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INTRODUCTION

Before You Fly

We strongly recommend that you read this guide as well as the real manual before attempting to use SkyView in actual flying situation. Additionally, we encourage you to spend enough time on the ground for familiarizing yourself with the operations of the system.

Warning

Some descriptions are taken from the actual Dynon SkyView manual and may not exactly reflect features implemented in this simulation. Whenever it makes sense such text will be shown in green for bringing your attention to eventual discrepancies. Please let us know if something is missing or went under our radar so we can keep this manual up to date and as accurate as possible.

CUSTOM DATABASE

During aircraft loading and script initializations, our SkyView builds its own navigation database by taking information from GNS files and then completing it with data from scenery files, following X-Plane's own internal logic. This means that:

- Navigation data will be first searched in Custom data/GND430/navdata and then in X-Plane's default folder only if not found here.
- apt.dat files in the Custom Scenery folder will be searched and read according to your scenery.ini file, finishing with the default apt.dat.
- Only first occurrence of an airport is taken in account from apt.dat files, meaning you should ensure your custom sceneries are above Global Airports.

You will likely find many warnings in the log, such as: "[SASL WARNING] "panel" Ignoring [4MO1] 'STAFFORD' because according to GNS 'MONTGOMERY-WEHRMAN' is 132nm away with same airport code" meaning that airport 4MO1 was found in GNS database with name 'MONTGOMERY-WEHRMAN' and that an airport with same ICAO code was found in an apt.dat file with name 'STAFFORD', and located 132nm away from the first one. Do not report such warnings to us, they are mainly due to inconsistencies in default X-Plane database. Instead, please visit https://gateway.x-plane.com/ if you want to help.
PRESENTATION

Our goal

When developing our virtual SkyView, our main goal was to provide a visual experience as close as possible to the real instrument. This has been achieved by using the same resolution as the real instrument (1024x600px), carefully hand drawing each texture that is displayed and ensuring they perfectly matched the original ones. However, because this is a simulation and we had to use standard tools such as SASL there are some limitations, both visually and in terms of functionality. While we will be making numerous references to the original documentation of the real SkyView, we will highlight the differences whenever it is relevant and not obvious.

Pop-up display

All digital custom instruments\(^1\) can be displayed in pop-ups and our SkyView doesn’t make an exception to this. All pop-ups behave the same way:

- to open or close a pop-up, click on a non-active part of the instrument's screen
- to close a pop-up, you can also click on the top right close icon
- to move a pop-up, click and drag a non-active part (typically a border)

The first time you open a SkyView pop-up, it is displayed so that the inner screen size is 1024x600, which is the native resolution of the real SkyView. You cannot move pop-ups outside the main screen. Take some time getting familiar with this and arrange the pop-ups at your convenience.

\(^1\)The TCAS/Weather radar and all backup instruments are not custom instruments and have no pop-up
**Hotspots**

Hotspots are areas where you can click with mouse, either on the screen itself or on its border when displayed in a pop-up. Any part which is not a hotspot can be used to move the window when in pop-up mode.

The top bar contains 4 hotspots that are shortcuts to (from left to right):
- Autopilot menu
- Transponder menu
- Clock/Timer menu
- COM radios menu

The bottom bar contains 8 hotspots that match the corresponding softkeys, which are dynamic functions based on the context.

The rest of the screen is a giant hotspot for bringing and dismissing the pop-up (except when the virtual keyboard is displayed, as shown in the Map section of this manual).

The lower border of the pop-up window contains the clickable areas for the softkeys and the joystick, having same functions as their 3D counterparts.

We will now refer to softkeys like this: `[SCREEN]` meaning you need to press the softkey named 'SCREEN', regardless of its position on the bar.
SCREEN LAYOUT

Examples

The following pictures shows sample screen layout configurations available on Aerobask SkyViews. Each of the three SkyViews is configurable independently from the others.
Selecting and Arranging Pages

1. Press [SCREEN] when on the Main Menu.
2. Press [PFD PG], [EMS PG], or [MAP PG] to toggle display of Primary Flight Display, Engine Management System, or Map pages.
3. Press [LAYOUT] to cycle between the different possible layout configurations, based on the number of pages displayed.
4. Press [BACK] when you are done and to return to main menu.

