GoodWay is a flight planner for virtual flights on X-Plane v10 & v11 (64 bit only). It allows you to create realistic flight plans like a real pilot using air routes, but also to fly freely in VFR to train or explore.

For 16 years GoodWay has become the indispensable tool for all virtual pilots who want to add realism to their flights. This new version installs directly into X-Plane as a plug-in for Windows and Macintosh.

In addition to fixing bugs and improving the frame rate, this new version brings new features in high demand (indicated by a *) as well as a new dynamic notification system and fonts that are easier to read on the screen.

GoodWay must only be used for simulator flight. It is strictly forbidden to use it for real flights!
Un-zip the **GoodWay.zip** file and put the folder as it is into the folder: *X-Plane > Resources > Plugins.*

The plug-in updates are **automatic**, without any intervention on your part. You are informed of the installation of a new version.

**Licence**

When you use **GoodWay** for the first time it will ask you to enter your **license**. Otherwise, you can activate the **demo** mode.

Your **license** is composed of the 2 elements you received when you registered *(your Email and your Serial)*.

You must enter this information **exactly as it is written** in the registration email you received. The **license depends on your computer**. You may only use a license for a single installation and only on the computer for which you purchased this license.

The computer using **GoodWay** must be able to access the Internet. To validate your registration, **GoodWay** connects to its web server. Your license will then be attached to this computer and can no longer be used on another computer.

Once your license is accepted, you will no longer be asked for it.

Demonstration mode has some limitations. Outside these limits, **GoodWay** works like the normal version:

- **GoodWay** can be used for **15 minutes**.
- Waypoint’s names are not displayed.
- It is not possible to **save** or **load** a flight plan or **export** it as HTML.
- The flight plan cannot be sent to FMS, FMC, GPS and GNS.

**Interface**

**Menu & Shortcuts**

**GoodWay**’s menu is in the *X-Plane Plugins* menu. It provide access to every **GoodWay** functions.

<table>
<thead>
<tr>
<th>Shortcuts</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ctrl A</td>
<td>Flight Plan</td>
</tr>
<tr>
<td>Ctrl E</td>
<td>Light intensity</td>
</tr>
<tr>
<td>Ctrl Z</td>
<td>Map</td>
</tr>
<tr>
<td>Ctrl R</td>
<td>Settings</td>
</tr>
<tr>
<td>Ctrl S</td>
<td>Flight profile</td>
</tr>
</tbody>
</table>

These shortcuts are easily modifiable in the *X-Plane menu: Plugins > Admin Plugin > HotKey Admin.*

**Joystick & Keyboard**

You can set **Joystick** buttons to control **GoodWay**. Search **GoodWay** in the *X-Plane Joystick Button Functions list to select the functions:*

- Show / Hide the Flight Plan
- Show / Hide the Map
- Change night mode

On the map:

- Center on plane
- Show / Hide the Flight path
- Show / Hide the Flight Plan
- Zoom in / Zoom out

More simply, you can also assign **keyboard keys** for the same functions.
Windows

**GoodWay** windows can now be internal (standard plug-in operation) or external (independent window that you can move out of the X-Plane application and even on a second screen).

A higher version of X-Plane v11.10 must be used to take advantage of this new feature. In this case, a small button is displayed at the top right of the GoodWay windows and allows you to switch from internal window to external window and vice versa.

The window then has a new title bar specific to the operating system you are using.

Two windows have a special function: **Flight Plan** and **Map**. These two windows automatically return to the same operating mode as before.

When a standard GoodWay window is moved off the screen and disappears, simply use the menu or equivalent keyboard shortcut to hide it and display it again or restart X-Plane...

When a window is independent and you activate the X-Plane window, it can happen that the GoodWay independent window is hidden by the X-Plane window (this is the same with the X-Plane external FMS, GNS, etc. windows). To make it visible, use the menu or keyboard shortcuts.

When a GoodWay window uses the keyboard (red bar visible in the input field), type `Escape` (ESC) to return the keyboard to X-Plane.

Window’s management has been reviewed so that they can be resized from any angle or side using the small arrows that appear next to the cursor.

**FLIGHT PLAN**

The **Flight Plan** tool displays the flight plan as a list, like the one that pilots take with them on board the aircraft.

Details of the functions from left to right:

- **Create** a new Flight Plan.
- **Load** a flight plan; this opening dialog allows you to choose between GoodWay, X-Plane FMS or FlightPlanDatabase website flight plans.

- You can filter your search by entering the ICAO departure and/or arrival codes (this option is mandatory if you want to use FlightPlanDatabase flight plans).
- The flight plan map is displayed when you select a flight plan.

There are daily limits imposed by FlightPlanDatabase in number of searches per day and by Google in number of preview. When the limit is reached, it is necessary to wait until midnight to do a new search and see the flight plan previews again.

- **Save** your flight plan in the formats:
  - **GoodWay**
  - **FMS X-Plane**: Flight plans are now stored in the X-Plane FMS folder (instead of the GoodWay FMS folder).
  - **Ready to publish**: creation of an HTML file that you can publish or print (the file is placed in the folder X-Plane\output\GoodWay_publish). The file contains the details of the flight plan, the global flight map, the plans of the departure and arrival airports as well as the METAR of these two airports (METAR is only provided if the actual weather is activated). You can disable the export of these maps in the Settings (Tab Others).

- **Send to** ... Storing or sending the flight plan:
  - Copy the flight plan: copies the flight plan to the computer’s clipboard. The flight plan is then in the official ICAO format and the pilot can then paste it where he wants.
  - Copy for ATC: copies the flight plan to the clipboard. Then simply paste it into the X-Plane ATC window and the ATC will guide you according to this flight plan.
  - XSquawkBox: opens the XSQ Box plug-in and automatically copies the flight plan (you must first connect to SquawkBox).
  - VATSIM Web server: opens the VATSIM web page and copies the flight plan data to it.
GoodWay X-Plane Flight Planner

• JARDesign fichier X-Life ATC: sends the flight plan to the X-Life plug-in of JARDesign. This option is only active if this plug-in is present.

JARDesign’s X-Life uses its own database, which may be different from X-Plane’s database. It is therefore advisable to use the Navigrad database for X-Life and X-Plane data (to be placed in the Custom Data folder).

• 124th ATC: no special procedure.
• FMC (X-Plane v11, requires manual entry of departure and arrival airports).
• FMS, GNS 430 and 530 (X-Plane v11), FMS and GPS (X-Plane v10).
• ZIBO 737-800 Aircraft: It takes 8 seconds for the FMC to initialize correctly (an alert is displayed during this time).

