

Add-on for Microsoft
Flight Simulator X

Compatible with FS2004



aerOSOFT™

PFE



Tool

Programm benötigt
keine Kennzeich-
nung

ProFlight Emulator Deluxe

Manual

Copyright:

© 2007 / **Aerosoft GmbH**

Airport Paderborn/Lippstadt
D-33142 Büren, Germany

Tel: +49 (0) 29 55 / 76 03-10

Fax: +49 (0) 29 55 / 76 03-33

E-Mail: info@aerosoft.de

Internet: www.aerosoft.de



aerosoft™

All trademarks and brand names are trademarks or registered of their respective owners. All rights reserved.



ProFlight Emulator Deluxe

Manual

Add-on for

Microsoft Flight Simulator X

Credits

I would like to thank the following for their help and support during the development, testing and production of this product. If I've missed anyone it was not intentional.

Beta Testers:

Abraham Abyad, Hani Choucrallah, Allen Cremeen, Mike Dingley, Steve Harris, David Hawley, Jame Hicks, Peter Kamper, Erich Kastelic, Ray Lunning, Robert Mariani, Ken McNally, Stefano Murgia, Bruce Nicholson, Paul Racines, Antti Saastamoinen, Gerard Salden, Rick Schaefer, Frank Schneider, Udo Zander

PFE Program Design and Development:

Dave March, Copyright (c) 2007 OnCourse Software Ltd

PFE Icons, Installer, Website and Advertising Graphics:
Trevor Piggott of Web Media UK, www.webmediauk.net

Additional Work:

Rick Schaefer for the design and development of PFE's FS9/FSX runways database and tools.

Ray Lunning for his tireless work in helping me to tweak PFE's approach vectoring and for writing 'A Guide to using PFE'.

Almost Last:

My thanks to the creative genius and development talents of the original authors of ProFlight 2000, Robert Mackay and Tom Main.

Thanks also to Tom Main, Robert Mackay and Marty Arant for their kind permission for us to re-publish ProFlight 2000 with the PFE Deluxe Edition.

Last but not Least:

To my dear wife, Hazel, for all your help and support during this, my latest journey. At the height of this project we became like passing ships in the night but you knew how important it was for me to spend as much time as possible in an attempt to get things just right. Never a complaint, never negative, only your constant support and love as always.

Thank you darling. X



Content

| | |
|---|-----------|
| System Requirements | 6 |
| Installation | 7 |
| Deinstallation..... | 7 |
| Overview | 8 |
| What is it? | 8 |
| What have we added to PFE that was not available in ProFlight 2000 | 9 |
| AI Traffic Detection | 9 |
| SIDs and STARs | 10 |
| Transition Altitudes by Region | 10 |
| Define Your Own Hotkeys..... | 11 |
| What have we removed from PFE that was available in ProFlight 2000 | 11 |
| What have we changed in PFE from the way it used to work in ProFlight 2000 | 12 |
| Hotkeys..... | 12 |
| What does not work that used to work in ProFlight..... | 13 |
| Getting Started..... | 14 |
| First Steps... only steps..... | 14 |
| A Guide to using PFE by Ray Lunning (beta tester) | 17 |
| Introduction | 17 |
| The Pilot..... | 17 |
| Flight Preparation | 17 |
| Flight Plans..... | 18 |
| PFE and WIND | 21 |
| PFE Options and Configuration | 22 |
| ProFlight 2000 Options and Configuration..... | 39 |
| PF2K Commands | 40 |
| FAQ..... | 45 |
| Support..... | 49 |

System Requirements

- Microsoft Flight Simulator version FS2004 or FSX
- 10MB disk space required for the standard edition of PFE
- 300mb disk space required for the deluxe edition of PFE (which includes ProFlight 2000)
- Runs under Windows XP or VISTA

To use PFE Standard Edition you must have a working copy of ProFlight 2000



Installation

Compared to installing the standard edition of PFE this is a breeze.

Simply run the PFE Deluxe Setup.exe program and follow the on-screen prompts. The only decision you have to make is where you wish to install PFE. Once complete you will have a fully installed version of PFE and ProFlight 2000.... ready to run.

Total time for this installation is approximately 2 minutes, depending on your system specifications, which includes installing all available ProFlight 2000 voice sets.

Deinstallation

For Windows XP Users

From *Control Panel* select *Add or Remove Programs*.

Select PFE Deluxe Edition then select *Change/Remove* to remove PFE Deluxe (including ProFlight 2000) from your system.

PFE Deluxe and ProFlight 2000 has now been removed from your system, with the exception of certain log files, flight plans, etc, which you will have to do manually.

For Windows VISTA Users

From *Control Panel* select *Uninstall or change a program*.

Select PFE Delux Edition then select *Uninstall/Change* to remove PFE Deluxe (including ProFlight 2000) from your system.

PFE Delux (including ProFlight 2000) has now been removed from your system, with the exception of certain log files, flight plans, etc, which you will have to do manually.

Overview

What is it?

ProFlight 2000 Emulator (PFE) provides you with the means to use one of the all time favourite Flight Simulator ATC programs with FS2004 or FSX. Namely ProFlight 2000.

Yes, that's right, despite the fact that neither of these versions of Flight Simulator support Adventures PFE runs as a standalone program alongside these newer editions of Flight Simulator to emulate the adventure engine.

How does it achieve this?

Using our own bespoke APLC32 compiler PFE produces an almost identical flight for you as you would have experienced using ProFlight 2000 in FS2000. We say almost identical because during the development of PFE we did discover (and fix) a few bugs in the way ProFlight 2000 handled various flight scenarios. We also added a lot of new and exciting features plus devoted a lot of time on the approach vectoring functionality... but more on these new features later.

Written in Visual Basic and VB.NET PFE does not actually produce flight simulator adventures. It does, however, utilise the flight plan data produced by ProFlight and of course those much loved 40+ regional voice sets.

Going forward we hope to add even more new features to enhance your enjoyment of ProFlight 2000 further.

PFE Deluxe includes everything you need to enjoy ProFlight 2000 including a full working copy of the original ProFlight 2000 program (*licensed to us for distribution with PFE by the original publisher and developers of ProFlight*).

