Aerofly Version Changelog

Aerofly FS 2 is still in development even after the official release. This changelog shows the progress made throughout development. Much focus was made to develop a solid core to build upon throughout Early Access, and this was achieved. Focus will now be put on adding features to the core engine of Aerofly.

Changelog

2017-11-23

- Performance improvements
- Buecker Jungmeister Bu 133 released
- Core aircraft functionality

2017-11-20

- **Official release of Aerofly FS 2**
- Performance Improvements and core stability efforts
- Colorado scenery released

2017-10-04

- Fixed rollover behavior for COM and NAV frequencies
- Fixed F18 sends correct acceleration values for SDK
- Changed unified click spot handling: three state switches work as before, left and right click to push and pull the switch, mouse wheel to rotate in a specific direction two state toggle switches now consistently have a left click toggle and no right click action and can be set to a certain direction with the mouse wheel just like three state switches
- Changed adjusted brake strengths, softened the response for small inputs
- Changed adjusted autobrake
- Added autothrottle can be overwritten in SPD mode, move throttle input either to full forward or full idle to disagree with the automatic throttle command
- Changed autothrottle holds speed better in turn
- Fixed autopilot on most aircraft can arm approach below 400ft now
- Fixed autopilot: manually selecting speed during go-around now possible
- Fixed autopilot: go around vertical mode (SRS) is flown even if radar altitude dips below 50ft
- Fixed autopilot: several small bugs, for example: VNAV now stays armed in Learjet and Q400 when other simple modes such as FLC, V/S or SPD are selected
- Fixed autopilot VNAV ALT is removed when at cruise altitude.
- Fixed localizer capture at very steep angles now turns correct direction
- Fixed A320 LAND mode now stays on display even if radar altitude increases again
- Changed ASG29 flap lever speed adjusted, now slowly moves from one to the next gate, has high speed when you move the input quickly
- Changed B747 reduced flare strength from autopilot, should now float less and touch down a lot

sooner
- Added B747 maximum maneuvering speed to PFD speed tape
- Added B747 autobrake RTO now resets to off when airborne
- Added B747 three state gear lever
- Fixed LJ45 less throttle input now allowed before gear warning is triggered
- Added F15 nav light clickspots
- Changed F18 yaw dampening for improved roll coordination around velocity vector
- Fixed Q400 removed red belly beacon
- Added ASG29 added force trim
- Changed B737 flight mode annunciators
- Changed B737 flight directors now hidden when off
- Added B737 autopilot bank limit selector
- Changed MB 339 increased ground effect
- Changed F4U reduced flap actuator speed
- Added F15 high sensitivity steering (45°), toggled with autopilot disengage
- Fixed click spots for parking brakes are now enabled
- Changed yaw-damper improved: better roll in and roll out of turn behavior
- Changed improved fly-by-wire: fine tuned roll behavior, improved pitch support in turns, A.FLOOR and TOGA LK can be cancelled, protections (overspeed, alpha, low pitch) engage softer
- Changed B747 improved yaw damper turn coordination
- Added B747 added outboard aileron lock out at high speeds with flaps up
- Added B747 added master warning and master caution lights and push button
- Changed B747 “FD” text and cross bars removed when onside flight director switch is off
- Changed B747 now accurate altitude alert logic
- Changed LJ45 course synchronization now uses direct to station if available (as real aircraft)
- Fixed LJ45 speed-tape on PFD values no longer pop in at the top
- Added A320 added RADIO NAV page of MCDU, this allows you to manually tune frequencies and override the auto-tuning
- Changed A320 tiller inoperative as long as autopilot is commanding steering in roll out phase. Disconnect autopilot to exit the runway.
- Changed A320 ND renders previous waypoint and current leg properly
- Changed A320 autopilot and autothrust masters work during LAND phase
- Changed A320 autopilot selected values can be changed when in LAND phase
- Changed A320 adjusted flight model: angle of attack lower in clean config, pitching moment adjusted
- Changed A320 accurate altitude alert logic
- Fixed A320 flashing values on the PFD now change their visibility in sync with the flashing
- Fixed A320 no longer commands full aileron when autopilot disconnects

2017-08-25

- Fixed a bug that caused the pilot figures to be shiny
- Fixed a bug where the trees were floating above the ground in random locations
- Small bug fixes to the A320 and B747 aircraft

2017-08-23

- Added official support for FSWidgets.