• FlightFactor A320 Ultimate: A very specific procedure must be performed on the FMC to retrieve GoodWay’s flight plan:
  1. Click on the DATA button,
  2. Click on the A/C STATUS line,
  3. Click on line L3 (with a small blue arrow to the left). This reloads the CO Routes database (nothing is displayed but it is normal),
  4. Click the INIT button,
  5. Type GOODWAY and click on the L1 button (CO RTE),
  6. The flight plan is loaded, all you have to do is initialize the performance and SID/STAR informations.

If the FMC displays an error, your X-Plane data may not match the aircraft data. In this case, synchronize them with the latest NAV-DATA files. Details of the error encountered by the FMC can be found in the X-Plane/log.txt file (see Flight Factor for more information).

• FlightFactor B757 & B767: To download into the flight plan, simply enter as the coroute name the ICAOs of departure and arrival airports with no space (e.g. LFMNLFO).
• X-FMC: no special procedure.
• Instruments of compatible aircraft from partner manufacturers: JARDesign or Aerobask, etc…

Continuous evolutions of X-Plane v11 (betas) can cause malfunctions of some of these functions (FMS/GPS/FMC/GNS) which will be adapted as and when they occur.

Manual altitudes (by default) or performances of the selected aircraft.

Manual choice of a specific cruising altitude (this altitude must be compatible with the performance of the selected aircraft).

SID & STAR / Approaches: Allows you to obtain instrument arrival and departure procedures (see the chapter on SIDs & STARS, below).

Open the Map window (shortcut: CTRL + Z).

Open the Flight Profile window (shortcut: CTRL + S).

This function is also accessible through the plugin menu and can be assigned to a joystick button.

This window shows the profile of the flight plan with the terrain. A small aircraft moves in real time (as on the Map) to show your vertical position. (to get the flight path, you must open this window at least once before your flight begins).

The trace is logged with respect to the last point passed. This can lead to «back and forth» effects on the route.

If the mouse pointer is placed over a waypoint, the information for that waypoint is displayed in the bottom bar (ICAO, name and altitude).

You can change the altitude of the waypoints with the mouse (in 1000ft steps or with the Alt key in 500ft steps). The waypoint then turns red as in the Flight Plan window.

A Shift-Click on this waypoint allows GoodWay to automatically re-calculate its altitude.

The current version of X-Plane (v11) does not allow GoodWay to fully control the FMC. Once the flight plan is sent to the FMC, you simply need to manually add the departure and arrival airports to the FMC Init page.
When you select a Performance for your aircraft, the TOC (Top Of Climb - C) and TOD (Top Of Descent - D) are displayed on the profile and on the map.

2 new lines are then added to your flight plan as additional waypoints (you can disable this option in Settings).

TOCs & TODs appear only if you do not display SID and STAR. This information is calculated in relation to the average performance and loads of the aircraft, but this gives a good estimate of when you will arrive in level flight and when you should initiate the descent. If the length of the flight plan does not allow you to climb to cruise altitude or you have not selected any performance, markers C and D are not displayed.

### The Flight Plan

The list shows the waypoints of your flight:

- **TYP**: Waypoint type (APT (airport) · VOR · ADF · FIX).
- **ICAO**: ICAO code of the waypoint.
- **FREQ**: Beacon Radio frequency.
- **NAME**: Waypoint’s name.
- **TRK**: Direction in magnetic degrees to be taken to the next waypoint (tracker).
- **DIST**: Distance in nautical miles to the next waypoint. The value displayed on the arrival airport line shows the total distance of the flight. The seasoned pilots use it to calculate their fuel consumption for the flight.
- **ALT**: Altitude where the airplane passes the waypoint. This information is not calculated by GoodWay if you have not selected any aircraft in performances. Otherwise, the altitudes will be automatically calculated by GoodWay either as a function of the minimum altitudes of the routes or as a function of the performances of the aircraft selected.
- **TIME**: Estimated time in minutes to the next waypoint. (Only displayed if you have selected an airplane). The value displayed on the arrival airport line shows the total duration of the flight in hours and minutes.

If the flight plan window is too small to display all the waypoints, arrows and an elevator allow you to scroll through the list. (You can also scroll the list with the mouse wheel or manually resize the window using the box at the bottom right).

At the bottom of the window, the distance and duration to the next waypoint and the distance and ETA (Estimated Time of Arrival) to the arrival airport are displayed (above a speed of 50 knt and provided that the Dynamic information option is activated in the Settings).

### Actions

- **Double-click on a line** of the flight plan: Center the map on that waypoint.
- **Double-click on an airport**: Opens the Airport window. The information it contains will be important when preparing the flight plan or before reaching it (see AIRPORT section).
- **Click on a line** to highlight it. This allows you to easily locate a particular waypoint.
- **If no airplane is selected, click a waypoint** in the Altitude column (except for airports) to enter the altitude in FL (Flight Level) and then press the Enter key to confirm or Esc to cancel.
- **If this is your first flight plan** this information is not really needed, just remember to fly higher than the mountains!
- **If an airplane is selected**, you can still change the altitude of any waypoint. Click in the ALT column to enter a different altitude in FL (Flight Level) and then press the Enter key to confirm or Esc to cancel. A small red dot indicates that altitude management for this point is manual.
- **To return the altitude control to GoodWay**, empty the text box and validate.
- **To move a waypoint** through the list, hold down the SHIFT key, move the line to its new position, and release the SHIFT key.
- **To delete a waypoint**, hold down the SHIFT key, drag the line out of the window, and release the SHIFT key. A rotating cursor informs you that the line will be deleted.

**The line of the waypoint** the aircraft has just passed (at less than 1.8 Nm) is automatically underlined in red (it is important to know where you are) provided that Dynamic information is activated in the Settings. It gives you essential information, the TRK (heading in magnetic degrees) you need to follow to reach the next point.

**A Control-Click** on the first column (TYP) moves the current point on another line (e.g., if the ATC allows you to make a direct by skipping a waypoint).

**The next line** (indicated by a small arrow - this is important to know where you are going) indicates the next waypoint and possibly the radio frequency of the beacon (VOR or ADF) to which the aircraft is heading.
**Set Instruments:** This menu is accessed by an Alt-Click on one of the lines of the flight plan.

Depending on the type of the waypoint, you can directly adjust your flight instruments: **autopilot** (heading, altitude, VVI, OBS), and **radios** (NAV / VOR, ADF / NDB).