As mentioned earlier PFE basically uses the flight plan data generated by ProFlight 2000 and the original localised voice sets too. For you, dear user, it will be just like running a ProFlight 2000 adventure but alongside the latest Flight Simulator versions (FS9 and FSX).



What have we added to PFE that was not available in ProFlight 2000

AI Traffic Detection

Probably the most exciting feature we've added is AI Traffic *detection*. Not quite as exciting as AI Traffic interaction which is basically not fully possible and will not be so until Microsoft issue an AI Traffic SDK, which is highly unlikely. Nonetheless, AI Traffic detection is without doubt a *must have* for any ATC program.

So, what exactly have we achieved

At your departure airport, once you're on the taxiway approaching the active runway PFE will start to check the taxiing aircraft around you and any aircraft on approach to your designated runway. PFE will not issue instructions for you to enter the active runway whilst there are any aircraft close by and on final approach. The exact distance is set by default to 6 miles for Jet aircraft and 3 miles for smaller, prop, type aircraft. This, along with the many other PFE options, is user configurable.

When lining up behind other aircraft on the taxi way you will be told something like this: „...*expect clearance in ten*“.

When next in line for takeoff you will be instructed to „*Hold for traffic*“ if there are any aircraft actually on the runway on on finals.

When awaiting the arrival of another aircraft you will be instructed to „*taxi into position and hold*“ as soon as it's safe to do so after the other aircraft has landed.

Once all other aircraft have left the active runway you will receive take-off clearance.

During the approach phase of your flight PFE will prevent any other aircraft from taxiing onto the active runway and should therefore prevent any annoying go-arounds caused by such things. PFE will also attempt to handle traffic separation between you and AI aircraft on

route to the same airport and runway. However, due to interactive limitations with AI traffic this feature is not very elegant so we basically only deal with traffic behind you.

SIDs and STARs

Another exciting feature we've added is the ability to fly a published departure. ProFlight 2000 always did allow you to fly a published approach, simply by using a hotkey to request a „*Cleared to Finals*“. Now, thanks to PFE you can select to fly a SID (DP) of your choice. You can even give it a name (Alpha-Two-Romeo for instance) which will be included in the clearance and takeoff instructions you receive.

With no SID departures in place the standard ProFlight clearance would be „*Cleared for takeoff, runway nine, fly runway heading*“.

Using the new SID feature you would hear „*Cleared for takeoff, runway nine, alpha-two-romeo at five thousand departure approved*“. You would then fly whatever published departure you want, with no further ATC interaction, until you reach the altitude given in the takeoff clearance, at which point ATC would kick in again and give you any altitude instructions accordingly. Please note, SID altitudes can be set in the SID/STAR options display too, but should you choose to leave this at zero for any configured SID then PFE will work one out for you.

Transition Altitudes by Region

Yes you can now set the correct transition altitude for up to 26 different (ProFlight) geographical regions, so flying from one country to another could result in the TA changing on route.



Define Your Own Hotkeys

ProFlight 2000 is installed with several preconfigured hotkeys, most of which are supported in PFE.

However, using our Hotkey configurator feature you may choose the actual keying sequence you prefer to use for any one of the supported hotkeys. This ensures you can alleviate any possible contention issues with other programs.

We've also added a new hotkey - *Ctrl+Shift+D* - which can be used to toggle PFE's AI ground detection on/off. This is useful in certain circumstances where you may find yourself waiting for clearance to takeoff with no other (AI) aircraft in front of you or supposedly on finals. This is a rare occurrence but can sometimes happen dependant on your position on the taxiway and the position of AI aircraft behind you and relative to the active runway. Should you find yourself in this situation simply use this new hotkey to deactivate ground traffic monitoring, at which point you should then be cleared for takeoff. Suffice to say, you use this hotkey at your own risk.

Should you find there are some hotkeys you would never use you can deactivate them completely. This frees up any unwanted hotkey slots from the somewhat limited space available within FSUIPC for hotkey configuration, an area which is shared should you be running other addons that use an FSUIPC hotkey feature.

What have we removed from PFE that was available in ProFlight 2000

1. Closed Caption Mode
2. Pushback
3. CoPilot mode 4

What have we changed in PFE from the way it used to work in ProFlight 2000

Hotkeys

The following default hotkeys are used to interact with PFE:

The original ProFlight 2000 program required you to use the Ctrl+Shift key combination for all hotkeys (communication keys) and we have retained this requirement with the exception of 0 thru 9 and the Roger keys, where you only need to use a single keypress.

0 thru 9 has been used to replace ProFlight's Control+Shift+0 thru Control+Shift+9.

We used these as they are normally used to interact with FS ATC, and since you won't be using that we thought these keys would be best suited to use in PFE without causing any contention issues with FS.

\ has been used to replace ProFlight's Ctrl+Shift+'

So, to contact Clearance Delivery simply hit the 0 (ZERO key) whereas to change the CP mode you would use Control+Shift+V

To Roger back to ATC just use the \ (backslash) key

All other keys are as described in the ProFlight documentation... a listing of these keys is also provided in the file named ProFlight 2000 Commands.htm which can be found in the PFE\Help folder. These details are also available in the 'Getting Started' section of this manual under the PFSK Commands section.



What does not work that used to work in ProFlight

Obviously there some features of ProFlight 2000 that no longer function correctly with the later versions of Flight Simulator.

Namely:

- Writing flight plan data to the FS GPS does not work.
- Choosing to start your ADV Flight at a certain point does not work.
- Choosing to start the ADV Flight with engines running or not running does not work.
- Generating ProFlight weather does not work.

Getting Started

First Steps... only steps...

Here a very brief bulleted summary of how I use PFE/ProFlight/FS, followed by more detailed instructions on how to do so.

1. Start FS.
2. Create a Flight Plan.
3. Start PFE.
4. Select Convert a Flight Plan to convert it ready for ProFlight 2000.
5. Start ProFlight 2000, select the converted FS Flight Plan then Compile it.
6. From PFE select the ADV Flight File just created in step #5.
7. From PFE select Connect to FS.
8. Enjoy your flight.

