FS9 NAVAIDS UPDATE PACKAGE

Installer Version 8.4

This FS9 Navaids Update Package includes a collection of modified BGL files that will update worldwide **en route navaids** (**VORs, NDBs)**. In the Europe area, **ILS data , markers**, **airport data** (airport names and identifiers, runway identifiers, runway/approach lighting systems, PAPI/VASI, terminal NDBs, COM frequencies) can also be corrected. In other regions, only VORs and NDBs are updated although a few NDBs (those contained in airport AP*.BGL files) may remain unchanged.

A dedicated installer is provided in order to select the regions and facilities to be updated, move the necessary files to their FS9 locations, backup the original files and restore them as needed.

1 – PACKAGE CONTENT

Unzip the *FS9_WorldNavaids.zip* package in any temporary folder **outside the sim folder** and check that the following files have been extracted:

A) In the root directory

FS9Navaids_Installer.exe: the program that will automate the install/uninstall process,

FS9NavaidsUpdate.pdf: this file,

Magdec.bgl: an updated (2022) magnetic variation file for FS9,

Cycle.txt: the current AIRAC cycle,

AP9FileList.txt and AP9FileList2.txt: text files for subfolder content check.

B) NV9Files subfolder: containing the new en route navaid BGL files.

C) EurwAP9Files and EureAP9Files subfolders: containing corrected airport data for the Western and Eastern Europe area respectively.
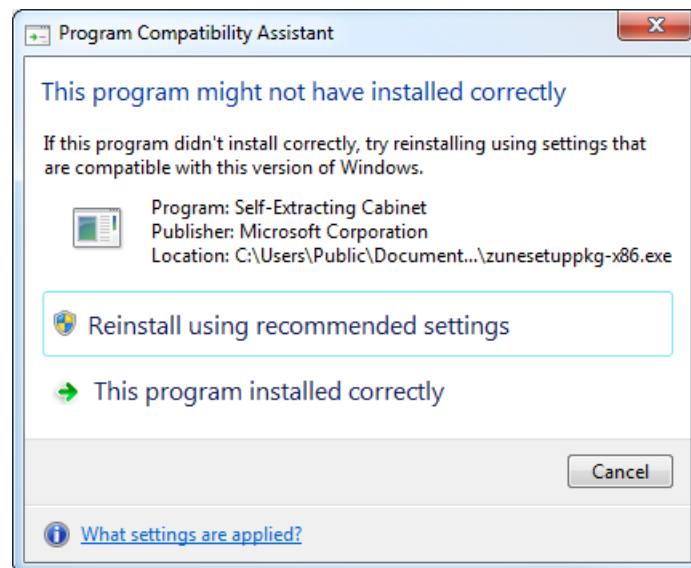
2 – DOWNLOAD, INSTALL, UNINSTALL and PROGRAM OPTIONS