Active elements will change the background color of the corresponding softkey, turning it to light grey. If a menu item is disabled, the text itself will also be greyed.

Joystick menus

Joystick menus will change depending on the layout you have chosen. Two modes are available, PFD and MAP, with eight sub modes for the PFD and 2 sub modes for the MAP.

The joystick menu is in PFD mode when displaying reference to one of the height bugs: (BARO), (MDA), (CRS), (HDG), (ALT), (VS), (IAS) or (DIM). The actions on the corresponding joystick are explained in the PFD section of this manual.

(RNG) indicates that the joystick menu is in map mode without the Flight Plan displayed, otherwise it will display CURSR. The actions on the corresponding joystick are explained in the MAP section of this manual.

2: You cannot dismiss both the PFD and the MAP pages, you must have at least one of the two displayed.
This chapter focuses on the Primary Flight Display page, going into details of the layout, symbols and functions available when in this mode.

**Displayed items**

- Artificial horizon
- Airspeed Indicator with Airspeed Bug and Airspeed Trend Rate
- Attitude Indicator with Extreme Pitch Warning Indicators
- Flight Path Marker
- Altimeter with Altitude Bug, Altitude Trend Rate, Barometer Setting, and Density Altitude
- Vertical Speed Indicator with Vertical Speed Bug
- Heading Indicator/Compass Rose/Directional Gyro with Heading Bug
- Slip/Skid Ball
- Angle of Attack Indicator
- Outside Air Temperature
- Wind Information
Bugs

The SkyView PFD uses the airspeed, altitude, vertical speed, and heading bugs to control the autopilot, and the minimum descent altitude to provide both aural and visual alerts to the pilot. They are all modifiable using either standard X-Plane commands, or from the PFD Joystick Menu:
1. briefly push the knob or move the joystick in any direction to bring the list of bugs
2. select the bug you want to modify using joystick up and down
3. push again the knob to select the bug you want to modify
4. turn the joystick left (counterclockwise) or right (clockwise) to change the value of the displayed bug

Bugs can be synchronized to actual value (or to 29.92 in-Hg for the barometer) by either:
- pushing and keeping pressed the knob for 0.5 second
- pushing and holding the joystick left or right for 2 seconds

Airspeed Indicator and bug

The Airspeed Indicator is displayed on the left side of the PFD and incorporates an airspeed tape with a digital readout, true airspeed (TAS), airspeed trend indicator, and airspeed bug.

The airspeed tape displays indicated airspeed including gray, white, green, yellow, and red ranges to provide a graphical representation of aircraft speed in relation to the aircraft's limits. True airspeed (TAS) and GS are digitally displayed at the bottom of the airspeed tape.

The airspeed bug is displayed above the airspeed tape. The default color is white and it will turn cyan if the autopilot is in IAS mode with servos engaged.

Attitude Indicator

Attitude indicator symbology is displayed on PFD and incorporates a roll scale with roll pointers and a zero pointer reference, pitch scale with horizon lines, and water line symbology.

Flight Path Marker

The flight path marker is an icon that is superimposed on the PFD. It depicts the actual trajectory that the aircraft is flying through space. In contrast, the attitude indicator displays the direction that the aircraft is pointed. The flight path marker is extremely helpful in correlating and distinguishing between aircraft attitude and flight path, giving the pilot a better understanding of what the aircraft is doing.

3 You can also start changing the value by rotating the knob without first pushing it.
Altimeter

The altimeter is displayed on the right side of the PFD. It incorporates an altitude tape and digital readout, Density Altitude (DA), barometer setting, and altitude bug.

Barometer Setting

To change the barometer setting:
1. Enter the Joystick Function Menu.
2. Move the joystick up or down to highlight (BARO). (BARO) will now display just above that joystick. The barometer setting on the PFD will be outlined to signal that it is selected. Turn the joystick to adjust the barometer setting or push joystick to exit this menu.

Altitude Bug

The altitude bug is the cyan marker on the altitude tape and the digital readout is displayed at the top of the altimeter. To set the altitude bug:
1. Enter the Joystick Function Menu.
2. Move the joystick up or down to highlight (ALT). (ALT) will now display just above that joystick. The altitude bug setting on the PFD will be outlined to signal that it is selected. Turn the joystick to adjust the altitude bug or push joystick to exit this menu.

