

1.98 Dev 2

1.98.0.43 changes are Grey

1.98.0.44 changes are Blue

1.99.02 changes are Green

1.99.03 will be Yellow

(1.99.03/4 changes thanks to [1.98 changes after the second dev server : Warthunder](#))

All updates past .04 are here [1.98 changes after the second dev server : Warthunder](#).

[1st Datamine](#)

[Official Patch Notes](#)

Note that some of these may not be correct by the time live comes around.

Tank Changes

- ★ The STRF 9056, changed weapon traverse limits on specific angles, reduced stabilizer effectiveness from 75kph to 15kph and added new ammo DMs.
- ★ The Type 93 received gen 3 thermals for gunner and commander.
- ★ The STRV 103c grille changed from structural steel to modern RHA, thickness doubled from 15mm to 30mm.
- ★ The A33 Excelsior received gun optic damage model
- ★ The Chally 2 Dorchester, gunner thermals switched from 1st gen to 2nd gen, added new hull composite armor somewhere (90mm thickness).

The 9P157 (it had that many changes)

- The 9P157 received "timber" armor
- The 9P157 received hullbreak.
- 9P157 limits for the launcher changed from (yaw: -90 to 10) to (yaw: -85 to 85) and (Pitch: -10 to 20) to (Pitch: -5 to 15)
- The 9P157 has had its mass changed from 23 tons to 18 tons,
- The 9P157 had RPM changes and gear ratio changes (can no longer reverse at -70kph).
- The 9P157 has received floating abilities.
- The 9P157 changed sight Field of Views and a modern rangefinder system
- The 9P157 received ESS
- Finally, the 9P157 received a new camo.
- ★ The Type93 got new engine sounds
- ★ The BMP-1 and 2 got new turret armor with values ranging from 6mm to 30mm of armor.
- ★ 9M123 Khrizantema: shot frequency changed from 0.12 shots per second to 1 shot per second, reload time increased from 13s to 15s, proper model given instead of an Ataka.
- ★ The 105mm Type 83 accuracy increased.
- ★ The 105mm Zpl94 accuracy increased, shot frequency increased from 7rpm to 8rpm.
- ★ The 75mm XM247 ROF changed from 11rpm to 40rpm.

- ★ The 76mm OTO Breda demarre penetration constant decreased for the SAP shell, HE-VT shell explosive mass increased from 0.673kg to 0.745kgs.
- ★ The Khризantema radar changed: azimuthLimits for locking, tracking and los locking changed from -7 to 7 to -90 to 90.
- ★ The HSTV-1 BR increased from 9.3 to 9.7. Added modern rangefinder upgrade to modifications.
- ★ The Type 93 BR increased from 9.3 to 9.7.

Type 91 Changes (This happened again)

- It's no longer a Mistral Copy.
- The Missiles Mass is now decreased to 7.7kgs, its explosive mass is now 0.6kgs of Composition A (Whatever that is) and its end mass is now 6.0 kgs.
- Time to fire the missile is 6 seconds and warm up time is now 4 seconds.
- The missile also now has thrust vectoring and an end speed of 650m/s with lock on range increased in general.
- Rear Aspect is now up to 7km lock range and all aspect locks are now 4.5km max range.
- Max angle lock range is increased to 40 degrees and has a lower update rate of 12 (units/second idk)
- The APN (makes the intercept course) was nerfed and proxy fuze detonation is now 0.5m.
- ★ HSTV lost a lot of optic armors.
- ★ The 9P157 launcher no longer counts as ammo, instead it's a "tank_barrel", ammunition increased from 15 to 16.
- ★ Type 69 II-G, gained its ESS, lost 40mm of turret back thickness and mass has decreased from 37.7 tons to 37 tons.
- ★ 75mm XM274 APFSDS, mass increased from 2.2kg to 3.05kg
- ★ Changed a bunch of Challenger 2 armor and made smoke grenades a tier 1 mod (it's stock now).
- ★ The STRV 103C armor was changed from RHA Modern to RHAHH.
- ★ Changed early japanese tank suspension dampeningRelaxationRatio from 1.0 to 0.4.
- ★ 9P157, back armor changed from 13mm to 43mm, same change to BMP-3 (same chassis).
- ★ Changed a modifier for tank suspension: mulSuspensionResting has been completely removed.
- ★ Made Chally 2 Dorchester modification a tier 3 mod from tier 4.

