

## Batch Download & Update of Plates- For Advanced Users

- With the procedure on the next page, you may download approach plates for the entire U.S. directly from the FAA free of charge and store them on your computer and USB stick. This feature requires some experience with computers. Approach plates are available to the public free of charge from AeroNav.com, but are normally downloaded one at a time. This procedure allows automated downloading and updating of all the approach plates for the U.S. in one step.
- An external program called Active Perl must be installed on your computer first. This will enable you to run a script on your computer that finds and updates complete batches of charts from the FAA AeroNav website. This feature was created by Mike Stewart, a computer programmer and GRT customer who created the script for the batch download & update of approach plates for GRT users. He is a frequent IFR flyer and created the script for his own use, and graciously shares it with the rest of us.
- The script will look in the AeroNav catalog for changes/deletions/additions since the last cycle and update the plates that have changed.
- A “plates” folder will be created on your computer. Inside the plates folder, each airport identifier will have its own folder containing PDF approach plates. Minimums plates are not downloaded by default, but the script may be modified to get them. Approach plates, arrival and departure procedures, and airport diagrams are downloaded if they are available.
- The plates for all the states are about 4GB, but cycle updates take less memory and time to download. Getting plates for all the states can take upwards of 8 hours on a typical home broadband connection the first time. It can easily run in the background while you do other things. Keep the computer on until it’s done, or you will have to start over.
- The script renames the NACO PDF files into something that is useful and easy to read on the EFIS.
- Once downloaded, put the plate files onto the USB stick as described earlier in the Using Approach Plates on HXr section of this manual. Advanced users may want to use the xcopy command from a command prompt. An example might be:

```
xcopy c:\downloadplates\plates\*. * e:\plates /d /e /c /y /f
```

The first time this will take a while since the USB stick is empty. It will prompt you to create the plates folder on the stick if you don’t have one. The next time you do this it will only copy the plates that have changed. USB is a bit slow so this xcopy command makes it nice for updates to be speedy.

- A logfile.txt is appended each time the script is run to provide useful historic information. You can open it and see your history of usage.

## Part 1: Prepare Your Computer – Windows or Mac

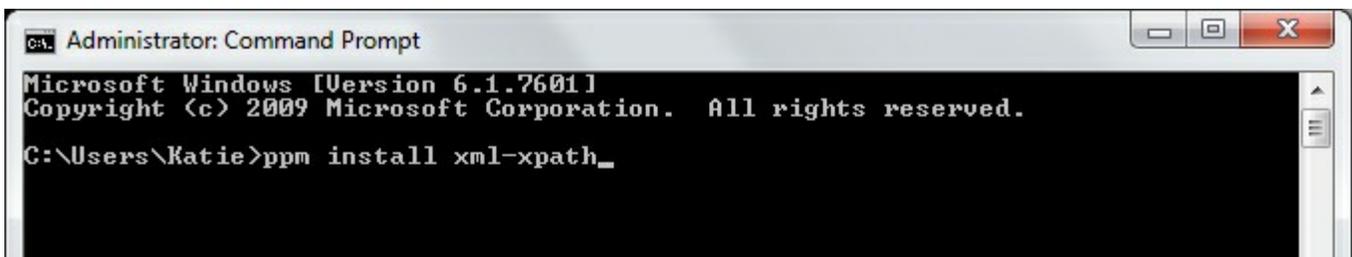
Note: These instructions were prepared for Windows 7 computers. Other versions of Windows or Macs may have slightly different procedures.

1. Make sure you have administrator access for your computer before beginning.
2. Install the FREE version of ActivePerl appropriate for your computer from this website:  
<http://www.activestate.com/activeperl/downloads>

Windows Users: To determine which ActivePerl program you need, go to Control Panel/System and see which operating system your computer has (64-bit or x86).

Choose the default settings when installing ActivePerl.

