

FSTramp

General information

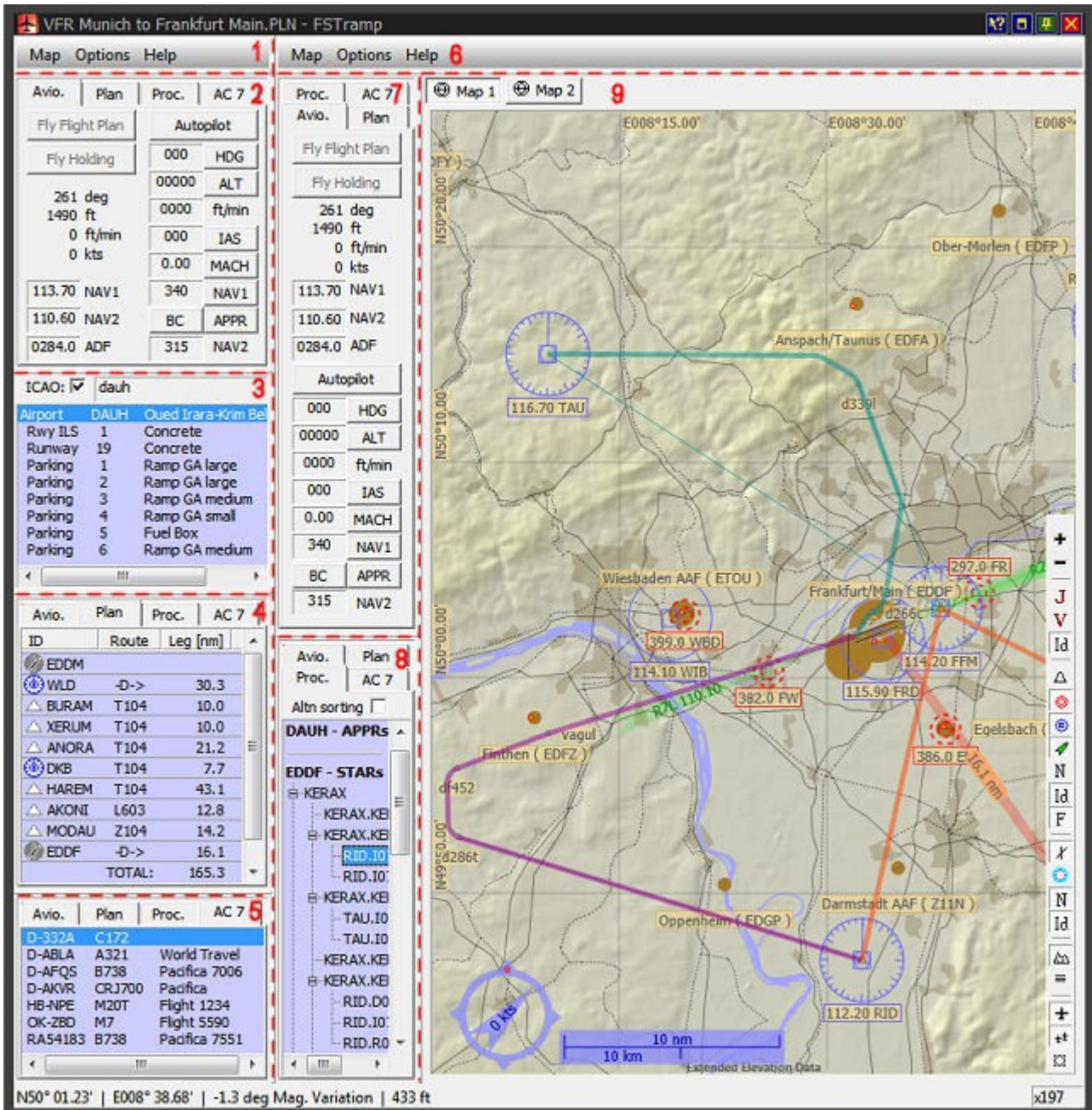
- FSTramp has been developed as an add-on for Flight Simulator to help you find your way from one airport to another one. It is not an independent program and it can only be used with the Flight Simulator. The program is activated with *FSTramp* in the Simulator *Add-ons* menu or by pressing the Ctrl+F12 keys.
- FSTramp contains a world map with airports and nav aids, a search option for localization of map information by input of keywords or ICAO identification, a panel for the autopilot, NAV1-, NAV2-, ADF-Radio, a table for selection of airport procedures, a sub-window showing online- and AI-Players as well as a display of the loaded flight plan.
- With exception of Earth's surface, continental and state frontiers, lakes and rivers, as well as airways, waypoints and procedures, all information regarding the scenery is obtained from Flight Simulator and the installed add-ons. This function is managed by the external program *FSTramp Database Creator*. All users of a computer will use the same scenery database.
- In order to use FSTramp as a module of Flight Simulator, every user has to activate the program from his own account. One simple start of the *FSTramp Database Creator*, even without creating the scenery database, will do this. On first starting FSTramp, Flight Simulator X will ask if you really want to use the FSTramp add-on and thrust it. Answer Yes to both questions.
- Some FSTramp functions can be controlled by key combinations. The key combinations can be assigned in the Simulators *Add-ons* menu *FSTramp*. Most combinations would be of more use if assigned to a joystick- or yoke button.

