How to Install & Use FSAcars

Version 1.3 – March 5, 2013

© 2013 Mountain Air Virtual Airlines

Why Do I Need To Use FSAcars?

While the use of FSAcars (Aircraft Communications Addressing and Reporting System) is not mandatory while flying with Mountain Air Virtual Airlines (MTN), it is encouraged and we believe it enhances your flying experience the more you become familiar with its' use.

FSAcars in the virtual airlines world is a system that allows data communications between your flight simulator aircraft information and the MTN server. It can be used pre-flight, mainly to look-up or download a dispatched flight with the associated MTN flight plan and adjust aircraft fuel as needed. Also, while in-flight, it provides real-time tracking of your aircraft and periodic status information updates that are sent to the MTN server and displayed on the website Flight Board. Post-flight automated PIREP (Pilot Report) filing is also accomplished by FSAcars. All this can be used whether or not connected and using VATSIM for online flight. An Internet connection to the MTN server is required.

Where Do I Get the FSAcars Software?

You need to install three freeware third-party programs and a MTN installation package onto your hard-drive for MTN FSAcars to function.

For FSAcars to successfully communicate with your aircraft, you must first have the latest version of FSUIPC (freeware or registered version) for your version of flight simulator installed. You do NOT have to run a registered version. You can download the latest version from:

http://www.schiratti.com/dowson.html

Next, you need the FSAcars software itself. This requires you to download two freeware FSAcars software files; the 4.0.11 version and the 4.0.15 update, from:

http://www.satavirtual.org/fsacars/downloads.html

Finally, you need to download the MTN FSAcars installation package file at:

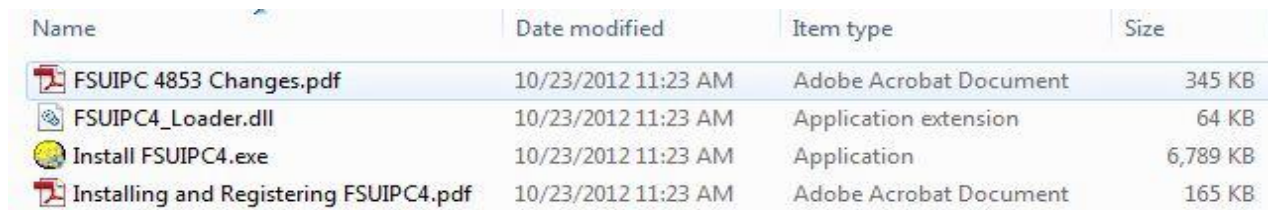http://www.mountain-air.org/fsacars/MTN_FSACARS_INSTALL_PACKAGE.zip

In summary and preperation for installation, you should have a total of four files downloaded onto your hard-drive:

*   FSUIPC (1 file)
*   FSAcars (2 files)
*   MTN's FSAcars installation package (1 file)

How Do I Install FSAcars?

Note: While the following installation is based upon FSX/SP2 and a 64 bit Windows 7 operating system, the installation using FS9 and/or other Windows operating systems is essentially the same procedure, but files may appear in different file folders depending upon how you configured your operating system and which version of flight simulator software is installed.

1) The downloaded FSUIPC file is a compressed .ZIP file. Extract its' files into a temporary folder (Fig. 1). There will be a "Installing and Registering FSUIPC4.pdf" file. Double click this file and follow the installation instructions. After installation is complete, you may delete the originally downloaded .ZIP file and the temporary installation files.

Name	Date modified	Item type	Size
FSUIPC 4853 Changes.pdf	10/23/2012 11:23 AM	Adobe Acrobat Document	345 KB
FSUIPC4_Loader.dll	10/23/2012 11:23 AM	Application extension	64 KB
Install FSUIPC4.exe	10/23/2012 11:23 AM	Application	6,789 KB
Installing and Registering FSUIPC4.pdf	10/23/2012 11:23 AM	Adobe Acrobat Document	165 KB

Fig. 1: FSUIPC temporary installation files.

