+ammo needs listed for the unit. So a division with total needs of 1100 tons of s/f/a have at least 55 tons flown in and delivered to the unit, it will have its supply status changed from isolated to beach/air supply status. This will last until the next friendly logistics phase. Units with beach/air supply will always pay penalties for being short of ammo, so there is a disadvantage in combat to be in beach/air supply (but it's better than being isolated where there are additional penalties). The air base must be in a clear or light woods hex. When in Beach/Air supply, the unit detail screen will show the information: Air Head Supply 400 / 20 (5%) which indicates the total amount of supplies+fuel+ammo the unit needs, the amount it has received via air resupply, and the total percentage of needs that has been met. When in Air Transport mode, the player can left click on an air base and then bring up that unit's detail screen to see a full list of all isolated unit that can trace to the air base, the total need of each unit, and the amount of supplies that have been sent to the unit. On the right side of that screen is a line that reads Air Supply Range: 10. By clicking on this line, the player may enter a different number from 1 to 10. Only units within the state range in hexes of the air base will be sent supplies that are airlifted to this air base. Air base units may be moved before supplies are delivered to it, but once it receives supplies for isolated units, it will not be able to move and then receive additional supplies for isolated units. Units that are merged or divided track the amount of air head supplies received, so they can lose their supplied status if no longer over the 5% threshold. The Soviet player may not fly airhead supply on the first turn of any scenario starting in June 1941.
 - 14) New Rule – Hiwis (Hilfswilliger - "auxiliary volunteers") – Rules have been added to account for the soldiers and civilians that served as support personnel for German units during WWII (known as Hiwis).

- α) Hiwis are generated from captured men. 8% of captured manpower will go into a Hiwi pool. Also, captured manpower centers in the Soviet Union produce 10 men for each captured point (theater production limits and damage to manpower centers apply).
 - β) Hiwis can be added to German unit's Support and Labor Squads starting from 1942.
 - χ) Hiwis can't be added to High Command HQs.
 - δ) Hiwis can't be more than 70% of current labor ground element TOE, 30% of current support element TOE, or 10% of current support element TOE of an SS Elite unit TOE.
 - ε) If the parent element is targeted and is destroyed there is a maximum 60% chance that a Hiwis squad will be destroyed instead (the less percentage of the element made up with Hiwis, the smaller the chance that a Hiwi squad will be destroyed).
 - φ) Hiwis elements provide the same amount of support and engineer values as a normal support squad.
 - γ) Upon loading a save from an earlier version of the game, when the first German logistics phase executes with the new version, the game will generate Hiwis based on the existing captured men and manpower centers (a onetime adjustment).
 - η) Interface changes - The number of Hiwis in a unit is show on the unit's detailed information display. The number of Hiwi elements is shown in parenthesis next to the ground element type. So the entry Support (Hiwi 2) indicates that 2 of the support squads in the unit are Hiwi squads). The production screen has an entry for Hiwis, showing how many men are in the Hiwi pool. Hiwis are included in the total German manpower shown on the Order of Battle screen.
 - ι) Hiwi's can be set in the editor by using the editor functions on the CR screen. It allows the scenario designer to substitute Hiwi's for normal support and labor elements. The Hiwi pool can also be set on the production screen.
- 15) New Rule – Added a chance that some fighters will be allocated to fly fighter sweeps along with any airstrikes that are ordered. They will fly as part of the original airstrike and combat with this fighter sweep will be resolved with the original airstrike (i.e. it will seem like one mission is being flown, but in reality there are two distinct actions taking place, the bombing raid and the fighter sweep). The higher the escort setting, the greater the chance that a fighter sweep will be flown.
- 16) New Rule – Added a chance that aircraft can be damaged or destroyed when an air group is transferred from one base to another, or whenever an air base moves (aircraft routinely flew to their new air base location, and could suffer operational losses during the flights).
- 17) New Rule - Damaged aircraft which were not repaired during the logistics phase can be written off (destroyed). Older aircraft with low durability and low reliability have a greater chance of being written off.
- 18) Changes to Production Rules
- a. Changed Soviet Manpower multiplier in 1942 to 40 (from 45).
 - b. Changed Soviet Armaments multipliers in 1942-1945 to 130 (from 200).
 - c. Items produced in Poland and Czech cities now added to the "built" German stats.
- 19) Changes to Morale Rules
- a. The following units receive bonuses to their National Morale: All Cavalry, Mountain Airborne and Air Landing units, and Axis Allied motorized units +5, German

Motorized Units +10, Soviet Motorized Units (from Sept 1942-August 1943) +5,
Soviet Motorized Units (Sept 1943-end of war) +10.

- b. Soviet National Morale has been changed to 50 in June 1941. One point is subtracted each month after this in 1941 (so it is 44 in Dec 41). In 1942 it is set to 40, with one point being added each month starting in September 1942 (so 44 in Dec 42). This continues in 1943 and 1944 until the Soviet National Morale reaches its maximum of 60 in April 1944.
- c. Build morale now equals national morale in all cases (there is no separate build morale table anymore).
- d. Changed rule so that the morale gain from refit when under 50 morale is only gained when the unit in refit is at least 10 hexes from a supplied enemy unit (similar to the current gain if less than morale 50 and 10 or more hexes from enemy unit).
- e. If an element's experience is less than half of the unit's morale, then the automatic +1 gain in experience each turn becomes +3.
- f. Shock Armies provide their +5 bonus for non-guards units which don't already have a specialty bonus. Guards Armies provide their +5 bonus for Guards units which don't already have a specialty bonus.

20) Changes to Fortification Rules

- a. Requirement to build up to Fort Level 5 - Only will be built in port hexes that have a fort unit. Once built, the fort unit is not needed to keep the level 4 fort. Not possible in a swamp hex.
- b. Requirement to build up to Fort Level 4 - Must have a fort unit in the hex. Once built, the fort unit is not needed to keep the level 4 fort. Not possible in swamp hex.
- c. Requirement to build up to Fort Level 3 - Must be adjacent to an enemy hex, be an urban or city hex, or be in or adjacent to a fort unit. Once the level 3 is reached, the condition does not have to continue to be met to keep the level 3 fort.
- d. Fort levels that have reached their maximum fort level for the hex may continue to build up to 10% towards the next fort level.
- e. Building forts in mud now uses a .25 modifier (instead of .33).
- f. Level 4 and 5 forts do not decay.
- g. There is no fort decay on turn 1 of any scenario.
- h. Doubled the rate of fort decay.
- i. Increased decay rate of low level forts, based on the weather.

Extra decay percentage:

Fort Level	Weather		
	clear	snow	mud/blizzard
0	20	40	80
1	12	14	48
2	4	8	16

- g. Added supply cost for fort construction as follows:
fort 0->1 1 tons per fort point (no cost for isolated units, construction rate is halved)
fort 1->2 2 tons per fort point (no cost for isolated units, construction rate is halved)
fort 2->3 20 tons per fort points
fort 3->4 200 tons per fort points
fort 4->5 2000 tons per fort points

*note each fort point represents 2% toward the next fort level

21) Changes to Naval Movement Rules

- a. Amphibious landings are not allowed west of x coordinate 76 (Rumania) until 1944.
 - b. Added Naval/Amphibious movement capacity limits as follows:
 - Axis
 - Lake Ladoga – 3000
 - Baltic Sea – 10000
 - Black Sea – 4000
 - Sea of Azov – 1000
 - Soviet
 - Lake Ladoga – 4000
 - Baltic Sea – 8000 (decreases by 1000 each year)
 - Black Sea – 10000 (decreases by 1500 each year)
 - Sea of Azov – 4000 (decreases by 500 each year)
 - Caspian Sea – 5000
 - Black Sea Amphibious Movement – 2500 (decreases by 100 each year)
 - Sea of Azov Amphibious Movement – 1000 (decreases by 100 each year)
 - c. Amphibious movement cost per hex is x4 before 1943 and x3 from 1943-45 (reduces the range of an amphibious assault).
 - d. Set shading for valid naval destinations during naval movement. This doesn't mean the current unit can reach the hex, just that it is a valid hex for the appropriate type of naval movement. Yellow shading indicates an enemy hex; green shading indicates a friendly hex.
 - e. Decreased "retreat losses" caused by the transport sunk event during interdiction attacks on naval/amphibiously moving units.
- 22) Rule Change – Ice levels no longer go up by 4 during a blizzard in all areas. The amount of increase is dependent on the weather zone as follows:
- Europe Zone +1
 - South Soviet Zone +2
 - Central Soviet Zone +3
 - North Soviet Zone +4
- 23) Rule Change – Major rivers are not considered frozen until the ice level is at least 8 (used to be 5). At ice levels 5-7, the extra cost due to icing is 8 when moving into an EZOC, and 4 when not moving into an EZOC.
- 24) Rule Change – Lowered the disabled return rate for the Soviets to ½ percent (from 1%).
- 25) Rule Change – Entrained units may not move via naval or amphibious movement.
- 26) Rule Change – Changed the formula that determines when a unit is unready. Now, Morale+TOE must be less than 90 for a unit to be unready (used to be less than 100).
- 27) Rule Change - Removed extra training flights if the aircraft in play was reaching a high value.
- 28) Rule Change - Made modifications to the routine which frees the slots for new aircraft to be built. Now it will first disband old airframes (inactive) in reserve and then active aircraft. If an air group reaches 0 aircraft, it will disband the air group.
- 29) Rule Change – The Soviet attack doctrine discussed in section 15.8 of the manual now only applies from June 1941 to February 1942 (inclusive).
- 30) Rule change – Creating a Soviet Fortified Regions now costs 8 APs between July 1941 and October 1941 (inclusive). It is still 16 APs in June 1941.
- 31) Rule Change – Further decreased the amount of Soviet CAP that flies on June 22, 1941.
- 32) Rule Change – Germany will export 1000 armaments points in a turn to each Axis nation

- instead of 10000 points.
- 33) Interface Change – The production filter ON now shows active elements that are built by the “on demand” production system (so not just AFVs and aircraft).
 - 34) New Feature – Added a disband function on the CR air group tab.
 - 35) New Interface – Added additional data to the battle sites report. When a battle site is clicked on, the player may click on Show Details to see additional information about the battle. Also added the names of the HQ commanding any aircraft in a battle.
 - 36) New Message – Added logistics event messages for the automatic disbanding of Soviet Corps HQ’s and NKVD Regiments.
 - 37) Formula Change – Units in beachhead/Air head supply will not suffer more than a 33% reduction in CV due to supply shortages (used to be it could be up to a 75% reduction in CV).
 - 38) Formula Change – Adjusted strike creation formulas so that human created airstrikes in which specific air groups are chosen for the mission will not as a rule fly less aircraft than computer created airstrikes.
 - 39) Formula Change - Increased effectiveness of flak, especially when defending airbases and cities/ports.
 - 40) Formula Change – Made it less likely that air strikes will be formed with over 100 fighters or over 100 bombers.
 - 41) Formula change – Increased the amount of CAP that flies in defense of Airfield or City attacks. Also, greatly increased the chance that air groups not in the target hex will fly CAP (in the past the chance was very low).
 - 42) Formula change – Increased the impact of pilot fatigue.
 - 43) Formula Change – The altitude that airstrikes are assumed to be flying at has been changed to better reflect likely altitudes for different types of airstrikes. There is also more variety at which the airstrikes will fly.
 - 44) Formula Change - Modified the replacement of the air groups. Replacements first go to the newest airframes. Once the aircraft count exceeds 15000, the replacements for air groups with old airframes decreases as the total plane count rises.
 - 45) Formula Change – When calculating supply/fuel/ammo needs, all units will have a minimum need of 1 for each of these items.
 - 46) Editor Change – The set fort level function in the editor will create forts with 10% construction towards the next fort level.