This function may not work if your (non-standard) aircraft does not directly use X-Plane’s informations and protocols.

If your **departure** and **arrival** points are far away, the easiest way is to choose them first and then insert the crossing points. This allows you to see the shortest path, so you can follow it better by zooming in on the map.

If you **duplicate** an existing flight plan (many flight plans are available on the internet), it will be easier to use the addition of crossing points.

If you want to make simple instrument navigation, choose **VORs** and **ADFs** instead because the position of the **FIXs** is more complex (they require triangulation and/or chrono from the **VOR** and **ADF** instruments).

**Auto Flight Plan**

This is one of the most powerful tool of **GoodWay** and thanks to it you will be able to achieve most realistic flight plans by indicating only some informations.

### Automatic Tab

- **From & To:** ICAO departure & arrival airport codes.
- **VIA:** The first waypoint of your flight plan after take-off (ADF, VOR or FIX) and to its right, the last waypoint before arrival. If you provide those informations, this will assist **GoodWay** during the completion of the flight plan. Otherwise, **GoodWay** will suggest **VIAs** that can match SIDs or STARs for airports.
- **Both airways:** The flight plan will use both types of air routes (**High Altitude** and **Low Altitude**).
- **Low Airways (<FL 195):** The flight plan will use the so-called low altitude routes, normally less than 19,500 Ft - in **Blue** on the **GoodWay** map.
- **HI Airways (> FL 195):** The flight plan will use the so-called High Altitude routes, normally over 19,500 Ft - in **Red** on the **GoodWay** map.

**Automatic flight plans now take into account one-way routes (high & low level).**

- **VFR** (Free flight): Only places the airport and VIA information you have entered and lets you make your flight plan yourself.
- **SID & STAR:** **GoodWay** automatically selects VIAs for you that will be close to SIDs & STARS.
- **Create:** **GoodWay** will create the flight plan for you. You can stop and cancel the creation at any moment.
GoodWay uses data from your earth_nav.dat, earth_away.dat and earth_fix.dat files, instead of standard data if they are present in the X-Plane Custom Data folder. If you add a user_fix.dat file in this same folder, GoodWay adds its content to the list of standard FIXs. The file must respect the format imposed by X-Plane. You also have the possibility to create personal FIXs (see the procedure in the Map chapter).

Automatic flight plans now take into account one-way routes (High & Low Level). Altitudes will be automatically calculated by GoodWay either according to the minimum altitudes of the routes or according to the capabilities of the aircraft selected in Performance.

You can refine your search for the best route by manually entering the departure and arrival Vias. Specialists will like to enter SID exit points and STAR inputs in this field.

During the flight plan creation, GoodWay will pause X-Plane for a few seconds to load the X-Plane data. If the distance between the departure and arrival airports is very short, it will be difficult to find a really optimized route.

The search buttons next to the input fields allow you to open the search tool. The button disappears to show you which input field corresponds to the current search.

Once you have found the information you are looking for, double-click on it to have it automatically added to your flight plan.

This tool provides the "horizontal" flight plan (viewed from above). GoodWay automatically sets the minimum altitudes for your waypoints but the vertical flight plan is assumed by the Performance tool that uses the aircraft’s capabilities to fix the vertical position at each waypoint.

In this version of GoodWay, the aircraft’s fuel consumption information has been deliberately omitted in order not to complicate your flight experience. Then, after all, in a simulator you don’t pay for fuel!

The choice of your aircraft’s performance is very important since it influences the calculation of the speeds and altitudes of the different phases of your flight and therefore its duration and profile.

There are 2 ways to get performance for your aircraft:

- The data of the real aircraft that GoodWay will recover on a specific site,
- Data created by you or another user.

Compatible aircraft continue to operate as before. The Global Performances are no longer located on your hard disk but are now on a server accessible by GoodWay.

In the Flight Plan window, select the performance of the currently used aircraft. This requires that the creator of the aircraft has correctly entered the aircraft’s ICAO code when it was created. You may have several proposals in the list, choose the one you want.

These are average performances of the aircraft, so they are sensitive to weight, wind and relative speed. If the Performances are the ones you have created yourself (see below) they are preceded by an *.

In order to create, modify or delete performances, go to the Plugin/GoodWay/Device menu to display the creation or modification window.
After having created or changed this information, you can save it.

You may also delete the performance of the displayed aircraft.

The performances modified by a user are stored on the GoodWay server. All users can access it, but only their creator can modify and delete them. Each pilot has only one customized performance per aircraft.

The Map tool allows you to see the world as defined in X-Plane. It is in the Map that you will be able to realize or modify your flight plans in a simple and visual way and follow the evolution of your flight.

Main Palette

On this palette at the top of the window, the buttons define the information displayed on the map:

- Open the Flight Plan tool (shortcut: CTRL + A)
- Open the Search tool (see Search chapter)
- Show the Airports.

To select the airport classes displayed on the map, make an Alt-click on this icon and select or deselect the desired airport types by clicking on them.

- Show ILS
  From a certain zoom level, you can see the runways and their orientation. This button then activates and allows you to display or hide the ILS.
- Show VORs
- Show ADFs
Display the FIXs (see Settings) and personal FIXs you have created (see the section Other Functions at the end of this chapter).

Display airways of your choice:
- High Level ( > 19,500 ft)
- Low Level ( < 19,500 ft)

One-way airways are marked with a triangle indicating the direction of travel (with XP >= v11).

To preserve the frame-rate, it is not possible to display both types of roads at the same time.

Display Names, ICAO codes and beacon Frequencies.

Show altitudes (Flight plan, SID & STAR).

Display your aircraft information in real time (see Settings): HDG (Heading), GS (Ground Speed), MSL (Mean Sea Level, altitude above sea level). Above 70 Knt, the ETA in a straight line on arrival is displayed.

Display the actual Flight Route (see Settings).

Display the Flight Plan Path.

Display selected SIDs & STARs.

Choose the map type. A menu and submenus allow you to select the map model that will be displayed among all the available ones. You can thus adapt the map according to your tastes and needs at any given time (exploration, creation of a flight plan, real-time flight monitoring, etc.). Test the different maps to find the ones that suit you best.

The display of MAPBOX DESIGN maps requires registration on their site and the (free) acquisition of an access key. The registration procedure is explained in the appendix at the end of this documentation.

- Enable Contrast improves the contrast of displayed data and icons (useful with some maps).
- Enable HDEF allows you to display (or not) more information on the map. An alert warns you that this option may cause the frame-rate to slow down significantly and make the map less readable.