... and now with a little more detail thrown in

The very first step is to remember how you used to use ProFlight 2000 and then do so again in exactly the same way as you did in the past. If, like me, your memory is not quite what it used to be, or perhaps you are completely new to ProFLight, then please refer to the ProFlight 2000 user manual. If you can't find the printed manual there will be an electronic one available from the *Start menu* after the installation is completed.

Basically you need to create a flight plan. This obviously has to be in FS2000 format so you will have to use a flight planner capable of producing such a flight plan (note: FS2004 and FSX can both read FS2000 flight plans).

Please Note: *This restriction to use an FS2000 flight plan format is obviously due to ProFlight 2000 itself, as this program has not be altered in any way - furthermore it was never our intention to do so nor will we attempt to do so in the future.*



For those of you who prefer to use the FS flight planner we have provided a utility as part of PFE to convert FS2004 or FSX flight plans for use with ProFlight 2000. When you first select this feature you will have to select the source (FS files) and target (PF files) folders for this process. Obviously the source folder will be the folder into which Flight Simulator saves its flight plans - normally *C:\Documents and Settings\Your Name\My Documents\Flight Simulator (or Flight Simulator FSX)*. The target folder would be the folder that ProFlight defaults to when you select a flight plan - normally *PFE\FS2000\Pilots* folder.

A very important point to remember here is your flight will only be as good as your flight plan. Just as it is in real life good planning is essential!

A good flight plan = a great flight

A bad flight plan = ??????????

Once you have configured ProFlight 2000 to your own particular requirements simply load your flight plan then hit the *compile* button. Your flight plan data will now be generated for use by PFE, which should only take a short time to complete and which you will notice is very, very much quicker than it used to be (maximum 30 seconds). This increase in compilation time is achieved by our own version of APLC32 which doesn't actually produce a compiled adventure but simply extracts the data required by PFE.

The original ProFlight 2000 ADVenture files were approximately 18 MB in size whereas the PFE ADV Flight Files are less than 15 kb.

Once complete you may now close ProFlight 2000 and start PFE. Then, from the PFE main menu use the *Select New ADV* button and browse to the newly created *ADV Flight Files*. Choose the one you require then click Load.

PFE will now be running, in much the same way as a ProFlight 2000 Adventure. However, PFE is written using both Visual Basic 6 and VB.NET functionality so performance is much more fluid, stable and responsive.

If you haven't already done so you should now start FS. Personally I find it useful to load the flight plan used to create our selected ADV Flight File into the FS flight planner... confirming Yes to the prompt about moving to the departure airport. This allows me to use the FS GPS to ensure I keep to the correct flight plan route expected by PFE.

Once you're ready to go you need to Connect PFE to FS, which you can do using one of two methods. The first, and probably easiest method is to open the Addon menu in FS and select *START PFE*. You may also use the *Connect to FS* button from PFE's main menu display.

You will see a message in the FS message window to indicate PFE is now active and all you need to do now is use the appropriate PFE hotkeys to contact Clearance Delivery... just as you did with ProFlight 2000.

The rest, as they say, should be *history*...

A Note about the FS Message Window

To get the best possible message display from PFE we recommend you setup the message window as follows:-

From the Addons menu select FSUIPC and on the main display page.....

1. Select *,FSUIPC Multiline Display Window'*.
2. Deselect *,Hide all Single line messages'*.
3. I also select the Misc options tab and then select *,Scrolling message to be in white'* (but that's my own preference).



A Guide to using PFE by Ray Lunning (beta tester)

Introduction

PFE utilizes ProFlight2000 for use in FS2004 and FSX.

PF2000 is a Flight Planning and ATC program that simulates ATC communications and navigation. It is an interactive program which allows the Pilot to respond to ATC voice commands.

The Pilot

To use this program the Pilot should have some knowlege of navigation and IFR/VFR Flight procedures. A successful flight will depend on the Pilots ability.

Flight Preparation

Prior to flight, the Pilot should have a printed ProFlight2000 Flight Plan. It will also be useful to have a print of the Flight Plan's *.brf file found in the PFEADV folder. These two items will provide you with most of the runway information and enrout frequencies needed to make the flight...

To do things by-the-book the pilot should ideally have a printed ILS or VOR Approach procedure published for the destination airport, although this is not absolutely necessary.

Approach Plates can be downloaded from several web sties such as:

www.airnav.com/airports/

Flight Plans

A good flight plan is the most important part of making a good flight.

ProFlight's compilation process to create an ADventure file is now intercepted by PFE to create a much more compact ADV Flight File.

Flight Plans can be created using the FS9 or FSX FlightPlanner. However they need to be converted to FS2000 format for use with ProFlight 2000. At the time of writing they can be converted the ConvertFS9FP.exe tool provided by OnCourse Software. However, this may find itself as an integral part of PFE by the time the program is released.

These Flight Plans need to be exported to the *PFE\FS2000\Pilots* folder.

When you open ProFlight 2000 you may wish to set various options before selecting *Compile*.

In this guide to using PFE I will assume you have created an IFR Flight Plan.

Most flight planners do about the same thing. First you select a Departure Airport and Runway then you select a Destination Airport and Runway. Second you select a cruise altitude. Here in the USA we observe the east / west rule.. Odd thousands when easterly and even thousands when westerly.

PFE does not detect terrain efficiently enough to be able to successfully vector you around hazards. Therefore it is important to select a cruise altitude that will clear all terrain and such hazards on route.

And last you must select a route. Again, here in the USA we fly Low Enroute Airways (V186) below 18000 ft. and High Enroute Airways (J24) above 18000 ft.

FS9/FSX FlightPlanners allow you to choose IFR or VFR, then select Low or High altitude airways or even VOR to VOR.

Once it generates a flight plan you can edit it and add or delete waypoints.

When creating a flight plan in FS9/FSX it is important to include co-located or the nearest VOR to the Departure and Destination airport. These are needed to define enroute waypoints. They can be added by using the edit feature..



ProFlight 2000 will drop VORs and waypoints near the airports (10 miles from Departure, 15 miles from Destination) and they will not appear on the ProFlight 2000 Flight Plan. It is a good practice to make a copy of the FS9/FSX flight plan as it will show those VOR frequencies for navigation.