- **Bug Fixes**

- 1) Fixed a bug causing escorts for air transport missions to too often not fly during blizzard weather.
- 2) Fixed a bug where partisan units could construct forts for the Axis.
- 3) Fixed a bug where brigades landing amphibiously were improperly taking control of adjacent hexes.
- 4) Fixed a bug where battle sites were active if hidden behind the battle report window.
- 5) Fixed a bug where depleted units can be located next to an enemy unit at the completion of the logistics phase.
- 6) Fixed a bug where Motorized units were being shown as available to move amphibiously.
- 7) Fixed a bug with Guards promotion of Soviet Armies.

- 8) Fixed a display bug that occurs when exiting the city information window.
- 9) Fixed a bug where the production filter didn't correctly show active artillery equipment.
- 10) Fixed a bug where ground elements and aircraft were being exported to Axis Allied nations that had surrendered.

- **Data and Scenario Changes**

- 1) Fixed Unit ID 333 - Fin. Commando Battalion used Hungarian Support Squads
- 2) Changed the ending date for the SS Motorized Brigade (OB 283) from 9/43 to 9/44 to correct typo.
- 3) Corrected data for 40mm 41M L/51 Gun.
- 4) Re-classified the SdKfz-221 Armored Car as a Light Armored Car.

V1.04.40 – September 5, 2011

- **Bug Fixes**

- 1) Fixed a bug that could corrupt scenario data.

V1.04.39 – August 12, 2011

- **Bug Fixes**

- 1) Fixed a bug where "Virtual" division units in Rifle or Cavalry Corps can get duplicated numbers when promoted to Guards.
- 2) Fixed a bug where some Soviet leader can't get assigned to Army HQ due to low ratings.
- 3) Improved the handling of server error messages during Multiplayer games.
- 4) Fixed a bug that allowed a player to exploit the undo key when moving soviet factories.
- 5) Fixed a bug that did not allow HQ build up to take place when the HQ was exactly 20MP from the railhead.
- 6) When building new Soviet units in 1944-45, all available unit types do not fit into "Pick Unit Type" screen. Fixed this by adding a scroll list.
- 7) Fixed an AI crash bug in limited map scenarios.
- 8) Eliminated some poorly executed Axis AI planned withdrawals in 1943.

- **Data and Scenario Changes**

OB, Device and AC File Changes

- 1) In Device file added Device 622 – 210mm M35 Howitzer;
- 2) In Ground Element file added Element 208 – 210mm Howitzer; Element 211 – CV33 Flame Tank; Element 212 – L6/40 Flame Tank;
- 3) In TOE(OB) File added OB 483 – 41 Ital. Machine Gun Battalion; OB 484 – 41b Ital. Heavy Howitzer Battalion (renamed 41 Ital. Heavy Howitzer Battalion to 41a); OB 485 – 41 Ital.

Flame Tank Company.

- 4) New TOEs with Panthers fit in.
- 5) Changed the Hungarian Hetzer (0274) from a tank destroyer to an assault gun in the hope that the Hungarians will actually use it. Fixed missing Symbols for the Hungarian Hetzer, the Slovakian Marder III (0336), and the Soviet 107mm mortar (0729).
- 6) Removed the upgrade path of the MG34 to the MG42 in the hope that this change might relieve somewhat the machine gun usage problem.
- 7) Updated Max imported values for some missing axis minor aircraft. Note: I now remember that these values were probably never entered since they were added later when I was working on the 1944 Campaign. Some of the Rumanian aircraft figures did not include German aircraft on loan so some of these figures have been bumped up. Some of the Hungarian numbers were adjusted as well.
- 8) Fixed a couple of missing links between the imported aircraft and its original model

Scenario Changes

- 1) Rebuilt some Rumanian airbases so they use Rumanian AA guns instead of German ones
- 2) Rebuilt Rumanian MG Battalions so that they have Rumanian 81mm Mortars instead of German ones.
- 3) Rebuilt Finnish Army HQs to fix wrong nationality in their support squads.
- 4) Removed Italian Autotransportable Corps as there is no evidence to show it existed in the Balkans in the summer of 1941. 133rd Littorio Armored Division reassigned to 2nd Italian Army.
- 5) 133rd Italian Littorio Armored Division now withdraws from the Balkans on 15 November 1941 to prepare for its commitment to North Africa.
- 6) Removed Italian 26th 'Assietta' Infantry Division as it withdraws in July 1941 to Sicily.
- 7) Removed Italian 20th 'Friuli' Infantry Division as the division never occupied Yugoslavia and was used to prepare for the assault on Malta.
- 8) Removed Italian 24th 'Pinerolo' Infantry Division as the division was sent to garrison Larissa, Greece in May 1941.
- 9) Italian 2nd 'Ferro' Celere Division set to withdraw on 15 May 1942 as it is reduced to a cadre only as its units are sent to North Africa.
- 10) Removed Italian 131st 'Centauro' Armored Division as this division was reduced to regimental strength by June 1941. Its remaining elements were sent piecemeal to North Africa.
- 11) Revised Italian Expeditionary Corps (CSIR).
 - a. Added CIV Italian MG Battalion (using new Italian OB)
 - b. Added II Italian Anti-Tank Battalion
 - c. Added Italian 65th CCNN Legion
 - d. Renamed 'V Ital. Construction Battalion' to 'IV Ital. Construction Battalion'
 - e. Renamed 'CSIR Ital. Assault Engineer Battalion' to 'XV Ital. Assault Engineer Battalion'
 - f. Renamed I-III/CSIR Ital. Medium Howitzer Battalions to the LX-LXII Ital. Medium Howitzer Battalion
 - g. Removed IV/CSIR Heavy Howitzer Battalion
 - h. Renamed 43rd and 45th Ital. AA Batteries to 95th and 97th Ital. AA Batteries.
 - i. Added IV and XIX Ital. AA Gun Battalions
 - j. Motorized the MG, AT, AA, and Art Battalions
- 12) M.C.A. Ital. Ski Battalion now arrives as a reinforcement for the Expeditionary Ital. Corps on

19 Feb 1942

- 13) 8th Italian Army (ARMIR) Changes
 - a. Arrives under Army Group South instead of Ital. Southeast Army Group
 - b. Added Croatian Legion (uses CCNN Legion OB)
 - c. Added CIX Ital. Machine Gun Battalion
 - d. Motorized the artillery and Anti-Air assets
 - e. 'LXXII Ital. Heavy Howitzer Battalion' renamed to 'L Ital. Heavy Howitzer Battalion'
 - f. '21st Ital. Heavy Howitzer Battalion' renamed to 'XXXII Ital. Heavy Howitzer Battalion'
 - g. '22nd Ital. Heavy Howitzer Battalion' renamed to 'LXXIII Ital. Heavy Howitzer Battalion' (uses new Italian OB)
 - h. Removed 61st Italian Heavy Howitzer Battalion
 - i. Added XXXVII Ital. AA Gun Battalion
 - j. Added I-III/3rd Ital. Light Howitzer Battalions
- 14) II Italian Corps Changes
 - a. Added II Italian Machine Gun Battalion
 - b. Added CII Ital. Machine Gun Battalion
 - c. Added XXXII Ital. Anti-Tank Battalion
 - d. Renamed 'II Ital. Construction Battalion' to 'XV Ital. Construction Battalion'
 - e. Added 4th and 5th Italian Flamethrower Tank Companies (uses new Italian OB)
 - f. Renamed the I-IV/2nd Ital. Medium Howitzer Battalions to the III Medium Howitzer, XXIII Medium Howitzer, CIII Heavy Howitzer, and CXXIII Battalions. Motorized these units.
 - g. Renamed the 35th and 37th Ital. AA Batteries to the 52nd and 54th Ital. AA Batteries
- 15) XXXV Italian Corps Changes
 - a. Renamed 'IV/CSIR Ital. Heavy Howitzer Battalion' to 'CXXIV Ital. Heavy Howitzer Battalion' to arrive on 18 June 1942.
 - b. Revised 1942 scenarios to incorporate the CSIR changes in 1941
- 16) Alpini Italian Corps Changes
 - a. Motorized the four howitzer battalions and two AA Light Batteries
- 17) Added 3rd VVS OAG Airbase at Sevastopol with 33 aircraft
- 18) Raised German pilot quality to 85 in 1942
- 19) 1942 Soviet Air Force is adjusted. A few PVO Fighter Divisions have been pulled from the Air Armies and placed in regional air commands where they belong. Number and types of aircraft have been adjusted as follows: VVS (Air Force) strength has been cut by about 1,200 aircraft. RGVK Reserves and PVO aircraft have increased to result in a net decrease in Soviet air strength of 944 aircraft. Source of new VVS strength can be found at http://ilpilot.narod.ru/vvs_tsifra/gl_3/3.106.html
- 20) A handful of leader changes
- 21) Corrected the initial factory size for the Panther D in the 1943 Scenarios.
- 22) Almost all Axis minor squadrons now use the 'Staffel' organization. Hungarian Air Groups now use the "Squadron" organization instead of "Group". Finland uses a variety of air organizations.

V1.04.36 – July 6, 2011

- **Bug Fixes**

- 1) Fixed a bug causing low morale/low experience air groups to potentially fly more aircraft in a mission instead of having high morale/high experience air groups have that chance.
- 2) Fixed a bug where fort levels in swamp hexes were getting higher than 3.

V1.04.34 – June 27, 2011

- **Bug Fixes**

- 1) Fixed a bug with Soviet airbase name duplication when they converted to Guards.
- 2) Fixed a display bug in the Logistics Phase Event Log where it was incorrectly showing 300 armaments being produced per factory instead of 250.
- 3) Fixed a bug where Soviet air units were not receiving replacements once their air force had grown very large (over 25,000 aircraft).

V1.04.30 – June 15, 2011

- **New Features and Rule Changes**

- 1) Revised Manual – With this version, you will find a new pdf manual [US Letter] which has corrections and revisions. We hope to periodically update this manual and incorporate new rules and rule changes into the manual. This version has some manual corrections, and a full list of the new features and rule changes listed at the end of the manual through version 1.04.29. The plan is to incorporate these changes into the text of the manual and remove them from the list as this happens. It will take us some time to catch up with all the changes made since release, but our goal is to catch up. Thanks to Leonardo Rogic (Apollo11) for his efforts to produce this living manual.

- **Bug Fixes**

- 1) Editor Fix - Fixed a bug that was preventing some production items from being shown in the ground element editor list (Manpower, Armaments, etc.)

V1.04.29 – June 13, 2011

- **New Features and Rule Changes**

- 1) Rule Change – Soviet Airborne HQ may not become Guards.
- 2) Rule Change – Element swapping is now restricted when missing entries are added.
- 3) Rule Change – Ground element duplication is restricted during element swap outs for non-AFV ground elements.
- 4) Revised Manual – More revisions were made to the US Letter manual.

- **Bug Fixes**

- 1) Fixed a bug where the hex shading and move path were not shown correctly during

amphibious mode when FOW was on.

- 2) Fixed a bug with the HQ buildup that was allowing HQ buildups at greater than 20 MPs from a railhead.
- 3) Fixed a bug where strategic movement was possible through heavily damaged ports.
- 4) Fixed a bug where port values were not set before unit supply.
- 5) Editor – Fixed a bug with the Find function in the OB screen.

- **Data and Scenario Changes**

- 1) Set the Jagdpanther (element 42) build limit to 3 and the expansion rate to 1.
- 2) Added 41 Italian Anti-tank Battalion (0296) in TOE(OB) file.