System requirements

- Windows Vista or one of the later Windows versions.
- FSX including Service Pack 1 + 2 or Acceleration Expansion Pack. Use FSX in windowed mode, as FSTramp will not work correctly with FSX in full-screen mode.
- FSX:Steam Edition. Use FSX-SE in windowed mode, as FSTramp will not work correctly with FSX-SE in full-screen mode.
- Lockheed Martin Prepar3D v2 or v3.
This simulator can be used in full-screen mode with FSTramp.
- FSTramp needs no internet connection.

Window Management

- FSTramp has two view modes. The docked window fills almost the entire Flight Simulator screen and can not be changed in position or size. The undocked mode allows you to change position and size of the window. You can toggle between the two views in the Simulator *Add-ons* menu *FSTramp* or by using the Shift+Ctrl+F12 keys.
- Within the FSTramp main window you will find 9 subwindows. Some of those subwindows are Tab windows. The 9 areas are separated by thin lines that can be relocated by dragging that line with the mouse. Hereby you can change size and surface of these areas. The positions of the individually adjusted areas will be saved and used each time you restart the program.



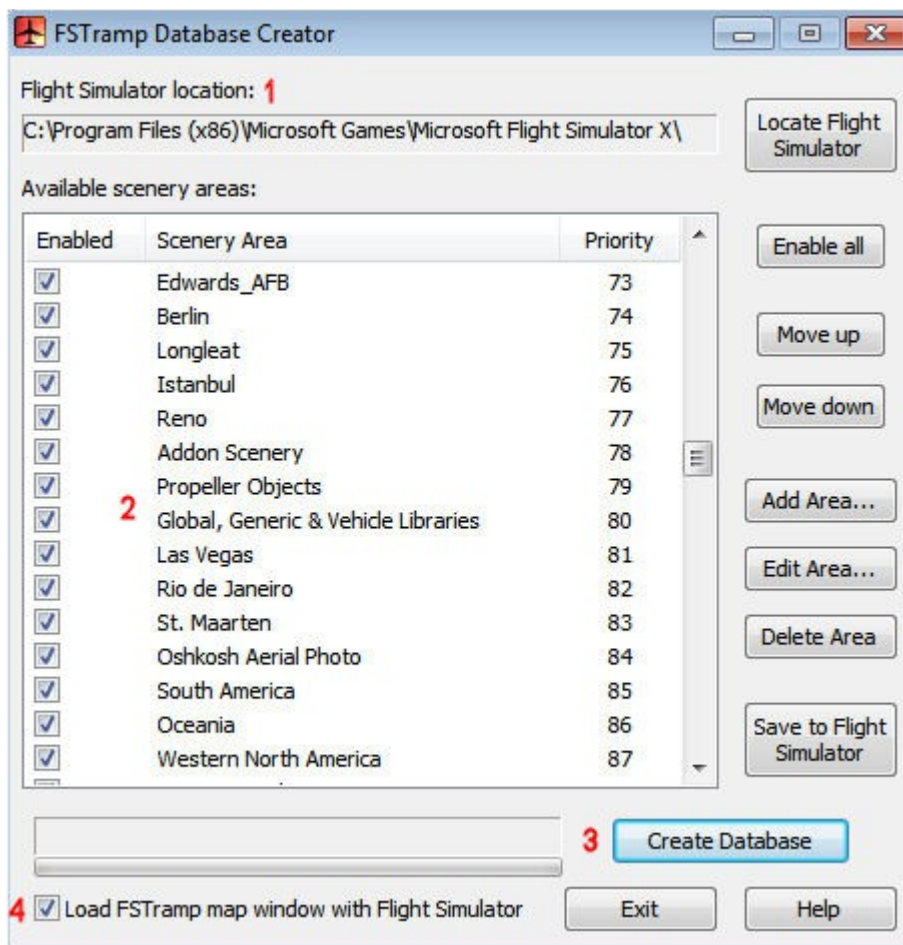
FSTramp Database Creator

The external program FSTrampDBC builds a compressed database for FSTramp from scenery files in Simulator and from data about airways and waypoints in text form. Raw data on airways and waypoints are present in C:\ProgramData\FSTramp\Navdata, and these can be actualized by datafiles offered by other firms (f.i. Navigraph)

When the FSTramp Database creator is started via one of the links installed by Setup in the Startmenu or on the desktop, connection with the right simulator is made automatically. This is done by using one of the start parameters:

-sim:FSX
-sim:FSX-SE
-sim:P3D2
-sim:P3D3

If the program is started without one of these parameters, FSTrampDBC will first show a dialog box for selecting the simulator with its scenery database to be scanned for use with FSTramp.



The main window of the program has four functional areas:

1. The installation path of Flight Simulator will be autodetected for reading the scenery. Sometimes it may be necessary to manually enter the installation path.