Ship Changes

- ★ Maximum shell distance of various naval weapons has been increased.

- ★ Ship_wood armor changed: armor quality reduced to 0.1, generic armor quality increased from 0.04 to 0.5.
- ★ Ship structural steel changed: explosion armor quality changed from 0.78 to 1.0
- ★ Changed G-5's classification on the statcard from a torpedo boat to a gunboat.
- ★ Corrected Romani class cruiser displacement on statcard from 54200 tons to 5420 tons.
- ★ Corrected Soldati, turbine and dardo destroyers countries from USA to Italy.
- ★ Added displacement stats for River class frigate.
- ★ Changed Lyddite explosive, from 1.0 equiv of TNT to 1.1
- ★ Changed PG-02's hydrodynamics.
- ★ Changed tucumcari's hydrodynamics.
- ★ Increased various ship max attack distance from 4km to 5km (for the low caliber AAs, only applies when AI takes over for all of these)
- ★ 7.62mm weapons attack distance decreased from 1.5km to 1km and removed delay after shooting.(AI)
- ★ The 76mm weapons attack range decreased from 15.7km to 10km.(AI)
- ★ The 85mm and 88mm weapons attack range increased from 9km to 10km.(AI)
- ★ The Italian 152mm cannons gained an AA shell.
- ★ The 76mm OTO Melara, nerfed penetration for the SAP shells.
- ★ Fixed the gun limits for MS 471 1a, MS 473 2a, MS 473 2a art.
 - Tiger cruiser: received Soviet radars.

Air Changes

- ★ The B6N1 FM was changed.
- ★ The F-104A/C/G/J/S had their Flight Models refined (S only got a rip speed increase from Mach 2.2 to 2.3)
- ★ The J-6A got cockpit canopy control.
- ★ The MirageIIIC got its booster, 2700kgf thrust at 0km/h, very weak at high altitudes.
- ★ The Re.2005 Serie 0 FM changed.
- ★ The Scimitar F.1 Flight Model was changed. Its thrust at sub 1000km/h and 0m altitude increased and its rip speed increased from Mach 1.08 to Mach 1.14.
- ★ The Su-7B FM changed, thrust to altitude/speed on various places changed (all of them increased, most notably high altitude performance)
- ★ Added new Damage Model for F-104A (China)
- ★ Added new Damage Model for F-104G (China)
- ★ Added new Damage Model for Hurricane Mk 1 Late (Premium)
- ★ Added new Damage Model for Ki-27 Otsu (Premium)
- ★ Added new Damage Model for Ki-44-1 (Premium)
- ★ Added new Damage Model for Ki-61-1A Hei (Premium)
- ★ Added new Damage Model for Re.2000 GA (Premium)
- ★ Added new Damage Model for Re.2001 Serie 1 EP (Premium)
- ★ Added new Damage Model for Spitfire Mk.IIA EP (Premium)
- ★ The Su-7Bs radar was removed.