Important Notes

The flight plan route should be to the IAF (Initial Approach Fix) It is from this point that you will be cleared or vectored. This IAF can be found on the Approach Plate for the runway in use. If the IAF is not available make your route to the nearest VOR.

It is best to assign altitudes to your waypoints. When compiling the flight plan ProFlight 2000 will give you the option to do so. Here are some guide lines which I have found work best for me:-

- Set the TOD waypoint the same as the „Previous waypoint“ .
- Step down your decent by select two or three waypoints before the destination and progressively lower your altitude. This will make for a smoother decent.
- Set your last waypoint at 4000 ft. AGL. If you don't do this you may find yourself too low too far out.
- With some Departures it may be better if you also step your climb.
- Prior to compiling your flight plan, be sure you have set the „Contact Center Altitude“ .
- This is the altitude that Departure will hand you off to Center. Here in the USA that altitude is usually 5000 ft AGL
-

IFR Flight: VOR Approach

On arrival at the IAF, or final waypoint, PFE will not detect an ILS at your destination airport and Approach Control will clear you as follows:

„(Aircraft) turn left (or right) heading 123. Cleared to final for runway 12 at Pilot’s Discretion. Contact the tower on 123.4 when established..“

The pilot may now fly the published VOR approach using his chart, If a chart is not available the GPS is a good option to navigate to the airport.

A PFE option after „cleared“ is to use the „Request Vectors“ option using the # 7 key.

When nearing the airport CP Mode 2 will connect you to the tower, otherwise with the airport in sight you can manually contact the tower using the # 1 key..

IFR Flight: ILS Approach

On arrival at the IAF, or final waypoint, PFE will detect an ILS at your destination airport and Approach Control will then clear you as follows:

„(Aircraft) turn left (or right) heading 123 for vectors to the ILS runway 12 approach.“

Depending on your position and the wind direction, Approach will try to vector you directly to the ILS or vector you into a downwind entry then turn to base and vectors to the ILS. When PFE detects your ILS intercept, Approach will clear you for the ILS and to „contact the tower on 123.4“...

A PFE option while being vectored to the ILS is to use „Request Cleared to Final at Pilot’s Discretion“ by using the # 1 key. The pilot would then fly the published ILS approach using his chart. If a chart is not available the GPS is a good option to navigate to the airport localizer course.



VFR Flight Plan

For VFR flights it is best to avoid Airway routes. PFE may determine that you are „off“ the airway.

A VFR flight plan is most often a straight line between airports. VOR navigation can be helpful. PFE does provide flight following and the Pilot can also request vectors using the # 7 key.

You will need to select VFR when creating the flight plan.

VFR altitudes use the east / west rule similar to IFR except that it is +500 ft. (6500).

PFE and WIND

During a flight PFE will determine the runway to use at your destination. It does this by first checking to see which runway is currently being used by AI traffic. If there are no AI traffic currently taking off, landing or on route to your destination airport PFE will assign a runway determined by wind direction. The Pilot can help predetermine his intended runway by selecting the wind direction in the Weather menu prior to starting PFE. For those using „real Weather“ or some other weather generating program, they will be subject to the „actual“ wind direction.

PFE Options and Configuration

PFE offers a host of configurable options for you to tinker with and setup the system to your very own requirements and according to your personal likes and dislikes. A lot of these options will actually override similar options available in ProFlight whilst others will be completely new and not found in PropFlight 2000 at all.

Please Note: *Some of these screen shots may have changed slightly in appearance and layout since this document was produced but the features and functionality remain the same.*

Options are accessed from the main PFE screen.





The first *options* page (shown below) replicates some of *ProFlight's options*.



At the top left you will see you can enter the *Pilots Voice* you want to use, the *Airline* and a *Callsign*. These entries will override any you have set in *ProFlight*. This you may find useful to ensure you always hear the *Airline/Callsign* and *Voice* you want, regardless of the *ADV Flight File* you may be using or who might have created it. This was of value to me during development as I was able to run *ADV* files created by various testers but was always ensured of hearing the *callsign* I wanted to.

Below this you will see the various *CoPilot modes* available, all of which are fully explained on the *options page*. Selecting a particular mode will ensure this is the one that will be used for all loaded *ADV Flight Files*. This mode can also be changed at anytime during your flight simply by using the *CSW* hotkey.

Below the *CoPilot modes* is the *Volume* control which allows you to set the volume of the *ProFlight* calls.

Below the volume control there is a *Debugging control*. This control filters the information we want written to the debug logging file. Normally this would be set to ,5' but you may be requested by *PFE*

Support to increase this as an aid to collating data with regard to any problems but be warned, setting this to 8 or 9 will produce very big logs.

On the right-hand side of this page you will see the following options:

Check for Program Updates each day - ensures you always keep up to date with any program updates.

Easy ATC - which is the ProFlight ATC hand-holding option for those new to flying and ATC.

ATC calls Alt Baro pressure in Millibars - when contacting a new facility and when below the current TA (transition altitude) ATC will read out the current barometric pressure. By default this is read out in *inches of mercury as two-niner-niner-one* (29.91), but selecting this option the call will be made in millibars as *one-zero-one-three* (1013).

Airway Deviation - by default ATC will nag you if you are +4 or -4 miles off the designated airway. You can use this option to increase this margin or set it to zero to turn the ,nags' off completely.

FS Inactive Time - is the amount of time PFE will wait if not getting any response from FS before closing down.

Hold for Jets and Hold for Props - sets the distance at which you will be told to hold for inbound traffic whilst waiting for takeoff clearance.

Pause Mode - An old favourite... this determines the distance from either the FAF or the runway you want to pause FS/PFE.

Hold Percentage Probability - set between 0 and 100 to decide on the probability of you getting a hold on route, dependant of course of several other factors.



Below this is a button named *Transition Altitudes*. Selecting this will display another screen (see below) showing 26 geographic regions.