V1.04.28 – June 8, 2011

- **New Features and Rule Changes**

- 1) Revised Manual – With this version, you will find a new pdf manual (US Letter) which has corrections and revisions. We hope to periodically update this manual and incorporate new rules and rule changes into the manual. This version has some manual corrections, and a full list of the new features and rule changes listed at the end of the manual through version 1.04.24. The plan is to incorporate these changes into the text of the manual and remove them from the list as this happens. It will take us some time to catch up with all the changes made since release, but our goal is to catch up. Thanks to Leonardo Rogic (Apollo11) for his efforts to produce this living manual.
- 2) Hotkey Change – The command link feature added in version 1.04.24 that previously used the ` key has been changed so that it uses the Shift-Z key.
- 3) New Rule– Added a fire penalty in combat when there is a large number of attacking units. The force value of the attacking side is calculated using the following values for each non-support, non-artillery division unit attacking:
Corps 15
Division 9
Brigade 5 (unless the brigade has less than 2000 men in which case it is 3)
Regiment 3
Once the force value exceeds 28 there is a chance that elements will not get to fire during combat. Artillery elements are much less effected (only impacted at closer ranges in combat), and the chance that elements will not fire increases as the force value increases. In general though, adding more units should result in more elements firing, but a lower percentage of the total elements will generally be firing as the force increases. The CV values of the attacking units are not changed by this rule.
- 4) Rule Change (section 7.5.4.1) – Static units may no longer use rail, naval or amphibious movement.
- 5) Rule Change (Section 21.5.2) – Changed per turn Lend Lease vehicle imports to the following:
1941 -- 300
1942 -- 800
1943 -- 4500

1944 -- 6000

1945 -- 1500

- 6) Rule Change - Reserve units no longer receive benefits during fire combat from the fort/terrain levels in the defending hex unless the battle hex is urban.
- 7) Rule Change – Restricted Guards conversion of Air HQs.
- 8) Formula Change – Greatly decreased anti-armor effect of flamethrower devices.
- 9) Formula Change – Increased the range in combat when AFV speed rating is used in the combat formulas.
- 10) Formula Change – Increased AFV breakdown rate when firing in combat.
- 11) Editor Change - Changed appearance of CR functions on the unit tab.
- 12) Editor Change - Added ability to set MP/SMP/DL/MAX TOE in editor(CR) for the selected units.
- 13) Editor Change - Added ability to set MP/SMP for a single unit in the editor.

- **Bug Fixes**

- 1) Fixed a bug where HQ buildups were limited to 19MPs from the rail instead of 20 MPs as it should be.
- 2) Fixed a bug where AFV ground element in close range were not using their speed rating correctly - very high AFV losses at close ranges.
- 3) Fixed a bug where Mech infantry and engineers ground types can "breakdown" in combat as if they were an AFV.
- 4) Fixed a bug where Mech infantry and engineers ground types can become damaged/destroyed by HE anti-armor fire.
- 5) Fixed bugs with weather where blizzard was happening in areas that shouldn't have blizzard.
- 6) Fixed a bug that when Rumanians flipped sides, German units with higher CV values could get disbanded.
- 7) Fixed a bug where some Logistics Phase messages were getting skipped.
- 8) Fixed a bug where supplies could be traced from Baku (or any other supply source) even if it was captured.
- 9) Fixed a bug in the unit size function that was counting divided Soviet corps units as the whole corps (equal to 15 points).
- 10) Fixed a bug causing the game to crash when using the shift-Y key to reactivate static units.

- **Data and Scenario Changes**

- 1) Changed the 81mm mortar ground element in the Rumanian Machine Gun Battalion (OB274) from German (77) to Rumanian (248).
- 2) Set the Flammpanzer III (element 12) build limit to 2.
- 3) Set the Panther D (element 22) build limit to 5.
- 4) In the Devices file, the K4 gun stats were copied to slot 568 and the original K4 gun (434) was converted to a K3 gun with appropriate stats;
- 5) In the Ground Element file, the Theodore 240mm Gun was copied to slot 338 and the original Theodore 240mm Gun was renamed 240mm Siege Gun with appropriate stats.
- 6) In the OB (TOE) file, the 41 Theodore Gun Battalion (237) was renamed 41 K3 Gun Battalion.

V1.04.24 – May 24, 2011

- **New Features and Rule Changes**

- 1) New Interface feature – Added a new hotkey that shows command links for the selected unit, on the map, graphically with lines. Pressing the ` key (just above the Tab key on most keyboards) will cycle through three modes – show no links, show links to all subordinates (blue- units, turquoise – HQs) and HHQ (orange), show links to subordinate HQ's (turquoise) and HHQ (orange).
- 2) Rule Change – Restricted recombining/dividing of routed/frozen static units.
- 3) Rule Change – Restricted combining Rumanian Cavalry units.

- **Bug Fixes**

- 1) Fixed a bug in the after-battle report for city bombing.
- 2) Fixed a bug where Rumanian units were converting to Guards after changing sides.
- 3) Fixed a bug where groups set to day missions were flying partisan supply missions.
- 4) Fixed a bug causing German air recon to be very slow.
- 5) Fixed a bug where HQ buildups were limited to 19MPs from the rail instead of 20 MPs as it should be.
- 6) Fixed a bug where recon planes were able to fly air transport missions (only transports and level bombers are allowed to fly air transport missions).
- 7) Editor Fix – Fixed a bug where delayed units were not getting the correct withdrawal seed.

- **Data and Scenario Changes**

- 1) 1941 Campaign and scenarios have the 2nd Hungarian Army assigned to Hungarian High Command instead of Army Group South
- 2) 9th and 10th SS Panzer Divisions in all campaigns now arrive with the Jpz-IV instead of the Jpz-IV(70)
- 3) 1944 Campaign withdrawals now seeded properly.

V1.04.22 – May 19, 2011

Special Note – Several art files were changed in this version in order to remove text from the art (to make it easier to localize WitE into other languages). Running an earlier version of the game with the art files included in this version will cause several buttons and tabs to be missing text (those like the unit mode buttons on the right side Unit Bar and the Menu Tabs on the Top Tool Bar). If you want to run an earlier version of the game while also using this or later versions, you have to maintain a separate copy of the game on your hard drive for the earlier version to avoid these issues.

- **New Features and Rule Changes**

- 1) Manual Correction (Section 22.2.2) – The entry in the Random Weather Table for a die roll

of 10 in September should be M (not C). The entry for a die roll of 12 in November should be S (not B).

- 2) Manual Correction (missing rule from version 1.00) (Section 22.3) – Soviet units in areas impacted by the First Winter rules pay half the normal movement points for entering enemy controlled hexes (this halving also applies to the portion of the ZOC to ZOC cost calculated based on the cost of entering enemy controlled hexes, as well as the additional cost for Regiments and Brigades entering enemy controlled hexes).
- 3) New Rules – (Section 9.2.4) – Soviet non-guards units that are directly attached to a Guards Army HQ will receive a five point bonus to their national morale. Shock Army HQs do not provide a morale benefit to guards units. Guards Army and Shock Army HQs do not provide their +5 bonus to non-guards units if their command limit is exceeded (they must be within their command limit for any units under their command to receive a benefit).
- 4) New Rule - Added the ability to select the destination unit for a supply air drop when using the manual air group selection. If nothing is selected automatic delivery will be used.
- 5) Rule change - Improved automatic unit selection when dropping fuel to the hex with multiple units. Unit with higher requirements vs stock will have priority. Added level 3 combat message to display which unit is getting supply/fuel.
- 6) Rule Change (section 20.6) - HQ supply buildups are not allowed for HQ's that are more than 20 MPs from their railhead at the moment the HQ buildup is ordered. In addition, the AP cost of an HQ buildup is now increased by the distance in MPs of the HQ from a railhead divided by 3 (truncated). So for an HQ with 3 attached divisions that is 16 MPs from a supply source, the AP cost would be $5+2+2+2+(16/3)=16$ (used to be just 11). This increased AP cost is used to calculate the other buildup penalties described in section 20.6.3 in the manual.
- 7) Rule Change - Refitting units next to enemy hexes have a 25% chance of getting more replacements than if they weren't on refit, but the exact amount of the additional replacements will vary greatly depending on the distance from the railhead.
- 8) Rule Change (Section 23.3.1) – Changed the area of automatic freezing of Soviet units in the northern area of the map (Finnish Front) in scenarios that begin on June 22, 1941. Now, units with an x coordinate >99 will no longer be frozen.
- 9) New Feature – Added information regarding weather determination at the top of the German Logistics Phase Event Log. The modified weather die roll and the weather for the turn are listed for each weather zone. Note that the die roll may be overridden by an exception rule leading to weather that does not match the die roll result in the table. Note when playing with non-random weather, the die roll shown in the event log assumes a roll of 5 plus the normal modifiers for each weather zone.
- 10) New Feature - Added toggle on the production screen to show active/transit/both pools.
- 11) Interface change – Weather information is no longer shown during the logistics phase.
- 12) Interface change – Now don't allow deliberate attack if non-eligible units are selected.
- 13) Interface change – Changed A.B. to AirBase in the Commander's Report Screen filter list.
- 14) Formula change – Altered the combat code to prevent Mech-inf and Mech-engr type elements from taking excessive losses.

- **Bug Fixes**

- 1) Fixed a bug where isolated units were receiving the benefits from a supply buildup done by the unit's HQ.
- 2) Fixed several minor discrepancies in the weather rules.

- 3) Fixed bug where Synthetic fuel factories generated resource requests after consumption.
- 4) Fixed a bug where scenario data was not being cleared out when saving a PBEM game.
- 5) Fixed a bug that caused negative combat values. Reworked the combat report to support higher numbers of displayed units.
- 6) Fixed a bug where the armaments pool could go negative after the logistics phase.
- 7) Fixed a bug that was preventing air supply of partisans during blizzard.
- 8) Fixed a bug where the wrong type of supply is delivered during automatic air drops (those without manual air group selection).
- 9) Fixed a bug where non-divided Brigades and Regiments were not paying the +2 cost for entering an enemy hex as they should have per the Movement Point Cost Chart.
- 10) Fixed a bug where the Fighter escort is missing if air transport is flown by the level bombers.
- 11) Fixed a bug with delayed (off map) units getting withdrawn.
- 12) Fixed a bug when nations surrender so off map units will get disbanded.
- 13) Fixed a bug where newly formed units can get statistics from old disbanded/destroyed/withdrawn units.
- 14) Fixed a bug where routed units can stay loaded on trains.
- 15) Fixed a bug where withdrawing units could be set to static mode.
- 16) Fixed a bug where air ground support may not be provided from the closest air bases.
- 17) Fixed a bug where renamed units were not withdrawing.
- 18) Fixed a bug where AA units attached to a city were not getting destroyed when the city was captured.
- 19) Fixed a bug where ready ground elements in a combat could go negative after a combat.
- 20) Fixed a bug where ground elements in the pool could go negative.
- 21) Editor Fix - Fixed bug in ADJUST UNIT FUNCTION when city ownership was set based on nationality instead of hex ownership .
- 22) Editor Fix – Fixed a bug when clicking on the TOE(OB) ground element it was always going back to the 1st ground element in GE TAB.
- 23) Editor Fix – Fixed insert/delete record function for the aircraft editor.

- **Data and Scenario Changes**

- 1) 41a Infantry Division (0024), 41 Sturm Division (0336) and 41b Infantry Division (0338) all modified to include 2 SdKfz-221 armored cars.
- 2) 41 Panzer Division (0034) modified to contain 45 Panzer IIf, 105 Panzer IIIj L/42, and 20 Panzer IVf.
- 3) 43 Panzer Division (0096) modified to contain 74 Panzer IIIIm, 74 Panzer IVg and 20 Panzer IIIIn.

V1.04.16 – May 3, 2011

- **Bug Fixes**

- 1) Fixed a bug where the number of aircraft in groups in the national reserve could get increased.
- 2) Fixed a bug where Guards partisans were being formed (there should be no Guards partisan units).

- 3) Fixed a bug where when Rumania surrendered, the Soviet player was building Rumanian units instead of the correct Soviet units.
- 4) Fixed an AI cheat move bug that was allowing AI units in beachhead supply to escape pockets.

