#### Readme

#### Version 1.1

# **Warning**

The current version (1.1) is **not compatible** with the previous versions of the game when playing via network. Both the server and client must have appropriate versions of the game (1.1) in order to connect.

## Notes on the Patch Installation

This patch (1.1) may be installed over the previous version 1.0.

#### **Modifications**

## Changes and fixes in Perfect mode

Fixes after version 1.1b:

- Removed dark areas of terrain appearing in the distance on some maps.
- Fixed mirror reflections looking overbright.
- Removed clouds flickering when flying with mirrors active.

#### **Tracks**

- Corrected incorrect repeated playback error.

#### Sound

- Fixed incorrect playback on card supporting EAX 2 (but w/o EAX 1).
- Removed stutter and unexpected fadings.
- Corrected network telephone and network telephone track playback.
- Corrected playback order of music files.

#### **FM**

- Further tuning is performed on a line of aircraft:

Me-262,

Su-2,

DB-3 and variants (Il-4),

P-39 and variants,

P-47,

Bf-109 family,

B-239 and

Hurricane.

- Revised velocity you can safely deploy flaps at.
- Modifyed damage penalties for when a propellor hits the ground this will effectively damage the engine now.
- Radiator-induced drag is now calculated properly in 'auto/closed' radiator mode.

Fixed a weird bug that caused Me-262 AI pilots to forget starting the right engine sometimes.

## **Weapons**

Revised the Ju-87 'Stuka' bomb handling:

- When pressing the bomb trigger ('Weapon 3' button), the bombs are released in a conventional way, in pairs like on the other planes.
- Opposed to, when the dive autopilot reaches the recovery altitude, it dumps the payload as awhole.
- You now can adjust the dive autopilot recovery altitude with 'Increase Bombsight Altitude' and 'Decrease Bombsight Altitude' buttons, alike the level bombers bombsight.

## **Network**

Added two new event types for 'eventlog'. One is generated when somebody kills a player descending on a parachute, the other one represents an event when his chute is damaged and he begins to free-fall to the ground.

Ex.:

08:01:46 7GvShAP300(1) was killed in his chute by 7GvShAP301 at 300248.72 97822.61 08:01:50 r01100(2) has chute destroyed by 1 Static at 252955.97 141074.05

## Changes in Dgen for version 1.1

- 1. Su-2 spelling is corrected in all locales.
- 2. AAA removed from one Crimea airfield.
- 3. Cosmetic changes in templates (some planes moved out of tents, etc).

# Other fixes

- Fixed a bug that allowed WEP with less than 100% throttle control during engine startup.
- Sun is not shining through instrument panel in B-239 any more.
- P-47 series have aileron trim, as they should.
- Fixed a glitch in artificial horizon in P-47.
- Ju-87 won't be dropping bombs continuously when 'Limited Ammo' is switched off.
- Automatic mixture control in Ju-87now works properly.
- Added ability to control mixture for He-111 series.
- Fixed Yak-3 magnetic compass reading.
- Removed random spark plugs failures on cold engines.

# Version 1.1b

#### Video

# Changes and fixes in Perfect mode.

# *To start the updated version, the latest driver versions are required* ATI Catalyst 3.4, NVidia Detonator 44.03 (or latest WQHL certified)

#### NB: Note to ATI users

We strongly recommend using ATI Catalyst 3.4 Driver, because versions 3.5 and 3.6 may cause lock-ups in Perfect Mode. *This problem may be solved with the next version (3.7) of the ATI drivers*.

# To play in Perfect mode without problems we recommend:

Video card: Geforce4, ATI 9500 or better, with at least 128 Mb of texture memory.

Processor: 2.4 GHz or higher. Memory: 512 MB or more

#### Important notes on bugfixes

Patch files are provided as the final version of 1.1b; however, limited options are reserved for open beta. If you experience serious troubles playing this version, please send bug reports to <a href="mailto:il2beta@1c.ru">il2beta@1c.ru</a> and we'll do our best to correct these with the next patch or add-on.