Display Airspaces (X-Plane > 11.20 required).
You must download them from the Plugin/GoodWay/Download Airspaces menu. It is recommended to do this once a month to keep the airspaces up to date.

Depending on your aircraft and/or its altitude and in order not to overload the map with irrelevant information, select the different airspaces to display and some options:

- Choose one or more types of airspaces to be displayed simultaneously. If you click on an airspace with the Shift key pressed, all other airspaces will be deselected.
- See spaces according to altitude: below FL115, between FL115 and FL190, between FL190 and FL660 and above FL660.
- Hide information, display the type of Airspace and information (names, categories and altitudes) or only information.

Airspaces are saved in the Custom folder. In rare cases, X-Plane may crash at startup. You must then purge GoodWay’s preferences: restart X-plane by holding down the Shift and Control keys and GoodWay will delete its preferences and empty the Map/Temp folder and the Map folder. Please report the problem to us so that we can resolve it quickly.
Display weather data.

A secondary palette appears below the main one and allows you to select the type of data to be displayed (see appendix for a description of the different symbols).

This new version of GoodWay allows you to display the weather for 3 altitude levels.

- Right-clicking on one of the weather icons on the map displays the METAR report at this position (on versions of X-Plane < to 11.10, simply click on the icon).

The weather data comes exclusively from X-Plane’s weather function to ensure that the information between the plug-in and your simulator is perfectly homogeneous.

Display the VATSIM or IVAO virtual controllers (choose from the Settings also see the Virtual Networks section below).

A secondary palette appears below the main one and allows you to select the type of data to be displayed:

- VATSIM or IVAO data.
- Controlled aircrafts
- Controlled aeras
- CLR
- Clearances
- Control towers
- Names
- Flight plans
- ATIS
- Ground controls
- Approaches
- Frequencies

- A right-click on one of the aircraft on the map displays its data: call sign, aircraft type, pilot, flight plan, speed and altitude. You can display its route and copy its flight plan and then paste it into a new flight plan (on versions of X-Plane < to 11.10, simply click on the icon).

Tools Palette

At the bottom of the window, the first 4 buttons on the left are the map tools. Only one tool can be selected at a time.

Hand: it allows you to move the displayed portion of the map.

- Click and hold the mouse button to move the map.
- When using another tool, you can still move the map by holding down the Control key.
- Control + Double-click zooms on the map.
- Control-Shift + Double-click de-zooms the map.

Ruler: it allows you to measure the distance and angle (relative to true and non-magnetic north) between 2 points of the map. GoodWay displays the distance and heading between these 2 points. Above 70Knt, the ETA is displayed.

- Click on the map and move the mouse in the desired direction.

Zoom zone: reframes the map on a particular zone.

- Click on the map and move the mouse to form a rectangle. When you release the mouse button, the map is automatically zoomed in on this area.

- If you hold down the Alt key, you can use the Area Zoom tool even if you are using another tool.

Edit: this is the core tool of GoodWay. It allows you to make and modify your flight plans in a simple and intuitive way with a few clicks. The List in the Flight Plan tool updates automatically based on your actions on the map.

- Add a waypoint at the end of the flight plan: click the desired waypoint with the Shift key.
- Insérer a waypoint between two others: simply click on the line linking these two points, move it and release the mouse button over the point to be added. (You can also Shift-click the previous waypoint and then move it to the waypoint you want to insert).
- Move a waypoint: click and move it on another waypoint (Airport, VOR, ADF, FIX) then release the button.
• Delete a waypoint: click and move it on the map where there is no information (Airport, VOR, ADF, FIX).

The following 4 buttons are used for framing the map:

- **Zoom** and **de-zoom** the map (Or use the mouse wheel).

At the bottom of the map and in the left corner, the **zoom level** and a **distance scale** are displayed.

**Zoom and reframe the map on the flight plan.**

**Centers** the map on the plane’s position. To zoom in on the aircraft as well, hold the Alt key at the same time.

**Double-click** the same button to keep the map centered on the aircraft’s position at all times while it is in motion. The icon will turn red.

To exit this mode, click the button again, move the map with the hand tool or select Flight Plan Zoom.

**Additional functions on the Map**

- **A Control-click (or right-click with X-Plane >= 11.10)** on an airport displays a menu that allows you to open the airport tool (see below), the SIDs & STARs tool (see below) or display the METAR report (METeorological Aerodrome Report) for that airport. The METAR indicates ground visibility.

- **A Control-click (or right-click with X-Plane >= 11.10)** on a marker displays a menu that allows you to display the informations of this marker (Name, ICAO, Coordinates, Altitude and magnetic deviation) or to add a personal FIX.

The creation of personal FIX can be done in two ways, by using the Plugin/GoodWay/Add Custom FIX menu and entering its coordinates, or by using the Map:

- **A Right-click (or Ctrl-Click)** on the map opens a popup menu that displays the location of the clicked point and allows you to add a FIX at that position. In the creation dialog (By Coordinates tab), simply enter the name of your FIX (5 characters maximum) and click on create. A small orange triangle appears in the defined location.

- **To add a FIX in relation to a beacon**, on a heading and a distance: right-click on this beacon and choose the option Add FIX by... this adds the beacon in the creation dialog (By Distance tab). From now on, all you have to do is enter the heading in true degrees and the distance in Nm.

- **To add a FIX in relation to the crossing of 2 beacons and 2 headings**, the procedure is identical except that you have to open the By Crossing tab and then right-click on the second beacon to add it. Now all you have to do is enter the respective headings (in true degrees).

- **To delete a personal FIX**: Right-click (or Ctrl-click) on the FIX opens a menu that displays the position of that point and allows you to delete it.

The data is stored in the Custom Data/user_fix.dat file and is compatible with X-Plane. However, it is necessary to **restart X-Plane** so that they can be taken into account by the simulator.
The magnifying glass button is available on the Map window (or on the Flight Plan creation tool).

- Enter your search (Airports, VOR, ADF, FIX or cities), even partially, indicate if you are looking for an ICAO code or a Name then click on the search button. GoodWay will then display its search results.

- If you are looking specifically and exclusively for an airport, VOR, ADF or FIX, you just need to start your search with “apt”, “vor”, “adf” or “fix”.

- If you Double-Click on one of the items found and displayed in the list, GoodWay will center the map on that item and show it to you with a rotating marker.

- If you Shift-Click on a found information, GoodWay automatically adds it to the end of your flight plan (except for cities).

The FIX search only takes into account those that are displayed. If you are looking for FIXs that depend on an airport, you will need to display them in the Settings (see Settings below).