- **Data and Scenario Changes**

- 1) Fixed the number of aircraft in air groups arriving on turn 3 of scenarios. These air groups had double or more of the number of aircraft that they should have had.

V1.04.15 – May 2, 2011

- **New Features and Rule Changes**

- 1) Rule Change – Each Armament factory now uses 50 supply points to produce 250 armament points per turn.
- 2) Rule Change - Moved equipment swap-out sub segment to after the replacement phase in the Logistics Phase sequence of play. This will cause less chance for the “active” equipment to be swapped out.
- 3) Formula Change – Reduced the chance of partisan attacks.

- **Bug Fixes**

- 1) Fixed a bug where all destroyed Soviet units were forming partisans instead of only some of them, so too many partisans were being created.
- 2) Fixed a bug that was preventing some units with swapped equipment from receiving replacements.
- 3) Fixed a bug where support units attached to high command could not be disbanded.
- 4) Fixed bug causing high transport op losses (destroyed aircraft).

- **Data and Scenario Changes**

- 1) Added anti-soft and anti-armor ratings for the 6 Pounder (329).
- 2) Added 47mm SA 37 gun (583).
- 3) Per the above corrected the device used by the captured French 47mm anti-tank gun (357).
- 4) Added the Valentine IX (828) as of mid-1943 and adjusted the Valentine III (761) dates accordingly.

V1.04.14 – April 28, 2011

- **New Features and Rule Changes**

- 1) New Interface – Added the ability to enter the amount of factories to be moved. You can now click on the number of factories being moved in the city display and a popup box will appear

allowing the player to enter the desired number of factories to be moved.

- 2) New Interface – The hex pop-up now shows factories that are not yet active.
- 3) Formula Change – Limited morale gain for partisan units (related to national morale).
- 4) Formula Change – Added code to make low experience combat elements expend more ammo when they fire.

- **Bug Fixes**

- 1) Fixed a bug with vehicle production.
- 2) Fixed a bug where factory sizes could get very large when the factory was relocated.
- 3) Fixed a crash bug caused by an air base converting to Guard status.
- 4) Fixed a bug where battle reports could show incorrect info when a unit surrendered.
- 5) Fixed a bug which was merging empty duplicate squad slots.
- 6) Fixed a typo (perecent).
- 7) Fixed a bug that was sometimes preventing the AI from flying recon missions.
- 8) Fixed a bug where pressing the On Train button to detrain a unit (when the unit detail screen is active) will prompt a message re merging the unit.
- 9) Fixed HQ detail screen to show FBD/NKPS that are attached to the HQ.
- 10) Fixed a bug causing the incorrect amount of planes to show on the battle report.
- 11) Fixed a problem where the map could scroll diagonally instead of down if a unit on the eastern edge of the screen is selected.
- 12) Fixed a bug where a reserve unit could show up with a CV of 999 when joining a combat.
- 13) Fixed a bug where ground support aircraft of the non-active (defending) player were not including bombers in the combat.
- 14) Made it possible to target factories at locations with no population.

V1.04.10 – April 18, 2011

- **New Features and Rule Changes**

- 1) Changes with Version Numbers – The main menu now lists both the installed version number and the exe version number for the program being used. This makes it easier to use multiple copies of the game with different versions on one computer. The top windows bar will still display only the installed version number. We have also changed our version numbering to show 2 additional digits in the version number instead of labeling versions beta 1, beta 2, etc. --- The exe version number is also shown now as the last entry in the logistics phase event log. This is the version number that was being used during the logistics phase, so it is now possible to see what version your PBEM or Multiplayer opponent was using at the end of their turn.
- 2) New Rule - Damaged equipment and manpower returned to the pool during the logistics phase are not available immediately to be used as replacements. Although they appear in the pool on the production screen, they actually are put in a “transit pool”. At the start of each friendly logistics phase, 25% of the amount in the transit pool is moved to the available pool. This represents the lost time from the front of

- lightly wounded soldiers and damaged equipment.
- 3) New Rule - Units from different Luftflotte's or Air Armies will not participate in the same air mission.
 - 4) New Rule – If the Moscow Defense Zone HQ is relocated and it has no valid hex in the Moscow region to be relocated to (x=106-112, y=45), it is disbanded.
 - 5) Rules Changes to First Winter rules (Section 22.3):
 - (a) (Section 22.3.1) Changed the CV modifications in January 1942 as follows: Attacking CV is divided by 2 (instead of /3). Any missed check (admin or combat skill) causes CV to be further divided by 3 (instead of /4). Defending CV is divided by 1.5 (instead of /2 – previously this was incorrectly listed as /4). Any missed checks causes CV to be further divided by 1.5 (instead of /2). The displayed on counter CVs are divided by 2 for attack and 1.5 for defense (instead of /3 and /2).
 - (b) (Section 22.3.1) Changed the CV modifications in February 1942 as follows: Attacking CV is divided by 1.5 (instead of /3). Any missed check (admin or combat skill) causes CV to be further divided by 2 (instead of /4). Defending CV is divided by 1.33 (instead of /2 – previously this was incorrectly listed as /4). Any missed checks causes CV to be further divided by 1.33 (instead of /2). The displayed on counter CVs are divided by 1.5 for attack and 1.33 for defense (instead of /3 and /2).
 - (c) (Section 22.3.2) The percent of damaged elements has been reduced in December 41 so instead of roughly 5-20% the losses are now roughly 1-7% (the damage losses are still reduced by 50% in Jan/Feb 1942). Units subject to this damage will now see their damage reduced if they are in a hex that has a fort level. The amount of the reduction is the fort level squared as follows:
 1. Fort Level 1 – 1% reduction
 2. Fort Level 2 – 4% reduction
 3. Fort Level 3 – 9% reduction
 4. Fort Level 4 – 16% reduction
 5. Fort Level 5 – 25% reductionSo a unit in a fort level 4 that would have suffered 6% attrition will now suffer roughly 5% attrition.
 - (d) (Section 22.3.3) The Morale drop for exposed units was reduced from 2 to 1.
 - (e) (Section 22.3.3) Removed the automatic pre-combat morale reduction of 2 when morale was greater than 60.
 - (f) (Section 22.3.3) Added a loss of 1 morale for non-Finnish Axis units whenever they are attacked and the final end of combat odds are greater than 1:2.
 - (g) (Section 22.3.4) Axis units tracing supply to a railhead in the affected area (22.3) will have the amount of supply they receive reduced by 25% after all other modifications. (previously it was reduced 50%).
 - (h) It was always harder for German units to received replacements during the first winter (previously undocumented). It is now even more difficult for them to received replacements during first winter.
 - 6) Rule Changes to fort level construction rules:
 - (a) (Section 15.3.2.1) Decreased the fort build rates as follows:
Fort Level 0 3.0 (was 3.0, no change)

Fort Level 1 1.0 (was 1.0, no change)

Fort Level 2 0.25 (was 0.33)

Fort Level 3 0.05 (was 0.10)

Fort Level 4 0.01 (was 0.02)

- (b) Construction values are reduced based on the supply level of the unit. In no event will they be reduced below 20% of normal due to supply level.
 - (c) Level 5 forts may continue to build up to 10% over level 5. This allows them to take some damage and still remain at Level 5.
 - (d) Artillery (especially Heavy Artillery) can cause small fort reductions during combat.
 - (e) Fort build rates for building forts greater than 3 can be divided by 2 if a leader admin check fails.
- 7) Rule Changes to Refit rules (Section 18.3) – Units set to refit (and those automatically considered in refit) will no longer receive the following benefits from refit if they are adjacent to an enemy controlled hex during their logistics phase:
- (a) (Section 9.1.1) Morale bonus if under 50 morale.
 - (b) (Sections 18.2.1 and 18.2.2) Replacements in the refit sub-segment. Instead they will receive replacements in the normal replacement sub-segment (without priority) and be treated as if they are not in refit mode for the purposes of the TOE limits in section 18.2.2.
 - (c) (Section 9.3.1) The refit experience (training) benefit when their experience is lower than their morale (previously not clearly documented).
 - (d) (Section 18.3) Priority on upgrading and swapping of equipment.
- 8) Rule Change – The amount of support units can be increased by the level of fortification in the defending hex.
- 9) Rule Change - Introduced the concept of a commanding HQ for each side for each combat. Generally this commanding HQ is selected because it has the most CVs directly reporting to it in the battle. Units not reporting directly to the commanding HQ will suffer command battle modifiers that will reduce their CV for the battle. The battle report now lists the units in the battle grouped under the name of the HQ they report to. If an HQ's units are suffering a command battle modifier, the amount of the CV reduction is shown next to the name of the HQ (for example XXIV Panzer Corps -36% indicates that each unit listed in this corps has had its CV reduced by 36%). The greater the number of HQ's that the unit must trace through to reach the commanding HQ, the greater the modifier. In addition, units that report directly to a high command HQ suffer an additional 20% modifier, and those that report directly to an Army Group or Front suffer an additional 10% modifier (these are shown as part of the total modifier percentage displayed).
- 10) Changed the way reserves are committed to battle. The lower the command battle modifier described in item 9 above, the higher the chance the unit will be committed from reserve (especially those units with a command modifier below 10%). Also increased the chance of motorized units being committed.
- 11) Rule Change – Adjusted the amount of morale a unit loses after a battle. Now units are not guaranteed to lose a morale point when a battle is lost. The higher a unit's morale is over its national morale, the greater the chance the morale will be reduced when it loses a battle.
- 12) Rule Change – (Section 18.2.1) Damaged units sent back to the pool during the

- logistics phase now have 40% of their manpower disabled (instead of 20%).
- 13) Rule Change – (Section 15.4.1) Artillery (ART,MORT,ROCKET,AT) support units have priority to be committed into a battle during a special commitment phase. During this round of commitments, defending HQ's have a chance of committing 3 more than the normal limit of committed HQs (so 9 or 21 instead of 6 or 18). After this round, the normal commitment round is conducted.
 - 14) Rule Change – (Section 9.5.2) Increased front line attrition, but reduced the proportion of these attrition loss that is KIA to 30% (was 50%). The net impact should be similar KIA but an increased amount of manpower disabled due to front line attrition.
 - 15) Rule Change – (Section 22.3.5) - First winter mitigation for towns and cities now protects the units with the largest manpower (including attached support units), instead of those with the largest CV (if any units are protected, as per the existing rules).
 - 16) Rule Change – (Section 12.2.5 and 16.1.7) – Changing the Mission setting for a Fighter Bomber group no longer costs AP points (used to cost 1 AP). Player's should realize that groups flying missions in a role they are not trained for will be flying at a major disadvantage.
 - 17) Rule Change – There are now restrictions on the swapping out Heavy Artillery ground types.
 - 18) Rule Changes – Each Armament factory now uses 50 supply points to produce 300 armament points per turn.
 - 19) Rule Change – Excess AFV's are not sent back to the pool if the AFV total in a unit is not exceeding the OB's AFV total by 25%.
 - 20) Multiplayer Change - Added 'Resign' option to the games list.
 - 21) Multiplayer Change - Added 'Show Completed' and 'Show Resigned' buttons to the games screen to allow filtering of the game list
 - 22) Multiplayer Change - Added 'hover' text to the games and challenges lists to display additional information about games.
 - 23) Multiplayer Change – Now when an attempt to save the game fails, the user will be informed of this event and given the opportunity to try again.
 - 24) Formula Changes to Movement Attrition and Fatigue:
 - (a) Non-AFV elements of motorized divisions will no longer suffer enhanced movement fatigue.
 - (b) Increased the average movement fatigue, especially for non-motorized units.
 - (c) Increased the chance of non-AFV elements breaking down during movement.
 - (d) Movement break down is decreased in case of successful Admin Rolls.
 - 25) Formula Changes - Reduced the effectiveness of interdiction in terms of casualties caused. Increased the chance that interdiction will cause movement point reduction to the interdicted unit.
 - 26) Formula Change - Decreased the morale reduction for air groups.
 - 27) Formula Change - Air strikes are more fragmented now depending on experience and leader checks.
 - 28) Formula Change – Reduced the amount of planes flying recon interception missions.
 - 29) Formula Change – Slightly increased the accuracy of tactical bombers, primarily those with higher experience.
 - 30) Formula Change - Increased the damage done by strategic bombing to some industry types including ports and heavy industry.