Altitude Alerter

SkyView is configured to audibly alert as the aircraft changes altitude in relation to the altitude bug. When the bug is active, audio out is configured, and the altitude alerter is configured, SkyView announces “APPROACHING ALTITUDE” as the aircraft flies within a chosen amount of feet/meters of the bug.

Minimum Descent Altitude (MDA) Bug

The Minimum Descent Altitude (MDA) Bug allows the pilot to set a bug to alert when approaching a set altitude. This is typically used during approaches to remain aware of approach minimums. This bug is distinct from the altitude bug, which is used to control the autopilot.

When the MDA bug is set (i.e. not at 0) and aircraft is descending:
- 200 ft above MDA, an “APPROACHING MINIMUMS” audio alert is played.
- At MDA, a visual “MINIMUMS” alert is displayed on the PFD.
**Vertical Speed Indicator**

The vertical speed indicator (VSI) is displayed to the immediate right of the altimeter and incorporates a vertical speed tape, vertical speed pointer (with digital readout), and bug.

**Vertical Speed Bug**

The vertical speed bug is displayed in cyan on the right side of the VSI tape and its associated digital readout is displayed at the top of the VSI. This bug is also used as a target for the pitch axis of the SkyView Autopilot.

**Compass Rose/Directional Gyro**

The compass rose/directional gyro is displayed on the lower center of the PFD and incorporates a magnetic heading compass rose, magnetic heading digital display, turn rate indicator, HSI pointer, course digital readout, 2 bearing pointers, heading bug, and heading bug digital display.

**HSI Source**

There are two primary types of sources: GPS and NAV radio. Anytime the SKYVIEW (GPS) is being used as an HSI source, all of the HSI data and the course pointer are drawn in magenta. When a radio is being used as the source, data is displayed in green. To the right of the compass rose, a textual info item describes the data source of the HSI. It can be any of GPS, NAV (VOR), or LOC (localizer).

To cycle through the available sources, press HSI SRC in the PFD Menu.

**Course Indicator**

The course indicator has an arrow at its end which points to the currently selected course. When the SKYVIEW (GPS) source is selected, course direction is automatically set by the programmed route and cannot be manually changed. When a NAV radio source is selected, the course direction can be set either on the radio or via the course (CRS) joystick function on SkyView, depending on the NAV radio that is selected. When tuned to a LOC, course must be set to the runway heading via the joystick CRS function.

In addition and in NAV mode only, the secondary arrow (closest to the aircraft symbol) tells you if you’re flying **TO** or **FROM** the selected radial.

---

4: Not implemented as of v1 of the airplane, you must tune CRS from Skyview for the moment
Course Deviation Indicator (CDI)

The CDI indicates how far to the left or right you are from the selected course. Full scale deviation depends on the selected mode:
- NAV: full scale deviation indicates 10° of deviation from the chosen VOR radial.
- LOC: full scale deviation indicates 2.5° of deviation from runway axis.
- GPS: full scale deviation indicates 5nm lateral offset.

Bearing Pointers

These arrows show you the bearing directly to a radio station or waypoint – in other words, the track you need to follow to fly directly to it. The display right of compass rose and below HSI data tells which source each BRG indicator refers to.

Information relative to BRG 1 is displayed in yellow and with a single arrow pointer, while BRG 2 is in orange with a double arrow pointer. A perfectly horizontal pointer means that no bearing information is available.

You cannot get reliable bearing information from an ILS source. You must use either a VOR or a GPS waypoint.

To cycle through bearing sources, press either [BRG 1] or [BRG 2] in the PFD menu.

Glideslope Indicator

This only appears when tuned to an ILS or a GPS with vertical navigation output. A red cross means that the source has been identified as an ILS but that no glidescope information is available yet. When in range, a green bar will indicate your deviation from the glide path, with a full deflection of 0.5 degrees.

In this picture, you're slightly below the glidescope, approaching runway 08R at Miami Intl (KMIA).

Wind Vector

Wind vector information is located just above the OAT display on the PFD. The winds aloft arrow indicates the wind direction relative to your current direction of flight. The wind strength, direction, and cross wind component are also textually provided.