When making such a report, please fill out the attached form and send it via e-mail.

!!Note that no wish lists, suggestions or FM speculations are accepted via that address, you should discuss these in the official UBL.com forum instead!!

## **Modifications**

There have been many modifications to FB, both in game code and visuals, and we're unable to list them all. The following lists the major modifications and fixes.

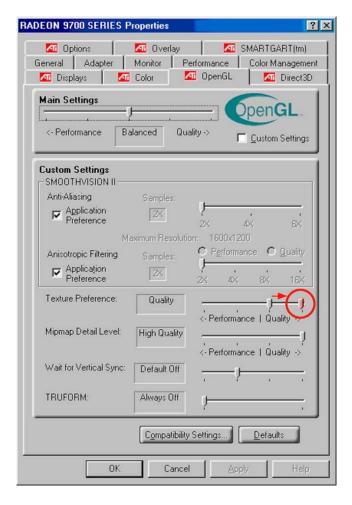
## **Fixed**

- 1. Hang-ups on ATI cards
- 2. Sped-up the geometry rendering of a landscape and trees
- 3. Increased view distance (the high altitude view has also been improved)
- 4. Improved object lighting
- 5. Reduced texture blinking of landscape (improved forest rendering at far distances)
- 6. Corrected set of visual artifacts
- 7. Peak delays in render are reduced

#### Not fixed features

- 1. On ATI 9700 screenshot function does not work
- 2. If you notice strips on landscape textures at far distance, it is recommended to set the maximal render quality from a driver tab in *Display properties* panel and to switch off a compression

Here is example for ATI cards



#### **Network:**

#### Console Commands:

- words containing spaces may now be used in console commands in quotes
- 'user' command is modified: disposed of of 'KICK' keyword
- 'chat' command is modified: added keyword 'TO# <N>' it sends the message to the player of the given number
- added command: 'kick <name>' disconnects the given player from the server
- added command: 'kick# <N>' disconnects a player of the given number
- added command: 'ban' prohibits connection for the given player groups command format:

ban [ADD] [REM] [NAME [<name>]] [PATTERN [<pattern>]] [IP [<ip mask>]] [CLEAR] [LOAD [<file name>]] [SAVE [<file name>]]

ADD - adds players listed in NAME, PATTERN, IP to the ban list

REM - removes players listed in NAME, PATTERN, IP from the ban list

CLEAR - clears the ban list

NAME [<name>] - picks out a player by his name

PATTERN [<pattern>] - picks out a player/players by the name(s) given in the <pattern>.

In the <pattern> - '?' represents any character, '\*' represents any quantity of any characters IP [<ip mask>] - picks out a player by his network address

<ip mask> - N.N.N.N, where 'N' is either a number 0 to 255, or a number range (i.e. 10127), or a '\*' that is any number

LOAD [<file name>] - reads list from a file ('banned.txt' by default)

SAVE [<file name>] - writes the list into a file ('banned.txt' by default)

#### Additional network fixes:

- improved interaction with GameService
- made improvement to the used network protocol
- modified skin download algorythm: switching off skin download now also prohibits skin uploading
- corrected a error not allowing to destroy air ballons
- in dogfight mode you will no longer collide with the chunks left of your previous flight
- corrected the issue with aircraft that spawn later into the co-op missions
- corrected the 'ground' response to vector to home base
- corrected incorrect 'eventlog' listings when a player leaves the session before mission ends

#### Track:

- corrected issues with incorrect playback of remaining fuel quantity, airbrake position and odd engine RPMs

## **Sound:**

- corrected errors in network telephone
- corrected the order of custom music files playback
- removed the option for 48 kHz from il2setup
- mproved overall sound quality

#### **FM**

# Reworked and tuned FM, according technical data

The tuning of the behavior or most aircraft in FB:

- More precise aerodynamics model
- Climb rates with more precise ratios
- Maneuverability and energy loss in maneuvers
- Stalls
- Spins
- Roll rates
- High altitude performances
- Dives
- Gliding ratio
- Impact of the speed on the control for different types of planes
- Work of flaps
- Landing on 3 points
- Breaking and taxiing
- Landing on roads
- Jamping and breaking on unprepared airfield (or out of airfield) surface

#### Additional:

- GM-1 NO2 boost now works in Bf-109E-7/Z
- Reworked manual pitch control for the row of the planes, especially Bf-109s and FW-190s (still under revision, if there will be other docs).
- Added automatic pitch control for Bf-109 series E4 and E7 (because with beginning of German invasion in Soviet Union most if not all were already re-equipped by constant speed propellers. Still under revision, if there will be other docs.)