2) The downloaded FSAcars 4.0.11 file is a compressed .ZIP file. Extract its' files into a temporary folder (Fig. 2). There will be a "fsacars.msi" file. Double click this file to install the software. After installation is complete, you may delete the originally downloaded .ZIP file and the temporary installation files.

Name	Date modified	Item type	Size
fsacars.msi	10/23/2012 11:42 AM	Windows Installer Package	1,737 KB
readme1st.txt	10/23/2012 11:42 AM	Text Document	1 KB

Fig. 2: FSacars 4.0.11 temporary installation files.

3) The downloaded FSAcars 4.0.15 file is a compressed .ZIP file. Extract its' files into a temporary folder (Fig. 3). Copy these two new files into the FSacars folder that was created in step 2 above. When you copy these 2 new files into the existing folder, you want them to over-write and replace the existing files. The FSacars folder is normally found in C:\Program Files (x86) or C:\Program Files (see Fig. 4). After installation is complete, you may delete the originally downloaded .ZIP file and the temporary installation files.

Fig. 3: FSAcars 4.0.15 temporary installation files.

4) The downloaded MTN installation package is a compressed .ZIP file. Extract its' files into your FSAcars program folder and let it overwrite the existing files. If you didn't change the location where FSAcars installed in steps 2 and 3 above, that location should be C:\Program Files\FSAcars or C:\Program Files (x86)\FSAcars (Fig. 4).
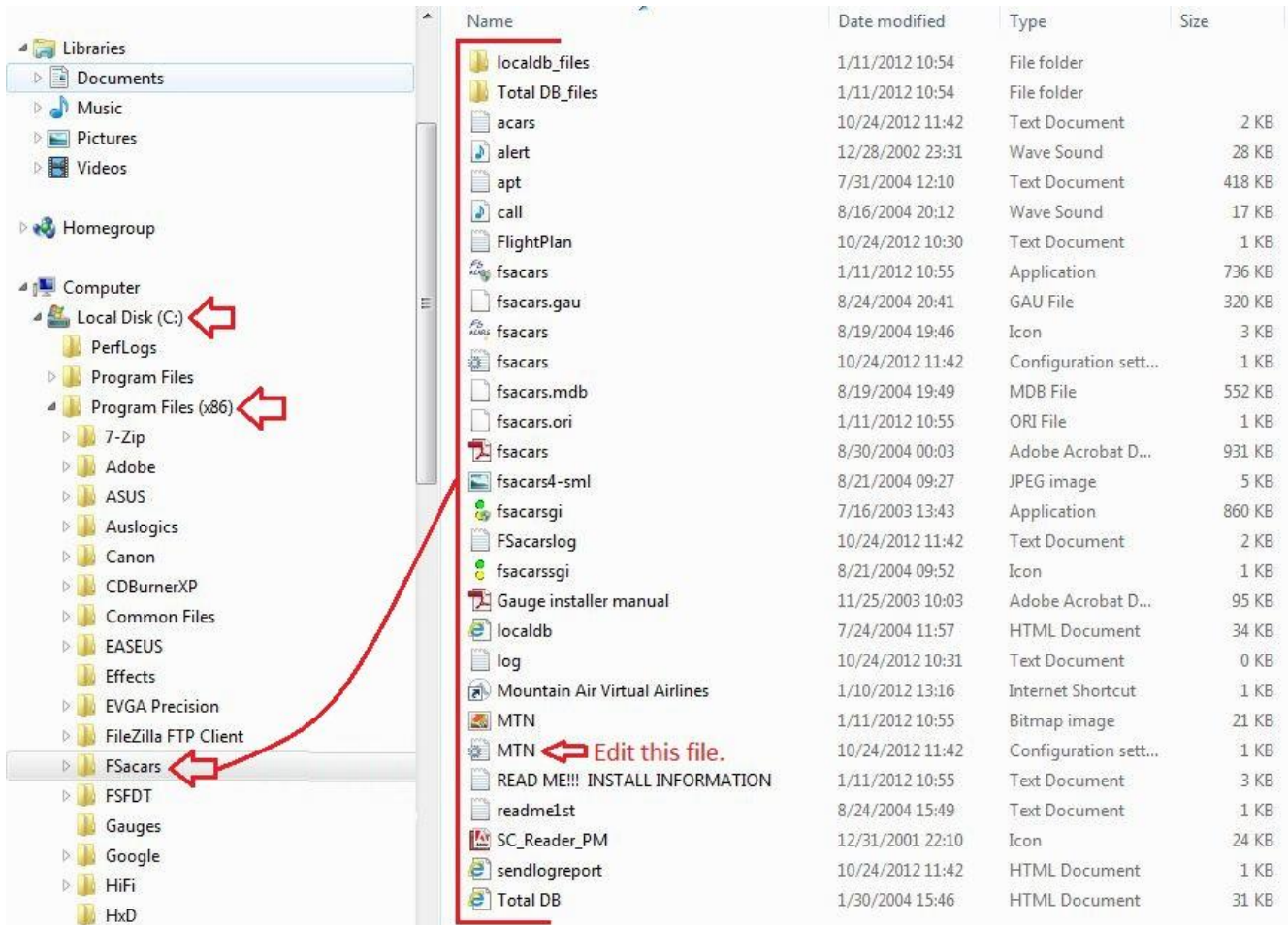