- ★ For the Su-7, SPO-2 Radar Warning Receiver added
- ★ Added new payload types: mirage_3c_rocket_booster and mirage_3c_fuel_tank_7_8.
- ★ The Firestreak and SRAAM propNavGuidance changed (helps with intercept course).
- ★ Changed swordfish Mk1's statcard turn time number from 50.237s to 13.0 (stat cards are inputted manually, they never affect stats themselves).
- ★ The F-4EJ now requires the F-104J to be researched.
- ★ The Re.2005 Serie.0 BR changed from 6.0 to 5.0.
- ★ The Fiat G.91R/4 (German) rank reduced from 6 to 5, given a GE cost and premium status.
- ★ The Mirage AIM-9B missiles now need the AIM-9B modification instead of AIM-9D modification.
- ★ Added the yp_38 damage model.
- ★ The S-3K missile max range increased from 2km to 5km and cumulative damage increased from 300 to 500 allowing for easier hullbreak.
- ★ Mirage gained 2 loadouts: mirage_3c_2xaim9b_sepr_844 and mirage_3c_2xr550_magic_sepr_844.
- ★ Fixed the F-104 engine sound in the cockpit (it previously used regular jet sounds)
- ★ F-104's, fixed flaps animation.
- ★ Mirage IIIC had its rudder sensitivity increased from 0.3 to 0.5 and increased spin drag from 0.01 to 0.03.
- ★ The F-4E's top speed changed and its drag increased from 0.0079 to 0.0083 for no flaps position.
- ★ Its slats have been removed and fuselage drag increased from 0.0071 to 0.0072.
- ★ Its thrust on various speeds and altitudes has mostly been nerfed.
- ★ The F-4EJ slats have been removed as well and got the same thrust changes as F-4E.
- ★ The R-530 Matra's had their AoA changed and reduced various proportional navigation stats (Interception thingy)
- ★ The R-550 Magic's had AoA changed and decreased various prop navigation stats.
- ★ Reduced various prop navigation stats for: Shafrir, PL-2, R-13M, R-3S, R-60, R-60M, RB-24's, Firestreaks, Sidewinders
- ★ The R-13M had its load factor increased from 10G to 15G and had its Angle of Attack changed.
- ★ The Red top missiles and Firestreaks had increased prop navigation stats.
- ★ F-104A FM changed. Its mass reduced from 6625kg to 6355kg empty and had its fuel mass reduced from 2948kg to 2641kg.
- ★ F-104C FM changed, mach rip speed reduced from 2.3 to 1.95 and had its max thrust changed from 5200kgf to 4300kgf. Also nerfed its overall thrust to altitude/speed and increased oil temperatures in all thrust modes.
- ★ Reduced F-104C maximum water temperature from 750 to 715 and mass reduced from 6625kg empty to 6205kg while also decreasing fuel mass from 2948kg to 2641kg.
- ★ Also made F-104A/C fuel tanks separate and changed their priorities.
- ★ Mirage BR changed from 9.0 to 10.3
- ★ F-104A BR changed from 10.0 to 9.7

- ★ F-104C BR changed from 10.0 to 9.7
- ★ F-104G, J and S BR for SB changed from 9.7 to 10.0
- ★ F3H-2 BR changed from 9.0 to 9.3
- ★ Re 2005 Serie 0 BR changed from 5.0 to 5.3
- ★ B6N1 BR changed from 2.0 to 1.7
- ★ B6N2 BR changed from 2.0 to 2.3
- ★ B6N2A BR changed from 2.0 to 2.3
- ★ Scimitar BR changed from 9.3 to 8.7
- ★ Su-7B BR changed from 9.0 to 9.7
- ★ The F-104G (China) gets AIM-9J. (Tier IV mod)
- ★ F-104G German) new presets:
 - 4x AIM-9B FGW.2
 - 2x AIM-9B FGW.2 + 2x AS.20
 - 2x AIM-9B FGW.2 + 1x 250 kg Matra 25E bomb
 - 2x AIM-9B FGW.2 + 1x 500 lbs Mk. 82
 - 2x AIM-9B FGW.2 + 1x 750 lbs M117
 - 2x AIM-9B FGW.2 + 1x 1000 lbs Mk. 83
- ★ F-104G (China) new presets:
 - 4x AIM-9J
 - 2x AIM-9J + 14x Hydra 70 M247
 - 2x AIM-9J + 2x AGM-12B
 - 2x AIM-9J + 1x 500 lbs Mk. 82
 - 2x AIM-9J + 1x 750 lbs M117
 - 2x AIM-9J + 1x 1000 lbs Mk. 83
- ★ IL-2 (all): water temp lowered by 5 °C.
- ★ F-104A: added a smaller fuel tank, but fuel capacity remains the same.
- ★ Su-7B: gear springs are now harder.
- ★ F3H-2: now it can leak oil on engine hit.
- ★ Mirage IIIC: received its own parachute model, instead of the Vautours.
- ★ Su-7B: received steel cooling system.