## The main work over pilot AI:

- Low level AI will not conduct head to head attacks
- Reworked the methods of ground attacks for different types of planes

#### AAA/FLAK:

- Reduced precision of Ground and Ship AAA

## Weapons:

- adjusted various ammunition lethality
- replaced Ju-87G underwing cannon shells with the tungsten-core APs
- bombs are not able to ricochet off asphalt or concrete surfaces
- reworked damage models properties for Yaks, I-16, with a line of fine adjustments for other aircraft as well

#### Other fixes:

- modified engine startup sequence
- corrected errors in 3D models for several aircraft
- corrected artificial horizon issues is several cockpits
- added missing landing and formation lights
- disabled the ability to de-WEP La-5F manually

## Special thanks

Sean Trestrail, Christopher Starr, and Ian Boys

## **Great thanks for consulting and beta testing:**

Dietger Pohl, Steffen Trombke, Jan Niukkanen, Jyrki Majamaki, Wastel, Covington's Woodworking, Youry Puzynia, Sergey Archakov, Jaime Cantos, Clemens Hahne, Joerg Wiedemann, Marc Winter, Pavel Korneev, Ville Pitkänen, Viktor Linnik, Sami Kukkonen, Jörgen Torgersson, Jari Vanttinen, Christian Tampio, Jonny Forsen, Marko Svard, Tomi Tikka, Anders Larsen, Tuomo Soiri, Ralf Kraeft, Jan Ivar Ravn, Stefan O. Kristensenand and many-many others.

See also bellow thanks for the Dynamical Campaign testing.

## **Dynamical Campaign Changes:**

Current version of DGen, Dynamic campaign engine for IL-2 FB, supplied with the patch is 1.0.1.18.

#### New features and modifications

- 1. Planes attempt to use routes avoiding AAA. Maximum number of AAA en route (except target area) is reduced to 3
- 2. New parameters in conf.ini:

RandomFlights=n sets number of flight groups not related to mission. Maximum is 5, minimum 0, default 2. New random groups - friendly bombers and returning allied planes. NoBadWeather eliminates storms, rain, snow, blind weather. All weather is possible by default

NoAirfieldHighlight - Not used airfields won't have AAAs anymore, which also removes their highlighting with a color on a map. They have AAA and are highlighted by default CampaignAI=Easy (Hard), default is Normal - increases or decreases friendly and hostile AI level.

CampaignMissions=Easy (Hard), default is Normal - switches to different scripts for operations, affecting number of planes and groups. Even on Hard, the scripts are less challenging than in the previous version - for all nations and years. CampaignDifficulty now sets both AI and Missions. CampaignLength=VeryLong (Long,Medium,Short,VeryShort), default is VeryLong. Sets number of missions in campaign. Long is about 2 times shorter than VeryLong. VeryShort is about 10 times shorter.

The lines can be placed anywhere in conf.ini, but recommended way to do it is to create in the end of the files a new [DGen] section and add everything after that. An example:

[DGen]
NoAirfieldHighlight
NoBadWeather
RandomFlights=5
MissionDistance=30
CampaignMissions=Hard
CampaignAI=Easy