Slip/Skid Ball

The action of the slip/skid ball simulates an analog slip/skid ball and provides a visual representation of lateral acceleration. When the ball is within the two vertical lines, the aircraft is in coordinated flight.
Angle of Attack Indicator

The Angle Of Attack (AOA) Indicator will display only when a Dynon AOA/Pitot probe has been properly installed and calibrated. During normal flight, the AOA Indicator will display green.

OAT

Outside air temperature (OAT) is displayed in the lower-right corner of the PFD. Units can be set to degrees Fahrenheit or degrees Celsius.

Extreme Pitch Warning Indicators

The SkyView PFD shows large red arrows as pitch warning indicators in extreme attitudes (by default 20° degrees or greater pitch up or down, see the setup menu for changing this value). These indicators point to the horizon and indicate which way to maneuver to attain a level attitude.
EMS Page

Skyviews are not designed for displaying jet engine parameters and consequently, the EMS window will only display the following information:

- amount of fuel, per tank and in total
- fuel selector (left or right tank)
- fuel mode (manual or automatic)
- bus amperage
- bus voltage
- trims
- flight time
- hobbs time

The only available option in the EMS page allows you to switch fuel quantities between gallons and kilograms.

Detailed information about the engine is displayed on the dedicated MVP 50 instrument. See the Victory flight manual for more information.
This section is about the MAP page, with the FMS/FPL function being covered in a dedicated chapter.

Independently of the actual map sub-menu or sub-window, turning the joystick clockwise or counter-clockwise will always change the range of the map. If this is the only action possible, the joystick menu will show (RNG). If the context allows or expects use of other joystick functions, then the menu will show CURSR.

Turn the joystick knob clockwise to increase the map range, up to 60nm for the inner circle. Please note that if displaying fixes, their names won't be shown starting 30nm range, and above.

The distance of objects that can actually be displayed on the map while at or near maximum range depends on the position of the aircraft. Navaids are searched within a 5°x5° region around the aircraft, meaning the distance covered varies based on your latitude and can greatly vary on the West-East direction.
NRST function

The [NRST] softkey toggles the display of the nearest airports window. If the map is in 100% (full screen) or 80% (map+EMS) mode the window will show up in the right, otherwise it will replace the map display. Note that even if the map is not displayed, zoom functions are still active.

Information displayed includes ICAO code, bearing to airport, length of longest runway, elevation, and full airport name. You may have duplicated if GNS and apt.dat databases are conflicting (typically with wrong airport code assigned in apt.dat files).

You can navigate and scroll up/down through the list with the joystick.

You can select an airport for a “direct to” by pushing the joystick. The airport will be highlighted in magenta instead of white to indicate it is ready for FMS insertion. You can confirm the plan change by pushing the joystick again, or cancel by either pushing the [NRST] softkey or moving the joystick left or right if you want to stay on the list.
INFO function

The [INFO] softkey toggles the display of the navaid info window. If the map is in 100% (full screen) or 80% (map+EMS) mode the window will show up in the right, otherwise it will replace the map display. Note that even if the map is not displayed, zoom functions are still active.

When selecting the info function, you'll be presented the search sub-window, which includes your search list and the virtual keyboard for easy input.

You can search for any airport or navaid by typing its code on the virtual keyboard. Only exact matches will show in the list and you can navigate using the joystick up/down, then push it to display the information about selected navaid.

NOTE: when this Skyview has focus, physical keyboard input is intercepted and you can use it for even easier input. A keyboard icon will be displayed below the clock to indicate that it has focus. You gain focus whenever you click on the keyboard or its border.

After selecting a navaid, the window will be populated with relevant information, on a single page for radios and fixes, on 3 pages for airports. You can switch between pages with joystick left/right and dismiss the info page by pushing the INFO softkey.
**JUMP function**

The **[JUMP]** function allows you to teleport your plane close to your next waypoint (with a limit of 100nm traveled). Several conditions must meet before the **[JUMP]** button is highlighted:

- Autopilot must be engaged.
- Autopilot must be in NAV mode.
- Autopilot must be linked to the Skyview you’re watching.
- NAV source must be GPS (Skyview).
- You must be less than 100ft from dialed altitude.
- You must have less than 5° banking.

There are other conditions which are tested only when you actually try to perform the jump itself:

- You must have enough fuel for the distance to cover.
- You must be more than 2nm from next waypoint.