Fig. 4: Installed FSAcars files.

How Do I Configure FSAcars?

1) After installing MTN's FSAcars installation package, you must navigate to the FSAcars folder and edit the MTN.ini configuration file. It is a text file so if it does not automatically open in a text editor; use <u>Notepad to open MTN.ini</u> . See Fig. 4 for this configuration file location.

You will need to change two things in this file. <u>DO NOT CHANGE ANYTHING ELSE</u>!

Find the following line in the file (it should be the fifth line down):

>PilotNumber=XXX

Replace the XXX with your 3 or 4 digit assigned MTN callsign number. For example, MTN's Dan Ellis is MTN395. His line in the .ini file would read:

>PilotNumber=395

Farther down the file, near the bottom, you should also see a line that says:

>Password=xxxxxxxx

Replace the x's with your secure database password. This is the password you use to log into the Secure Pilot Area of MTN's website to file a PIREP.

Save the file after editing.

>*<u>NOTE</u>: If you have problems saving the file after you have completed the edits and you are using VISTA or Windows 7, you will have to run NOTEPAD "as Administrator". To do this, right click on NOTEPAD in the Windows program start menu and click on "Run As Administrator"; now you can edit and save the file.*

<u>You have completed the required file editing and FSAcars configuration!</u>

How Do I Use FSAcars?

Before you get started, there are several hidden surprises that come with using FSAcars. They will be highlighted in this document as shown below using red text and beginning with the word CAUTION:

CAUTION: Save yourself some headaches by knowing and following this advice!!

There is a FSAcars .pdf manual that installs with the software. You may want to look at that to see some additional generic information about how to use the software. There are also a few Mountain Air specific items you need to know.

Starting the Software:

CAUTION: Before starting the software, have Flight Simulator running and have your plane at its' departure airport gate or parking area.

For Microsoft Vista or Windows 7 users ONLY: Right click on the FSAcars program file on your hard-drive and select "Properties", and then select the "Compatibility" tab. Under "Privilege Level", check the "Run this program as an administrator" box. Then select "Apply" and then "OK". Close all windows.