Heli Changes

- ★ The PARS ATGM seeker nerfed, effectiveness almost halved.(This is the UHTs Fire and Forget ATGM)
- ★ Bo 105 gunpod loadout lost flares.
- ★ Sa 341 gained its M621 cannon for loadouts with HOT missiles, Mistrals and FFARs.
- ★ Added new japanese heli, UH-1B.
- ★ AH-1S (Early) rank changed from 5 to 6
- ★ Japanese UH-1B BR is 8.7
- ★ UH-1B (JP) new name: UH-1B Hiyodori
- ★ Mi-35M: cockpit display now has a projection size.

Sensor/Weapon Additions

- ★ Added new bullet type: he_tf (Might mean High Explosive-Timed Fuze)
- ★ squadTargetIndicatorRandomRange:p2=15.0, 500.0 < the range for the indicator apparently
- ★ Added new tank MG: 7_62mm_ksp_39_strv_user_machinegun
- ★ Added new naval cannon: 280mm_52_skc_28_naval_user_cannon
- ★ Added new type of missile fr_sneb_type23_md_460
- ★ New plane cannon added : cannonm61a1. The M61 also received its own sound.
- ★ Added a more visual GUI for weapon preset customization only available to developers and alpha testers currently (just like plane protection analysis).
- ★ Added various different “weaponConfig” presets, likely the new loadout GUI.
- ★ Added more of the weaponConfig stuff mentioned above.
- ★ Removed naval MG, 13_2mm_breda_aa_naval_user_machinegun
- ★ New AAM: AIM-9B FGW.2

Global Changes/Additions

- ★ Sun infrared brightness sources masks changed from 3 to 4 (not sure what it is, but it has to do with sensors)<- might be AAM sensitivity to the Sun
- ★ New AI sound added (AI = when friendlies flyby you) “engine_23_f104_ai”, added player F104 sound.
- ★ Added new armor type: alum_alloy36.
- ★ Changed server timeouts for the client (loadLimitTime, saveLimitTime, retryLimitTime and curlProcessingTimeout) from 250000 to 35000 (possibly in seconds?)
- ★ All sidewinder “accelControlDiff” has been decreased
- ★ Changed “explosionImpulseThreshold” from 5.0 to 370.0
- ★ Changed “explosionImpulseDistanceThreshold” from 100 to 50
- ★ Increased the lifetime of “pylon_smoke” effect by 25%
- ★ Removed the “70mm_gun_flame” effect.
- ★ The M61’s now overheat much slower.
- ★ Changed the way explosions affect vehicles once more.
- ★ Changed various radars to have “checkDesignationType0”
- ★ Added new decorator: “crossout_wheel”
- ★ Made the point of interest marker available to every player instead of just devs
- ★ Server replay has been disabled for the xbox platform.
- ★ Simulator has been unlocked for xbox
- ★ Multifunction menu has been unlocked for consoles.
- ★ Added new items for the inventory (like discounts and stuff):
“special_offer_75_ussr_smk”, “special_offer_75_germ_t_34_747” and
“special_offer_75_us_m4a5_ram_2”

- ★ New menu options: "options/flares_series"; "Flares series", "options/flares_series_periods"; "Flares series periods", "options/flares_periods"; "Flares periods".
- ★ Lots of uppercase words changed to lowercase on PS4.
- ★ New PS4 control: "controls/use_touchpad_for_aim"; "Use touch pad for aiming"
- ★ New hint: "hints/ccrp_bomb_not_ready"; "Bomb release permission"
- ★ New warning: "HUD_LASER_WARNING"; "laser warning" (similar to Missile launched)