A message on the top of the screen will tell you how much distance you traveled and how much fuel has been used for the jump (or eventually why you could not perform the jump).

**VERY IMPORTANT:** because X-Plane is very “sensitive” when it comes to loading dsf files, crash may occur after a jump under some circumstances, especially if it did not finish loading files from previous location. Malformed dsf files may also lead to CTD when loaded. As a result, use this function at your own risk, ensure you have a stable frame-rate, and that there is little or no background activity before attempting.

**MAP menu**

This menu allows you to determine which elements are displayed on the map, as well as the orientation of the map itself. Just press **[NORTH UP]** or **[HDG UP]** for the latest.

The **[ITEMS]** sub-menu controls which icons are displayed on the map. Each softkey will turn on/off a feature. Note that with ranges above 20nm fixes names are not displayed.

The **[INFOS]** sub-menu controls information displayed as overlay on the map borders. The abbreviations stand for the following:

- **[GS-ALT]:** groundspeed and GPS altitude
- **[DTW-BTW]:** distance and bearing to waypoint
- **[ETA]:** estimated time of arrival (to next waypoint and to destination)
- **[ETE]:** estimated time en-route (to next waypoint and to destination)
The [AUTOPILOT] page allows you to control the autopilot from the Skyview. We however recommend you use the STEC-5000 for that, and that you refer to the original Skyview documentation for more information.

The main differences with the real Skyview operations are:

- only expert mode is simulated.
- LEVEL, VNAV and TRK mode are not available.
- all X-Plane autopilot constraints and limitations apply.

**Top Bar Autopilot Status Area**

Center AP Text:

- AP is displayed in green when either or both AP axes’ servos are engaged.
- AP flashes in yellow when the autopilot has been disengaged within the last 10 seconds.

Roll and Pitch Axes Engaged:

- Engaged modes show in cyan
- Armed (target) modes show in white
- Flashes in orange when the autopilot has been disengaged within the last 10 seconds.
- Arrows scroll up/down during Pitch Auto-Trim and left/right during Roll Auto-Trim.

**Autopilot menus**

The expert autopilot menu uses a system of background highlighting of the buttons to indicate the current state of the autopilot servos, flight director, active modes and armed modes.

A solid green background indicates that a mode is active and the autopilot is providing guidance with the servos engaged.

A green border and black background indicates that the autopilot is providing guidance via the flight director with the servos disengaged.

A solid light gray background indicates that a mode is armed and will become active when the autopilot detects the capture criteria for the armed mode have been met. A black background indicates that the mode or function is off.
The [AP] and [FD] softkeys will engage the autopilot and the flight director, respectively. Engaging the autopilot will also engage the flight director.

The [HSI SRC] softkey has same effect as the same softkey on the PFD page.

The [ROLL] and [PITCH] softkeys allows you to access these modes through their respective sub-menus.

ROLL sub-menu

| BACK | HDG | TRK | NAV | ROLL HLD | NO MSG |

The [ROLL] sub-menu allows you to choose between [HDG] and [NAV] horizontal modes. When none is selected, the autopilot automatically falls back to [ROLL HLD].

PITCH sub-menu

| BACK | VS | IAS | ALT HOLD | NOSE DN | NOSE UP | NO MSG |

The [PITCH] sub-menu allows you to choose [VS], [IAS] or [ALT HOLD] vertical mode. When none is selected, the autopilot falls back into “pitch hold mode”, which has no corresponding display on the Skyview. Check the STEC-5000 screen for accurate info.

The [NOSE DN] and [NOSE UP] softkeys can be used to adjust either the vertical or horizontal speed, depending on the selected mode.
The [XPNDR] page controls the transponder modes and code. Its status is always displayed on top of the Skyview screen. Since there’s only one transponder, the display and actions are synchronized across all installed Skyviews.

The transponder information is always displayed on the top of the screen, left to the clock. Text will show in green whenever the transponder is in a mode that respond to queries, yellow when in a passive mode, and red in case of failure.

The [GND], [ON], [ALT] and [SBY] softkeys control the transponder mode. If you press an already selected mode, the transponder will actually go off.

The [IDENT] softkey is available when the transponder is in [GND], [ON] or [ALT] mode and should only be pressed on request from ATC.