After launching the program, be sure "MTN - Mountain Air Virtual Airlines" is showing in the drop-down box as shown in Fig. 5, then press "Choose Selected Company".
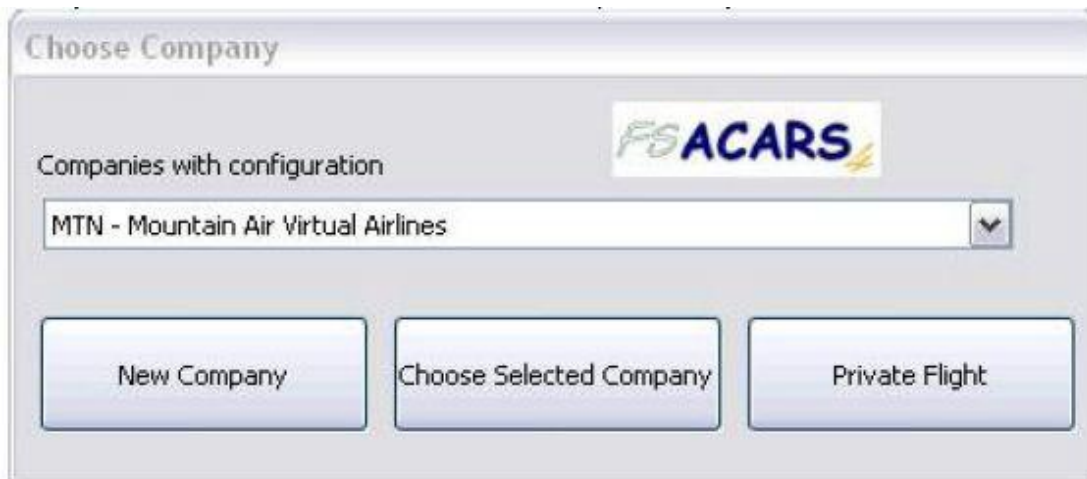

Fig. 5: Selecting Mountain Air company configuration.

Flight Plan Information:

CAUTION: DO NOT press the "Start LOG" button until you are SURE you are ready to begin logging. You cannot make changes after starting the log.

After starting the software and choosing "MTN – Mountain Air Virtual Airlines" company, you will get the main interface screen as shown in Fig. 6.
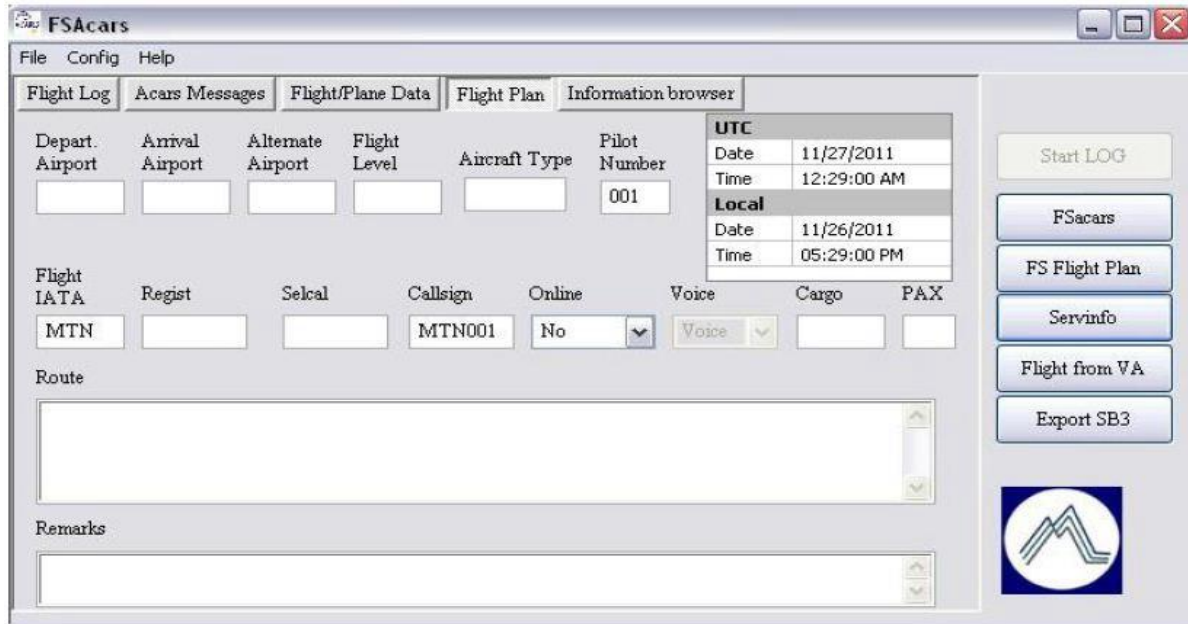

Fig

Fig. 6: FSAcars Flight Plan.