The left panel of the window contains general information about the airport (ICAO code, name, altitude and magnetic drift), then according to your choice (with the 4 radio buttons): detailed information: runways, ILS, other geographical information and METAR or radios, taxiways or doors.

- A click on a radio or ILS allows you to automatically adjust the radio frequencies of your aircraft.

- A click in the list on a taxiway displays it on the right map. You can select multiple taxiways with the Shift key pressed, which can make it easier to understand when ATC gives you a route on the ground. The first three lines of the list allow you to hide all taxiways (Hidden), display only taxiways lines (No Name) or display all taxiways (All).

- A click on a door displays it on the airport map.

Taxiways are only viewable from X-Plane 11 and are not available at all airports.

The right part of the window shows the map of the airport as Blue Print (lines) and the position of your aircraft (if it is located at this airport, of course). Using the two slider buttons: Taxi panels and Taxi lines (top and right of the first panel), you can also display on the map the runway panels and taxiway lines.

The 5 lower buttons, from left to right, are used to:

- Hide the left panel (informations) of the window to keep only the map.

- Centrer and zoom the map on the airport.

- Zoomer in and out of the map. (You can also move the mouse wheel) and you can move the map with your mouse.

- Center the map on the position of the aircraft.

- Double-click to lock the centering on the aircraft’s position while it is in motion. The icon will turn red (as on the map).
To access the SIDs & STARs from the map, right-click on the icon of the selected airport. A window then displays the SID (Standard Instrument Departure) and STAR (Standard Terminal Arrival Routes) of your departure and arrival airports.

You can also access the SIDs & STARs by clicking on this icon in the Flight Plan list.

- To select a SID, first select one of the runways at your airport, then select one of the corresponding SIDs. The SID is then displayed on the map in purple.

- To select a STAR and an approach, first select a STAR and then one of the proposed approaches. The STAR is then displayed on the map in yellow.

In the Settings (Flight Plan tab) you can adjust what you want to see on the map: approach and missed approach (displayed in dark purple).

SIDs and STARs are only point-to-point.

With the two buttons on the right, you can optionally add (or delete) the selected SIDs & STARs to your flight plan.

This is an unconventional procedure that is not used for actual flight plans. This option is only there to help you if you are using the good old X-Plane 10 FMS.

This function is still in its beginnings! update after update, we will improve its simplicity, its display, and also add additional information such as Holding Patterns.

Flying with the benefit of virtual air traffic control and in accordance with the real procedures and phraseology is undoubtedly more realistic. This is made possible by joining virtual air traffic networks such as VATSIM (Virtual Air Traffic SIMulation network) and IVAO (International Virtual Aviation Organisation).

GoodWay allows you to display the data of these two networks (optional in the Settings, Flight Plan tab).

When you click this button in the Map window, you can select the information you want to see on the map (see the Map section).

In the virtual networks secondary palette, this button displays a new window with different data divided into three tabs:

- List of active servers with their IP address, callsign and location.

- List of active ATCs (Air Traffic Control) with indication of their zone, airport, frequency and name or callsign.

- List of active pilots with their callsign, aircraft used and flight plan.

On these last two tabs, you can filter the list to restrict the results or search for a particular item.

The numbers of active servers, ATCs and pilots are displayed in real time at the bottom of the window.

If we compare the activity of the two networks, IVAO is more suitable for flights in France and Europe and VATSIM for the rest of the world.
**4 tabs** allow you to customize the way GoodWay works.

**Flight Plan tab**

- **Dynamic information**: Enables or disables the display of flight plan tracking and ETAs on the list.
- **Add TOC and TOD**: Adds to the flight plan, the flight profile and the map the corresponding waypoints: top of the climb and beginning of the descent.
- **Virtual Routes**: allows the use of a file of virtual routes NAT or PACOT (variable routes Trans-Atlantic and Trans-Pacific in particular) to simplify the realisation of long-distance flight plans. These routes are not displayed on the map and therefore cannot be used in a manual flight plan. Even if these routes are virtual, they use the NAV and FIX of X-Plane, which makes them 100% compatible with X-Plane.
- **STAR**: display or hide approaches (and final approaches) and use or not use missed approaches.

In some cases, **missed approaches** may also be added to the route. This is because the DME, Back and VOR approaches are only used for aligning, and that the file does not contain the runway... It’s up to you to delete unnecessary information from your flight plan.

**Map Tab**

A pop-up menu allows you to choose the map that will be displayed (same function as the Map button on the main palette).

If you use a MapBox map that requires registration (free of charge), enter the serial number you received in the input field. Then check the correct connection using the Test button (detailed registration procedure in the appendix).

- **Your aircraft**: display or hide your aircraft on the map. This is very useful if you don’t necessarily want to know where you are but you want to be able to consult the map during your flight.
- **Airport FIXs**: X-Plane adds a lot of FIXs around airports to make the approach easier. This multitude of information makes the legibility of the map more difficult and you may prefer not to have this information.

**Flight Plot**: GoodWay will record the plot of your flight and you can see it on the map in real time. **Warning**: This only works if you have opened a GoodWay window at one time or another. If no window is opened, the plug-in does not load and does not use any resources.

**Auto framerate protection**: limit the amount of information displayed on the card if your framerate drops below 20fps. This is an intelligent protection, GoodWay disables one by one the options of the card to bring up the framerate.

**Memory Cache Tab**

In order to speed up the map display, this one is downloaded in the background as squares saved in the folder X-Plane > Output > GoodWay_Map.

- **Enable cache management**: Controls the number of downloaded map portions based on the maximum cache size you specified (in megabytes) below. The next time X-Plane is launched, GoodWay will delete the surplus data.
- **Cache only the current map**: GoodWay keeps portions of the map currently in use as a priority.
- **Delete cache folder content**: All maps portions stored in the cache folder will be deleted and re-downloaded as you use it.

**Others Tab**

- **Font size** of the map.
- **Virtual network**: choose none, VATSIM or IVAO.
- **Units**: Temperature display in degrees centigrade or fahrenheit and pressures in hPa (hectopascal) or inHg (inches).
- **Hide GoodWay** when using an external view of the aircraft in X-Plane (except the Settings window).
- **Display air traffic on the Map and airport maps**: This function does not work with plugins like World Traffic that do not share this information with other plugins.
- **Export the flight map and airport plans to the <<ready to publish» HTML file.**
Although GoodWay is installed as a plug-in in X-Plane, it does not use memory or processor resources if you do not use it! It has been optimized to the maximum so as not to slow X-Plane when you use it. Some options in its Settings allow you to control the impact on the simulator.