- 31) Formula Change - Increased the chance that an element will be damaged in combat instead of disrupted.
- 32) Formula Change – Increased damage from retreat attrition.
- 33) Formula Change - Reduced the rate at which leaders are promoted.
- 34) Formula Change – Reduced the amount of flak attacks.
- 35) Formula Change - Armament point usage during supply conversion to ammunition can get reduced by 2-4 times if the Admin roll is successful.
- 36) Formula change - There is a slightly higher chance than previously for high national morale units to gain morale during the logistics phase (didn't change for those with morale less than 60).
- 37) Interface Change - Added AA units directly attached to cities to the OOB display.
- 38) Interface Change – Added turn, date and location information to the battle reports.
- 39) Interface Change - Units that are already assigned to an HQ will not appear on that HQ's list on the Pick Support Unit Window when the Assign/Form button has been selected.
- 40) Interface change – Added a high detail combat message when an element is disrupted due to an airstrike.
- 41) Interface Change - Added the number of ready, damaged and reserve aircraft to the reinforcement screen for each air group listed.
- 42) New Message - Added a message to the event log when an empty unit is disbanded.
- 43) New Editor Feature - Added COPY/CLEAR functions to the TOE(OB) editor.
- 44) Improved Soviet AI in the Caucasus.
- 45) Somewhat improved the automatic air base selection method (still best to select the air base manually).

- **Bug Fixes**

1. Fixed a bug causing incorrect numbers being shown in the number of men moving to and from the pool in the Event Log.
2. Fixed a bug causing some withdrawing units to incorrectly place their equipment and manpower in the pool.
3. Fixed a bug where Axis units could ignore the TOE% settings during the first winter.
4. Fixed a bug in the truck loss routine that was adding manpower to the pool when trucks were damaged.
5. Made sure that the CR and OOB screen numbers agree. There were some discrepancies that could cause the two to disagree.
6. Fixed bugs that caused the AI to sometimes move support units to off-map/delayed HQs and “inactive” support units to on map HQs.
7. Fixed a bug that caused units moving by naval transport to get stuck in a water hex when it was interdicted.
8. Fixed a bug in which small factories could report different amount of equipment built than those that actually went to the pool.
9. Fixed combat so odds may no longer be shown as 0:0.
10. Fixed a bug that could cause routed tank divisions to not correctly transform to delayed tank brigades.
11. Fixed a problem in which the disband routine was not bringing some damaged equipment back to the pool.
12. Fixed a bug where inactive support units were passing through the upgrade/swap

- ground types procedure, placing and taking equipment to/from the pool.
13. Fixed a bug where the number of partisan cadres formed was incorrect.
 14. Fixed a bug that was causing ports to be repaired too quickly.
 15. Fixed a bug in the path tracing that could prevent defending units to receive support units help in a battle.
 16. Fixed a bug that caused a unit to not be able to trace a movement path through a hex with 3 friendly units.
 17. Fixed a bug where a guards unit was created with the same name as that of an existing guards unit.
 18. Fixed a bug causing manpower loss/gain when escaped squads convert to partisans.
 19. Fixed a bug in the Set All Unit MPs function in the editor that doesn't set MP for the Axis units correctly on June 22 1941.
 20. Fixed Motorcycles Squads so they are set to infantry class instead of artillery class.
 21. Fixed Heavy Infantry Guns so they are set to artillery class instead of infantry class.
 22. Fixed a bug where Artillery Regiments had the option to assign another support unit to them, something that should never happen.
 23. Fixed a bug where damaged elements were not having their manpower sent to the pool when due to an OB change the elements were no longer needed (the manpower was just being lost).
 24. Fixed a bug where elements that were being exchanged due to a TOE change or upgrade were not properly accounting for the difference in manpower between the old and new elements.
 25. Fixed a bug that could cause inaccurate record keeping of manpower lost from retreat attrition.
 26. Fixed a bug that could prevent a totally empty Soviet or German unit removed from the map from being brought back on the map to be rebuilt.
 27. Fixed a bug where ground elements which had an upgrade path set to 0 (instead of to themselves) could have some of their elements incorrectly sent back to the pool.
 28. Fixed bugs where the map popup was not closing correctly when either ground element details of support units were displayed, or when TOE(OB) of support units attached to a city were displayed.
 29. Fixed a bug where HQ units moving by naval transport were stopping when they entered an enemy zone of control in a water hex.
 30. Fixed a bug where CV counter values for Axis units during the first winter were not displaying the correct modified CV value for the "attack".
 31. Fixed a bug preventing support units directly attached to combat units from helping in fort construction. Also fixed a bug that had allowed "inactive" support units to allow in fort construction.
 32. Fixed a bug where undoing an air base unit movement could wipe out air groups recently assigned to the air base from reserve.
 33. Fixed another instance where an isolated AI unit makes an illegal escape.
 34. Fixed a bug where new units could be formed in reserved slots in the database (0, 8172-8191).
 35. Fixed a bug where Soviet Military Districts and the Moscow Defense Zone that were isolated could not be destroyed when they should have been (they should be disbanded after October 1941 if they are forced to retreat).
 36. Fixed a bug where HQ or routed units can start the turn next to an enemy combat unit

- when other units in the stack surrendered during the logistic phase.
37. Fixed a bug where enemy units were revealed by selecting a friendly unit and then shift-clicking on remote hexes.
 38. Made a change so that frontline attrition will never cause damage beyond the amount of ready squads.
 39. Fixed a problem where the unit names of units disbanded during combat were not being reported in the battle report.
 40. Fixed a bug where delayed air groups could reset their plane count on load/saving a scenario.
 41. Fixed a problem where HQ units were being listed as routed/retreated/shattered. This should not happen for HQ units.
 42. Fixed a problem where partisan units could form routed.
 43. Fixed a problem where hidden enemy units were being shown on the jump map when the end turn is pressed.
 44. Fixed a problem where units could receive a very large number of support elements as replacements which were not needed.
 45. Made some improvements to the staging airbase selection code and air map generation code.
 46. Fixed a crash bug caused by right clicking on a unit in the right unit panel while another units TOE detail screen is open.
 47. Fixed so that HQ/Air Base units can no longer improperly be set static with the Shift-T hotkey.
 48. Fixed so that Germany will no longer send armaments to surrendered nations.
 49. Fixed a bug where the strongest units in a city or town were not correctly chosen for first winter mitigation effects (a weaker unit would sometimes be chosen instead).
 50. Fixed shading in water hexes when using Movement FOW.
 51. Fixed bugs that could in some cases prevent off-map factories from repairing/expanding.
 52. Fixed factories in isolated cities so they will not upgrade.
 53. Fixed a problem where newly arrived units which didn't immediately receive replacements could get disbanded.
 54. Fixed a bug where leaders could be dismissed without fighting a battle.
 55. Fixed so that partisan cadres cannot get over 100% of OB.
 56. Fixed a bug where hidden partisan units could affect an Axis unit's move path display.
 57. Fixed bugs where reorganizing/reforming Soviet unit messages appeared in the German Event Log.
 58. Fixed a bug where heavy AT guns were not being produced.
 59. Fixed a bug where units could get duplicate names due to OB/Guards conversions.
 60. Fixed a bug where Fighter Bombers with a fighter mission were sometimes flying in bomber strikes as bombers.
 61. Fixed a bug where 1 guard and 2 non-guard Soviet units when merged were forming a guard unit.
 62. Fixed a bug where combat values of support units attached to combat units were not benefitting from non-urban fort/terrain modifier.
 63. Fixed a problem where small partisan units with no listed supply need would not receive supplies from air resupply (even when missions were flown). Also fixed a

display bug with the number of aircraft flown during a partisan resupply mission.

- **Data and Scenario Changes**

1. Small adjustments of Heavy Panzer Battalions for correct OBs for arrival dates
2. Moved the 653rd and 654th Heavy Panzerjager Battalions arrival date to 3 Jun 43
3. Changed the Soviet 1st BAK Commander to Izotov in all 1941 scenarios
4. Adjusted Operation Blue's Victory Points to make a German decisive victory a little easier. Stalingrad is now worth 300 VPs to the Germans at the end of the scenario (was 200). Soviet VPs for Baku is now worth 200 (was 300).
5. Fixed Soviet overstack in 1943 Campaign at 85,24
6. Ernst Leyser put as commander of XXVI Corps in 1943 Campaign
7. Ran SET ALL CITY SUPPLY REQUIREMENTS in all non-campaign scenarios
8. Updated leader file with corrections to German names
9. Purged airgroups on the arrival schedule now arrive with the proper amount of aircraft in all scenarios
10. German 41 Flak Regiments have been rebuilt in all scenarios to get rid of the 105mm Flak Gun
11. Polizei SS Division rebuilt as a 43 SS Grenadier Division for the 1943 Campaign Game
12. 22nd, 23rd, and 24th Panzer Division that arrive in Spring of 42 now have their historical tank numbers
13. One Rumanian Anti-Tank Battalion was rebuilt to use the proper 47mm Anti-Gun in all scenarios
14. Manpower and armament pools were wiped for all scenarios and campaigns except for the 1941 Campaign, Operation Barbarossa, Operation Typhoon, and "Road to" Scenarios.
15. Manpower and armament pools adjusted slightly for "Road to" scenarios to be consistent with the 1941 Campaign game.
16. Starting Administrative Point numbers slightly changed. Soviets were getting extra APs due to them receiving their per-turn allotment prior to their first turn.
17. Corrected amount of Support in OBs 86 & 87 (43 Guards Tank Corps) to agree with Support in OBs 104 & 105 (43 Tank Corps).
18. Adjusted upgrade dates of German Panzer Pioneer squads (Units 101 – 104) to fix problems created by duplicate squads (102 & 103).
19. Corrected device in Unit 370 (122mm Field Gun) from M-10 howitzer to A-19 field gun.

V1.03 - February 28, 2011

- **New Features and Rule Changes**

1. Added an editor function – SET ALL CITY SUPPLY REQUIREMENTS. It sets all requirements based on the existing industry and production percentage. Also supplies cities to support first production turn.
2. Partisan supply drops are now hidden if FOW is on.

3. Formula Change - Slightly reduced the experience drop when ground elements received replacements. The higher the average experience of the elements, the less the decrease that can be expected.
4. Empty ground element slots that have the same type as other elements in the unit will be deleted. This will lead to more uniform divisions with higher experience.
5. Introduced a new kind of battle called Interdiction that can be shown on the Commander's report list of battles and also as on map battle sites. Friendly interdiction attacks are not cleared at the start of the logistics phase, so you can now view the interdiction attacks that occurred during your opponent's turn.
6. Added more factors to the interdiction attack routine, such as terrain, range to the supplied enemy, unit average experience, unit size and a morale roll.

- **Bug Fixes**

1. On map defending CV values for units in Swamp and Heavy Forest hexes were being calculated as if their terrain fort value was +1 when in reality their terrain fort value was +2. This caused the displayed defending CV to be undervalued. This was a display bug only, and has been fixed.
2. Fixed a bug where global supply and fuel stocks were not calculated correctly.
3. Fixed a bug where captured equipment once in units could be produced (to be used as additional replacements).
4. Fixed the AI so that it now pays the increased rail costs for Soviet factory evacuation.
5. Fixed a bug where the hex popup text could get stuck with static text, ex. "View this unit", "View this air unit", Show detailed aircraft change window".
6. Fixed a bug with attacks over rivers that could cause negative disruption.
7. Fixed a bug where elements with 0 ready elements could retain disruption.