2. Scenery areas can be activated/deactivated, moved, installed, edited and deleted. Those changes will also apply to Flight Simulator when the button *Save to Flight Simulator* has been pressed, and the new scenery has been loaded by Flight Simulator. For FSTramp the changes will be active as soon as a new database has been created by pressing *Create*

Database.

A Scenery.cfg that contains unordered area numbers and layer numbers will automatically re-arrange the Layers as soon as you click *Save to Flight Simulator*.

3. With the *Create Database* button, the scenery database that is essential for FSTramp will be created. When first started, all scenery areas active in the Simulator will be read and information relevant for FSTramp will be saved. This process can take several minutes like in every other add-on. If later any changes are made in the scenery configuration, a short update with *Create Database* is necessary. This update is even possible if Simulator and FSTramp are running. The newly created database will be loaded as soon as the user switches FSTramp from invisible to visible mode.
4. FSTramp will be attached to your personal Flight Simulator and can be loaded or not. This option is given to every separate computer user. Only if FSTrampDBC has run at least once, with this option active, will the command to load FSTramp be activated in the file:

C:\Users\UserName\AppData\Roaming\Microsoft\FSX\dll.xml

or

C:\Users\UserName\AppData\Roaming\Microsoft\FSX-SE\dll.xml

or

C:\Users\UserName\AppData\Roaming\Lockheed Martin\Prepar3D v2\dll.xml

or

C:\Users\UserName\AppData\Roaming\Lockheed Martin\Prepar3D v3\dll.xml

Note: After installation of a new version of FSTramp, or after adding to your scenery, or actualisation of airways and waypoints, FSTrampDBC must be run with "Create Database".

The World Map

FSTramp contains two, with Tab or hotkey switchable map windows, **Map1** and **Map2**. Both show the same objects, but map area, zoom factor and the option *Map view follows user aircraft* are set independently for each map window.

Usually only one map is necessary. The second map gives the possibility to preset the destination airport in zoomed mode and quickly toggle to this mode during landing.