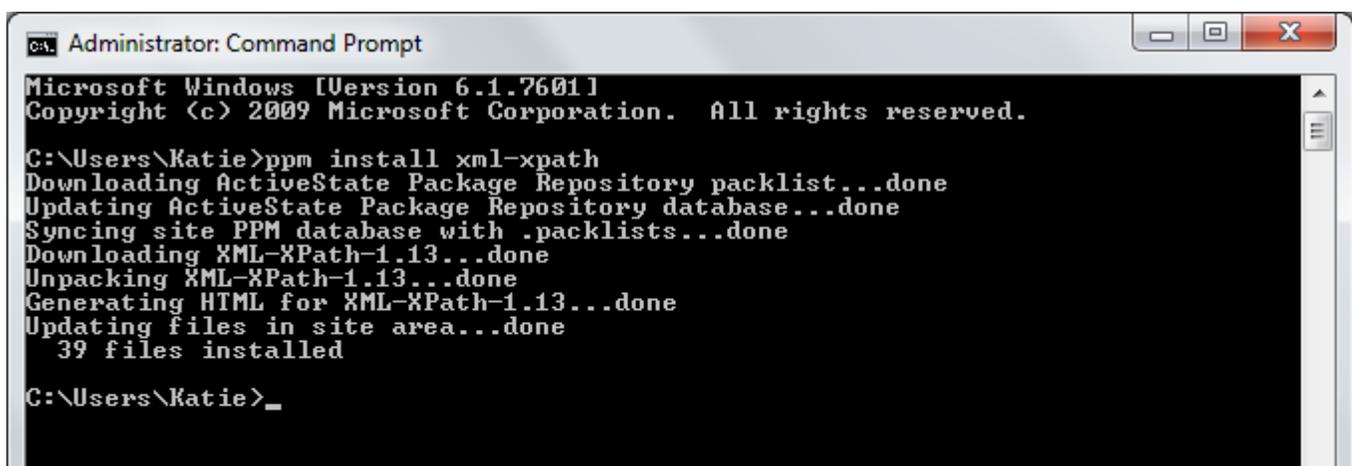
3. When ActivePerl is finished installing, restart the computer.
4. Access the Command Prompt by typing *command prompt* in the Start Menu Search Bar. The Command Prompt icon will appear in the search list; click it. A window similar to the one below will appear.
5. At the command prompt, type "ppm install xml-xpath" without the quotes as shown below and hit Return. This will install the required perl xml parser. You need only do this once. This will take a few minutes, and the command prompt cursor will return to normal when the parser is finished installing.



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Katie>ppm install xml-xpath_
```

*Parser installation command...*



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

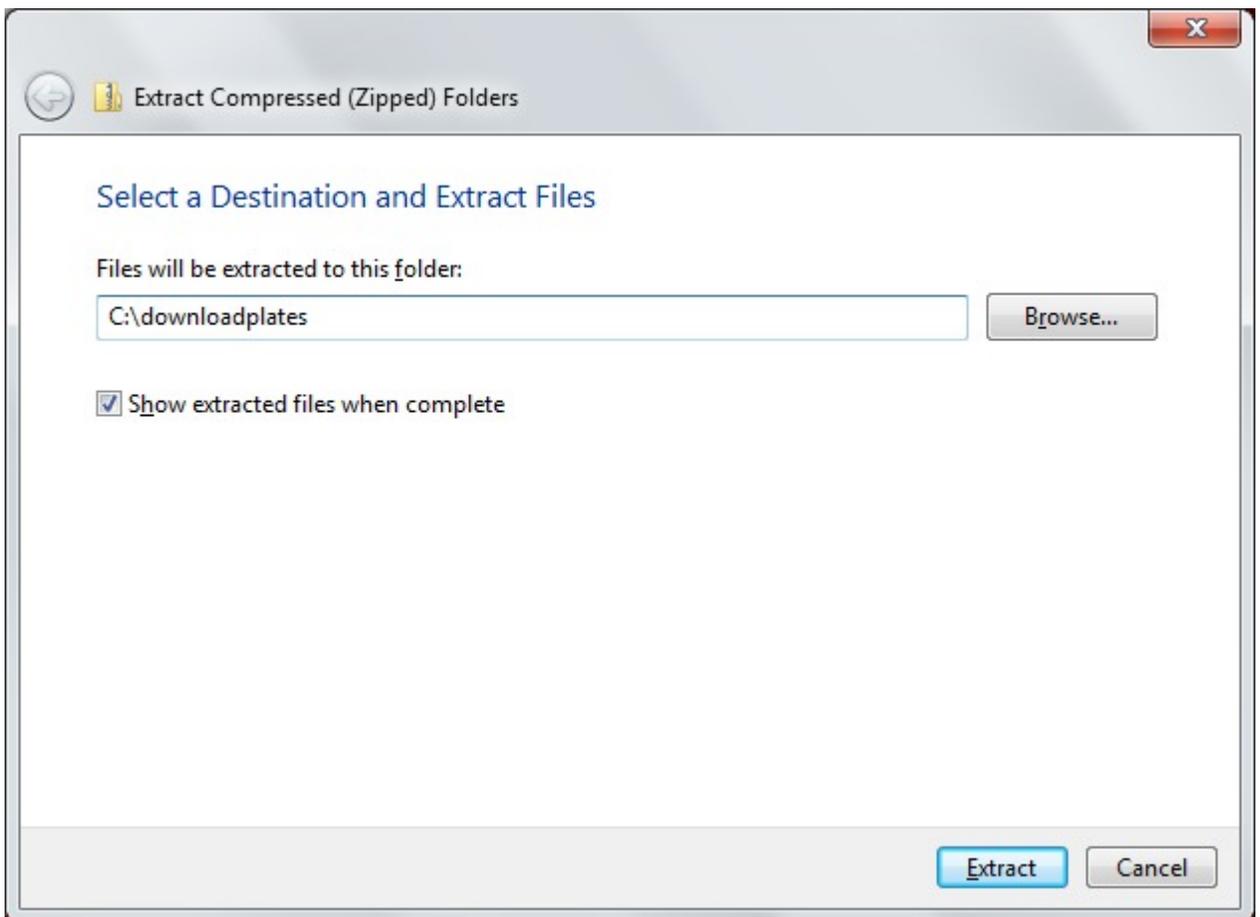
C:\Users\Katie>ppm install xml-xpath
Downloading ActiveState Package Repository packlist...done
Updating ActiveState Package Repository database...done
Syncing site PPM database with .packlists...done
Downloading XML-XPath-1.13...done
Unpacking XML-XPath-1.13...done
Generating HTML for XML-XPath-1.13...done
Updating files in site area...done
 39 files installed

C:\Users\Katie>_
```