- **Data and Scenario Changes**

1. Go145C aircraft changed from a Recon type to a Tactical Bomber (this appears not to have been changed in an earlier patch as we had thought).
2. Set supply/fuel/resources/oil requirements for all scenarios.

V1.03 Beta 5 – February 14, 2011

- **New Features and Rule Changes**

1. Manually merged units are now added to the destroyed/disbanded unit list.
2. Added withdrawal info to the hex pop-up text.

- **Bug Fixes**

1. Fixed a crash bug in beta 4 when the hex pop-up is displayed for a city with a port and AA.
3. Fixed a bug where setting the hex pop-up delay to 0 was causing battle reports to be displayed while in Move Mode.
4. Fixed a bug where data was not cleaned correctly when a PBEM password was

entered inaccurately.

5. Fixed a bug where HQs were showing a legal movement path through visible partisan units, something they can't move through.
6. Fixed a bug where city bombing of factories was not correctly adding newly created damage to the existing damage already on the bombed factory.
7. Fixed a bug where phantom attacks occurred during the first turn of a Soviet AI 1941 Campaign game.

- **Data and Scenario Changes**

1. Increased the starting Armaments pools for both sides in all scenarios that begin in 1941.
2. Fixed the starting OB for the 900th Lehr Motorized Brigade so that it matches the revised TOE in the 1941-45 Campaign scenario.

V1.03 Beta 4 – February 11, 2011

- **New Features and Rule Changes**

1. Reduced the effectiveness of city bombing on factories.

- **Bug Fixes**

1. Fixed a bug that caused some German and Soviet Human player attacks on turn one of the 41-45 Campaign to have their attacking CV values dramatically increased.
2. Fixed a bug causing the Soviet Gun Brigade to be listed as a choice to be created prior to its correct May 42 availability date.

V1.03 Beta 3 – February 7, 2011

- **New Features and Rule Changes**

1. Rule addendum and rule change – Units defending in Heavy or Light Urban terrain receive a doubling of their Combat Value when determining the winner and loser of the battle. This doubling is in addition to all other modifiers previously reported. Prior to this version, this doubling also applied to defenders in Swamp, Rough, Mountain and Heavy Forest terrain. This has been removed, so the doubling now only occurs in Heavy or Light Urban terrain.
2. New Rules – Routed units may not move via rail or naval transport. Routed units will not change their TOE.
3. New Rule – Each turn there is a chance that a unit's morale will be lowered by 1 or 2 points if its morale exceeds its national morale by 30 points or more.
4. New Rule – Axis leaders that are limited to Army and Corps commands only that achieve the rank of Feldmarschall are permitted to command Armies.
5. New Rule – Isolated units will fire only ¼ as much as they would if they were not isolated in order to save ammunition.

6. New Rule - On map Soviet air groups with no aircraft can be disbanded automatically before 1943.
7. Rule Change – For combat value reductions due to ammo/fuel/supply shortages, these will be limited such that all units will be considered to have at least a minimum of 25% of each of these items.
8. Rule Change - Reduced the Soviet manpower production multipliers to 50 in 1941 (from 55) and 45 in 1942 (from 50).
9. Rule Change – Made changes so that the experience for ground elements newly introduced to a unit due to a TOE change will be based on the average of similar ground class elements in the unit. If no such elements exist, the national morale will be used to build the new elements.
10. Rule Change – The chance of manpower migration will decline once the city's manpower is less than 50% of its population. Also, note that the manual is incorrect in that there is no limit to the amount of migration that can occur in a turn.
11. Rule Changes - Changed the way support squads are handled during the replacement phase: 1) Support squads are not sent to a unit if additional support is not required 2) Support conversion happens at the end of the replacement phase, when there is less chance that conversion will be needed. 3) Experience reduction from support conversion is based on the existing experience and number of existing rifle squads versus the number of converted squads.
12. Rule Change - Experience reduction caused by replacements is more based on the relative amount of replacements received.
13. Rule Change and New Rule - Doubled the rail capacity costs for factory rail movement. No factory movement is allowed on the June 22, 1941 turn.
14. Rule Change – The 2nd Polish Army mentioned in section 19.3 of the manual will never enter the game before 1944.
15. Rule Changes – Production changes: 1) Reduced Heavy Industry output and resource consumption. Each HI point now uses 500 resources to produce 500 supplies. 2) Reduced Armament output and supply consumption. Each Armament factory now uses 50 supply points to produce 200 armament points. 3) Reduced fuel production. One fuel factory now uses 300 oil to produce 300 fuel.
16. Rule Change – The undo command will no longer work once an air mission has been flown. This prevents a player moving an air base, using it as a staging base for a mission and then undoing the air base's move.
17. Rule Change – Increased the amount of Admin points charged for the formation of Rifle Corps to 20 prior to 1943.
18. Rule Clarification – Units that rout may only move to cities/towns that are less than 24 hexes away and which are on a linked rail line or are a linked port. If they are unable to rout move to a valid HQ or city/town, they will surrender.
19. Formula Change – Lowered the chance of a unit getting morale increases from combat if the unit's morale already exceeds its national morale.
20. Formula change – Increased the chance that defending fighters will be able to intercept recon missions.
21. Formula Change - Made an adjustment to the section 15.8.1 rule in the rules addendum regarding units that have no hex to retreat to. Originally this rule never applied to units with a morale of greater than 75. Now it never applies to units with a morale greater than 60. Also, the chance of this happening to qualifying units has been

reduced.

22. Rule Change – There are now less restrictions for changing the aircraft in an air group. Aircraft can be changed if:
 1. Aircraft types are the same
 2. Tactical Bombers can switch to Fighter Bombers
 3. Fighter Bombers can switch to Tactical Bomber if the group is trained as bombers
 4. Fighter Bombers can switch to Fighters or Jet Fighters if the group is trained as fighters
 5. Fighters can switch to Fighter Bombers and Jet Fighters
 6. Jet Fighters can switch to Fighter Bombers and Fighters
 7. NBAP groups can switch only to U-2 Tactical Bombers
 9. ZG groups can switch to Night Fighters and Fighter Bombers
 10. JG groups cannot switch to the Bf110
 11. Groups with the Bf110 cannot switch to the Bf109

The AI can use these new rules to swap aircraft in the group automatically.

23. Formula Change – The chance and amount of morale reduction incurred by isolated units in the logistics phase has been reduced.
24. Formula Change – Larger sized construction support units will be more likely to be sent to repair rail hexes with damage greater than 19.
25. Formula change - Increased the amount of planes destroyed during training, but decreased the impact of each lost plane on the group's experience (less pilots assumed killed).
26. New Interface - Added an interface window to provide information when upgrading aircraft. Accessed from the group detail window when the group is set for Manual Aircraft Change. Click on the word 'Manual'. The window will display the possible aircraft alternatives and for each, the amount of aircraft in the pool, the amount of aircraft in air groups, and the number of factories. Allows for navigation to appropriate information windows and back. Also allows players to compare aircraft.
27. Improved German AI first turn script in the 1941-45 Campaign.

- **Bug Fixes**

1. Fixed the bug that was allowing game options to be changed after the start of a PBEM game.
2. Fixed a bug where Army Group south was not splitting into AGA and AGB in March 1943.
3. Fixed a bug where a lack of suitable leaders was causing AGB to arrive without a leader. A leader will be appointed, although it may be one that is of a lower than normally required rank.
4. Fixed a bug inserted in 1.03 beta 2 that caused FBD units to pay an extra +2 MPs when entering an enemy controlled hex.
5. Fixed a bug where ground elements that change to another element due to a TOE change were losing experience. Fixed a bug that could be altering the experience and fatigue of ground elements during a TOE change.
6. Fixed a typo in the production messages in Event Log - ""aircraft"" -> ""aircraft""

7. Made changes to the map popup function which may be a possible solution for the popup issue where the message "View this unit" becomes the only text shown.
8. Increased the probability of artillery and infantry weapons being produced from armaments.
9. Deleted the temp file created when a Multiplayer game is saved to the server.
10. Fixed a bug where the Yes/No dialog state was not reset when you answer No to the end the turn question.
11. Fixed a bug in the AI that was allowing the Axis AI to move isolated units illegally out of their pocket and back to their friendly lines.
12. Support squad conversion to rifle squads is now being properly limited to 30 per unit per turn.
13. Fixed a bug involving vehicle usage during the replacement phase.
14. Fixed a bug with the non-random weather that could cause incorrect clear or mud weather in the May to June 19 timeframe.
15. Fixed a bug where partisans could attack a rail hex 6 hexes away. The limit of 5 hexes should now apply.
16. Fixed a bug causing captured ports to generate shipping points for the Axis player. Captured ports should not generate shipping points.
17. Fixed a bug in small scenarios where rail hexes out of the playable map area were sometimes not functioning properly (causing issues with the supply system).
18. Fixed a bug with aircraft that could result in players getting a "no more slots available" when attempting to upgrade aircraft.
19. All damaged elements were being returned to the pool whenever a ground unit changed its OB. This was not intended and has been changed so it does not happen.
20. In small scenarios with limited production, made sure that only the supplies needed for the reduced production levels are expended.
21. Fixed the interface so that when in recon mode, right clicking on the right side panel will bring up the air base detailed information window instead of launching a recon mission.
22. Fixed a bug where the AI was improperly raiing factories out of cities adjacent to enemy units.
23. Fixed a bug where non-Rumanian units attached to a Rumanian HQ could still be listed as attached to the HQ after it had become a Soviet unit upon Rumanian surrender.
24. In some cases, Finnish units were incorrectly able to attack once they were over the Finnish no attack line. This has been corrected so that until the 2 Leningrad hexes have been taken, the Finns can never attack when south of the line.
25. Fixed the G hotkey so that it will never assign a non-security unit to a RHG HQ.
26. When using FOW, the fogged up CV values of enemy units were not being saved off when saving a game and cleared properly when exiting a game. This could lead to anomalies in CV values when repeatedly loading save games. This was only a display issue and did not impact the unit's real CV in combat. This has been fixed.
27. Fixed a bug that prevented Soviet Amphibious landings against enemy controlled hexes.
28. Fixed a bug where Rumanian units were being allowed to move north of the Axis Ally

Limit Line.

29. Fixed a bug where aircraft could be removed from the production pool.
30. Fixed a bug where a player could move a unit and then perform an HQ buildup and then undo the previous move and regain the AP spent on the HQ buildup. Now, once an HQ buildup is performed, no moves done prior to it are undoable.