You need to fill in the flight plan. There are two ways to do this. The easiest way is to let MTN's server do it for you. In order to do this, you must have a flight dispatched to you. This is best if done before you start Flight Simulator. If you did that, you can skip to the next paragraph. However, if you forgot, you can do it now through the interface. Click on the "Information browser" button. When you do, the buttons on the right will change to look like Fig.7. Click on the "VA Site" button. The FSAcars main window will now become a browser and you will be on MTN's main page. You can navigate normally to the database and dispatch your flight. Once that's completed, press the "Flight Plan" button at the top to return to the flight plan page.

Fig. 7

Once back at the flight plan, press the "Flight from VA" button, and the flight plan page will fill with all the dispatched flight information. All you will need to complete now is the alternate airport (if you're flying online and want to indicate one for the controllers; this is optional), select your online status from the "Online" drop-down, select your voice status from the "Voice" drop-down (Note: this is enabled only if you are online), and indicate cargo weight and/or passengers on board. Weight and passengers selected here are random and don't affect flight dynamics or fuel burn. (NOTE: If you are using Windows 7 and FSX, you may have problems seeing the pull-down menus. To fix this situation, minimize FSX while using the FSAcars pull-down menus.)

If you're flying a flight that can't be dispatched, you will need to manually fill in the flight plan information. Most items are self-explanatory. Flight level should be numerical – i.e. FL350 should be entered as 35000. Flight IATA is the flight number. Use the designated flight number, or the word "Charter" for a charter flight. "Regist" should be the tail number of the aircraft. If using an unofficial plane, use N999MA as the registration. If the "Start Log" button stays grayed out and does not 'light up', you have not filled in all required fields. Most of the fields in the Flight Plan screen are required. See page 9, "How to Minimize Database Errors", for additional information on how to properly complete the Flight Plan.

Fuel Load:

CAUTION: You CANNOT change fuel load after starting the log. It will disable the flight. In one case during testing, it even crashed Flight Simulator when attempting to change fuel in-flight.

You can now move to the "Flight/Plane Data" button. You can accept what's already there, or you can click on the numbers in each tank for sliders to change the fuel. After moving a slider, click in the Total Fuel box to get an updated total of fuel load. FSAcars will load the plane with the fuel showing when you start the log. This will override any other fuel setting or loading you may have used. Again, make sure you have enough. If you run out before your destination airport, you will crash. You cannot add fuel during the flight.

Starting the Log:

CAUTION: Your Parking Brakes must be set before actual logging will start. The "Start Log" button will light when all the required flight plan information is entered and you will be able to push the button, but you will get a message scroll at the top of your screen that your Parking Brakes must be set. Logging will not begin until that happens. If you fail to set the Parking Brakes and begin your flight, the flight will not be logged.

Once you are sure your fuel is correct, your flight plan is correct, and your Parking Brakes are set, you can start logging. Press the "Start LOG" button. Unless you need to get to the information browser during flight, you can minimize the window and send it to the tray. The software logs (and your flight is credited) for block to block time. That means your credited time is from push-back (Parking Brakes released) at departure airport to gate arrival (Parking Brakes set) at destination airport. The software logs pertinent flight information can be used for real time position and flight status updates. MTN

currently does not use status updates, but will be looking toward that in the future with a possible Google Maps interface showing all active flights. The information that we do currently capture that will be used is block to block time for the flight, actual flight time, speed and flaps settings, gear settings, and landing speeds (both forward and vertical).

<u>Stopping and Sending the Log</u>:

CAUTION: Logging does not end and the log cannot be retrieved and sent until the Parking Brakes are set at the destination.

