# NobleAir AutoPIREP Module Ver 2.0

(For FSX & FS9)

User Manual

Version 2.0.0.0 (April 2009)

### **Introduction:**

The NobleAir AutoPIREP software is a utility that automatically interacts with the VA PIREP system and Microsoft <sup>TM</sup> Flight Simulator.

It automatically detects whether FS9 or FSX is in use and will custom build a database based on your installed scenery.

It enables the Pilots automatically file their Pilot Flight Reports without the need to visit the website and fill in cumbersome forms.

The software also provides a 'Live' ACARS (Aircraft Communications Addressing and Reporting System) a positioning system that informs Pilots about who is flying and where, including a world map and other flight information.

### **Installation:**

You MUST be connected to the internet during the installation of this software. Installation is very simple by running the setup.exe file that came with this document.

The installation of this software requires Microsoft <sup>TM</sup> DotNet 3.5 (Installed or updated automatically during the process)

The software default installation directory is {program files}\NoblePirep although this can be changed during installation.

And the installed files are: NoblePIREP.exe MakeRwys.exe Server.ini Pirep.ini FSUIPCclient.dll Noble.ico Airport.dat NoblePirep 2.0 Manual Whsom.ocx

The installation will create a shortcut on your desktop to the NoblePIREP system and another in the Program List with a shortcut to the software and the manual.

This software requires Peter Dowson's FSUIPC located in the modules folder of Flight simulator. (Freeware Version or Registered Version)

# **Initial Setup:**

Once you have installed the software, run from your start menu or from the shortcut placed on your desktop.

The initial screen should look like this:

1 NoblePIREP					- • 💌
Status Parkbrake Doors Status NO CONN FS A/C:	Location ICAO Facility Zulu 2022 - 31Z ATC Callsign	Flight Fight Num: DepICAO: ArtCAO: A/C:	Pax: Weight: Freight: TailNum:	FS Connect Live ACARS Server OFFLINE	FS DisConnect PIREP System ACARS

As this is the First time you have run the software, we have some general housekeeping to do.

When the software opened, it should have opened the configuration page.

🖳 Syst	tem Config	uration 🗖 🗖 💌
Pi	ot Details	
	Name	
	Password	
	UTC	0 V Hrs
	PIREP on	ParkBrake 👻
Se	erver Details	(Do Not Change)
	VA-Name	Noble FSX
	MainURL	http://www.nobleairaus.com/
	Login Page	http://www.nobleairaus.com/
	Pilot Page	pilot.php
	Flight Page	flights.php
	Add Pirep	addpirep.php
	Pirep View	YES
	Acars Upld	acars/upload.php
	Acars View	acars/viewacars.php
	Rte Search	http://rfinder.asalink.net/free.
	Weather	getweather.php
		Save Config

The only section that concerns us is the 'Pilot Details',

Enter your real name (Not Your Noble Number) in the Name section. Enter your PIREP system password in the password section.

The UTC dropdown box is to select the time difference between your local time and Zulu (GMT) time. If your local time zone is +2GMT, then select -2hrs.

The PIREP on selection is to choose whether opening/closing doors or releasing/applying Park Brakes is the trigger for the PIREP recording and stopping. The system defaults to Park Brakes and it is recommended to leave it unless the aircraft does not have a Park Brake.

All of the Lower Server details is set to use the Noble VA Pirep system and does not need to be altered.

Save the configuration, and close the form.

Once you have returned to the main screen, click the PIREP SYSTEM button and ensure the PIREP system has you automatically logged in.



If it does not automatically log you in, then the name/password configuration is wrong.



Click on the spanner icon To re-enter or change the settings

Your Initial settings are complete.

### The database:

The system uses a database which is generated automatically if a database is not detected in your Flight Simulator directory. The files that make up the database are:

- Runways.txt
- Runways.csv
- G5.csv
- R5.csv
- R4.csv
- T5.csv
- F5.csv
- MakeRwys.exe

Building the database:

Once you have the initial setup complete, start FSX or FS9 and place any aircraft at any airport.

Once the scenario has finished loading and the aircraft is sitting on the ground, click the FS Connect button.

Once the software has established a connection to Flight Simulator, the following message will be displayed.



Click OK and the database will start building.

Make Runways: Version 4.29	x
Area.021 "0202 Base" (Layer=21) Scenery\0202\scenery\APX20180.bgl	
Total airports = 5136, runways = 10968	
Cancel	

Once the database has been built, shutdown and restart the PIREP system software. If you use both FSX and FS9, this will occur the 1<sup>st</sup> time you connect to each version of Flight Simulator.

If you install additional add-on scenery, and would like to update your location database, run MakeRwys.exe from your Flight Simulator directory.

The database is used to find the aircraft location and the location of airports for ACARS reporting (covered later). The system also contains a custom database for adding airports you may not have in Flight Simulator.

Missing airports is generally caused by the differences between FS9 and FSX. Eg. In FS9 there is an airport with the code of WRRR and in FSX the same airport has the code WADD.