- **Data and Scenario Changes**

1. The following data files were changed: wrdevice.dat, wrleader.dat, wrac.dat, wrob.dat.
2. Tweaked the blast radii of many of the devices to correct for rounding errors.
3. Changed the German 88mm Anti-tank Gun to Heavy AT-Gun type. This change should keep the 88mm ATG out of units it shouldn't go to as well as keeping lighter ATGs out of German heavy anti-tank gun battalions.
4. Corrected the number of hand grenades (as devices) in Panzer Grenadier Squads 99 & 100. It read 8 but should have been 1.
5. Changed all ground element end dates of 5/45 or later to a consistent 9/45. This fix is to correct production stopping in games going past 5/45 for many ground elements.
6. Renamed OB 402 to 42b Guards Tank Corps and added OB 404 42a Guards Tank Corps to correspond with OB 79 42a Tank Corps. This will fix the problem where 3 guard tank brigades could not be merged into a Tank Corps and 2 guards and 1 non-guards were merging into regular Tank Corps.
7. Added OB 393 43 Heavy Panzer Battalion (-) to be the TOE for the 101st SS Heavy Panzer Battalion.
8. Changed Slovakian leaders so they can command both ground and air HQ's.
9. Added OB 470 44c SS Panzer Division for the Tigerless Wiking Division. OB 115 has been renamed from 44c SS Panzer Division to 44d SS Panzer Division.
10. Changed Go 145C(48) type to Tactical Bomber
11. Reduced the build limit for the U-2(transp) to 5 and U-2(recon) to 2.
12. Changed FW 190F type to Tactical Bomber
13. Changed FW 190G type to Tactical Bomber
14. Modified build limit for Ta 152H to 4
15. Added drop tanks for the FW190G, increasing its range
16. Renamed Bf 109G-6/R6 to Bf 109G-6/R2
17. Changed production rates and build limits for Fw-190 planes
18. Fixed FW190 and U-2 production in scenarios
19. Changed the Rifle Squad in the 42 Motorized Brigade (OB 93) from ground element 797 (not produced till 1943) to in production element 793.
20. Changed the production start date of the Reconnaissance Squad (776) from 9/42 to 4/42 to correspond to available date of 42 Motorized Brigade.
21. Changed a couple of Soviet Air Leaders for 1941 Campaigns and scenario
22. Removed the 6th Panzer Army from arrival schedule
23. Added 101st SS Heavy Panzer Battalion to all campaigns to arrive on 12 Nov 43 and withdraw on 9 Jan 44
24. 1st SS Panzer Division arrival date bumped up a couple of weeks to 12 Nov 43 (was 2 Dec 43)

25. 1943 Campaign German leader changes
26. Standardized German Corps names across the campaigns and scenarios. Replaced the 'XL' in all German Corps names with 'XXXX'

V1.03 Beta 2 – January 21, 2011

Special Note – Please be aware that when a pop up box comes up asking for a value to be entered, if the X is pressed, the game reads this as entering a value of 0.

- **New Features and Rule Changes**

1. Eliminated German leader dismissals prior to 12/15/1941 (This was incorrectly reported fixed in v1.03 beta 1)
2. The AI has been improved so that it will be less likely to leave enemy units supplied by ports behind it's lines. An example of this is that the German AI should be less likely to leave Odessa in Soviet control in the fall of 1941. Also improved the Soviet AI reaction to German moves into the Caucasus (sometimes it would respond with too many units). (This was incorrectly reported fixed in v1.03 beta 1)
3. Restricted Soviet Rifle brigades so they can't merge into Rifle Divisions prior to May-1942.
4. Increased the Admin point cost for creating Soviet Rifle Divisions and Cavalry Divisions to 20 before May-1942.
5. Soviet Rocket and Heavy Tank units get automatic Guards status. (This was incorrectly reported fixed in v1.03 beta 1)
6. Made improvements in the AI to reduce/eliminate very poor ground attacks that were occasionally being made.
7. Missing Rule – Section 22.2 should contain an additional exception that states there will be no snow or mud during December 1941 and January 1942 (only Blizzard).
8. Rule Correction - The 110 in the last sentence of section 10.3 should be replaced with 120 (Axis Allied Frozen Garrisons).
9. Rule clarification – Naval Rifle Brigades may be used to create Rifle Corps.
10. Made some adjustments to the amount of CAP that intercepts fighter sweeps (airfield attacks with no bombers).
11. Vehicles produced by Axis Allies will be placed in the German National Pool.
12. Have disabled the production of cities in surrendered nations. Surrendered nations now show 0% production on the production screen.
13. Soviet air groups in the national reserve are not counted when determining if new Soviet Air Bases should be created.
14. The game now limits the amount of Soviet Guards Armies to 11 and Guards Tank Armies to 6.

- **Bug Fixes**

1. Soviet Guard Corps should no longer have duplicate names. (This was incorrectly reported fixed in v1.03 beta 1)
2. Captured equipment of destroyed Soviet support units were going to the Finnish pool.

Now, where the equipment goes will depend on the map location of the HQ, on map unit or City that the unit is attached to. (This was incorrectly reported fixed in v1.03 beta 1)

3. Fixed a problem with delayed SAD air bases that were disbanding. (This was incorrectly reported fixed in v1.03 beta 1)
4. Fixed text in the CR screen leader tab. (This was incorrectly reported fixed in v1.03 beta 1)
5. Fixed a bug that allowed the Admin Point total exceed 500 when a Soviet Front entered the game. Admin Points should never exceed 500.
6. Fixed a situation where an AI German unit that was totally surrounded was illegally picked up and placed back in friendly territory.
7. Added code to prevent the AI from evacuating factories from isolated cities.
8. Adjusted some issues with non-random weather where the exception cases listed in section 22.2 of the manual could occur in non-random weather. Now they should only appear when using random weather.
9. Fixed a problem where fort levels in a swamp hex could exceed 3.
10. Fixed a problem that in some situations was causing air recon to reduce the detection level of enemy units.
11. Fixes a problem that caused players not to be able to access their current Multiplayer games.
12. Fixed support units that were not being affected by their HQ's supply shortages and were receiving more than they should.
13. Fixed some incorrect values in the supply details for support units.
14. Fixed a problem causing HQ's to not send all their supply dumps to units that needed them.
15. Fixed a problem causing Fighter Bomber groups to fly bomber missions even when set to Fighter mode. Fixed another problem that could in some cases cause Fighter bomber groups that were showing they were set to fighter missions to not fly intercepts.
16. Fixed a problem causing oversized groups to appear on the air strike list.
17. Ground elements in a unit will no longer upgrade if the upgrade is to equipment types that are not in the OB of the unit.
18. When ground elements are sent back to the pool because they do not belong in a unit's OB, once they are all sent back to the pool the ground element slot will be removed from the unit. Previously the slot would remain as 0 and could block other appropriate equipment from being added to the unit.
19. Made some refinements that can allow a unit to have more different types of tanks as long as the totals are within the OB of the unit. In the past, some units would be overstrength because they would not allow a different tank into the unit even though it was of the appropriate type for the OB.
20. Fixed Axis Allies so that they use the German vehicle pool when needed to generate certain motorized replacement squads (ex. Hungarian motorcycle squads in Hun. Armored Division). In the past they might not get these replacements because they required Hungarian vehicles.
21. Partisan units will no longer generate "no longer frozen" messages in the logistic event log.
22. Fixed a bug that could cause ground support to target a non-participating ground unit

that was stacked with a ground unit that was in the battle. Also altered the targeting routine so that ground support can be split over several target units instead of always concentrating on one target unit per combat.

23. Fixed a bug where fortified units could be forced to rout move away from enemy units. Now, if a fortified unit is so weak that it would normally displace, it will be disbanded.
24. Independent regiments (not broken down divisions) were not paying the +2 extra to move into an enemy controlled hex. This has been fixed so they pay the extra cost.
25. Fixed a problem so that when a unit is broken down, the support/need values will immediately be divided by 3 on the unit detail display.
26. Fixed a bug that could cause the text in the multiplayer screen to be off center when the screen is maximized.
27. Fixed a possible crash bug caused by the Aircraft fuel usage formula getting a divide by zero.
28. The build cost is now shown correctly in the aircraft tab in the editor.
29. Fixed the Inventory Compare display for aircraft.

- **Data and Scenario Changes**

1. Data Fixes

- * added a “regiment” of 108 security squads to the 41 Security Division TOE
- * reduced this “regiment” to a “battalion” of 36 squads in the 42 Security Division TOE
- * Changed ground element (732 - ""Partisan Squad"" type to ""Partisan Squad"" (52), a newly created type. Done to limit Partisan Squads to partisan units. In games using this new data, Partisan Squads will not be used in non-partisan units.
- * Reintroduced I-15bis(272) and fixed the armaments and ratings for the IAR37/38/39 planes
- * Renamed OB 402 to 42b Guards Tank Corps and added OB 404 42a Guards Tank Corps to correspond with OB 79 42a Tank Corps. This will allow the formation of Guards Tank Corps in April 1942 (previously only non-Guards Tank Corps could be formed prior to July 1942.

V1.03 Beta 1 – January 12, 2011

Special Note – The new air doctrine settings described as the first two “new features and rule changes” will be defaulted to off in any previously saved games. Players need to turn these on when they load an old save in order to fly ground support and/or escort their recon missions.

- **New Features and Rule Changes**

1. Added Ground Support ON/OFF to the air doctrine screen. This can also be toggled by using the hotkey ‘x’. When on, ground support will be provided normally. When off, no ground support will be flown (fighters will still intercept enemy ground support). The current Ground Support status will be shown on the top bar next to the word MOVE when in move mode. The text will either be GS-on or GS-off.

2. Added Recon Escort ON/OFF to the air doctrine screen. When on, recon missions will be escorted as they have in the past. When off, no fighter escorts will be provided for recon missions.
3. Air groups may now shift between Day and Night missions even if they have flown or moved during the turn.
4. Removed the AI button when in Air Transport mode. The player may no longer have the AI fly air transport missions.
5. HQs that have not moved during the current player-turn have an increased chance of committing support units to battle.
6. Reduced the chance each turn of a leader being killed due to the distance to the enemy by 2/3. In addition, any leader in an HQ that is more than 10 hexes from the enemy will have his chance of being killed reduced by an additional 2/3.
7. Eliminated German leader dismissals prior to 12/15/1941.
8. Support units that are attached to a motorized division or corps on map combat unit will now require additional vehicles.
9. Adjusted the way that air group mileage is logged when an air base moves.
10. Adjusted the way that the use of an air unit on an airbase could cause all other air units at that airbase to incur miles flown.
11. Changed the game default setting for Auto Save Game to On.
12. Changed the default Intercept value on the Air Doctrine screen to 50.
13. Changed Soviet ability to keep Cavalry tanks together with Light and Medium Tanks before 9/1941. Reduced the swap out probability. This is done to support very mixed compositions of Soviet Tanks divisions.
14. The AI has been improved so that it will be less likely to leave enemy units supplied by ports behind it's lines. An example of this is that the German AI should be less likely to leave Odessa in Soviet control in the fall of 1941. Also improved the Soviet AI reaction to German moves into the Caucasus (sometimes it would respond with too many units).
15. Soviet Rocket and Heavy Tank units get automatic Guards status.

- **Bug Fixes**

1. Eliminated the possibility of a leader commanding two HQ's at the same time.
2. Fixed a problem causing some reinforcements to appear off the playable map area in small scenarios.
3. Fixed an issue preventing Rumanian units from moving into an area in the Soviet Union just north of the Rumanian border and just east of the Hungarian border.
4. Fixed a problem that occasionally prevented some valid transport air groups from being available to fly air transport (had to do with the method of picking which units would show up first in the pick air units for mission window).
5. Fixed a bug in the AI that was allowing units to move too far when nearly pocketed.
6. When using non-random weather, some December turns in 1942-44 were snow turns when they should have been blizzard. They will now all be blizzard.
7. Fixed a bug in the production display of captured equipment. Now captured items will show up in the display as long as there are some of the items either in the pool or in a unit.