The more elements you see on the Map, the more power you need. The Flight Plan, Search and Airport windows use virtually no resources.

Some operations such as loading navigation data can pause X-Plane for a few seconds. Just wait for the operation to finish ...

Flight plans made with GoodWay are made with and for X-Plane. They can be used to define your flight with the Air Traffic Control, be entered in the FMS / FMC and also the X-Plane GPS.

Every radio frequencies and precise positions of each flight information are those of X-Plane. You are therefore assured that your flight plans will work perfectly in the X-Plane world.

A new API has been developed for plug-in developers who want to exchange data with GoodWay (consult us).

GoodWay v5 updates will be free in all 5.x.x versions. It is compatible with X-Plane v10 & v11 (64 bits only), but frequent X-Plane updates may cause some plug-in incompatibilities. We are always working intensively to provide you with updates that will correct these problems.

Check regularly the GoodWay web site or the Facebook page for more information on these updates.

References

The author discovered X-Plane in version 3. The realism of the simulator quickly convinced him that he was flying with the best consumer simulator available. This impression was fully confirmed during a pilot’s baptism where everything went exactly as in X-Plane. He then had the terrible desire to fly and to understand how to find his way in the air. He discovered navigation and began building GoodWay in 2002.

He then took pilot training courses to better understand the real world of aviation and be able to transfer it to the simulator to improve the X-Plane flight experience.

Over the years, many passionate enthusiasts, real commercial pilots and instructors have come to enrich his thinking and help him. Progress that is now essential for X-Plane comes for most of these highly motivated people (Cockpit 3D, Push-Back, Pilot 3D in the cockpit, aircraft outside view, etc…). All this comes from a community of diverse people who love to build scenes, airports, fly, and experiment so that our pleasure is always more real!

GoodWay tutorials, information and updates
xpgoodway.com

GoodWay v5.2 trailer on YouTube
https://youtu.be/ZhkcM2HgcJQ

Milan’s Tutorials on YouTube (in french)
Version 5.2 overview
https://youtu.be/wnVIHOjOA7M

Manage Direct To with GoodWay 5.2
https://youtu.be/tgRkbbVWQQ4

If you want to know more about real flight, instrument flying, and have much more fun than with a GPS, here are some other sites to consult.

Flying with NDB / ADF (simplest)
lavionnaire.fr/RadioNavADF.php
airinstruction.com/cours/index.php

The xplane.fr site with hundreds of tips on X-Plane and its tools (in French)
xplanefr.com

Be aware that what you learn there will help you to push the door of an aeroclub one day, because flying with X-Plane will cost you a lot less!

Virtual air traffic control networks
VATSIM: vatsim.net & VATSIM France: vatfrance.org
IVAO: ivao.aero & IVAO France: ivao.fr/fr
This little tutorial will not teach you how to fly but it will teach you how to use GoodWay to achieve your first flight plan.

**VFR Flight with waypoints**

You are going to prepare a flight from Nice (LFMN) to Les Milles (LFMA) passing by the seaside (it’s nicer!) and without considering the air routes (VFR flight).

- Open the Flight Plan tool and the Map tool.
- Position the map so that you can see both airports (use Search if necessary).
- Select the Edit Flight Plan button in the Map window.
- Holding down the SHIFT key, click LFMN, then LFMA. Both airports have been added to the flight plan.

- Then we will insert the CNM VOR. Display the VORs with the button at the top of the window toolbar, click on the segment of the flight plan and move it to the CNM VOR, then release the mouse button. The CNM waypoint is inserted in your flight plan after LFMN.

- Repeat the same operation by adding the STP VOR and then the HYE VOR.

- Now, let’s have a look at the direction of the LFMA runway. In the Flight Plan window, Double-click LFMA. This opens the Airport window with every information about LFMA (runways, ILS, radios, ...).

- We see that the only runway is oriented 14/32. It would therefore be nice to arrive on the runway in its axis (near the 320° heading).

- By displaying the ADFs, we see that the OB marker seems to be approximately in the axis we are looking for and we insert it in the flight plan as before.

- There we have a final approach that arrives almost in the axis of the runway with a 322° heading.

- Now when displaying the ADFs, we see that we can have extra help for our approach since there is an ALM ADF. Add it to the flight plan, it will help you to go precisely in the direction of the runway.

That’s it! Now you can save your flight plan with the Save button on the Flight Plan window and start the engine ...

Visit the GoodWay website from time to time to find ready-made real flight plans, but also tips, links to instrument flying courses, etc ...

Enjoy your flights!
This chapter is far too short considering the number of people who have contributed to GoodWay's development for more than 15 years is great. Those who are not mentioned should not hold it against us, they will always be the craftsmen of the pleasure that we all have to fly with X-Plane.

Here is the list of people that the authors want to thank for their help and support during all these years:

JP and his team,
Always ready to help and bring their excellent ideas.

Tony, Mario, Jean Paul, Pimpom, E.T., Gérard,
Pierre, Ron, Rollen, Alexis, XP.Fr, XP.Org,

and of course
Austin, Sergio, Ben, Phillip, Sandy et Randy
for their incredible work on X-Plane.

This list could not be complete if we do not also thank our wives or companions who support our absences during our flying hours and our endless stories about our virtual landings ...

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**WARNINGS**

- **Goodway** uses data from several websites, **these data are the property of these websites** and are not guaranteed over time.

  The service of these sites may indeed be suspended or definitively stopped independently of our will. We will of course do our utmost to be able to maintain these services or functions but without any guarantee of success.

  Some sites used by **Goodway** may have **connection limits by IP address**. They are therefore not always usable at will and may have a daily or monthly limit.

- **Goodway** does not work in **VR** mode (**Virtual reality**).

- Changes in the size of the **X-Plane** interface (**130-150%**) disturb **Goodway** and should not be used.

- Before contacting technical support, please consult the FAQ ([http://www.xpgoodway.com/faq.html](http://www.xpgoodway.com/faq.html)) where you will find answers to the most frequently asked questions.