I recommend you temporarily disable your antivirus that may prevent downloading the package and/or running the installer (see false positive antivirus warnings information).
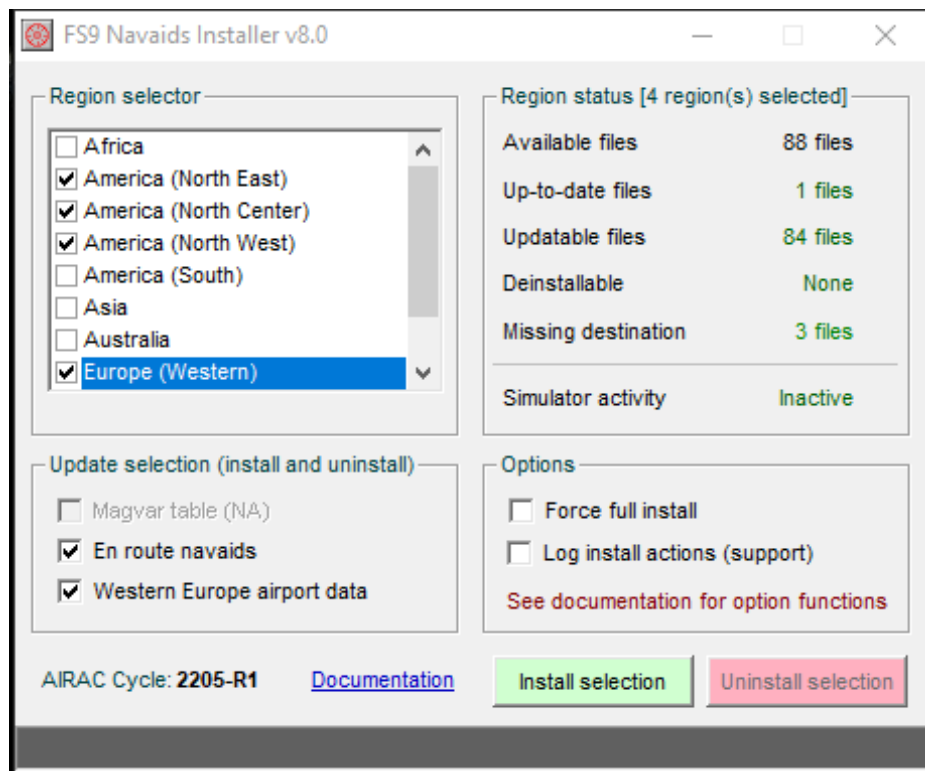
The *FS9Navaids_Installer.exe* program will automatically install or uninstall the necessary BGL files. When installing, only more recent BGL files than the current ones are replaced in the regions and for the elements that have been selected. All default FS9 files are saved with a **[.bglbckup]** extension in their original directory. These backup files are necessary for uninstalling the package. **DO NOT delete them.**

The FS9Navaids_Installer is compatible with Windows Vista, Windows 7 and Windows 8/8.1, 10 and 11. For Vista and above, a pop up warning message may be displayed if you didn't

disable the Program Compatibility Assistant feature. In such a case, just select "This program installed correctly".

Note that the installer requires it is launched with the full access rights of an administrator. This is to ensure file replacement is possible and to disable UAC virtualization if FS9 is installed in a protected system folder (e.g. Program Files (x86)). In some rare cases, it may still be necessary to change file/folder permissions for the FS9 directory and its folders (see here). In case the installer crashes at startup (stop working message), ensure you temporarily disable your antivirus that may prevent the program to execute correctly.

2.1 – Region selector

Select or unselect here the regions to be updated. Note that **region selection both applies to the install and uninstall processes**.
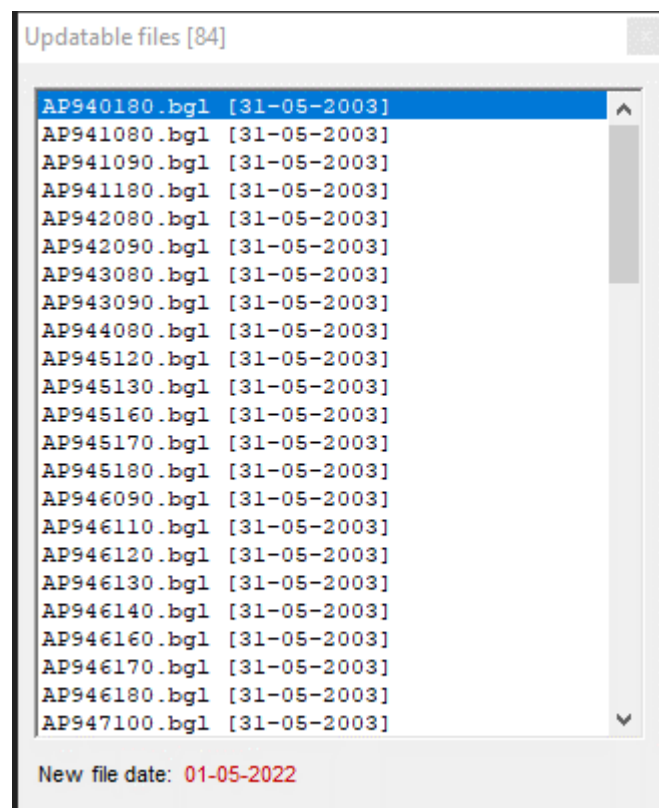
2.2 – Update selection

Select or unselect the elements to be managed. **Will also apply while uninstalling** (except for the Magvar table)

- *Magvar table:* update the magdec.bgl file (grayed if already set to latest version),

- *En route navaids:* include en route VORs and NDBs updates (NV9 files),

- *Europe airport data*: include all airport changes in the Western and/or Eastern Europe area, including ILSs and markers (AP9 files)

2.3 – Region status

This frame indicates for a given region and element selection the number of already up-to-date, updatable and deinstalable files. It is automatically refreshed if you change your selection. Missing simulator files and simulator activity are also displayed (see below). You can click on individual numbers to display a list of up-to-date, updatable, deinstallable and missing files.