Once parked at the destination with the Parking Brakes set, you can retrieve FSAcars from the tray, and press the "Stop LOG" button. It will then cause a window to pop up with a flight summary and ask you if you want to accept the log. Press "Yes". Once accepted, press the "Flight Log" button and choose "Send Log". A window will pop up asking you to verify your pilot number. Press "OK". Your PIREP will be sent and automatically added to the database. When your PIREP is sent, you will get an acknowledgment window that it was accepted. The software also logs the flight to your local hard drive, so if needed, you can retrieve the information and log your flight manually.

<u>How to Minimize Database Errors</u>:

From experience, it appears the most common cause of database errors when using FSAcars is not properly filling out the Flight Plan page. Unfortunately, the FSAcars log can be started without having all the necessary data entered in the Flight Plan. <u>It is up to you to make sure the Flight Plan is completed properly before starting the log</u>. In Fig. 8, you will see five fields identified with green arrows; these fields are the only fields that MAY be left blank OR contain information data, – they are optional fields. All other fields MUST contain entered data.

If you receive a database error message, you MUST delete an error data file that was created when the error was detected. If you do not find and delete this file, FSAcars will continue to fail every time you try to use it. The location of this file will vary depending on your system and how it is configured. To <u>find and delete this file</u>, search your hard-drive for a file that will look like MTNxxxx.dat, where the xxxx will be your MTN callsign #. For example, if you were MTN395, the file would be MTN395.dat .
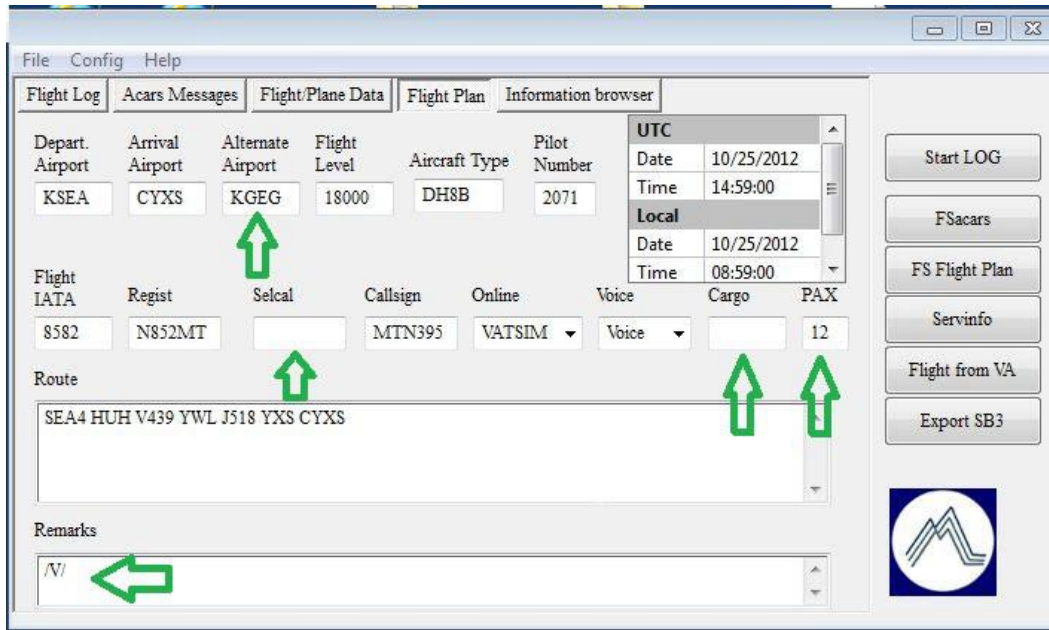
Fig. 8: Optional Flight Plan fields (green arrows).

Summary of Error Preventing Tips:

1) Fill in the Flight Plan page correctly.

2) Don't try to change fuel during flight.

3) If you receive a database error, delete the MTNxxxx.dat file before attempting to log another flight.

IMPORTANT: Additional information on preventing common errors and obtaining additional ACARS technical help are available via the Mountain Air ACARS Forum at:

http://forum.mountain-air.org/viewforum.php?f=34