- 3. Roster adjustements: fighter and bomber careers use different criteria for awards.
- Pilots are now younger.
- Promotions rate slowed down.
- Intitial number of sorties and kills increased. It is also year and nation specific, for instance
- Germans may start in 1941 with many aces, and Soviet squadrons are getting more and more experienced as war progresses.
- Criteria for some awards change historically during war it requires many more kills for German fighter pilots to receive
- Knight's Cross in 1944 comparing to 1941.
- AI pilots fly missions even if they are not in your group, so number of sorties for you and AI is growing at the same rate. AI pilots can score and be killed in these missions, probability of that depends on their experience.
- Until you have the senior rank (Colonel), squadron CO will be always at least of your rank, no LtCol flying under Major's command anymore.
- 4. Summary of air and ground targets destroyed by you in the last mission and during your career are now listed in the debriefing.
- 5. New campaign German retreat from Kuban in the fall '43
- 6. Templates can now use custom buildings.
- 7. Player's plane armament for ground attack now has different variants for soft targets, armor, ships and bridges.
- 8. Intercepting planes now not always receive special armament, like rockets or gunpods, it is more random.

9. For every career a file that defines plane classes for this career can be created. File name is ClassesNnX.dat, where NnX is career ID, like DeS for Geman Stuka. It is a text file that overrides default plane classes for this career, the format is:

PLANE ROLE, for example:

FW\_109A4 FIGHTER FW\_109A5 FIGHTER

the following roles are supported:

FIGHTER = escort, intercept, recon missions
LIGHT = same as fighter, "soft" ground targets like trains can be attacked.
TANK = soft targets + tanks, not antiship or anti bridge.

JABO = scramble, recon and all ground attack missions
ALL = all missions, fighter and ground attack

GROUND = only ground targets, suitable for bombers or ILs

## **Bugs fixed**:

- 1. Level bombers attack area targets in formation.
- 2. Spaces in pilot's name don't cause problems.
- 3. Known static planes causing collisions are removed.
- 4. Coordinates of one of Lvov map airfields corrected.
- 5. Date of Stalingrad missions are fixed.
- 6. Rzhev dates are changed in order not to overlap with Stalingrad.
- 7. Initial border on Lvov map corrected.
- 8. Junior rank for Germans now corresponds GUI ranks.
- 9. Evening missions start earlier.
- 10. 190F8 switched to JABO, won't fly escort missions. It's default ground attack loadout changed to SC500. Plane name in brieifngs corrected.
- 11. DB-3F bombing with torpedoes fixed.
- 12. Me-323 should not appear in Finland transfer missions.
- 13. Some German briefings corrected.
- 14. Hungarian ranks in German locale corrected.
- 15. BF-109F fly higher.

- 16. Main BF-109G bombing loadout changed to SC250 from SC500.
- 17. BF-109s capable to carry additional tanks, are equiped with them if a mission requires.
- 18. No snowstorm messages in summer time anymore.
- 19. Yak-1 ans Yak-1B can now fly ground attack missions.
- 20. Wrong national markings in some campaigns (German Blenheims and PZLs) are fixed.
- 21. FLAK removed from a runway in Northern Crimea.

# Misssion sets for new difficulty levels made by:

Johannes Ritter

## **Special thanks to:**

Johannes Ritter, Ian Boys, Pierre Berger, Helmut Skrdla

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Johannes Ritter, Ian Boys, Pierre Berger, Helmut Skrdla, =38=Backfire, =38=HeartC, =38=Catso, =38=Etwas, 602 Furball, 602 Jose, 602 Sigi, 602 Luppe, 602 Slig, 6BL-tttiger, Tom72k.

# **Bug Reporting**

Bug Reporting enables you to get across information about **irregularities**, **problems**, **bugs** and other defects in FB version 1.1b directly to 1C:Maddox Games via e-mail (special mailbox **il2beta@1c.ru** is issued to collect your information). You can also use the Bug Report to give us feedback on certain issues.

**Before sending us a report**, please convert TGA files to JPG, and zip large files.

# **Bug report form**

- 1. Version Number
- **2.** Computer (complete info. including versions and type of video/sound drivers and type of online connection)
- **3. Bug/Defect Description** (short, including description for each screenshot or track, if is)
- **4. Describe steps to reproduce the bug** (detailed)
- **6. File Attachment** (Screenshots, tracks or logfiles)