The **visible area of the map** can be moved by dragging the map with the left mouse button or be centered to the point of the mouse arrow by a double click at the desired spot. Additionally the area can be moved with the mouse on 4 big arrows at the edge of the map window, or with the four hot keys.

Changing the map area by zooming in and at the same time **measuring range and bearing** is done by pressing the right mouse button and dragging. During this process the future area of the map will be shown as is information about distance and bearing. The process can be aborted (no zoom-in) by clicking the left or middle mouse button at the same time.

The **zoom factor** can also be changed with the two upper buttons in the toolbar on the right, the context menu of the right mouse button, the mouse wheel as well as by two hot-keys.

If the option **Map view follows user aircraft** is active the visible map area will automatically be centered on the aircraft as it reaches the edge of the currently visible map. If the aircraft leaves the visible area of the map through manual operation, the map can be automatically centered again by reactivating this function.

The objects displayed in the two map windows can be selected in the Dialog box **Options/Settings/Map** and with the **Toolbar** at the right side of the window, which are self-explanatory.

It should be noted that visibility of roads, railways, cities, smaller lakes and rivers is dependent on the zoom factor.

Special is the **visualization of the ILS**. A notch at the wide end indicates the existence of a glide slope transmitter for (automatic) control of descent. If the wide end is closed with a straight line, then there is no glide slope transmitter. A sharp point at the end of the wide end indicates a back course ILS, with mirrored localizer (R-L are switched) and without a glide slope transmitter.

Air spaces in the colors blue or green are informative, pink indicates restrictions or danger and red indicates forbidden airspace. The earthglobe is covered by the net of the Area Control Centre (ACC), and/or the Air Route Traffic Control Centre (ARTCC). On top of these are the areas around the airports, as CTR, TMA, and Danger- and Restricted areas.

The elevation of **mountain peaks** as shown is a little less than real because of data compression. 300 feet or 75 meters is recommended between aircraft and mountain top.

A major part of the map window is the **info pop-up**. If the mouse is shortly paused over the center of an object, the end of an airstrip, the line of an airway or the edge of an airspace, relevant information will be displayed. The info pop-up is also shown when the mouse pointer is within an airspace. If more airspaces overlap, the info about the smallest one is shown.

If the info pop-up concerns a Rwy-ILS, ILS, VOR, or NDB, the frequency of this object can be **dragged & dropped** to the FSTramp Avionics window. ILS and VOR to NAVx and NDB to ADF.

With the right mouse button a **context menu** can be opened.

Fly to here works only if the aircraft has taken off and an autopilot is available. FSTramp activates the autopilot and initiates the correct course, even considering the cross wind. Altitude and speed are regulated manually or by programming the autopilot.

Skip to here works in two ways. If the info pop-up of a runway, helipad, parking position or a fuel box is visible, the aircraft will be stopped if necessary, and put down on the ground at this position. If however the aircraft is in the air, it will be moved to the new position without changes to altitude, heading or speed.

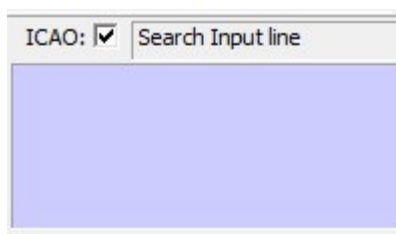
List Procedures is active if at that time the info pop-up showed information about an airport or elements of an airport, and data about procedures for this airport are available. After selecting this item in the menu, procedures for this airport are shown in the window on the left and can be selected. If procedures of a different airport were already present in the window, these are overwritten.

Holding pattern defines a waiting loop at the mouse position. The necessary parameters must be entered in the following dialog box. There can only be one Holding pattern defined at a time.

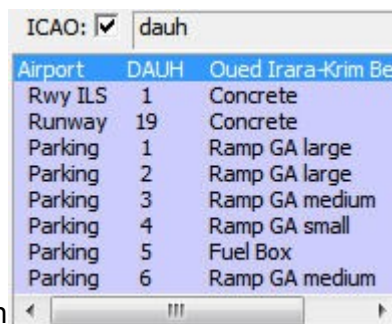
Navaid freq. to... can only be used if the info pop-up of an Rwy-ILS, ILS, VOR or NDB is displayed and the aircraft disposes of the right receiver for this function. The frequency displayed in the info pop-up will then be copied to the radio receiver.