- Changed autopilot improved LOC tracking, now uses a calculated lateral offset, not deflection angle
- Changed autopilot / flight director LOC stays engaged when autopilot disconnects
- Changed Fly by wire implemented C* law, modified flight phase transitions, pitch trim reset after touch down now smoother, nz load protection.
- Changed FBW bank protection, how the aircraft rolls back to 33deg when stick released, softer pitch attitude stop, over speed protection now targets VMO + 15kts when stick full down, VMO when released.
- Changed FBW angle of attack protection now internally also controls only angle of attack, aileron compensates asymmetries better
- Changed wheel simulation: improved ground handling, idle taxiing and improved brake control. Q400 one engine taxiing now possible.
- Added parking brake
- Added deformable wheel animation
- Added thrust lever sealing lip animations for Q400 and F18, more to come
- Fixed A320 fixed auto-brake now disables 5 seconds after lift off, correct ECAM page displayed after lift off during gear retraction, PFD now displays correct ground phase
- Changed ASG29 improved flight model: more realistic behavior to flap, added pitch trim synchronization on AP disconnect button (force trim), reduced drag from landing gear, fine tuned glide performance for current weight (no water)
- Changed pressure settings in airliners are not automatically set to either STD or QNH when initialized in air or ground.
- Fixed B737 localizer now displays correctly
- Changed B747 flight physics to be less sensitive to throttle, better flare dynamics
- Changed B747 updated cockpit 3D model with new textures, newly modeled switches and buttons
- Fixed B747 some bugs in VNAV, placing the 747 near the route should now correctly resume VNAV PATH
- Added F18 high and low sensitivity nose wheel steering, toggled per AP disconnect (same button in real world)
- Changed Q400 decreased nose gear steering speed to be more realistic, decreased drag on approach, more realistic cruise drag
- Changed Q400 increased full flap pitch attitude, decreased pitch attitude for others
- Fixed Q400 a bug in the REDUCED NP LANDING, a bug in the pitch trim runaway detection, is now sensitive to autopilot pitch trim changes
- Fixed Q400 master caution and master warning, now re triggers when a new warning comes up
- Fixed Q400 a bug in the formatted ILS view
- Changed Q400 increased stall trigger margin for full flaps
- Changed Q400 right side MFD to display system pages per default

2017-07-26

- Fixes to the shimmering buildings and houses seen by some users
- Improvements to the night lighting and a fix to the flickering lights seen at night
- The ability to now define a user folder in a new location/drive advanced autopilot (AP in C172, B58 unchanged)
- completely overhauled
- increased functionality and greater realism for all aircraft
- reduced pilot work load, prepared for usage in takeoff, clean and landing configuration
- basic modes for each aircraft is now corrected

- improved LNAV/VNAV functionality (e.g. automatic descent at T.O.D. in Boeing)
- added manual navigation source selection in LJ45, Q400 and C90GTX
- added fully automatic landing for A320, B737, B747
- added managed RNAV (GPS) approach with lateral and vertical deviation from FMS
- added mode reversions for A320 auto-thrust system overhauled completely
- disables with levers at idle in A320
- is set on in A320 by applying FLX or TOGA on ground, features stall protection: A.FLOOR and TOGA LK, ground speed mini principle
- added B747 and B737 have reduced thrust during climb
- added FMS like features to the navigation displays of all airliners, e.g. top of descent, vertical and lateral deviation from flight plan
- added crew alerting system (CAS) added to LJ45 and B747 with takeoff configuration warnings, autopilot and auto-throttle disconnect warnings
- Improved the fly by wire of the A320 but not finished yet (WIP)
- faster roll rate
- better turn coordination
- features basic protections, like pitch, bank, stall and over-speed protections
- trim reset on landing
- modernized A320 displays, more realistic look and greatly increased functionality
- adjusted flight models:
- reduced drag in A320, B747, LJ45

controls:

- added auto throttle disconnect
- added TOGA button assignment
- added spoiler move two directions (incremental)
- added spoiler arm

DETAILED AUTOPILOT CHANGE LOG:

- advanced autopilot completely overhauled
- added lateral modes: bank hold, track, go-around track, localizer capture, runway (takeoff), runway track (takeoff), rollout, vor capture, RNAV/GPS approach
- added vertical modes:pitch hold, go-around pitch (takeoff), flight path angle, altitude capture, altitude cruise, MACH hold, FLCH climb and descent (OP CLB, OP DES)
- added flight level profiles for LJ45 (high speed and normal), expedited CLB or DES, SRS (takeoff), step climb, VNAV path (auto-descent after top of descent), FINAL (similar to VNAV path but for approach), glide slope capture, flare (autoland), rollout (autoland)
- added throttle modes:HOLD (levers can be moved in idle or during takeoff roll), MACH hold, “A. FLOOR”, “TOGA LK”, “THR REF”
- added correct basic modes for all aircraft (BANK, HOLD, HDG)
- added autopilot can auto-land certain aircraft: A320, B747, B737
- added automatic auto-throttle engagement with thrust lever when flight directors are on (A320)
- added auto-throttle is set off when levers are retarded to idle (A320)
- added auto-throttle locks current thrust value when it is set to off.
- added support for manual navigation source selection in LJ45 and King-Air
- added voluntary and involuntary disconnect
- added autopilot disengages at MDA -50ft if not in LOC/GS, also disengages at 50ft AGL if it can't auto-land
- added support for 360 deg turns depending on direction the knob is turned

- added “ground speed mini” principle (in manged mode the speed won't be allowed to drop very far, remains above flap retraction speeds)
- added acceleration height and thrust reduction height (1300 and 1500 ft)
- added automatic switch over from speed to mach in climb (reversed in descent)
- added support for aircraft without specific flight director key (Q400, LJ45 FD clear only buttons)
- added RNAV (GPS) approach
- added correct behavior for multiple autopilots at once (multiple AP's only allowed during approach and go-around)
- added vertical and lateral deviation from flight plan, incl. top of descent warning, drag required, etc.
- added mode reversions (e.g. target altitude is changed during altitude capture phase)
- added for A320: when FD is in ALT and the autopilot is engaged it will do a level off at current altitude when the deviation to the target altitude is greater 250 ft.
- added auto-throttle maintains speed above VLS (low speed) and below VMAX
- Added intelligent automatic initialization:ready to go in takeoff configuration (LNAV/NAV armed, CLB/VNAV armed), cruise altitude set in landing configuration: automatic ILS capture or final approach (LNAV/VNAV) armed, ga-altitude set altitude hold in cruise configuration and armed LNAV/VNAV and managed speed, current selected,altitude synchronized
- adjusted vertical speed hold modes to be more subtle
- adjusted loc-capture and hold to be based on ground track, not heading (for crosswind landings)
- fixed selected speed below allowed minimum value
- fixed selected/managed speed target always above minimum allowed value

fly by wire (FBW): (Work in Progress)

- angle of attack protection
- over-speed protection
- high and low pitch
- bank protection
- added automatic trim reset on ground

DETAILED AIRCRAFT CHANGE LOG:

A320

- added auto-thrust can be disengaged by pulling levers to idle
- added thrust lever indents
- added flexible takeoff (FLX)
- added A.FLOOR and TOGA LK
- added thrust lock when auto-thrust set off via FCU
- added auto-thrust limited to lever position
- added autopilot disconnect warning can be cancelled if disconnect button pressed twice
- added fly by wire resets trim on touch down
- added a lot more moving buttons to virtual cockpit (autopilot, ecam switching panel, auto-brake, chrono and clock, etc.)
- added spoilers retract at high angle of attack
- added slat retraction inhibited at high angle of attack
- added MACH and FPA selection to FCU
- added auto-thrust now protects speed from dropping below lowest selectable speed
- added ground speed mini principle during approach (speed is kept high depending on selected flap setting)
- changed total mass of aircraft to 60t