These are ProFlight geographic regions and each one will be set with a default value showing the *transition altitude* for that area. The area you're currently flying through will be determined by PFE by the current voice/accent configured for, but not necessarily in use by, the ATC controllers and will then use the TA as required. What this means is you could fly from one country to another and experience varying *transition altitude* calls.

Closing the *transition altitude* display takes you back to the first *options* page and from there you can select the *Hotkey Options* by using the large button toward the bottom of the display named *For Hotkey Options Click Here* which will display the following page:



There are 18 preconfigured hotkeys in PFE, which are basically the same as those found in ProFlight 2000. However, the Hotkey page allows you to choose any key or multi-key combination for each hotkey if you wish. Just select the hotkey from the left hand-side and then select *Change Hotkey...* then press the key(s) you want to use for this procedure then press Activate.



In the example shown below we are attempting to change the ZERO hotkey to use the Shift+Ctrl+0 combination of keys.



Now close the *Hotkey* screen to return to the main manu display and select SID's/STAR's.



PFE's unique SID's (DP's) and STAR's display page will now be displayed:



This is where you control the use of SIDs (DPs), STARs and Missed Approach altitudes. There are quite a few variations you can choose when deciding how to use SIDs. If you wish to fly a published departure from all airports but really can't be bothered to enter any data here, simply select the *SIDs (DPs) Active* master switch. Just below this option if you choose *If no SID (DP) name entered use the default „Delta Papa“* each time you contact clearance (at any airport) you will hear *,Cleared as filed, squawk 1234, Delta Papa departure at xxxx approved, contact ground on.....“* (where xxxx will be the altitude you are initially cleared to whilst flying the published departure and at which point ATC will resume control. Until you reach that altitude you will not hear anything from ATC other than to hand you off to another control facility.

If you don't want to use the default *,Delta Papa‘* name for you generic published departures you can enter your own default name if you select the option *,If no SID (DP) named entered use...‘*. Here you can enter a five character alpha numeric code which ATC will read out.



The other alternative is for you to enter a name against individual runways. To do so you need to first enter the ICAO code for the airport you want to display, then hit ENTER or select the *Display Runways* button. In the following screen shot example we're displaying the runways for KORD:



Using the above configuration, if departing runway 4L Clearance would confirm „Cleared as filed, squawk 1234, Mike-Alpha-Four-Lema at Five Thousand departure approved“. You would also hear the same from Tower when being cleared for takeoff.

Departing runway 14L you would hear „Cleared as filed, squawk 1234, Alpha-Delta-Lema-One-Four at Six Thousand departure approved“.

Departing from any other runway (other than 4R) you would hear „Cleared as filed, squawk 1234, Delta-Papa at xxxxx Thousand departure approved“. Where xxxxx would be determine by PFE at the time of the clearance and would normally be set at an altitude halfway between the current airports ground elevation and the altitude set for the first waypoint. Eg. If your departure airport's elevation is 1,000' and the first waypoint's altitude is set to 11,000' then the cleared to altitude would be 5,000' $(11,000 - 1,000 / 2)$.

Please note you need to indicate which version of flight sim you are using to ensure the correct PFE database is configured with the above data. This is done simply by choosing either the *FS9 Data* or *FSX Data* option situated just to the right of the Airport ICAO entry box.

This same screen is also used for configuring STARs and/or Missed Approach altitudes. As previous users of ProFlight 2000 will remember you were always able to fly a published approach by activating the „*Cleared to finals*“ feature. Obviously this feature is still available to you but now, should you choose to activate the PFE *STARs option* (using the default STAR name) you would be cleared as such: „*Cleared to final for Sierra-Tango approach, runway xx...*“

Exactly the same variations are available for STARs as they are for SIDs with regard to the departure/approach name used by ATC.

This screen is also used to enter a missed approach altitude. This is the altitude you will initially be told to climb to should you report a *go around*. You don't have to use this feature as PFE will usually tell you to climb 2,000', but should you find an airport where surrounding terrain make such an altitude too dangerous you can adjust this feature for each runway should you wish.

Any changes you make to runways, like entering SID/STAR names or altitudes must be saved by selecting the Save Changes option. You will be prompted to do so should you forget.



Okay, let's go back to the main menu display now and check out some more options and features:



Selecting the *FS9 / FSX FP Converter* option for the very first time will prompt you to tell PFE where your FS9 or FSX flight plans are and where you would like the converted ProFlight files sent to.



Just OK this message to display the following:





Now, PFE will not open this display into the correct folder so you will need to navigate to the folder in which all your FS flight plans are copied. For FS9 users this is normally:

C:\Documents and Settings\YourName\My Documents\Flight Simulator Files

And for FSX users:

C:\Documents and Settings\YourName\My Documents\Flight Simulator X Files

Once into the correct folder simply select any one of the files then select Open and the location will be saved for the next time you use it. This location can be changed at any time (explained later).

You will have to do the same for the target files and this would normally be the folder from which ProFlight normally checks for flight plans and this must be:

PFE\FS2000\Pilots

Again once you navigate the correct folder you would need to select a file (any file) and then press Open to ensure the location is saved.

Subsequent times you access the FS9/FSX converter option you will be persented with the following:



This display shows all the F9 flight plan files currently on the system which were created using the FS9 flight planner. To use these for ProFlight 2000 they need to be converted to FS2000 format. To do so simply select the flight plan you want to convert and then select the *Convert FS FP to PF2000* option. The converted flight plan will be created using the same original file name but prefixed with ,PFE_'.



And the following popup message will appear when complete:



A few other options worth mentioning on the flight plan converter screen are *Change Source* and *Change Target*. These two allow you to change the location of your source (FS) and target (PF) files at anytime should you wish.

Another very useful option is the *Adjust FS FP for PF2000*, but first a little more info so you understand why it is so useful.

When you create a flight plan in FS, or any other flight planner, it really doesn't care too much about the distance between waypoints or from your departure or destination airports, whereas ProFlight most certainly does. You see with waypoint which are too close together or too close to the airport can cause ProFlight a lot of problems vectoring you from one to another. So during the compilation stage ProFlight will drop any waypoints it determines to be too close to either airport or too close together enroute. Subsequently you could end up with an FS flight plan which you may choose to load into the FS GPS and ProFlight's flight plan being different. What I like to do is have the two completely in sync so when I load the FS GPS I know it's showing me the exact same waypoints as there are in the actual ProFlight plan. And this is where the new option button comes in.