Search window

The search window, displayed as unused on the left, and on the right as it looks after entering a keyword, contains the check box *ICAO*, with on its right side an edit line for the search text and below it an output field.



By pressing the left mouse button over the words *Search Input Line* you can activate the input line. If a text is entered and confirmed with the *Enter* key, the output field will show a list of scenery objects that correspond to the search text.



If the **check box ICAO** is not marked, only names will be considered for the search. The search

text must appear in any form in the name.

If the check box *ICAO* is marked, the search will be limited to identifications. The search text must then be at the beginning of the input line.

If a found scenery object is chosen with mouse or keyboard, it will be marked with a red circle on the map. In this way f.i. a parking can be found on the map. If the selected object is an airport, and procedure data for this airport are available, these will be shown in the Window *Proc*. If procedures for different airports are already present in the window, these will be overwritten. By searching with an empty inputline the search window and **Proc**. Window are cleared.

A left double-click on a found object or hitting *Enter* will center the map on the selected object.

With **drag & drop** the radio frequency of Rwy-ILS, ILS, VOR and NDB can be dragged to FSTramp Avionics. ILS and VOR to NAVx and NDB to ADF.

The right mouse button opens the **context menu**.

Fly to here works only if the aircraft has taken off and an autopilot is available. The FSTramp automatics activate the autopilot and initiate the correct course, even considering cross wind. Altitude and speed are set manually or by programming the autopilot.

Skip to here works in two ways. If the info pop-up of a runway, helipad, parking position or a fuel box is visible, the aircraft will be stopped if necessary, and put down on the ground at this position. If however the aircraft is in the air, It will be moved to the new position without changes to altitude, heading or speed.

Holding Pattern defines a waiting loop at the mouse position. The necessary parameters must be entered in the following dialog box. There can only be one Holding pattern defined at a time.

Navaid freq. to... can only be used if the info pop-up of an Rwy-ILS, ILS, VOR or NDB is displayed and the aircraft disposes of the right receiver for this function. The frequency displayed in the info pop-up will then be copied to the radio receiver.

Avio, Plan, Proc, AC

This multifunctional window is available in different ways, in a wide as well as in a narrow form. The contents depend on selection by the tabs on top.

Avio is a compact form of the displays and control systems of the aircraft. Elements not available in the aircraft are disabled here. The buttons can be operated by mouse or, if already selected, by hitting the space bar. The sunken fields can be opened for editing by mouse or *Enter*. The input will be transmitted to the aircraft when confirmed with the *Enter-key*. With the *Tab-key* you can select the next button or field.

The buttons *Fly Flight Plan* and *Fly Holding* are special:

Fly Flight Plan can be used if the aircraft has an autopilot, a flight plan was loaded in the Simulator and the airplane is in flight. After activating this button the aircraft will follow the flight route. Speed and altitude must be adjusted manually or set in the autopilot. This function is not connected to the Garmin Flight Management System, so do not try to use both systems simultaneously. The GPS/Nav switch should be on Nav.

Fly Holding can only be used if an autopilot is available, a holding pattern has been defined and the aircraft is in flight. If necessary the speed should be reduced. The button must be activated **before** the holding pattern is reached. As long as *Fly Holding* is active the aircraft will follow the holding pattern.

Avio.	Plan	Proc.	AC 1
Fly Flight Plan		Autopilot	
Fly Holding		000	HDG
		00000	ALT
4 deg		0000	ft/min
460 ft		000	IAS
0 ft/min		0.00	MACH
0 kts		340	NAV1
113.70	NAV1	BC	APPR
110.60	NAV2	315	NAV2
0284.0	ADF		

Plan shows a flight plan as loaded in Flight Simulator, and is the basis for the Avionics *Fly Flight Plan* button. If *Fly Flight Plan* is active, the next waypoint is marked red.