- changed total drag (now lower)
- changed gear lever is locked on ground
- changed radar altitude callouts now quieter
- corrected FCU display, e.g. dashing values after 10 or 45 seconds
- corrected v-speeds for increased takeoff-mass of 60t
- fixed auto-brake not on MAX in takeoff configuration
- fixed baro-pull knobs, now push and pull

primary flight display (PFD)

- changed display colors
- changed flight mode annunciation
- changed names of autopilot modes
- added new modes are boxed
- added comm modes LAND, FLARE, ROLLOUT, FINAL APP
- added approach capability (e.g. CAT 3 DUAL)
- added flashing LVR CLB warning (action required: reduce throttle position to engage auto-thrust system or disable auto-thrust)
- added amber THR LK warning (action required: move thrust levers to gain manual control)
- added “DECELERATE” warning when flown past the top of descent and not stated descent yet
- added “MORE DRAG” warning (action required: extend speed-brakes and monitor vertical deviation)
- added “DH 100 ft” to PFD default enabled when approach phase is set (Baro minimum is prepared as well, can't be used yet)

changed speed tape

- completely re-done
- fine tuned design
- added V1 digital readout
- changed numbers (V1, VR, V2, VLS, green dot…) to more realistic values
- changed speed-bug appearance
- vls, low speed and alpha protection tape now moving depending on load factor
- mach number now correctly positioned
- all overflow clippings or pop-ins simulated correctly as in real world

changed attitude indicator:

- completely re-done
- changed to a more authentic look
- fine tuned pitch ladder
- added high and low pitch red arrows
- added amber tail-strike warning arrow
- changed pitch and bank protection angles now dynamic
- added flight path vector and BIRD (flight path vector) when in TRK/FPA
- added flight director failure warning and selected heading tick
- added mode reversions (flashing flight director on PFD and audible “3-tick”)
- added flight director failure text (big red “FD” in top left)

changed altitude tape

- completely re-done

- accurate magnifier size
- accurate font-size
- accurate altitude-bug roll-in
- added altitude alert
- added flashing QNH/STD barometer reference when above/below transition altitude/level (action required: pull/push baro STD)
- added vertical deviation (green dot on altitude tape)
- added brown low altitude awareness
- adjusted radar altimeter red low altitude awareness rendering
- added support for latest A320 yellow MDA/baro-minium bar
- added qnh/std transition level/altitude flashing warning
- added/adjusted metric altitude readouts
- support for negative altitudes

changed compass

- completely re-done
- changed heading bug appearance
- changed ILS overflow to a box
- changed ILS values in lower left to look more realistic

changed vertical speed indicator

- overhauled
- displays digital readout correctly now
- changed font size

changed ILS display of localizer and glideslope

- overall look fine-tuned
- parked position/overflow points outwards
- added V/DEV for None-ILS managed approach on PFD (magenta brick instead of ILS glide slope)
- added flashing “ILS” warning - push LS button
- added flashing “V/DEV” warning - push LS button

navigation display (ND)

- added “TA ONLY” box at the bottom
- added MODE CHANGE and RANGE CHANGE when switching settings
- added selected approach “ILS APP” or “RNV APP” depending on available auto-tuning availability
- added top of climb, top of descent, end of descent, 10,000 ft acceleration and deceleration point, approach speed deceleration point, ETP etc.
- changed route now drawn only partially (remaining route)
- changed chrono time look
- changed bearing needle pointers and tables in left and right bottom corners
- changed GS and TAS readouts in top left corner
- changed next waypoint into in top right corner
- changed LS and VOR modes now display course deviation only if signal received
- changed the look of LS and VOR mode