2.4 – Options

- *Force full install:* updates all selected files regardless of date/time stamps of existing files (only to be used in case of confirmed lack of update of some files),

- *Log install actions*: creates an [Installer_Actions.log] file in program directory on Install action (to be used for support in case of problem, see chapter 6.2)

2.5 – Scenery rebuilding

After install or uninstall has been completed, simulator will automatically rebuild its indexes at first launch. In a few cases, it may happen this process doesn't occur as expected. In such cases, rebuilding can be forced by going to the World/Scenery Library menu and clicking OK without making any change.

2.6 – Missing BGL files (Missing destination status)

Some 3rd party add-ons or other update programs may deactivate or replace some stock BGL files. These missing files will not be updated but can be restored if backup files already exist. However, **it is recommended you restore first the default files in order to avoid possible problems if uninstalling**.

3 – LIMITATIONS and ADDITIONAL INFORMATION

3.1 Replacing BGL files within the simulator *cannot be done if the simulator is active*.

3.2 The program automatically detects FS9 installation directory. Sometimes, this process may fail. In such a case, you can disable the automatic detection (see Chapter 7) but it is recommended you repair the Windows registry data. A FS9 registry repair tool is available on the [Flight1 software site](#).

3.3 **IMPORTANT**: the updates will replace "stock" BGL files. Therefore, *any additional scenery will have the same priority as it had before* by reference to the default scenery files. Third party add-on sceneries usually have a higher priority than the stock simulator files. In such a case, they will conflict with the present updates and usually exclude most elements. Consequently, **modified data in the stock simulator files may be inactive**.

4 – KNOWN PROBLEMS

Replacement of stock airport and navaids BGL files may have side effects on generated flight plans, map display, GPS approaches using default sim data (but not those using external providers) and possibly AI traffic and ATC functionalities.
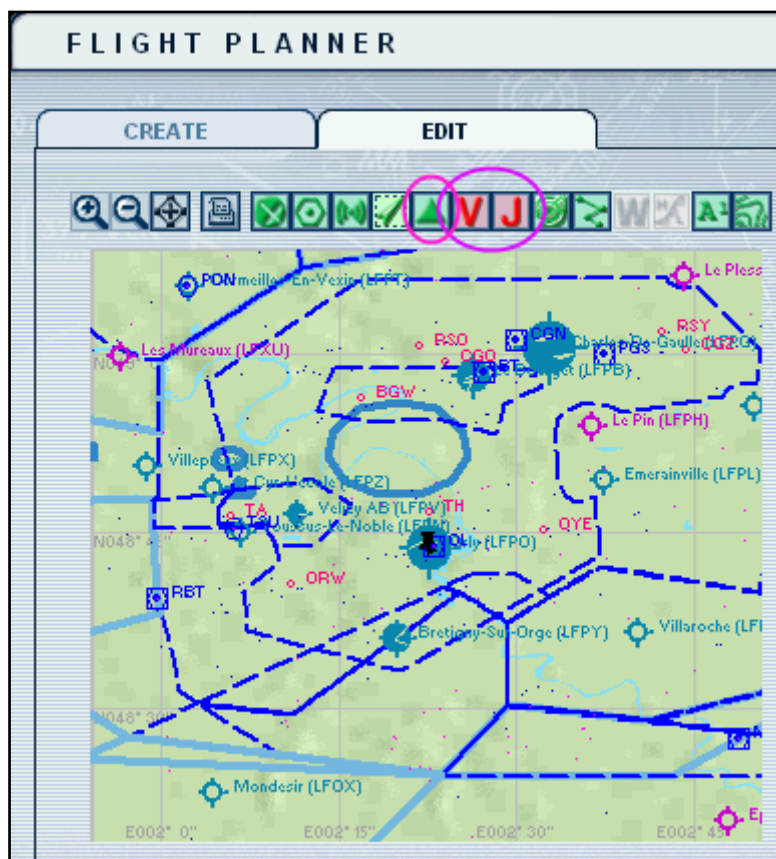
Due to the fact FS9 also uses BGLs that contain *airway definitions* (not updated by this project) and that some BGL files may still contain *invalid references to nonexistent VORs or NDBs*, flight planning usually fails and may result in crashing the simulator. Loading a FS-generated saved PLN file may have similar effects as well as switching to map view in some areas. *GPS display is not affected*.