- To contact technical support, send an email ([support@xpgoodway.com](mailto:support@xpgoodway.com)) indicating in the subject line your serial number (in the form xxxx-xxxx-xxxx-xxxx-xxxx-xxxx) and the problem encountered. Also attach the X-Plane/log.txt file.
<table>
<thead>
<tr>
<th>Actions</th>
<th>Flight Plan window</th>
<th>Map window</th>
<th>Search window</th>
<th>Airport window</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click</td>
<td>• On a line to highlight it.</td>
<td>• To access the airport pop-up menu on X-Plane &lt; 11.10 (map and informations, SID &amp; STAR, weather report).</td>
<td>• On one of the search results to center the map on that point.</td>
<td>• On a radio or ILS to automatically adjust your airplane frequencies.</td>
</tr>
<tr>
<td></td>
<td>• On a waypoint in the ALT column or on the flight profile to enter or modify the altitude.</td>
<td></td>
<td></td>
<td>• On a gate or a taxiway to display it on the map.</td>
</tr>
<tr>
<td>Double-Click</td>
<td>• On a line to center the map on that point.</td>
<td>• On the Aircraft centering tool to center and lock the map on your plane (the map follows the plane).</td>
<td>• On one of the search results to center the map on that point.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• On an airport to open this airport information window.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• On a waypoint in the search results to add this waypoint to the flight-plan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Click &amp; Move</td>
<td>• To move the map.</td>
<td>• With the ruler to measure the distance and the angle between two points.</td>
<td>• While clicking on the Aircraft centering tool to zoom on your plane.</td>
<td>• On a radio or ILS to automatically adjust your airplane frequencies.</td>
</tr>
<tr>
<td></td>
<td>• With the Zoom tool to zoom on the framed zone.</td>
<td></td>
<td>• While clicking on the Airport button to select the airport types to be displayed.</td>
<td>• On a gate or a taxiway to display it on the map.</td>
</tr>
<tr>
<td></td>
<td>• On a waypoint to move it or delete it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• On a segment of the flight-plan to insert a waypoint.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt-Clic</td>
<td>• On a line to set the instruments of your aircraft. (on X-Plane &lt; 11.10).</td>
<td>• While clicking on the Aircraft centering tool to zoom on your plane.</td>
<td>• To use the zone zoom tool even if another tool is used.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• While clicking on the Airport button to select the airport types to be displayed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• To use the zone zoom tool even if another tool is used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control-Click</td>
<td>• On a line in the TYP column to move the current point on that line.</td>
<td>• To use the hand tool (move the map) even if another tool is used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shift-Click</td>
<td>• On a waypoint on the profile so that GoodWay can recalculate the altitude.</td>
<td>• On an element of the map to add it as a waypoint in the flight-plan.</td>
<td>• On one of the search results to add it at the end of your flight-plan.</td>
<td>• Sur plusieurs taxiways pour les afficher sur le plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• In the Airspaces menu on one zone to hide all the others.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shift-Click &amp; Move</td>
<td>• To move a waypoint in the list.</td>
<td>• To insert a waypoint (starting from the previous waypoint).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• To delete a waypoint (by dragging it out of the window).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-Click</td>
<td>• On a line to set the instruments of your aircraft (on X-Plane greater than or equal to v11.10).</td>
<td>• To access the airport pop-up menu on X-Plane &gt;= 11.10 (map and informations, SID &amp; STAR, weather report).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Main palette (Map)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔍</td>
<td>Search</td>
</tr>
<tr>
<td>🛀️</td>
<td>Airports</td>
</tr>
<tr>
<td>🌈</td>
<td>ILS</td>
</tr>
<tr>
<td>🦆</td>
<td>VOR</td>
</tr>
<tr>
<td>🕵️</td>
<td>ADF</td>
</tr>
<tr>
<td>🔊</td>
<td>FIX</td>
</tr>
<tr>
<td>🏰</td>
<td>Flight Level Routes</td>
</tr>
<tr>
<td>🛠️</td>
<td>Low Level Routes</td>
</tr>
<tr>
<td>📚</td>
<td>Names</td>
</tr>
<tr>
<td>👤</td>
<td>ICAO Code</td>
</tr>
<tr>
<td>🎵</td>
<td>Frequencies</td>
</tr>
<tr>
<td>🧪</td>
<td>Altitudes</td>
</tr>
<tr>
<td>👨‍✈️</td>
<td>Aircraft Info</td>
</tr>
<tr>
<td>📈</td>
<td>Flight Log</td>
</tr>
</tbody>
</table>

### Secondary palette - Weather (Map)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>☁️</td>
<td>Wind (Ground, FL120, FL340)</td>
</tr>
<tr>
<td>🌡️</td>
<td>Temperature</td>
</tr>
<tr>
<td>⛅️</td>
<td>Pressure</td>
</tr>
<tr>
<td>🌊</td>
<td>Networks Data</td>
</tr>
<tr>
<td>🛰️</td>
<td>Active Aircrafts</td>
</tr>
<tr>
<td>📊</td>
<td>Flight Plans</td>
</tr>
<tr>
<td>🎫</td>
<td>Controlled Areas</td>
</tr>
<tr>
<td>🚨</td>
<td>ATIS</td>
</tr>
<tr>
<td>📪</td>
<td>Clearances</td>
</tr>
<tr>
<td>👨‍💻</td>
<td>Ground Controls</td>
</tr>
<tr>
<td>📰</td>
<td>Control Towers</td>
</tr>
<tr>
<td>🤖</td>
<td>Approaches</td>
</tr>
<tr>
<td>🌱</td>
<td>Names</td>
</tr>
<tr>
<td>🎵</td>
<td>Frequencies</td>
</tr>
</tbody>
</table>

### Secondary palette - Virtual Networks (Map)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>✇️</td>
<td>Flight-plan SID &amp; STAR Map choice</td>
</tr>
<tr>
<td>🌌</td>
<td>Airspaces</td>
</tr>
<tr>
<td>⛈️</td>
<td>Weather</td>
</tr>
<tr>
<td>🕵️</td>
<td>Virtual Controllers</td>
</tr>
</tbody>
</table>

### Tools palette (Map & Airport Map)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>🖍️</td>
<td>Hand</td>
</tr>
<tr>
<td>🟢</td>
<td>Ruler</td>
</tr>
<tr>
<td>🔍</td>
<td>Zoom On Zone</td>
</tr>
<tr>
<td>🔍</td>
<td>Flight-plan Editor</td>
</tr>
<tr>
<td>🔍</td>
<td>Zoom</td>
</tr>
<tr>
<td>🔍</td>
<td>De-Zoom</td>
</tr>
<tr>
<td>🔍</td>
<td>Flight-plan Framing</td>
</tr>
<tr>
<td>🔍</td>
<td>Aircraft Centering</td>
</tr>
<tr>
<td>🔍</td>
<td>Aircraft Lock</td>
</tr>
<tr>
<td>🔍</td>
<td>Left Panel</td>
</tr>
<tr>
<td>🔍</td>
<td>Aircraft Center</td>
</tr>
</tbody>
</table>