ECAM

- added set lever to climb warning on ECAM memo
- added autopilot disconnect (voluntary) and auto-thrust disconnect (voluntary and involuntary)
- added “cabin ready” annunciation
- changed fuel on board, fuel flow and gross weight now rounded
- prepared engine display for shut down engines (not enabled yet)

changed N1 display

- adjusted look
- changed lever position to a circle
- added auto-thrust command arcs
- added amber “REV” when reversers are in transition

Changed EGT display

- adjusted look
- added max EGT tick

Changed flap display

- completely redone
- more realistic look
- displays now selected flap and slat target

B737

- added flight director priority lights on MCP
- added moving buttons for MCP
- added mach selection in MCP
- added autopilot disconnect warning light
- added altitude alert
- added gear lever now has an off position
- added auto-brake disengage warning
- added HSI mode can be changed to view lateral and vertical deviation from flight plan (toggle switch in glareshield, left and right of autopilot selection)
- added flight mode annunciator
- changed automatic nav-tuning disabled per default
- changed vertical speed can be stepped in 50 ft/min increments

B747

- added crew alerting system (CAS) with messages like auto-break status, autopilot warnings, takeoff configuration warning for spoilers, flaps, etc.
- added THR REF limit for the auto-throttle system. Uses full thrust for takeoff and reduces to 90% after thrust reduction height
- added buttons on glareshield are now moving
- added vertical deviation to navigation display
- added airport elevation visible on PFD
- added autopilot bank limit selection
- added auto-throttle keeps speed at or above flap retraction speed in VNAV during the approach\
- added VREF display
- changed flight mode annunciator on PFD highlights new modes and displays correct names
- changed flap retraction speed visible on PFD speed tape

- changed top right information on ND
- changed trend arc for turn doesn't overlap with center line and is white
- changed total drag of the aircraft is reduced
- changed when set to runway selected speed is V2
- changed ND plan mode
- changed MCP buttons light up

C90GTX

- added navigation source selection: FMS, NAV1, NAV2 including coupling to left or right HSI
- added autopilot target vertical speed to vertical speed indicator
- added autopilot buttons now move in virtual cockpit
- added label “next page” to radio management unit
- changed HSI displays course even if no signal is received, only course deviation indicator is removed
- changed flight mode annunciator on PFD displays correct names for modes
- changed navigation source legend on primary flight display now displays more realistically if no signal received or no if data present
- fixed ADF frequency on radio management panel now visible again

LJ45

- added crew alerting system (CAS) with info like status of auto-spoilers, warning spoilers extended, take off configuration warning: flaps, trim, etc.
- added take off warning affected items boxed in red on EICAS
- added altitude alert
- added FMS mode (TERM, APPR or enroute) displayed on PFD
- added reduced bank limit for autopilot
- added animated buttons in virtual cockpit
- added approach capability displayed on PFD
- added MFD TCAS view
- added AP and YD disconnect warnings now flashing
- changed flight mode annunciator highlights new modes and displays correct names\
- changed selecting vertical speed mode hides selected speed and vice versa.
- changed trim display on EICAS
- changed MFD top left FMS information hidden when no route available
- fixed auto-spoilers now only deploy above 60 kts ground speed

Dash 8 Q400 Details

liveries;

- Austrian Airlines, Canada Express, Flybe, Horizon Alaska, Celebration and Green, Sata, SkyWork
- full rigidbody simulation of the fuselage, wings, stabilizers, gear and propeller with Aerofly FS 2 engine nativly accurate flight model which is fairly close to real world numbers during climb, cruise and descent

simulated prop wash effects on wing, gyroscopic effects of the large propellers which require a bit of trimming on pich, yaw and roll axis when power changes

custom engine physics for the PW150A turboprop engine using real world physics laws and no “lookup table” calculations