Even if default flight planning is often impossible after updating navigational aids, you must be aware that many airways, navaids and intersections have changed since the release of FS9 (FS9 information dates back more than 10 years..) and that *default flight planning is anyway unreliable.*
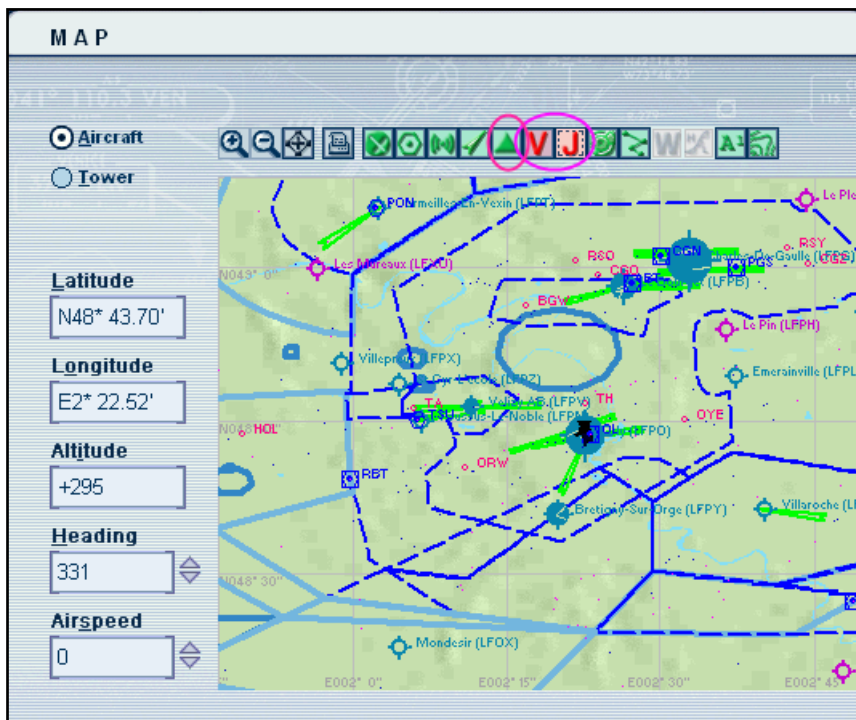
Indeed, most simmers are searching for an up-to-date definition of aeronautical data to use conventional radio navigation instruments or GPS information from current AIPs and/or 3rd party providers; they also perform flight planning and published approaches from charts or using 3rd party tools that include an up-to-date aeronautical information. *They do not use the integrated flight planner and default GPS approaches* and seldom make use of map viewing.

For those who still wish to use the integrated flight planner editor and/or map screen or encounter problems when loading a flight plan, avoiding FS crash can usually be achieved by *deactivating airway depiction and intersections on the flight planner and map screens*.

1 – **Before loading a flight plan**, disable the drawing of Victor and Jet airways in the Edit menu (the V and J buttons should now be red). *In some areas you will also have to deactivate the drawing of intersections (the triangle)*,

2 – Also **deactivate airways drawing** (and possibly intersections) **in the Map view**

If you cannot open the flight planner and/or map screens because of a crash, you will have to modify the following lines of the **FS9.cfg** file before launching the simulator:

In the **[MAPVIEW_MAP]** section
SHOW_VICTOR=**0**
SHOW_JET=**0**
SHOW_INTERSECTIONS=**0**

In the **[FlightPlanMap]** section
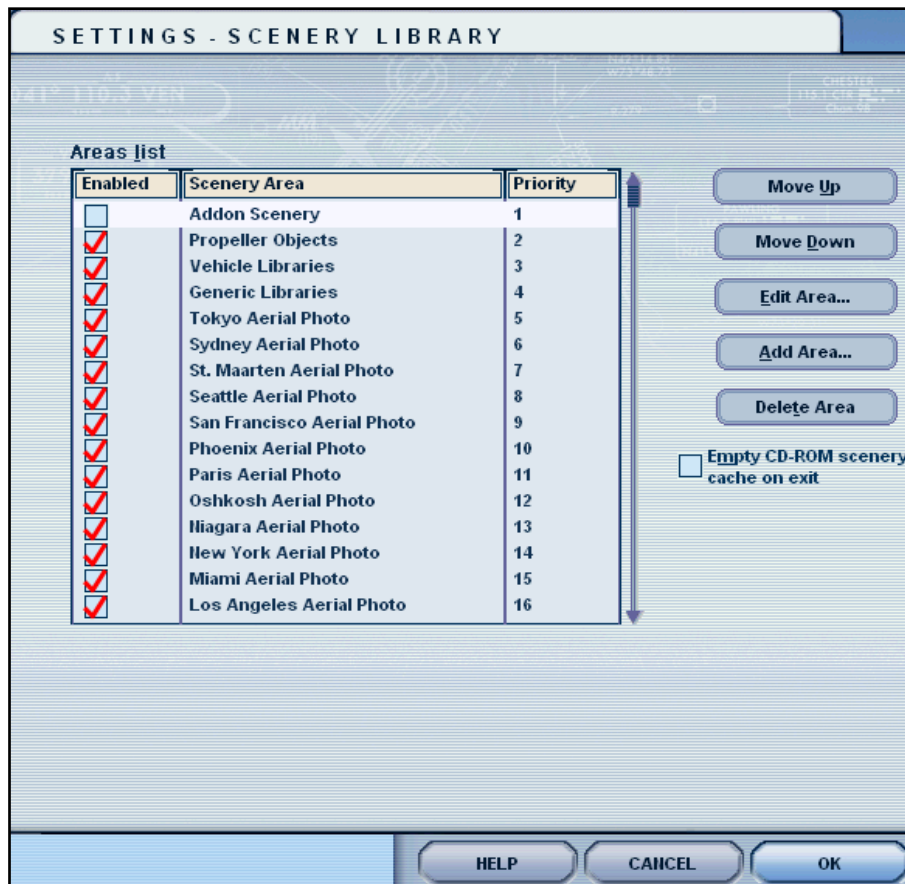SHOW_VICTOR=**0**
SHOW_JET=**0**
SHOW_INTERSECTIONS=**0**

3 – If you are still unable to load an already existing flight plan without crashing the simulator, *first locate your aircraft in another area, load your flight plan and then relocate your aircraft at the intended departing airport*.