The first thing you need to do is select the flight plan you want to adjust and then select *Adjust FS FP for PF2000* (see below) - please note: this feature doesn't actually change the original selected FS flight plan but creates a new one of the same name but with the prefix PFE_.



The next screen will show a list of GPS files. These files are created automatically by APLC32 and contains a list of each waypoint (by name) used by ProFlight when formulating the data for the ADV Flight File. You need to select the correct GPS file for the FS flight plan you want to adjust. Unfortunately ProFlight and FS both use different default naming conventions so it's up to you to ensure the correct files are chosen. No harm is actually done as the original flight plan file is not altered in any way but you could end up with a rather strange flight plan in your GPS.



FS normally names its flight plans with the name of the airport eg *IFR Luton to Dublin* whereas ProFlight uses the ICAO codes eg *PF2000-EGGW to EIDW*.



Okay, now select the correct GPS file and then select *OPEN*. You should now see the following message:



After you OK this message you will return to the FS flight plan listing and should see your newly converted file (prefixed PFE_) ready and waiting and this is the file you should load into the FS GPS so you then know it will contain the exact same waypoint data as the ADV flight file and the route which ATC will be expecting you to adhere to.

No we go back to the main menu and the last few buttons are quite self-explanatory.

Check for Updates - does just that and this feature can either be configured to run automatically each day to check for updates or you can run it manually at any time.

Select New ADV - is used to display a list of all ADV Flight Files on your system, from which you select the one you wish to fly next.

Select Last ADV - is used as a quick route back to using the same ADV Flight File you used last time. You can actually see which one this was by checking the the display line situated about a third of the way from the bottom.

Connect to FS - Obviously once you've configured PFE the way you like it you select this option to Connect to FS and begin your flight.



ProFlight 2000 Options and Configuration

We do not intend to reinvent the wheel here as full details on ProFlight 2000 options and configuration can be found in the ProFlight User Manual, either the hard copy that came with the original cd of the electronic one accessed from the Start Menu after installation.

This section is merely to explain which options you should set a certain way to prevent any unnecessary issues going forward and which settings have no effect when running PFE.

On the main ProFlight screen all the available options work in conjunction with PFE with the exception of the following:

1. Set Adventure Start Time.
2. Weather

On the ProFlight *Settings* page you should select the option to *Use Real Weather*.

All options on the ProFlight Settings page work with the exception of the following:

1. Command Line Options
2. Performance Mode
3. Performance Count
4. Changing Barometer
5. Set Module
6. Manage FMC

During the compilation process there are a few options that pop up that again, are now defunct. These are:

1. Start Adventure with Engines Running
2. Start Adventure with Engines Off
3. Start Adventure with a FS2000 Flight File
4. Write Flight Plan to the Selected Aircraft Keyboard
5. Write Flight Plan to FS2000 GPS and FMC

PF2K Commands

| Proflight Commands used in PFE | | | |
|--|-----|--|----------------------------------|
| <p>PFE Default settings require you to use the Ctrl+Shift+ key combination together with one of the keys listed below EXCEPT for keys 0 thru 9 and the ROGER key, which only require a single keypress. Eg. For Virtual Co-Pilot mode use Ctrl+Shift+V but for Initial Check In you only need to use the zero key and to Roger an ATC call you only need to use the ,' key</p> | | | |
| Facility | Key | Pilot Command/Message | Game Commander |
| - ALL - | E | Declare an Emergency | „Mayday, Mayday, Mayday“ |
| - ALL - | = | Say Again/Repeat | „Say Again“ |
| - ALL - | \ | Roger/Readback | „Roger“ |
| - ALL - | D | Toggle AI ground traffic detection on/off (default is ON) | N/A |
| - ALL - | V | Virtual Co-Pilot Mode - 4 Modes OFF, COMM, COMM PLUS, P.I.C., P.I.C. PLUS | N/A |
| - ALL - | W | Warp Mode - Warp to Waypoint, User Wind/Override Selection | N/A |
| EMERG | Y | Positive answer (Yes) | „Yes“ |
| EMERG | N | Negative answer (No) | „No“ |
| Clearance | 0 | Initial Checkin, request CLEARANCE | „Checking in“ |
| Ground | 0 | Initial Checkin, ready to TAXI to RUNWAY | „Checking in“ |
| Ground | 1 | Taxi To Runway Guide | |
| Ground | 5 | Clear of the runway, request TAXI to TERMINAL | „Request Taxi to Parking“ |
| Ground | 6 | Request Radio Check | „Request Radio Check“ |
| Ground | 7 | Request Altimeter Setting | „Request Altimeter Setting“ |



| | | | |
|----------|---|--|------------------------------|
| FSS | 0 | Request to Open Flight Plan | „Open my Flight Plan“ |
| FSS | 1 | Request to Close Flight Plan | „Close my Flight Plan“ |
| FSS | 2 | Extend ETA by 30 minutes | „Extend my E.T.A.“ |
| FSS | 3 | Request Weather Advisories | „Request Airport Advisories“ |
| FSS | 4 | Request Center Frequency | „Request Center Frequency“ |
| FSS | 6 | Change Flight Plan to IFR/ VFR (toggle) | „Change my Flight Plan“ |
| FSS | 7 | Request Airport Advisories | „Request Airport Advisories“ |
| FSS | 8 | Amend Flight Plan to land at next available airport | „Amend my Flight Plan“ |
| FSS | 9 | Report Position | „Report Position“ |
| Multicom | 0 | Initial Checkin (in the air only) | „Checking in“ |
| Multicom | 2 | Announce entering DOWNWIND | „Entering Downwind“ |
| Multicom | 3 | Announce turning BASE | „Turning Base“ |
| Multicom | 4 | Announce turning FINAL | „Turning Final“ |
| Multicom | 5 | Announce CLEAR of the RUNWAY | „Request Taxi to Parking“ |
| Multicom | 6 | Announce TAKING the RUNWAY | „Taking the Runway“ |
| Multicom | 8 | Announce DEPARTING the AREA | „Departing the Area“ |
| Unicom | 0 | Initial Checkin (in the air only) | „Checking in“ |
| Unicom | 2 | Announce entering DOWNWIND | „Entering Downwind“ |
| Unicom | 3 | Announce turning BASE | „Turning Base“ |
| Unicom | 4 | Announce turning FINAL | „Turning Final“ |
| Unicom | 5 | Announce CLEAR of the RUNWAY | „Request Taxi to Parking“ |
| Unicom | 6 | Announce TAKING the RUNWAY | „Taking the Runway“ |