The [CODE] softkey allows you to enter a 4-digit code as instructed by control. The digit you are actually editing will show in reverse on the top display. If you do not press a number within 5 seconds, your changes will be canceled and the original code will be restored.

The [VFR] (or [IFR]) softkey allows you to set a predefined code into the transponder without losing the existing code. This predefined code will stay until you press again the VFR (or IFR) softkey and can be chosen from the [TOOLS] → [SETUP] menu.
TOOLS page

The [TOOLS] page gives access to the [TIME] and [COM] menus, as well as the [SETUP] menus of your Skyview.

TIME menu

The [TIME] menu controls the clock which is always displayed in the top of the Skyview screen. You can choose between [ZULU] (UTC) and [LOCAL] time. Note that this will also affect the ETA display on your map, and will be reflected with letter U or L whenever the time is displayed somewhere.

There’s a basic timer which you can use when needed for your approaches. The [TIMER] softkey toggles the display between timer and clock. If a timer is running while the clock is displayed, the U or L symbol will blink in cyan. Press the corresponding softkeys to [START], [STOP] or [RESET] the timer.

COM menu

The [COM] menu controls the display of comm radios in the top-right of the Skyview screen. The four first softkeys allow you to choose:
- [COM1 A+S]: radio #1 active and standby frequencies
- [COM2 A+S]: radio #2 active and standby frequencies
- [COM1+2 A]: active frequencies for radio #1 and radio #2
- [COM1+2 S]: standby frequencies for radio #1 and radio #2

If [COM1 A+S] or [COM2 A+S] modes is selected the [FLIP FRQ] softkey becomes available and allows you to switch between standby and active frequencies for the displayed radio.

SETUP menu

The [SETUP] menu allows you to configure your Skyviews in a persistent way. Any setting you modify here will be saved and loaded for your next flight.

TEMP sub-menu

Allows you to choose between Celsius and Fahrenheit for OAT display. This is a local option, only affecting the Skyview where you set it up.
**XPNDR sub-menu**

The [XPNDR] sub-menu lets you select which code will be used when pressing the [VFR] (or [IFR]) softkey in the main [XPNDR] menu:

- **[US 1200]**: standard VFR code in the US.
- **[CA 1400]**: VFR code for Canada.
- **[STD 7000]**: standard VFR code.
- **[UK 7010]**: UK, so they believe they are different.
- **[IFR 2000]**: standard IFR code when non assigned by control.

**VVI sub-menu**

The [VVI] sub-menu allows you to toggle the VVI scale on the PFD between 2000 and 4000 feet per minute. Note that the 4K scale is not linear. This is a local option, only affecting the Skyview where you set it up.

**BARO sub-menu**

The [BARO] sub-menu allows you to choose between inches of mercury and millibars for the barometric pressure setting. This is a local option, only affecting the Skyview where you set it up.

**PITCH sub-menu**

The [PITCH] sub-menu allows you to choose at which pitch angle the pitch alert will be displayed. This is a global option, affecting all Skyviews installed in the aircraft.
This section is dedicated to the Flight Management System which is accessed from the [FPL] softkey of the [MAP] page. If the map is in 100% (full screen) or 80% (map+EMS) mode, the window will show up in the right, otherwise it will replace the map display. Note that even if the map is not displayed, zoom functions are still active.

The [FPL] page consists of 3 tabs that can be accessed moving the joystick left or right:

- **ACTIVE**: your actual flight plan.
- **IMPORT**: for loading an existing flight plan in X-Plane fms format.
- **EXPORT**: for saving your flight plan to X-Plane fms format.

**ACTIVE tab**

The ACTIVE tab displays your flight plan as a list of waypoints with the following information, from left to right:

- active leg marker (magenta arrow)
- waypoint symbol
- waypoint name

If your ground speed is above 80kts and for waypoints ahead of you only:

- track relative to previous waypoint
- distance from previous waypoint
- ETE from previous waypoint

You can scroll through the list using joystick up and down. The bottom of the screen will show total distance and ETE to destination.