8. Added code to ensure that AI units will not improperly attack across impassible hexsides.
9. Tank brigades are now correctly placed in the arrival queue when tank divisions are destroyed.
10. Made sure a message appears in the event log when lend-leased trucks (vehicles) are received.
11. Fixed a problem with fighter allocation to airstrikes.
12. Groups sent to the National Reserve are now shown in the arrival list.
13. Fixed the CR sorting on some columns when HQ chain filter is enabled.
14. Fixed several replacement problems that could cause some German panzer units to go way over TOE in tanks while others units lost tanks. As part of this fix removed the ability for Germans to swap Medium Tanks to CS Tanks.
15. Fixed a bug when replacements were adding to a unit but the ground element was staying with 0 exp.
16. Fixed a bug in the AI rail-repair function.
17. Fixed some sea zone and port mismatches.
18. Made the off-map city of Kiel contribute to the Baltic Sea zone transport.
19. Made sure that fort units do not start a scenario in static mode.
20. Fixed air group fatigue reduction.
21. Fixed intercept percentage doctrine setting effect.
22. Fixed a problem with the AP cost to build Soviet units.
23. Fixed a problem preventing some Soviet HQ units from being listed in the units that may be built.
24. Fixed the unit size filter in the CR screen so it works correctly when other filter or sorting is active.
25. Fixed a bug in the editor that prevented setting of the name/surname if current values are empty hexes.
26. Fixed a problem preventing some units from being able to disband/merge due to an incorrectly set withdrawal link to this slot.
27. Fixed a problem where unit withdrawal data was not handled correctly when unit record was inserted, deleted or cleared.
28. Enemy units no longer show up on the jump map during the opponent's AI turn when FOW is on.
29. AI units should no longer perform "warp" moves when they are being supplied via a friendly port and not via an overland rail link.
30. Fixed a bug causing supplies, fuel, resources, oil not to be sent back to the map from off-map locations and locations with no rail. Also, fixed a problem where supplies were not being sent correctly to off-map locations.
31. Prevented "Future" ground elements factories from generating supply requests and causing "not enough supplies" messages.
32. Soviet Guard Corps should no longer have duplicate names.
33. Captured equipment of destroyed Soviet support units were going to the Finnish pool. Now, where the equipment goes will depend on the map location of the HQ, on map unit or City that the unit is attached to.
34. Fixed a problem with delayed SAD air bases that were disbanding.

35. Fixed text in the CR screen leader tab.

- **Data and Scenario Changes**

1. Changes to 1941 Campaign, Barbarossa, and all 'Road to' Scenarios:

- * Two 833rd Karl Siege batteries withdraw on 1 July 1941
- * Added Karl Siege batteries to arrival schedule with appropriate withdrawals
- * Fixed German motorized flak battalion withdrawal dates
- * 5th, 8th, and 28th Jager Divisions have been rebuilt as Infantry Divisions and then withdrawn in Nov/Dec 1941 to rebuild as Jager Divisions
- * 5th, 8th, and 28th Jager Divisions arrive as reinforcements in Jan/Feb 1942
- * Added 156th Vicenza Italian Security Division to arrival schedule
- * 2nd Fallschirmjager Division is now non-motorized
- * XXXV Italian Corps arrives with Gen. Zingales as the Commander
- * Fixed 6th SS Motorized Brigade withdrawal issue. Renamed this unit 'Langemarck SS Motorized Brigade' and it will automatically upgrade to a SS Grenadier Division.

2. 1942 and Operation Blue:

- * 2nd Fallschirmjager Division is now non-motorized
- * Gen. Wetzel now commands V Corps
- * Added V and LVII Panzer Corps as reserve commands
- * Fixed 6th SS Motorized Brigade withdrawal issue. Renamed this unit 'Langemarck SS Motorized Brigade' and it will automatically upgrade to a SS Grenadier Division.
- * Additional German units are withdrawn from the Operation Blue scenario to participate in 'Operation Whirblewind' in Army Group Center.

3. Changes to 1943 Campaign:

- * 339th Jager Division now rebuilt as an infantry division
- * Gen. Zeitzler is now in command of OKH
- * Guards Light Rocket Regiments are no longer attached to Soviet Cavalry Corps
- * 2nd Fallschirmjager Division is now non-motorized *
- Fixed 6th SS Motorized Brigade withdrawal issue. Renamed this unit 'Langemarck SS Motorized Brigade' and it will automatically upgrade to a SS Grenadier Division.

4. Changes to 1944 Campaign:

- * Soviet 51st Army removed from front line and moved to Gomel as a STAVKA reserve
- * Soviet 2nd Guards Army and 51st Army are now frozen for two turns as the STAVKA reserve
- * Shuffled Baltic Fronts front line units to be more historical. 6th Guards Army is now properly situated north of Vitebsk.

- * Removed Soviet artillery attachments to Soviet corps
- * Resupplied all Soviet military district units so they no longer show over 100% supply
- * Gen. Heusinger now commands OKH

5. Leader files:

- * Added German leaders - Wilhem Wetzel, Adolf Heusinger, Helmuth Felmy
- * Added Soviet Polish leaders – S.G. Poplowski, Karol Swierczewsk

6. Data fixes:

- * Fixed ZiS-30 start date and build cost
- * Set 41 TD Battery OB (414) start date to 9/1941, end date 4/1942
- * Set Build Cost for SU-57 to 0 (lend-lease)
- * Set first month for MC.202 was set to 8/1942.

V1.02 Beta 1 – December 23, 2010

- **New Features and Rule Changes**

1. Improved the speed of unit movement across the map.
2. Sped up the opening and closing of windows.
3. Sped up combat by reducing the amount of sound files playing at the same time during the combat.
4. Units that are selected on the right unit bar when a battle begins remain selected at the end of the battle.
5. Reduced effectiveness of flak by 75% against planes flying fighter missions (fighters and fighter bombers).
6. Changed the way aircraft are allocated to ground support missions. Less aircraft will be added to the battle if the pre-combat odds are heavily in the side's favor.
7. Added arrival messages in the event log for support units.
8. AI air recon will no longer show air flight lines at combat resolution message level 1.
9. Added a message when a delayed air group arrives to the National Reserve.

- **Bug Fixes**

1. Revised and improved mouse handling performance.
2. Fixed a bug preventing proper aircraft repair for air groups in the national reserve.
3. Prevent disruption on turn 1 from going negative on some ground elements. Also, negative disruption, if it occurs, is removed during the logistics phase. Now prevent empty elements in units getting disrupted on the first turn, which could cause problems.
4. Fixed a problem where units bombed can get more disrupted elements than the amount of ready elements in the unit.
5. Fixed a crash bug caused by pilot training.
6. Undo now correctly restores attached support unit data.

7. Fixed some hexes that were being considered heavy urban for some purposes (Minsk being one).
8. Fixed rail in Imatra.
9. Fixed a crash bug when trying to build Soviet units without enough admin points.
10. Now clear the movement path when the Esc is pressed.
11. Fixed a problem with the undo button being active when an undo is ordered.
12. Fixed a bug that in unusual circumstances allowed AI units to beam behind enemy lines.
13. In Multiplayer, changed the code to ignore the case of a username when determining who is the 'current player'.
14. Fixed a bug with Formation Inventory not displayed correctly if sorting on Unit tab in Commander's Report is enabled.
15. Fixed a bug with setting refit for individual units in Commander's Report not working when sorting is enabled.
16. Fixed possible unit name text overflow on the right panel.
17. Fixed so that when a factory is moved cities without empty slots no longer are shown in green on the map.
18. Strategic movement values are displayed when moving a factory.
19. The DektolIcon is now loaded on the start of a game.
20. Fixed a bug where disbanded support units were not sending their ground elements to the pool.

- **Data and Scenario Changes**

1. The 75mm Cannon (0053) in the device data base was misidentified as an air-to-air rocket.
2. The 85mm S-53 gun (0581) was built as a heavy gun instead of a medium.
3. In Road to Smolensk and Road to Moscow scenarios, fixed the problem with 4PG units starting with no supplies, fuel or ammo.
4. Changes to 1942 Campaign & Operation Blue scenario
 - * Corrected Axis minor countries not having support units in the air bases
 - * Corrected some missing Axis support units
 - * Added the German 17th and 167th Infantry Divisions to the arrival list
 - * Added Theodore Artillery units
 - * Added V Corps and LVII Panzer Corps (HQ only) to Army Group South
 - * Froze several Soviet Armies for several turns until they were released historically
 - * Army Group South units had their supply, ammunition, and fuel levels boosted to 200%
5. In the 1943 Campaign, corrected Axis minor countries not having support units in the air bases

v1.01 – December 17, 2010

- **Bug Fixes**

1. Fixed a bug that restored admin points previously expended by undoing a unit's

- strategic movement.
2. Fixed it so Shift-T cannot be used if the unit does not fulfill the requirements in 7.5.4.1.
 3. Corrected the map data in hex 80,40 in Velikie Luki scenario.
 4. Fixed a typo in the HQ switch leader check pop-up that spelled "succeeded" as "suceded".
 5. Disabled map clicking during the AI turn.
 6. Fixed a display bug in the combat text shown at high detail levels that could lead it to report a unit was shot at by itself.
 7. Fixed a bug that would in some cases prevent valid air groups from being listed as available for an air mission (in the pick air groups for mission window) even though they were closer to the target than some other units that were being listed.
 8. Fixed text typos: "Numberal" to "Numeral", "Unit and it's.." to "Unit and its.."
 9. Prevented the user preference for the combat resolution message level from being able to be set higher than 7.
 10. Fixed range of Soviet 152mm Howitzer.
 11. Changed the name of IS-I, IS-II, IS-III to IS-1, IS-2, IS-3

v1.01 Beta 4 – December 15, 2010

- **Bug Fixes**

1. Fixed a problem that was sometimes preventing the Soviet AI from forming a good line in the western Ukraine during the summer of 1941.

v1.01 Beta 3 – December 14, 2010

- **Bug Fixes**

1. Air combat fixes, attacking player ground support fighters were not engaging defender player bombers during combat.
2. Editor function fixes

v1.01 Beta 2 – December 13, 2010

- **Bug Fixes**

1. Fixed mouse button handling which caused left button to be always active. (needed a small fix in engine)
2. Added fix for one more instance of the missing mouse click.
3. Reduced input polling during airstrike missions. AI should be faster, but more chances of black screens.
4. Fixed city bombing.

5. Fixed combat report when bombing the city.

v1.01 Beta 1 – December 10, 2010

- **New Features and Rules Changes**

1. New Feature – Added ability to use custom fonts. Disabled automatic font reduction in high dpi settings. Instructions for setting up the use of custom fonts can be found at: <http://www.matrixgames.com/forums/tm.asp?m=2645378>
2. New Feature – Added Multiple Monitor support. Added new code to use the bounding box of the current monitor to control scrolling.
3. Formula adjustment – Toned down on the amount of disruption that ground units suffer when bombed by aircraft (in all air mission types).

- **Bug Fixes**

1. Bug Fix – The / key no longer makes the AI take control during a human player turn.
2. Bug Fix – Improved mouse performance to correct occasional unresponsiveness with some mouse clicks.
3. Bug Fix – Reduced high CPU usage when idle with the map on the screen.
4. Bug Fix – Reduced the frequency and duration of appearance of a black screen during the AI's turn.
5. Bug Fix – Fixed problems that could occur if the PBEM box was checked when a player created a new Multiplayer game. Now the PBEM box should not impact Multiplayer games in any way.
6. Bug Fix – Fixed the appearance of the options screen when maximized while in multiplayer mode.
7. Bug Fix – In the air unit detail window, changed the color of the text for switching between day/night operations to light blue.
8. Bug Fix – Fixed the overprinting of text on the VP Advantage line of the Victory screen at the end of the game when the screen is maximized.
9. Bug Fix – Prevented units not in a scenario from showing up as disbanded on the Losses screen.
10. Bug Fix – Fixed the appearance of the Yes/No dialog box so it will not cut off longer text that appears in the dialog and the actual Yes/No portion of the text.
11. Bug Fix – Fixed it so that all Soviet on map units that should be able to be created (listed in the manual) are coming up in the game as creatable (if available by date).
12. Bug Fix – Made some miscellaneous bug fixes in the editor.

v1.00 – November 26, 2010

- Initial Release

- **Rules Addendum**

1. Section 7.5.2 - Admin points are added when support unit is sent back to the higher HQ in case of unit break down (Soviet corps to divisions that can't have support units)

attached - 1 AP per unit sent back).

2. Section 15.8.1 - Units that have no hex to retreat to and that are not in an undamaged port may have their CVs divided by 10 (depends on unit morale).
3. Section 18.2 - Up to 30 support squads may be converted to rifle squads per unit per turn (not 20).
4. Section 14.2.2.1 - Prior to December 1941, Soviet rail repair units will not automatically move to rebuild damaged rail lines that are within 5 hexes of an enemy unit.