- realistic engine shut-down and preliminary failure of other systems with engine off
- engine start: physically accurate simulation with starter connected to high pressure shaft
- engine has realistic heat capacity and cools down when its off

custom FADEC simulation

- all real world derates implemented: MTOP, NTOP, MCL, MCR, reduced TOP TRQ selection
- power lever with audible detents

new governor implementation

- fully feathering
- reduced prop rotation speed for landing (REDUCED NP LANDING)
- beta range and reverse

autopilot

- requires manual click on “ALT SEL” button to arm any altitude capture. can also be used to arm the flight director, right click (temp. workaround) to disarm altitude capture
- fully simulated navigation source selection including “DUAL FD” during ILS CAT 2 approach
- lateral modes: bank hold, heading hold, heading select, LOC*, LOC, VOR, LNAV
- vertical modes: GA pitch guidance, pitch hold, V/S, ALT*, ALT, IAS, VNAV PATH, G/S*, G/S
- as in real world: no auto-throttle, no auto-land, no VNAV climb, deselection of modes possible to return to basic modes

custom rendering algorithm for all displays

- top of climb <TOC> and top of decent <TOD> displayed on ND
- navigation source selection on PFD, vertical and lateral offset from flight plan
- formatting of ND allows ILS preview and whilst autopilot still follows FMS routing

glass cockpit functionality

- all system pages, and display swaps
- full mode of ND, data toggles
- formatted mode to pretune ILS/VOR course, right-click (temp. workaround) the FORMAT button to engage this view
- MDA/DH, V-speed and pressure selection
- altitude alert
- raw data needle bearing selection
- increased reference speeds with switch on ice protection panel

ARCDU (audio radio control display unit)

- default: FMS autotune engaged, can be disabled to set ILS or VOR frequencies manually
- has multiple pages as well as expand features
- tuning of VHF, VOR/ILS, ADF, ATC as well as adjustment volume levels
- change ATC/TCAS from ON ALT to off and vice versa using right-click
- can be set off

all clickspots have been prepared and are available, most switches already work but not all systems are modelled yet. A lot of the pushbuttons are animated to give better feedback

other implemented features

- control lock
- stick pusher (stall protection), can be set off
- spoilers and rudder control are lost when engines set off in flight
- flight controls can be manually set off using the “powered flight control surfaces” buttons
- nose wheel steering can be set off
- spoiler switch with automatic “set on” function when power levers are advanced
- parking brake
- chrono and elapsed timer (ET automatically runs in flight)
- warning panel with a lot of warn indications and warning/advisory light test

Sounds

- blade pitch effects such as DISC condition of props, reverse, RPM changes, etc.
- engine turbine and ignition
- wind, ground roll
- bleeds

warning sounds

- overspeed warning
- gear warning horn
- stall warning
- takeoff configuration warning - tests trim, condition levers, flaps and tiller centered
- beta range warning in flight - leave power lever above flight idle detent in flight
- master caution, master warning and fire test sounds
- pitch trim warning sound
- seat belts and no smoking signs, audible “ding”
- detent sounds, switch sounds, and button sounds
- altitude alert
- autopilot disconnect
- altitude callouts

Partial Functionality

- pressurization: panel working but has no affect yet
- hydraulics: hydraulic panel for STBY and PTU selectable, when engines are off some flight controls fail
- bleeds: mostly audible sound, no affect on cabin conditions modeled yet
- APU: has self test, can be started and shut down, has no affect
- electrics: mostly static, some failures due to engines off are shown
- deicing panel: automatic and manual selection can be made, has no affect on aircraft what so ever, icing not modeled yet.
- fire test: sound and warnings shown
- auto-feather: shows as armed but actual feathering is not implemented since currently the only way to turn off the engine is through moving lever to cut off anyway
- animations: tablets left and right of pilot and f/o can be folded down

2017-04-03

- New DLC featuring the State of Utah
- Improved graphics performance and memory usage
- Minor bug fixes in the Navigation menu

2017-02-10

- Improved interior textures for C90GTx and Learjet 45
- Improved Learjet 45 displays and functionality
- Added Learjet 45 system pages
- Added an option to broadcast current flight position over LAN or Internet so it can be received by compatible apps like ForeFlight, iFlightPlaner and Sky Demon
- Improved HUD can be activated in any view and displays more values and 5 degree ticks for horizon and pitch.
- Fixed Saitek panels show blanks for values that are not available in the current aircraft and therefore cannot be changed
- Added new functionality to the SDK. You may now create your own liveries for the C172, B747, C90GTx, LJ45 and the Pitts. More airplanes will be added in the future.