**Flight Plan Menu**

Pushing the joystick while on the ACTIVE page will bring up the Flight Plan Menu, which offers different options. These can vary depending on the selected waypoint:

- if you selected the first waypoint of the list and it is an airport, then the 'DEPARTURE' entry will be available in the menu, otherwise it will not show up.
- if you selected the last waypoint of the list and it is an airport, then the 'ARRIVAL' entry will be available in the menu, otherwise it will not show up.
**DEPARTURE / ARRIVAL sub-menu**

Selecting this option will display the list of runways at departure or arrival, with their length and surface type, allowing you to select the one you want and replacing previous airport entry in your flight plan.

You can confirm by pushing the joystick or otherwise cancel by moving it left or right to return to the waypoint list.

**INSERT WAYPOINT sub-menu**

The INSERT WAYPOINT sub-menu allows you to add a new waypoint after the one that was selected. When doing so, an 'INSERT WAYPOINT' sub-windows appears, with a virtual keyboard for easy input. Please refer to the 'INFO function' paragraph for more information on how to use the virtual and physical keyboards.

If multiple waypoints match your input, you can navigate through them with joystick up/down, and you can cancel the waypoint insertion by moving the joystick left or right.

Only exact matches are shown in the list.

**REMOVE WAYPOINT sub-menu**

The REMOVE WAYPOINT sub-menu allows you to delete the selected waypoint from the list, shortening your flight plan.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.

**DIRECT-TO WAYPOINT sub-menu**

The DIRECT-TO WAYPOINT sub-menu allows you to tell the FMS to go directly to the selected waypoint, following a course starting with your actual position. The flight plan will be shortened, your actual position will become waypoint #1, and the remaining of the flight plan will start with your previous selection which has become waypoint #2.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.
**ACTIVATE LEG sub-menu**

The ACTIVATE LEG sub-menu allows you to make active the leg starting with the selected waypoint, letting your flight plan untouched.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.

**REVERSE FLIGHT PLAN sub-menu**

The REVERSE FLIGHT PLAN sub-menu will recreate your flight plan with waypoints in reverse order. We strongly recommend that you do not perform this while the autopilot is engaged in NAV mode with Skyview as source since new active leg after the operation may not be suitable for properly conducting the rest of your flight.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.

**DELETE TO END sub-menu**

The DELETE TO END sub-menu allows you to delete all waypoints from the selected one until the end, including your selection. This can lead to unpredictable results if the autopilot was following one of the deleted waypoints.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.

**DELETE FLIGHT PLAN sub-menu**

The DELETE FLIGHT PLAN sub-menu will delete every waypoint in your flight, letting it empty. You however need to be aware that the internal logics of X-Plane will keep your previous waypoint in memory, making the FMS/Skyview a valid source for the autopilot, while it is not from a logical point of view. As a result, please only use this function while on the ground and prior to inserting a valid flight plan.

A first push on the joystick will ask for confirmation and a second one will confirm deletion. You can cancel your choice by moving the joystick in any direction.
**IMPORT tab**

The IMPORT tab allows you to load an existing flight plan into the FMS. The flight plan must be in X-Plane fms format. The import routine is pretty tolerant and accepts waypoints not in the database, trusting the type and coordinates from the fms file.

You can only access files with the .fms extension and located in the Output/FMS plans folder. Subfolders will show in blue between square brackets, while files are displayed in cyan and capitalized. A virtual keyboard allows file and folder filtering.

Use joystick up/down/push to navigate through folders and push for loading the selected file. You will **not** be asked for confirmation and you can exit the IMPORT tab by moving the joystick left or right.

**EXPORT tab**

The EXPORT tab allows you to save your flight plan to the X-Plane fms format.

You can only save plans to the Output/FMS plans folder. Subfolders will show in orange between square brackets, while existing files are displayed in yellow and capitalized. A virtual keyboard allows file and folder filtering as well as new file name input.

Use joystick up/down/push to navigate through folders and push for saving to an existing file. You will **not** be asked for confirmation and you can exit the EXPORT tab by moving the joystick left or right.

**A new file will only be created if your input doesn't match any existing file. As a result, you cannot create a new file whose name only consist of the beginning of an existing file. This may change in the future.**

For more information on how to use the virtual and physical keyboards for input, please refer to the 'INFO function' paragraph.
This is revision 1 of this documentation. Please contact the author through the advertised support channel for pointing any error, inaccuracy or omission you may notice in this documentation, so we can improve it.

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