So if you get an assignment from WRRR and you fly FSX, you will not be able to auto-pirep the flight because the aircraft location will never match the departure airport, secondly it would create ACARS problems if you decided to fly anyway.

To prevent this from occurring, if your Departure ICAO or Arrival ICAO for your chosen flight cannot be found in the database, you will receive the following message:



After clicking the OK button, the software will then search your ACARS custom database. If the airport is not found, then you will be prompted to add it.

🖳 Add Custom Airport
YSTB is not in your ACARS Airport Database Please Enter the LAT / LON for this airport ACARS will NOT start unless LAT/LON entered AutoPIREP will NOT work on this flight
Latitude
Longitude
Enter Co-ords as numbers eg8.7487 & 115.1538 Cancel Not N/S/E/W ACARS S & E are neg. numbers Save Airport

Remember to enter the numbers as positive and Negative numbers not N/S/E/W. Click 'Save Airport' to add. If the numbers are left blank, or click cancel ACARS, your flight will not show on the ACARS system.

### **The Main Screen:**

Now we will take a close up view of the information screen and the data it contains.

The unit is broken down into sections:

- Status
- Location
- Flight
- Control
- Server
- ATC

#### The Status:

The status area of the main screen tells you whether the PIREP recording will automatically start, when the software is started (before connecting to Flight simulator) - Starting a PIREP via Park Brakes requires at least 3 Green Lights:



It clearly displays NO CONN, indicating it is not communicating to Flight Simulator.

Status	
Parkbrake	SET
Doors	CLOSED
Status	DEPART
FS A/C:	B58

Flight Simulator is connected, Park Brakes are set, Doors are closed, (ready to Depart) but the aircraft is located at the wrong airport (as displayed by RED DEPART). The wrong aircraft is also selected (Yellow Bar).

Status	
Parkbrake	SET
Doors	CLOSED
Status	DEPART
FS A/C:	B58

Flight Simulator is connected, Park brakes are set, Doors are closed, we are located at the right airport ready to depart and we have the right aircraft.

For a 'PARK BRAKE' triggered PIREP to start - we need the following:

- Park Brake set
- Doors Closed
- Right Departure Airport

The aircraft setting does not matter, although it is advised to fly the aircraft in your library that is a close match to the one booked for the flight.

For a 'DOORS' triggered PIREP to start - we need the following:

- DOORS sign Open
- Green Status Light indicating we are at the right airport.

Both the Park Brake and aircraft are not checked.

#### Location:

- Location ICAO	YPAD	
Facility	Gate 15	
Zulu	1229 - 28	Z

The location section contains information about your current aircraft location, determined by the LAT/LON position of your aircraft in Flight Simulator and compared to the system database. It can track aircraft to Gates, Taxiways and Runways.

The 'L' button is to manually update the location information when your aircraft is on the ground (it is not available when in the air). The location area also contains the ZULU clock (Offset should be set in the configuration screen).

#### Flight:

The flights section has several parts

Hight				
Fight Num: CHT3402		Pax:	3	CHT3402 YPAD - YPPF B58
DepICAO: YPAD	I	Weight:	0	
ArrICAO: YPPF	R	Freight:	0	Refresh Flights
A/C: B58		TailNum:	: VH-HAV	

After the system determines your location, it contacts the PIREP system and retrieves any flights which are ready to fly and displays them in the white box. A flight is determined ready when it has been assigned to the user pilot and has an aircraft attached to it. These flights can be Charter, Assigned or Ribbon Flights.

After the list of flights has been returned, clicking on a flight in the list will retrieve the details of the flight (as seen above). You can force a refresh of your available flights by clicking the 'Refresh Flights' button.

#### **Control Area:**

The area of button that control certain aspects of the software

FS Connect	FS DisConnect
Live ACARS	PIREP System

FS Connect FS DisConnect	<ul> <li>– connects to a running Flight Simulator</li> <li>- dis-connects from a running Flight Simulator</li> </ul>
Live Acars	- Shows the 'Live' page with information about currently flying
PIREP System	pilots - Opens the PIREP system with the Pilot automatically logged
	in.

# **Operation:**

The easiest way of describing the operation is to put it into a flow chart. \*If Doors is selected as the PIREP trigger, then close the doors to start and open to finish.



#### **Other Features:**

The 'R' button opens RouteFinder for determining best flight route between airports using up to date AIRACS.

The text that appears in the FS A/C box is read from the aircraft.cfg file for the chosen aircraft and the line is the atc\_model in the [General] section:

[General] atc\_type=BEECH atc\_model=B58

This is important, because if you have the correct aircraft for the flight, and the box still has a yellow background it is because your line in the aircraft.cfg file does not match the type on the server. Edit your aircraft.cfg file to match the A/C in the flight details box.

If the correct aircraft is chosen and the boxes match, then the FS A/C box will turn green.