*Parser installation is finished.*

## Part 2: Install Mike Stewart's Approach Plates Download Package

1. Go to Mike Stewart's website: <http://mstewart.net/super8/grtgetallplates/index.htm>
2. Near the top of the screen, there is a link for the downloadplates.zip file. Click on it. This will start a download of the package that contains the script, instructions, and some other files. If your computer gives you a warning about those types of files being dangerous, tell it to keep the file anyway. When the computer is finished downloading the file, click OPEN.
3. Click EXTRACT ALL FILES. This opens a window, shown below, in which you will type the directory you want the files to be saved under. Type C:\downloadplates as shown to create a file on your computer's hard drive root directory. Then click EXTRACT. You have now created the file in which all of the plates will be stored.



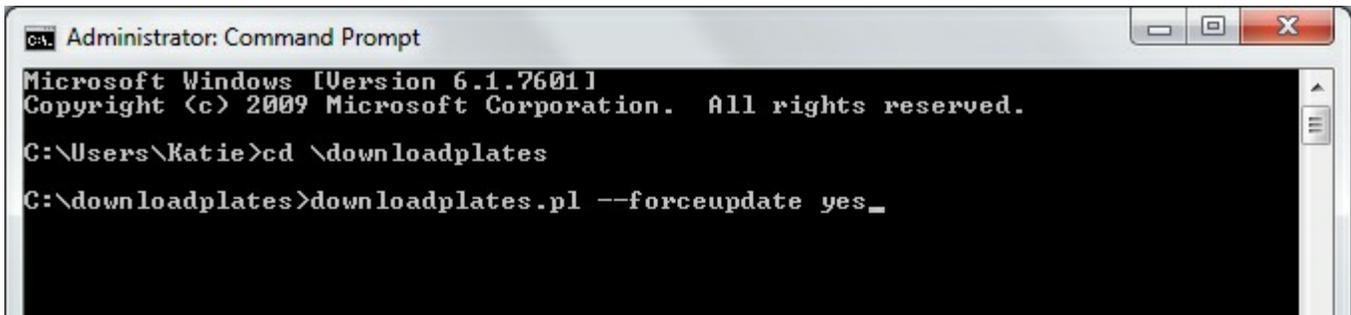
There are several utilities included in the package. One of them is a wget.exe file for Windows. This application is required to get the approach plates off of the AeroNav server. Macs and some other types of computers may already have a wget.exe application. If your computer does not need it and it causes problems, you may delete it. Otherwise, keep it in the folder with the rest of the package.

The License Agreement and full set of instructions as written by Mike Stewart are also included in the package. Some features are available for advanced computer users that are not listed here. READ THE LICENSE AGREEMENT; there are no warranties or guarantees that the service will work; it is for convenience only.

## Part 3: Getting & Updating Approach Plates

1. Open the Command Prompt again.
2. At the prompt, type "cd \downloadplates" without the quotes, space as shown. This will give you access to the file folder/directory where the downloadplates.pl script is. Press Return.
3. To get all the approach plates for the United States, type the command:

"downloadplates.pl --forceupdate yes", without the quotes, spaces as shown.



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\Katie>cd \downloadplates
C:\downloadplates>downloadplates.pl --forceupdate yes_
```

4. Alternatively, to get approach plates for just selected states, type the following "switch" command:  
"downloadplates.pl --forceupdate yes --states xx,xx,xx"  
where the "xx" are the state abbreviations. Separate them with commas, no spaces.
5. There are other download options as well, including grouping them by volume sets of states, downloading minimums charts, and debug mode. You can also download them directly to the USB stick you will use with the GRT Horizon. These command modification suffixes are called "switches." Please see Mike Stewart's instructions for more information.
6. If the computer gives you a warning about running script files, say YES to run the file anyway. The computer will then access the AeroNav catalog, create a "plates" directory, and subsequently begin downloading the approach plates into the downloadplates/plates file folder. This process may take a long time the first time, 8 hours or more. It can run in the background, but do not turn the computer off during the process, or you'll need to restart the operation.
7. Once the plates are finished downloading, copy the "plates" folder to the root directory of the USB stick you will use with the GRT Horizon. The entire collection of approach plates is about 4GB, so the stick needs to have plenty of memory.
8. To update the plates each consecutive cycle, repeat Steps 1-3 or 1-4 as appropriate, eliminating the "--forceupdate yes" portion of the command. This will fetch only those plates that have been updated since the last cycle and shorten download time. If you skip one or more cycles between updates, run the full command to force the update of all the plates and ensure you get all of the updates.