| | | | |
|-----------|---|--|------------------------------------|
| Unicom | 7 | Request Field Advisories | „Request Field Advisories“ |
| Unicom | 8 | Announce DEPARTING the AREA | „Departing the Area“ |
| Tower | 0 | Initial Checkin, ready to TAXI to RUNWAY | „Checking in“ |
| Tower | 1 | Initial Checkin for LANDING | „Request Landing Clearance“ |
| Tower | 2 | Report entering DOWNWIND | „Entering Downwind“ |
| Tower | 3 | Report turning BASE | „Turning Base“ |
| Tower | 4 | Report turning FINAL | „Turning Final“ |
| Tower | 5 | Request the Option (Touch ,n Go) | „Request the Option“ |
| Tower | 6 | Initial Checkin, ready for TAKEOFF | „Request Takeoff Clearance“ |
| Tower | 7 | Request Field Advisories | „Request Field Advisories“ |
| Tower | 8 | Report going to ALTERNATE Airport | „Going to Alternate“ |
| Tower | 9 | Report Go-Around/Missed-Approach | „Declaring Missed Approach“ |
| Tower | w | Request other Runway | „Request other Runway“ |
| Tower | n | Show another Runway | „Show another Runway“ |
| Tower | y | Accept that Runway | „Accept that Runway“ |
| Departure | 0 | Initial Checkin (if VFR, request Flight Following) | „Checking in“ |
| Departure | 1 | Request Cleared To Final At Pilot’s Discretion | „Request Cleared to Final“ |
| Departure | 3 | Request LOWER ALTITUDE due to CLOUDS | „Request Lower Altitude“ |
| Departure | 4 | Request HIGHER ALTITUDE due to CLOUDS | „Request Higher Altitude“ |



| | | | |
|-----------|---|--|--|
| Departure | 5 | Request LOWER ALTITUDE due to TURBULENCE | <i>„Request Lower Altitude“</i> |
| Departure | 6 | Request HIGHER ALTITUDE due to TURBULENCE | <i>„Request Higher Altitude“</i> |
| Departure | 7 | Request VECTORS | <i>„Request Vectors“</i> |
| Departure | 9 | Report POSITION | <i>„Report Position“</i> |
| Center | 0 | Initial Checkin (if VFR, request Flight Following) | <i>„Checking in“</i> |
| Center | 1 | Request Cleared To Final At Pilot's Discretion | <i>„Request Cleared to Final“</i> |
| Center | 3 | Request LOWER ALTITUDE due to CLOUDS | <i>„Request Lower Altitude“</i> |
| Center | 4 | Request HIGHER ALTITUDE due to CLOUDS | <i>„Request Higher Altitude“</i> |
| Center | 5 | Request LOWER ALTITUDE due to TURBULENCE | <i>„Request Lower Altitude“</i> |
| Center | 6 | Request HIGHER ALTITUDE due to TURBULENCE | <i>„Request Higher Altitude“</i> |
| Center | 7 | Request VECTORS | <i>„Request Vectors“</i> |
| Center | 8 | Report AIRPORT IN SIGHT if VFR/VFR Approach | <i>„Airport in Sight“</i> |
| Center | 9 | Report POSITION | <i>„Report Position“</i> |
| Approach | 0 | Initial Checkin (if VFR, request Flight Following) | <i>„Checking in“</i> |
| Approach | 1 | Request Cleared To Final At Pilot's Discretion | <i>„Request Cleared to Final“</i> |
| Approach | 3 | Request LOWER ALTITUDE due to CLOUDS | <i>„Request Lower Altitude“</i> |
| Approach | 4 | Request HIGHER ALTITUDE due to CLOUDS | <i>„Request Higher Altitude“</i> |
| Approach | 5 | Request LOWER ALTITUDE due to TURBULENCE | <i>„Request Lower Altitude“</i> |

| | | | |
|----------|---|---|----------------------------------|
| Approach | 6 | Request HIGHER ALTITUDE due to TURBULENCE | <i>„Request Higher Altitude“</i> |
| Approach | 7 | Request VECTORS | <i>„Request Vectors“</i> |
| Approach | 8 | Report AIRPORT IN SIGHT if VFR/VFR Approach | <i>„Airport in Sight“</i> |
| Approach | 9 | Report POSITION | <i>„Report Position“</i> |



FAQ

If you don't find the answer to your problem here please ensure you check the PFE section on our website for more upto date information:

http://www.oncourse-software.co.uk/pfe_faqs.htm

- Q:** *I'm using Copilot Mode 2 but PFE doesn't detect when I get near to the active and so doesn't tell me to switch to the Tower.*
- A:** PFE waits for you to be within 700' feet of the active runway before issuing a 'Contact Tower on...' command. If you happen to be taking off from a position other than the end of the active runway you may well be more than 700' away from that detection point. Should this be the case you would need to manually switch to the Tower frequency, then use Hotkey 6 to contact Tower and request takeoff clearance.
- Q:** *I'm using FS2004/FSX to create a flight plan for PFE but I get errors when trying to compile it.*
- A:** ProFlight requires the flight plan to be created in FS2000 format, after all, it was developed back in FS2000 days. Flight planners used during testing for this purpose included FSBuild, Ultimate Airlines, FSNav and NAV3. We have also provided a means to convert FS9/FSX Flight Plans for use with ProFlight 2000.
- Q:** *PFE ATC routed me to fly right into a mountain.*
- A:** In such hazardous areas it is vitally important to create a good flight plan to ensure PFE delivers safe approach vectoring. PFE is not aware of mountains or obstacles on your approach route so you, as the pilot, need to ensure you plan your flights correctly. Remember also that YOU are the Captain in charge and if, during approach vectoring, you consider ATC to be issuing a bad and dangerous turn you should ignore it and use the #1 hotkey to request a 'Cleared to Final Approach'.