### Other Windows

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔍</td>
<td>New Flight-plan</td>
</tr>
<tr>
<td>🔍</td>
<td>Open a Flight-plan</td>
</tr>
<tr>
<td>🔍</td>
<td>Save &amp; Export</td>
</tr>
<tr>
<td>🔍</td>
<td>Send To...</td>
</tr>
<tr>
<td>🔍</td>
<td>SID &amp; STAR Map Window</td>
</tr>
<tr>
<td>🔍</td>
<td>Search</td>
</tr>
<tr>
<td>🔍</td>
<td>Add SID &amp; STAR</td>
</tr>
<tr>
<td>🔍</td>
<td>Remove SID &amp; STAR</td>
</tr>
<tr>
<td>🔍</td>
<td>Save</td>
</tr>
<tr>
<td>🔍</td>
<td>Delete</td>
</tr>
</tbody>
</table>

### Weather - Sky

<table>
<thead>
<tr>
<th>Icon</th>
<th>Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀️</td>
<td>Sunny</td>
</tr>
<tr>
<td>☁️</td>
<td>Mostly Clear</td>
</tr>
<tr>
<td>☁️</td>
<td>Variable or Cloudy</td>
</tr>
<tr>
<td>☁️</td>
<td>Cloudy</td>
</tr>
<tr>
<td>☁️</td>
<td>Mostly Covered</td>
</tr>
<tr>
<td>☁️</td>
<td>Obscured</td>
</tr>
</tbody>
</table>

### Weather - Precipitations

<table>
<thead>
<tr>
<th>Icon</th>
<th>Precipitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌧️</td>
<td>Light Rain</td>
</tr>
<tr>
<td>🌧️</td>
<td>Moderate Rain</td>
</tr>
<tr>
<td>🌧️</td>
<td>Heavy Rain</td>
</tr>
<tr>
<td>🌧️</td>
<td>Light Snow</td>
</tr>
<tr>
<td>🌧️</td>
<td>Moderate Snow</td>
</tr>
<tr>
<td>🌧️</td>
<td>Heavy Snow</td>
</tr>
<tr>
<td>🌧️</td>
<td>Isolated Storm</td>
</tr>
<tr>
<td>🌧️</td>
<td>Great Storm</td>
</tr>
</tbody>
</table>

### Weather - Winds (icons are oriented in degrees, the arrow points in the wind direction, half a bar represents 5 knots of wind, a bar: 10 knots, a triangle: 50 knots)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>☁️️</td>
<td>No Wind</td>
</tr>
<tr>
<td>💦</td>
<td>5 knots N - 0°</td>
</tr>
<tr>
<td>💦</td>
<td>10 knots NE - 45°</td>
</tr>
<tr>
<td>💦</td>
<td>15 knots E - 90°</td>
</tr>
<tr>
<td>💦</td>
<td>25 knots SE - 135°</td>
</tr>
<tr>
<td>💦</td>
<td>50 knots S - 180°</td>
</tr>
<tr>
<td>💦</td>
<td>70 knots SO - 225°</td>
</tr>
<tr>
<td>💦</td>
<td>125 knots E - 270°</td>
</tr>
<tr>
<td>💦</td>
<td>150 knots and + NE - 315°</td>
</tr>
</tbody>
</table>

### Weather - Temperatures °C or °F (at your choice in Settings)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌡️</td>
<td>Very Cold</td>
</tr>
<tr>
<td>🌡️</td>
<td>Cold</td>
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<tr>
<td>🌡️</td>
<td>Tempered</td>
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<tr>
<td>🌡️</td>
<td>Hot</td>
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<tr>
<td>🌡️</td>
<td>Heatwave</td>
</tr>
<tr>
<td>🌡️</td>
<td>Very Low &gt;1000 hPa</td>
</tr>
<tr>
<td>🌡️</td>
<td>Low &gt;1000 &lt;1010 hPa</td>
</tr>
<tr>
<td>🌡️</td>
<td>Standard &gt;1010 &lt;1020 hPa</td>
</tr>
<tr>
<td>🌡️</td>
<td>High &gt;1020 &lt;1030 hPa</td>
</tr>
<tr>
<td>🌡️</td>
<td>Very High &gt;1030 hPa</td>
</tr>
</tbody>
</table>

### Weather - Pressures hPa or inHg (at your choice in Settings)

<table>
<thead>
<tr>
<th>Icon</th>
<th>Pressure</th>
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</thead>
<tbody>
<tr>
<td>🌡️</td>
<td>Very Low &gt;1000 hPa</td>
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<tr>
<td>🌡️</td>
<td>Low &gt;1000 &lt;1010 hPa</td>
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<td>🌡️</td>
<td>Very High &gt;1030 hPa</td>
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</tbody>
</table>

### Keyboard Shortcuts (par défaut)

- **Ctrl** + A: Flight-plan
- **Ctrl** + E: Light intensity (day/night, 4 levels)
- **Ctrl** + Z: Map
- **Ctrl** + R: Settings
- **Ctrl** + Z: Flight Profile
MapBox is an extremely powerful tool for creating, customizing and using high-quality maps online.

Of all the maps available on this site, GoodWay offers a selection of maps specially adapted to create and monitor flight plans.

Displaying these maps in GoodWay requires registration on the MapBox site and a (free) access key.

Here’s how to register in a few steps (as the Mapbox website evolves regularly, the procedure may be slightly different):

- Open the MapBox web site.  
  https://www.mapbox.com
- Click on the Get started for free button.
- Fill in the Sign up page with a username, email and password and click the Get started button.
- Click at the bottom of the window on Create a map.
- On the page Choose a style to start editing (Mapbox Streets is pre-selected, you do not need to change this choice), simply click at the bottom right on the Next button.
- On the next page, click on the Edit the map button.

At this stage, you can follow a short tutorial to discover the full potential of MapBox.

- Click on the Return Home button (at the top left of the page).
- Click on the Home button (top and left).
- Click on the See your access tokens button (top and right).
- Copy to memory the Default Public Token (the key shown in the box below) so that you can paste it into GoodWay.
- Here you can now leave the MapBox site by clicking on the Sign out button (at the bottom left of the page).

In a few moments you will receive a confirmation in your mailbox as well as a request for confirmation of your email to which you will of course have to answer.

- In GoodWay, paste this key in the MapBox Serial box (Parameters, Map tab) and click the Test Connection button.

A message will confirm that the key is valid and you can now take advantage of the MapBox maps selection.