A double-click or hitting the *Enter key* will center the map to the selected checkpoint.

With **drag & drop** the radio frequency of VOR and NDB can be dragged to FSTramp Avionics. VOR to NAVx and NDB to ADF.

If an airport has been selected with mouse or keyboard, and if procedure data are available for this airport, then these data are shown for selection in the *Proc* window. Procedures already open in the window, will remain there.

With the right mouse button the **context menu** can be opened.

Fly Flight Plan from here can be used during flight if an autopilot is available. It works like the Avionics-button *Fly Flight Plan*, with the difference that the first waypoint must be entered manually. Illogical waypoint selections will be corrected automatically.

Fly to here works only if the aircraft has taken off and an autopilot is available. The FSTramp automatics activate the autopilot and initiate the correct course, even considering cross wind. Altitude and speed are set manually or by programming the autopilot.

Skip to here works in two ways. If the info pop-up of a runway, helipad, parking position or a fuel box is visible, the aircraft will be stopped if necessary, and put down on the ground at this position. If however the aircraft is in the air, it will be moved to the new position without changes to altitude, heading or speed.

Holding Pattern defines a waiting loop at the mouse position. The necessary parameters must be entered in the following dialog box. There can only be one Holding pattern defined at a time.

Navaid freq. to... can only be used if the info pop-up of an Rwy-ILS, ILS, VOR or NDB is displayed and the aircraft disposes of the right receiver for this function. The frequency displayed in the info pop-up will then be copied to the radio receiver.

Proc shows a table that lists the procedures for one or two airports. The term Procedure stands for SIDs, STARs, Approaches and Circuits. Where this is possible, STARs and Approaches have been combined. If procedures of two airports are shown, the procedures selected in search window or map are placed above those selected in the flight plan.

By double-clicking one of the words *SIDs*, *STARs*, *APPRs* or *CIRCs*, procedures in this category are listed. With the *Altn sorting* button the procedures can be sorted according to name, or to the enroute transfer point. If sorting is done according to the route transfer point, and this point is selected with mouse or keyboard, it will be marked on the map with a red hexagon.

For every runway 2 circuits (traffic patterns) are available, left-hand and right-hand. The first is always the circuit indicated in the scenery as standard. As this does not always reflect reality, the alternative is presented below it.

After selection of one of the procedures with mouse or keyboard, its route is shown in the map window. A click on the words *SIDs*, *STARs*, *APPRs* or *CIRCs* will remove this route from the map again. Pressing *Enter* or double-clicking on the name of a procedure or its description will centre the map on the airport it is associated with.

ID	Route	Leg [nm]
EDDM		
WLD	-D->	30.3
BURAM	T104	10.0
XERUM	T104	10.0
ANORA	T104	21.2
DKB	T104	7.7
HAREM	T104	43.1
AKONI	L603	12.8
MODAU	Z104	14.2
EDDF	-D->	16.1
TOTAL:		165.3

Avio.	Plan	Proc.	AC 1
Altn sorting <input type="checkbox"/>			
DAUH - SIDs			
- ELO			
- SID2.ELO 1			
- SID2.ELO 19			
- IMN			
- MNA			
- NSL			
- TGU			
DAUH - APPRs			
EDDM - SIDs			
- ALG			
- ALG1Q.ALG 8L			
- ALG1E.ALG 8R			
- ALG1S.ALG 26L			
- ALG1N.ALG 26R			
- ANKER			
- BIBAG			
- EVIVA			

A green line in the map window indicates a SID or Missed Approach. An orange line indicates a STAR, a magenta line an Approach and Holdings are shown in white. A combination of STAR, APPR, Missed Approach and Holding therefore consists of lines in orange, magenta, green and white. Circuits are drawn in green, indicating climb, orange for the downwind leg, and magenta for descent in baseleg-final.

For every procedure there is a description in text, with added indications of altitude and speed. It should be noted that these indications are derived from instructions to the PC for the graphical display; they are therefore only aids to assist the pilot.