Q: *I had to reinstall ProFlight 2000 and now PFE will not work.*

A: If you have the PFE Standard Edition you cannot reinstall ProFlight 2000 without reinstalling PFE. Should you ever need to reinstall ProFlight you must then run the PFE_1 and PFE_2 installers. You may run the PFE installers at anytime without having to reinstall ProFlight but you cannot do it the other way around.

Q: *I never got handed over to any Centre facilities during my flight.*

A: PFE (ProFlight) determines which control centres to hand you over to dependant on the altitude you are currently flying. If you don't reach a center's specified altitude you will remain under the control of a Departure or Approach controller. This altitude setting can be changed from within ProFlight's settings page and defaults to 14,500'.

Q: *PFE is working and I can hear the controllers talking to me but I can't hear the pilot's voice.*

A: Check the Game Commander option in ProFlight and ensure it is unchecked.

Q: *When compiling my flight plan I chose the option to write the flight plan data to the GPS. However, when loading the GPS I don't see any flight plan data.*

A: Please remember ProFlight 2000 was written for use in FS2000, consequently certain options (like writing to the FS GPS) are no longer functional. Please see the section „What does not work that used to work in ProFlight“ for more details on what ProFlight features do and do not work. Also please see the section „First steps... only steps...“ for details on using flight plans with the FS GPS.

Q: *I have been trying to generate weather in ProFlight but it doesn't seem to work!*

A: That's because it doesn't work! Please see the section „What does not work that used to work in ProFlight“ for more details.



Q: *I'm using ActiveSky Atc vectors me to land VFR on runway 21. At the same time all AI were landing and departing runway 03, the opposite end. Why?*

A: This can happen when using an external weather programs such as ActiveSky. Pro Flight ATC reads the weather and chooses the correct runway, but ASV6 may update the weather forcing a change of the active runway. FS9/FSX ATC will change the active runway, but PFE has already made its choice, hence the incursion. To avoid this, it is necessary to use the „suppression“ options according to the type of flight/aircraft. Using the New Route and Navigation Log will be helpfull too.

Please see your ActiveSky manual for details and how to use these powerful features, it is usually located (Windows XP) at:

C:\Program Files\Microsoft Games\Flight Simulator 9\Modules\
ASv6\User Guide

If one chooses not to take these extra steps in ActiveSky, then using the default FS9/FSX real weather instead of ActiveSky will prevent this issue from happening while using PF ATC.

Q: *I changed my callsign in ProFlight, recompiled the ADV Flight File, but I'm still hearing my old callsign.*

A: Check to see if you have a callsign set in PFE option. If you do then you must delete it. Pilots Voice, Airline and Callsign each override the same settings in ProFlight but can be useful if you always want to use the same callsign even if using an ADV Flight File created by another user with their embedded callsign.

Q: *The approach to my destination was rubbish. I was far to high when cleared for the approach!*

A: Adjust you flight plan descent profile during compilation. Remember, your flight will only be as good as your flight planning, just as in the real world.

- Q:** *I found a bug whilst using ProFlight. How do I report it and when will you fix it?*
- A:** The actual ProFlight 2000 program has not been changed by us nor will it ever be. ProFlight 2000 was developed by Tom Main and Robert Mackay and released in 2000. It is not our program, we do not have the source code and there will be no fixes for any problems found.
- Q:** *After PFE had a problem and crashed my Regional Settings appear to be wrong and numbers are not being displayed correctly?*
- A:** Restart PFE then immediately close it using the Exit button - That should reset your numeric regional settings to their original state.



Support

The latest support information can be found on our website:

<http://www.oncourse-software.co.uk/contactus.htm>

Should you experience problems installing or using PFE please ensure you are using the most recent version before asking for assistance. You can easily check you have the current release of PFE by using the Check for Updates button on the main menu.

Please Note: *We only offer support for the latest released version of our software and any requests for support for earlier versions will be ignored.*

Our support extends only to PFE and its supporting files and applications (eg. databases, APLC32, etc). We do not and cannot support the actual ProFlight 2000 flight planning application.

ProFlight 2000 is licensed to us for distribution only and is no longer a supported application.

The original Publisher of ProFlight cannot offer any support at all and the ProFlight development team have long been disbanded.

Any issues you may have with the ProFlight flight planning program can of course be raised on our support forum for discussion and/or workaround suggestions, but there will be no further updates, fixes or patches for the actual ProFlight 2000 flight planning application itself. PFE however will be an ongoing development to which we plan many more exciting enhancements.

All PFE support will be via the the support forum only, we do not offer support by email.

For support with PFE please visit our support forum at:-

This information was not available at the time of writing this manual. Please obtain the latest support information (with links to our forum) by visiting our website:

<http://www.oncourse-software.co.uk/contactus.htm>



Add-ons

for Microsoft FSX



aerosoft™



Mega Airport London Heathrow

One of the busiest and most interesting airports!

Designed by the Simwings team this package contains the complete Airport of London-Heathrow, including the brand new Terminal 5. Even Pier 6 for the A380 has been modelled. Based on photo-real textures with aerial photography, this scenery actually jumps to life with its animated jetways, dynamic traffic and service vehicles, etc. Enjoy the very busy atmosphere of this truly international airport.

Mega Airport London Heathrow X

€ 25.99



MyTraffic X

Realistic in-flight and aircraft ground traffic!

MyTraffic X generates more than 475,000 daily flights between and around 7,800 airports worldwide. Varying from general aviation, regional jets, military aircraft, freight services, right up to the intercontinental airliners. MyTraffic X also supports the new features in Flight Simulator X such as the jet ways which dock on to the aircraft, ground vehicles, baggage carts, etc.

MyTraffic X

€ 39.99

www.aerosoft.com

Aerosoft GmbH • Germany
E-Mail: info@aerosoft.de