To get the SDK just register at this website: https://www.aerofly.com/aerofly_fs_2/sdk/ Registration is free, all we require is a valid Email address so we can inform you when new a new update is out.

2016-12-21

- Added the F-15
- Added New York region as a DLC
- Improved tree rendering with less graphics card memory usage
- Fixed zoom speed is independent of frame rate
- Added preliminary Vive controller support for menu and cockpit interaction
- Fixed device list in controller menu can be scrolled to display more than 8 connected devices
- Changed HUD keeps vertical orientation in 'follow' view
- Changed minimum HUD size is smaller
- Changed only minimal HUD is shown when in 'external' and 'fly by' views

2016-11-25

- Fixed a critical bug when connecting/disconnection a controller
- Fixed shadow rendering bug while in VR
- Added new HUD display for VR with configurable size and optional horizon
- Added more values and functionality to B747 PFD
- Added path prediction line to B747 navigation display
- Added new graphics element that allows complex nozzle animations Added ECAM pages to B747

2016-11-11

- Bug fix regarding shadow rendering on HTC Vive
- Fixed the approach guides not being shown

2016-11-04

- Improved VR rendering performance (over 25% when using the HTC Vive and around 10% when using Oculus)
- Enabled aileron, elevator and rudder control using keys or buttons (not the recommended way to control an airplane, but you even can land smoothly with proper trim and throttle management).
- Fixed XBox and similar controllers: combined trigger assignment to rudder and brake works again
- Fixed Baron 58 turn indication
- Added COM and NAV tuning via radio management units in Learjet 45 and King Air C90
- Fixed F18 autopilot trim interaction
- Fixed coarse tuning steps for NAV and COM
- Added max positive / negative G can be reset on aerobatic aircraft
- Changed basic autopilot on Baron58 and C172 softer on bank and pitch controls

2016-09-24

- Fixed performance regression when using Oculus Rift with the native Oculus drivers
- Improved cloud billboard rendering less sensitive to view direction changes
- Added Numpad +-*/. as keys independently assignable in control settings
- Fixed key assignments with keys like [];',./ are saved correctly now
- Fixed performance regression when using Oculus Rift with the native Oculus drivers
- Improved cloud billboard rendering less sensitive to view direction changes
- Added Numpad +-*/. as keys independently assignable in control settings
- Fixed key assignments with keys like [];',./ are saved correctly now

2016-09-16

- Fixed rendering issues with landmarks, clouds and shadows since last update
- Fixed creating screenshots while in VR
- Fixed transponder code can be set with Saitek Radio Panel and buttons/keys
- Changed head tracking with HTC Vive (To get the best experience with your HTC Vive we recommend to turn on 'Allow projection' as well as 'Perf Heuristic Active' in the SteamVR performance settings window!)
- Added default assignments for Saitek Radio Panel for COM and transponder
- Added F18 autopilot controllable via Upper Front Control (WIP)
- Changed A320 small improvements/fixes to displays
- Fixed A320 flap / slat sequence
- Changed ASG29 flight computer improvements

2016-09-09

- Improved depth buffer rendering for less flickering of distant objects

2016-09-06

- Improved Rendering speed of up to 25% compared to the last update with version 2.0.1 EA3.30
- Added new VR option that allows you to set the pixel density. Please use this option with care, it has a strong impact on the performance.
- Fixed camera rotation resulted in oddly looking clouds especially while using VR
- Improved Longer flight recording of 10 minutes