Graphical representation of a procedure is impossible if an essentially important Navaid is missing in the scenery data. In such cases the name of the procedure will be preceded by the symbol *).

AC shows a list of the active aircraft; users, multiplayer AC and AI traffic included. Your own aircraft is always shown on top; AI aircraft are not listed during a multiplay session.

Avio.	Plan	Proc.	AC 7
D-332A	C172		
D-ABLA	A321	World Travel	
D-AFQS	B738	Pacifica 7006	
D-AKVR	CRJ700	Pacifica	
HB-NPE	M20T	Flight 1234	
OK-ZBD	M7	Flight 5590	
OO-SYK	B744	Pacifica 9586	

For each aircraft are shown from left to the right: Call sign, aircraft model/type as well as airline and flight number. By selecting an aircraft in Flight Simulator you can define your own call sign by using the dialog box *Aircraft Details/Tail number*.

A tip for Multiplayer sessions via FSHost servers: Use the program FSHostClient to display aircraft of the session in the simulator and in FSTramp. In order to display aircraft all over the world, you have to set the FSHostClient's option *Edit - Options - Show other player's planes within* to 0.

With a double-click or by using Enter on an aircraft in the *What's up* window the map will be centered on the selected aircraft.

A left click will mark the selected aircraft temporarily with a red spot.

With the right mouse key a **context menu** can be opened.

Fly to here works only if your own aircraft has taken off and an autopilot is available. The FSTramp automatics will activate the autopilot and initiate the correct course towards the position the selected aircraft had at that moment. Altitude and speed are set manually or by programming the autopilot.

Skip to here only works if your own aircraft is airborne. With this function it will be moved to the actual position of the selected aircraft without changes to altitude, heading or speed.

AI aircraft visible is available when external programs like FSInn or FSHostClient put multiplayer aircraft into the simulator. Using this option, AI traffic, that would in this situation be ignored by FSTramp, is hereby made visible.

Dialog box Settings

In this dialog box the main settings of the program are entered. These settings will be saved in the text file

C:\Users\UserName\AppData\Roaming\FSTramp for [FSX, FSX-SE, P3D v2]\Program.cfg.

If you wish to delete all personal settings this text file can be deleted without any problems. The effect will be seen after restarting Flight Simulator.

Tab Page Map:

- **Font labels** defines the font for all Text fields in the map (default: Tahoma Standard 8).
- **Font airport markings** sets the font used for texts for airstrips and taxiways (default: Small Fonts Bold 7).
- **Sea traffic** (default: on) makes computer-controlled ships and boats visible.
- **Taxiway signs** (default on).
- **Markers** (default off).
- **Back course ILS** are antiquated and rarely found in real life. In Flight Simulator however, all ILS can be used as Back course ILS for the opposite flight direction. Because of the unrealistic behaviour you should deactivate this option (default: off).
- **Thermal/Ridge lifts** can be found with help of the search window with the search term soaring. These are thermal areas for gliders (default: on).
- **Cities** (default: on). Only visible if Terrain is activated in the map.
- **Roads** (default: on). Only visible if Terrain is activated in the map.
- **Railroads** (default: on). Only visible if Terrain is activated in the map.
- **Political boundaries** (default: on).
- **Grid lines** (default: on).
- **Terrain color mode** (default: normal).
- **Continents without terrain** works only if the option *Terrain hidden* is active in the toolbar of the world map. The continents will be displayed unicoloured in blue or green (default: blue).
- **Globe representation** as flat world is an alternative way to display the world with the handicap that it deforms the proportions away from the equator (default: round).
- **Center (ACC, ARTCC)** (default: on)
- **Restricted areas** (default: off).
- **Warning, alert and danger areas** (default: on).
- **Military operations and prohibited areas** (default: on).

- **Display speed of Multiplayer and AI aircrafts as**
This setting has the options *Ground speed* and *IAS / TAS*. If *IAS / TAS* is selected, the speed is given according to the *IAS / TAS* setting in Flight Simulator dialogue box *Aircraft - Realism* (default: *IAS / TAS*).
- **Display aircraft labels on user plane** (default: off).