5 – HOW TO CHECK FOR A POSSIBLE NAVAID ANOMALY

If you think that, after applying airport or navaids Update, some data are erroneous or not properly corrected, please first carry out the following checks:
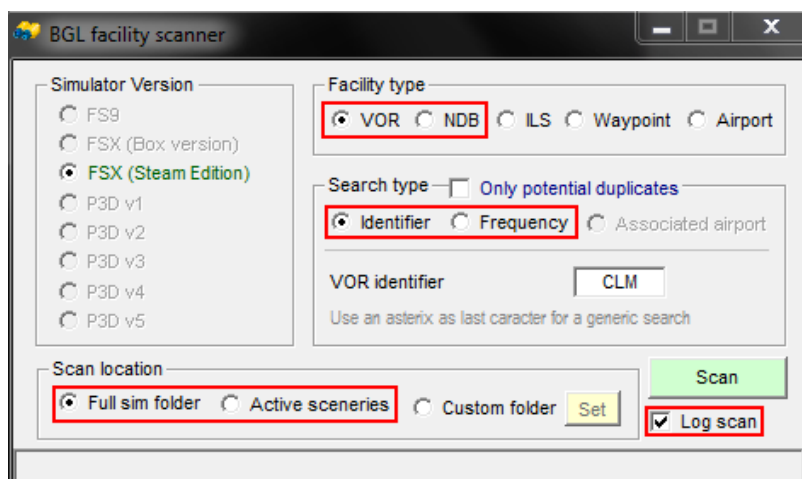
1 – In the FS9 Settings / Scenery Library, first **disable all third party sceneries** as well as the **Addon Scenery** area. Click on the OK button and relaunch the simulator,
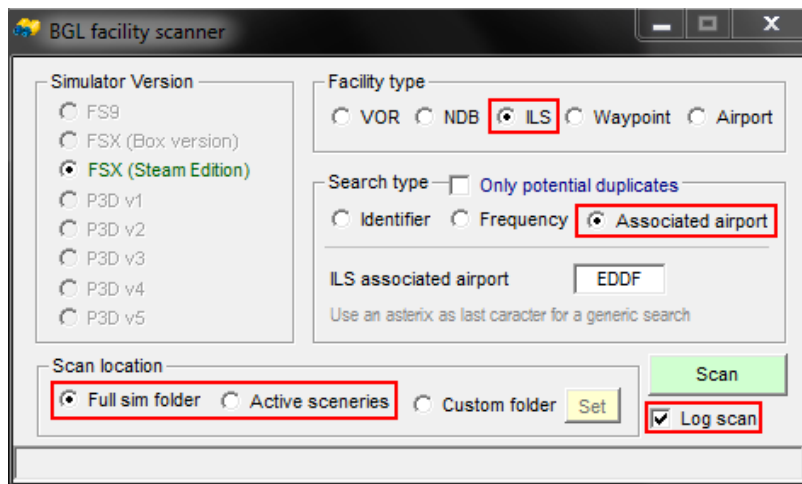
2 – Then check again the "dysfunctional" navaid,

Know that most problems come from installed 3rd party add-on sceneries whose priority is higher than default sceneries. Also be aware that, except for the Western and Eastern Europe areas, a few NDBs may not be corrected by the present update (those that are contained in untouched airport BGL files).

3 – Il there is still a problem, make use of my BGL Facility Scanner to check the FS9 navaid and provide me a screen shot of the search results or the created log file (preferred).[Screen shots below apply to FSX but will be similar for FS9]

Please feel free to email me in case you detect an error so as I correct it as soon as possible.

6 – PROGRAM FAILURES AND INSTALL LOGGING

6.1 – Program failures

In case the program warns you about corrupted files or is unable to install or uninstall some of the provided BGL files for whatever reason, a message will warn you and a ***FS9_Installer.log*** file will be created in the application directory. In such a case, *close the program without performing any further action* and provide me the following information: operating system, FS9 install folder, installer program version, user privileges (standard user or administrator), User Account Control settings (for Vista and above) and attach to your message the log file.

6.2 – Install logging

In case the installer doesn't correctly update some files, checking program actions is made easier by examining a specially created **Installer_Actions.log** file.

To achieve this, proceed according to the list below:
- First perform all selections as usual (region selection and elements),
- *Check the Log install actions* option (a warning will be issued),
- Note the resulting BGL status numbers (Up-to-date, Updatable, Deinstallable, Missing) or make a screenshot of the main screen,
- Then click the Install button,
- After Install has been completed, note again the BGL status numbers or make a second screenshot of the main screen,
- Close the program *without performing any further action*.

Provide me the BGL status numbers (or screenshots) as well as the Installer_Actions.log file that has been created in the application directory.

7 – INSTALLER SPECIAL COMMAND-LINE ARGUMENTS

To solve some rare but possible detection/analysis problems, the following command-line arguments are available while launching the installer

- **/nodetect** (FS9Navaids_Installer.exe /nodetect): skip automatic registry sim version detection. Simulator folder will have to be defined manually. Could be necessary in case registry entry for the simulator is invalid or broken.

8 – COPYRIGHT and REDISTRIBUTION

8.1 – Usage and distribution

This package and the accompanying installer software are released as donationware. As so, permission is granted to distribute it unchanged on any free media.

8.2 – Limitation of warranty

These software and package are provided "as-is" without any express or implied warranty. In no event shall the author be held liable for any direct, indirect, incidental, special, exemplary or consequential damages (including but not limited to loss of data or profits) arising from the use of this software even if advised of the possibility of such damage.

Hervé Sors – November 2022
Documentation version 8.4
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