Clicking the 'I' button returns Airport information for your departure and arrival airports including Runway and communications, and has a link to current 'real world' weather if you fly with that option turned on (either in FS, Vatsim or other weather program)

The aircraft Status has multiple states:

The available Aircraft Status reports are:

- Loading (At Departure airport with park brake on and doors open)
- Departing (at Departure airport, doors closed and aircraft not moving)
- Taxiing (at any airport moving > 5kts but less than 40.)
- Takeoff (at Departure airport moving > 40kts)
- Climb (Off ground with VSI > 200ft/min)
- Cruise (Off ground with VSI between -200 and +200 ft/min and over 2500ft)
- Descend (Off ground with VSI > -200ft/min and above 2500ft from Ground)
- Approach (Off ground with VSI < +200ft/min and < 2500ft from Ground)
- Landed (At any airport other than Departure, moving at > 40kts)
- Parked (At any airport other than departure not moving)
- Unloading (at any airport other than departure, Park Brake set and doors open)

# ACARS:

The software contains a complete ACARS module that reports your position and flight details, then displays the information on a common page and world map.

The SERVER section of the front panel is for ACARS. The dropdown box selects the information to be shown on the ACARS panel. It is only Advisory only, and has no bearing on the actual connection. The idea behind this is so other pilots can check the ACARS, see where you are flying, on what server you are flying (if any) and have the possibility of joining you on the flight.

The ACARS tickbox determines if ACARS data is to be sent. Unticking the box disconnects the flight from ACARS reporting.

Noble 'Live' ACARS									
ïew Map									
Pilot	Callsign	Connect	A/C	Reg	Flight	Dep-Arr	Progress	NM To Dest	Status
Edward Watson	NBL3668G	OFFLINE	B58	VH-IAC	CHT3237	YSSY-YPAD		627	DEPARTING

The ACARS page displays the information being sent by the software to the ACARS server (only I am flying here) or other pilots would be displayed as well.

Clicking on the "View Map" link returns a Google Earth Image showing where the pilots are flying and a picture of a plane showing location and heading.



Double click on the map to zoom in, drag the map to move map display. Clicking on the aircraft displays much more information.





Zooming in on the aircraft will show a very accurate position of the actual location

(From FSX) The small aircraft in the exact centre



(The ACARS map – different angle to the picture above, but location is correct)

## **Recording Mode:**

Once you have 3 green lights (4 if the aircraft is correct as well), and are located at the departure airport (DepICAO) release the Park Brake and the PIREP recording will begin.

itatus	Location	- Flight			0	
Parkbrake OFF	ICAO YSSY	Fight Num: CHT3237	Pax: 1	CHT3173 NDR - AYTB DH6 CHT3237 YSSY - YPAD B736	Connect to FlightSi	n
Doors CLOSED	Facility TAXIWY	DepICAO: YSSY	Weight: 0		Live ACARS PIRE	P System
itatus DEPART	ATC	ArriCAO: YPAD	Freight: 2.2	Get Flights	Server	
S A/C: B58	Callsign NBL3668G	A/C: B736	TailNum: VH-IAC	Show PIREP	OFFLINE - Q	

The background turns green and the Title Bar tells you it is recording, NoblePIREP(Recording) will be displayed in your windows taskbar.

If you were to click on the 'Show PIREP' button you would see the base information of the flight displayed.



Now fly the flight as normal.

Once you have landed, taxied to the gate and re-applied the PARK BRAKE. The PIREP recording will stop and your new location will be determined.

# **Reporting The Flight:**

To file the PIREP, once recording has finished – click on 'Report PIREP' button

PIREP	<
PIREP started Logging at 24/04/2009 9:38:16 PM (UTC 24/04/2009 12:08:16 PM)	
Flight Number: CHT3237 Departure ICAO: YSSY	
Arrival ICAO: YPAD A/C registration: VH-IAC A/C Type: B736	
Passengers: 1 (0 lbs) Freight: 2.2 lbs Fuel On Board: 677 lbs	
Landed at: YPAD Time: 12:00:00 AM Fuel at shutdown: 677 lbs	
Fuel Used: 0 lbs Flight Time: 0hrs 7mins 14sec	
Pirep Closed at: 24/04/2009 9:45:30 PM (UTC 24/04/2009 12:15:30 PM)	
Enter any additional comments	
Send PIREP	

The complete PIREP is now displayed, along with a Comments section for the Pilot to add their comments about the flight and the SEND PIREP button.

The reported Flight Time is the time the Flight Simulator was active for recorded by the flight, it DOES NOT include any time spent in PAUSE or SLEW mode.

Once the PIREP has been successfully received, you will receive a report on your new flight hours.

NoblePirep	×
PIREP added Successfully Your new hours are 836hrs 46mins	
ОК	

# **Reporting Problems:**

To report a Bug, please report to me via email on service@ecps.com.au

And it must contain the following information:

Windows Version: FlightSim Version: (FS9 or FSX) Service Patches Applied: Aircraft Flown: Flight Number: (if in Flight) Status at time: Whether Active / Paused / Slew etc Description of Bug: (if I cant replicate it, I may contact you for TeamSpeak Meeting so we can work through it )

Ed Watson NBL3668G Asst Hub Capt - Australia Software Development.