- **Display aircraft labels with airline and flight number** (default: off).

Tab Page Global:

- **Window color scheme** selects the brightness of window contents. Here you can also select *static* or *time dependent* (default: Time dependent). Separately for both modes, is with the sliders the desired brightness of the earth's surface finely adjustable (default: bright scheme = 1.0; dark scheme = 0.5).
- **Geographical coordinates format** (default: N00° 00.00' E000° 00.00').
- **Status bar on bottom of docked FSTramp** (default: on), undocked FSTramp (default: off).
- **Sound** activates acoustic signals by the program (default: on).
- **Search online for upgrades** is done in the background after FSTramp is started. If an upgrade is available, this is shown in the centre of the map (default: on).
- **Activate disabled warnings** will re-activate all warning messages disabled by the user at any moment (default: off).

Tab Page Hotkeys:

Hotkey settings on this page correspond with those shown in the FSTramp page in Simulator menu *Add-ons*. Changes should be made with great care, since most key combinations are already in use by Flight Simulator.

- **Program Visible / Invisible** (default: Ctrl+F12).
- **Program docked / undocked** (default: Shift+Ctrl+F12).
- **Fly flight plan** (default: Ctrl+F11).
- **Fly holding** (default: Shift+Ctrl+F11).
- **Show map 1 / map 2** (default: Ctrl+6).
- **Map view follows aircraft** (default: Shift+Ctrl+6).
- **Map zoom in** (default: Ctrl+7).
- **Map zoom out** (default: Shift+Ctrl+7).
- **Map view move up** (default: Ctrl+8).
- **Map view move down** (default: Shift+Ctrl+8).
- **Map view move left** (default: Ctrl+9).
- **Map view move right** (default: Shift+Ctrl+9).

Dialog box Holding Pattern

Only one Holding loop can be defined at a time; a new holding loop will delete the previous one. If you define a Holding loop during a flight, *Heading* is already filled with the actual heading. *Segment length* can be given in minutes or in nautical miles. When flying a Holding loop, you must adapt your airspeed to the radius of the loop.

Dialog box Payment and Registration

After installation, and as long as the program has not been paid, it works in Demonstration Mode. This means that you have a fully functional program for 20 Flight Simulator sessions. After this, the program will run in Freeware Mode, with limited functionality. The earth surface is no longer shown, the mouse will no longer find objects on the world map, and so can no longer produce Pop-up windows with information.

If you want unlimited and full functionality, then you have to pay for the registry information. This can be done via the Home page: <http://fstramp.com>.

After receiving the Registry information by e-mail, enter the license key in *License Key* of the dialog box. This should be exactly 10 digits in order to activate the *OK* button. After you use *OK* the key is tested and if found correct, the dialog box will shut and from then on the program work fully and without limitations. If you install FSTramp again as a new installation, the License key must be entered again.

The License key is unique and identifies you as a person. It is hardware-independent. It can be used for all your *FSTramp 5.x* installs on one or more of **your** computers.

Title bar

In the upper left corner, on the Title bar of the FSTramp window is a small program icon showing a aircraft symbol. Clicking this icon produces the context menu of the main window. To the right of this is the name of the program, and (if present) the name of the Flight Plan active in Flight Simulator is shown. At the right upper corner are four symbols with the following functions (from right to left):

- Hides the FSTramp window.
- Juggles FSTramp windows between Docked – Undocked.
- Maximizes or normalizes the FSTramp window.
- Activates the context-related help. If, after using this button, you click on an FSTramp subwindow, the Help info for this window is given.

Main menu

The FSTramp Main menu on the second bar is double. Depending on the configuration of your subwindows you can close one of those (see Window management)

- **Map** gives everything necessary for printing the actual map.
- **Options** gives Program settings and the dialog box for entering the registration info.
- **Help** leads to the *Help Topics* and the *About* dialog boxes.

Status bar

The Status bar on the lower edge will show (left to right)

- Help text or the global position of the mouse arrow with the magnetic variation there, and terrain elevation.
- Zoom factor