Vehicle Additions/Removals

- ★ Added new japanese heli, UH-1B.
- ★ Added Spitfire Mk.IIa Venture I
- ★ Added Hurricane Mk.I/L FAA M
- ★ Added Ki-61-I hei Hien Tada's
- ★ Added Ki-27 otsu Tachiarai
- ★ Added Ki-44-I 34 Shoki
- ★ Added Re.2000 G.A. Red 5
- ★ Added Re.2001 serie 1 Gruppo 22

Loadout System Plane/Heli List(1.99.04+)

(Thanks to reddit user u/gszabi99 for compiling this list)

Helis:

- ★ A129A Mangusta
- ★ AH-1Cobra (All)
- ★ AH-64 (All)
- ★ Bo-105 CB-2/PAH-1
- ★ G-Lynx
- ★ H.34 and H-34
- ★ Ka-29
- ★ Ka-50/52
- ★ Lynx AH Mk.1
- ★ Mi-24 (All)
- ★ Mi-28N Night Hunter
- ★ Mi-35M
- ★ Mi-4AV
- ★ Sa 341F Gazelle
- ★ SA 342M Gazelle
- ★ Eurocopter Tiger (All)

★ UH-1(All)

Planes

★ A21RB
★ A-26 (All)
★ A-36
★ A2D
★ A7M2
★ AM-1
★ Au-1
★ A-4B
★ B-29
★ B-57B
★ Beaufighter Mk X/21
★ Bf 110G-2
★ Bv.238
★ B-18A
★ B-24 (All)
★ Firecrest
★ D4Y2
★ AD-2
★ AD-4 (All)
★ DB-3A/B
★ Do 217Z-2/E-2/E-4/K-1/M-1
★ Yer-2 (All)
★ Etendard
★ F-100D (US)
★ F-104G (Both)
★ F-104J
★ F3H-2
★ F-4C/E/EJ
★ F-84G (All)
★ F-86 (All)
★ F-89D
★ F3H-2
★ F4U-7
★ F8F (All)
★ Firebrand
★ Firefly (All)
★ F.222.2
★ G5N1/2
★ G8N1

- ★ H8K2/3
- ★ Halifax
- ★ He-111H-2/6/16
- ★ He-177
- ★ Hurricane II/IV
- ★ IL-4
- ★ Il-28 (All)
- ★ J2M3
- ★ Ju 188A-2
- ★ Ju 88 A-1/A-4
- ★ Ju-288
- ★ Ki-21-1 Ko/Hei
- ★ Ki-67-I Ko/Otsu
- ★ Lancasters (All)
- ★ Leo 451 (All)
- ★ Lincoln Bomber
- ★ Martin Maryland 167-A3
- ★ Barougan
- ★ Mystere IIC
- ★ Super Mystere
- ★ Meteor F. Mk8
- ★ MiG-15/J-2 (All)
- ★ MiG-17/J-4
- ★ MiG-19/J-6A (All)
- ★ MiG-21/J-7II (All)
- ★ Mirage IIIC
- ★ Mosquito FB. MK VI/26
- ★ N1K2-J/Ko
- ★ NC.223.3
- ★ P-38L (All)
- ★ PB4-2 (All)
- ★ PB4-5A (All)
- ★ Pe-8
- ★ PV-2D
- ★ P.108B (All)
- ★ SB2C (All)
- ★ SBD-3
- ★ Seafire FR.47
- ★ Sea Hawk (Both)
- ★ Vautour IIA/IIA IDF
- ★ Spitfire Mk 1/3/18E/22/24
- ★ Su-7B
- ★ S.81

- ★ TB-3
- ★ Tempest II/V
- ★ Tu-4 (Both)
- ★ Tu-14T
- ★ Typhoon 1B/1B Late
- ★ Wellington (All)
- ★ Z.1007 (All)

You made it to the end, have a virtual cookie