2016-08-25

- Improved Rendering speed of up to 25% in cockpit view on modern 3D graphic cards (Please install the latest 3D driver!)
- Improved Depth Buffer precision for less flickering of distant objects
- Added Landmarks can be turned on/off during simulation. Assign a function in the Controls menu
- Added Screenshots can be assigned a function in the Controls menu
- Fixed route starting airborne
- Added right double click support
- Added more flight state messages to SDK output / wrt to body system
- Added support for Saitek Multi Panel
- Added support for Saitek Radio Panel
- Added support for Saitek Switch Panel
- Added Frequency select and swap assignable in controller menu
- Added support for Saitek TPM
- Added more autopilot functions assignable in controller menu
- Added mouse cursor fades in simulation
- Added light controls assignable in controller menu
- Fixed view rotation doesn't tilt view when looking left/right
- Changed default view tilt removed for VR
- Added a single control device can be reset to its default
- Added all assignments for one device can be removed
- Added screenshot function can be assigned to key or button
- Added varometer volume can be adjusted using buttons/keys
- Added A320 more ECAM pages, updates to flight displays (WIP)
- Added ASG29 flight computer (WIP)

2016-07-26

- Fixed ADF receivers can tune all NDBs
- Added MB339 flight director

2016-07-22

- Added buttons to show/hide navaids, airports and waypoints on map in location and navigation menu
- Added button to position airplane at start of route in location and navigation menu
- Added button to center map on aircraft position
- Added button to center map on route

- Added current route is displayed on location menu map
- Added aircraft equipped with LNAV/VNAV can fly the planned route automatically
- Added cockpit navigation displays show route and waypoints and time and distance to next waypoint
- Added PFDs show tuned ILS identifier, course and distance
- Added auto tuning: airliners automatically tune navaids from route, nearby navaids and destination ILS
- Fixed route shows magnetic track instead of true track
- Added new repaints for F-18, Pitts
- Fixed bump mapping on P-38
- Fixed rudder assist / autorudder turned off
- Added right mouse button to pull knobs in cockpit
- Added navigation guides for route (enable/disable with approach guides)
- Fixed auto spoiler retract when applying full throttle in all aircraft
- Added A320 ECAM pages: engines, electrics, hydraulics, fuel, wheels, flight controls (other pages are not completed yet)
- Added A320 automatic ECAM switching and manual page request and page iteration
- Work in progress A320 electric and fuel system (closing fuel valves has no effect yet)
- Added C172 full electrical bus system including battery and alternator simulation
- Added C172 radios and navigation instruments can be switched off (and on)
- Added C172 turning off the master battery switch will kill all electrics and set the cockpit into a dark state
- Work in progress C172 fuel system (closing fuel valves has no effect yet)
- Fixed minor bugs on aircraft (landing gear cutting through doors, hidden objects, …)
- Added C172 added waypoints and route display to the moving map display in the cockpit
- Added Baron58 electrical system, radio stack can be turned off

2016-06-02

- Changed pressing ESC while in pause/replay in-paused only instead of going back to the main menu
- Fixed Replay is available longer until you change or reposition the aircraft
- Added a reset button in the controller menu.
- All controller devices including the keyboard can be reset to their default assignments
- Added support for the TrackIR roll axis
- Changed Trim changes smoothly while trim button pressed, no need for repeated button presses
- Added help overlay for controller configuration menu
- Changed simulation is not paused when another window/application gets the focus
- Changed wind speed at ground level is higher for a given setting now
- Added The time before automatic replacement after a crash is adjustable in the Settings now
- Added a button to toggle sound on/off. Default assignment is 'Q'
- Fixed Altitude callouts are only played in cockpit and internal views
- Fixed Toggling the flight info doesn't reset the replay position anymore
- Fixed flight info size for large aspect ratio setups / widescreen
- Fixed Flight school mission can be select via mouse wheel as in aircraft menu
- Fixed autopilot is correctly reset after selecting a new starting position
- Fixed Autopilot selected vertical speed is correctly displayed in flight info
- Fixed Time rolls over correctly at 23:59 UTC
- Changed HUD and 'no aircraft/no panel' viewer position to the pilot's position

- Fixed Reflection map is re-generated after changing the airplane
- Added shift mode for the cockpit views. Head position can be adjusted up/down, left/right, forward/backwards. Default assignment is 'PageUp' / 'PageDown' for up and down movement.