



PROJECT Fokker-100/70 (PF10070) develops software products as an add-on to the Microsoft Flight Simulator program, based on the Fokker-100 and Fokker-70 twin jet-engine type aircraft for the purpose of flight simulation entertainment. PF10070 software are provided as freeware with limited use. This means that an End-User License Agreement and Copyrights are applicable. Visit the PF10070 website for more information at <http://fokker.avsim.net>

## PF10070v2 - README

Thank you for choosing the new PF10070 v2 release as an addition to your flightsim entertainment. This v2 software pushes the Fokker-100 and -70 models further up to the next level of software development for aircraft modeling and panel design, used within FS2004 (FS9).

The v2 features bring another addition to the previous v1 release and include:

- | <u>Models</u>   | <u>Panel</u>   | <u>Flight dynamics (FDE)</u>                                     |
|---|--|--|
| 1. Remodeled fuselage and re-mapped wing root.  | 1. New and more realistic 3D-look front panel bitmap.                | 1. Semi-auto land feature.                                       |
| 2. Remodeled vertical stabilizer.   | 2. Improved gauges also fix the autopilot problems.                  | 2. Ground handling for taxiing at idle thrust.                   |
| 3. Dynamic shine with 32-bit textures.  | 3. Partial functional overhead panel.                                | 3. New balanced and more realistic N1/N2 coupling.               |
| 4. Engines maintenance mode feature. Opens the engine hoods.                          | 4. Functional wide-panel-view (jump-seat), including animated yokes. | 4. New thrust model for a more realistic climb rate at take-off. |
| 5. New landing gear design, showing more details.                                     | 5. New rear-view cabin image.  | 5. Added functionalities for pax and fuel weight settings.       |
| 6. Rotating red beacon-light effect under fuselage and on top of vertical stabilizer. | No VC and FMC for this release.                                      | 6. Overall improvements for all three models flight dynamics.    |
| 7. All existing liveries have been repainted.   |  |  |
| 8. New thin correct airfoil engine mounts.  |  |  |
| 9. Corrected landing/taxi lights seen from cockpit view.                              |  |  |
| 10. Improved night-light effects.   |  |  |
| 11. Wing-view from cockpit.   |  |  |
| 12. Engine puff-smoke at startup whine.   |  |  |
| 13. New liveries added.   |  |  |

### Installation

The installation process installs all PF10070 software release v2 (PF10070v2) automatically into your Microsoft Flight Simulator-9 (FS2004). As apposed to v1 where the software was made available in separate modules for download, this v2 software is now a complete bundled package and includes:

- Two models, simulating the Fokker-100 and Fokker-70 aircraft in various engine types.
- Operational panels: Main, Overhead, Pedestal, Wide-view and Side-views.
- A total of 39 different livery textures from real airliners.
- Complete sound package.
- A sample flight to help you understand the basic functions of operation.
- This PF10070v2\_readme document in pdf format.

The installation of v2 does not overwrite existing v1 files. However, when running un-installs for either v1 or v2 may delete shared files between both versions. We therefore advice to un-install all previous PF10070 v1 modules before v2 is installed. This will also help to avoid possible confusion between selecting v1 and v2 Fokker aircraft.

### Un-install

If by any means you wish to remove the PF10070v2 software, simply run the file PF10070v2\_installer.exe again which will then ask you to un-install.

### Livery textures for v2

Due to the remodeling of the aircraft in order to comply with real specifications, we had to repaint all our livery textures to match the fuselage of the new models. Livery textures that were painted by 3<sup>rd</sup> parties for the v1 models may not show correct on the v2 models. When using v1 livery textures on v2 models you will see discrepancy of the textures under the fuselage between the wings and at the nose of the aircraft. We expect that authors of those repaints will redo their work for v2.

## PF10070v2 – Sample Flight

The PF10070v2 installer creates a sample flight in your FS9 flight folder. This flight is a useful aid to help you understand the basic controls for flying the Fokker-70 aircraft. The operational functions of the Fokker-70 aircraft are similar to the Fokker-100.

The sample flight remains in the Terminal Control Area (TCA) of Amsterdam Schiphol International Airport in The Netherlands. Amsterdam Schiphol airport [EHAM] is where the real Fokker aircraft manufacturing plant was located.

You will depart from runway 24, flying outbound EHAM clockwise for an ILS approach and land onto runway 19R. You have ATC approval for speed up to 310kts below 10,000 ft. Charts for SID and STAR are not required, but if you wish you can download charts from the Dutch VACC website at [www.dutchvacc.nl](http://www.dutchvacc.nl)

This flight sample follows the standard FS2004 (FS9) scenery for EHAM - Amsterdam Schiphol. If you wish you can download the freeware and very detailed scenery for the Netherlands from NL2000 at their website [www.nl-2000.com](http://www.nl-2000.com)

### How to Start the sample flight

- a. The PF10070v2 software must be successfully installed.
- b. Start FS2004 (FS9)  
From the menu, choose flight category: **PROJECT Fokker-100/70 (PF10070)**  
Next, select the flight: **Fokker-70 flight example - PF10070v2**  
Press OK.
- c. This will first open the Flight Briefing for this flight. Read it carefully. Or better, press "Print" for a hardcopy printout. Follow the instructions step-by-step.
- d. The yellow over pink numbers in the Flight Briefing (i.e. **M 37**) are pointers to the gauges you find in the panel images located in the last three pages of this document. There are three panel identifiers **M**, **O** and **P**, whereas:

**M** refers to the MAIN PANEL image

**O** refers to the OVERHEAD PANEL image

**P** refers to the PEDESTAL PANEL image

### Notes

- e. **Wide-view- panel** - The panel also includes a fully operational wide-view panel which gives a view from the cockpit as if you are sitting in the jump seat. Please note that this is not a Virtual Cockpit. Software v2 does not include a VC.
  - To open the wide-view-panel, press and hold keypad-5 (NumLock should be on).
  - To keep the wide-view-panel open, press keypad-5 and SHIFT-key simultaneously.Due to the wide-angle perspective, most gauges shown in the wide-view panel are not clearly visible and thus difficult to read. Therefore, you might not want to use this panel for navigation purposes. Also, the wide-view option does not support panel illumination effect during nights.
- f. Some instructions in the flight example give abbreviations like for example "**D25 SPL**". This means a distance (**D**) of **25** Nm from the VOR with ident **SPL**. The position of the SPL VOR is located just north of Schiphol airport. SPL VOR2 frequency is 108.40
- g. How to improve the sound effects for Fokker aircraft.  
There are types of sound cards that may not correctly handle a few of the older sound-wave files for the Fokker aircraft. If you do not clearly hear the simulated sound effects for wind-noise, AP-disconnect warning tone, flap gate transition, gear up-down, than we recommend changing your Hardware Sound Acceleration Level. In order to do so, open the DirectX Diagnostic Tools program. This is a standard Microsoft program. Press the Windows Start button and click on Run. Type in the filename **dxdiag.exe** and click OK. Once the program is open, select the Sound tab and move the slider to read Basic Acceleration. Close the program. You should now hear the sound effects.
- h. Information for FSNavigator users. The panel includes an easy-to-use FSNavigator operating system. The buttons link with the Navigational Map, Flight Planner and Flight Management System all together. The selector switch **M 33** on the glare shield, the HSI-Navigation Display and the 5 FSNAV buttons **M 45** or **P 29** all work together. If FSNavigator is not installed, both the NAV-switch and HSI-ND work fine without the use of the 5 buttons.

# POINTERS to GAUGES

## **(M) Main panel gauges**

- |                   |   |
|-------------------|---|
| 1. Simicon        | - Display / hide Overhead panel   |
| 2. Simicon        | - Display / hide Pedestal panel   |
| 3. Simicon        | - Display / hide ATC window   |
| 4. Simicon        | - Display / hide GPS  |
| 5. Simicon        | - Display / hide MAP  |
| 6. Simicon        | - Display / hide Kneeboard  |
| 7. BATT           | - Battery on / off  |
| 8. PNL            | - Panel on / off  |
| 9. AVN            | - Avionics master on / off  |
| 10. AP DISC       | - Autopilot main system connect / disconnect                                |
| 11. AP1 or AP2    | - Autopilot master 1 or 2 on / off  |
| 12. A/T           | - Auto-throttle on / off  |
| 13. IAS/M         | - Air speed turn knob. Use left / right mouse clicks or wheel               |
| 14. HDG           | - Heading hold. Use left / right mouse clicks or wheel                      |
| 15. ALT           | - Altitude hold. Use left / right mouse clicks or wheel                     |
| 16. CRS           | - Course hold. Use left / right mouse clicks or wheel                       |
| 17. Selector knob | - Activates the desired setting for IAS/M, HDG and ALT                      |
| 18. V/S           | - Vertical Speed hold. Use left / right mouse clicks or wheel               |
| 19. NAV           | - Nav hold  |
| 20. GPS           | - GPS hold  |
| 21. Y/D           | - Yaw Damper hold   |
| 22. LVL           | - Wing leveler hold   |
| 23. APP           | - Approach hold   |
| 24. BC            | - Back Course hold  |
| 25. FD/FPV        | - Flight Director. Toggles on/off the pink crossbars in the upper CRT       |
| 26. SEL           | - IAS/M selector. Toggles airspeed indication between IAS and Mach          |
| 27. QNH           | - Sets QNH to standard (press above 10,000ft in Europe and 18,000ft in USA) |
| 28. BRK           | - To arm, open and close the airbrakes                                      |

*The Fokker jets have two airbrake flaps at the tail-cone of the fuselage. Their purpose is to reduce speed in air and on ground after touch-down. In air, it is possible to deploy or arm. When armed, will auto-deploy upon touch down. The BRK button controls the airbrake flaps in different ways:*

	<u>on ground operation</u>	<u>in air operation</u>
Press BRK 1 <sup>st</sup> time	To open (green light ON)	To arm (green light BLINKS). Upon touchdown, the air-brake flaps will auto-deploy (green light ON)
Press BRK 2 <sup>nd</sup> time	To close (green light OFF)	To open (green light ON)
Press BRK 3 <sup>rd</sup> time	None	To close (green light OFF)

29. LDP - To arm, open and close the lift-dumpers

*The spoilers on the wings of Fokker jets are called "lift-dumpers", hence the abbreviation LDP. You cannot deploy the lift-dumpers in air such as with other aircraft. But you can arm the LDP in air to auto-deploy upon touch-down. The only purpose of the lift-dumpers is to reduce lift upon touch-down. The LDP button controls the lift-dumper in different ways:*

	<u>on ground operation</u>	<u>in air operation</u>
Press LDP 1 <sup>st</sup> time	To open (green light ON)	To arm (green light BLINKS). Upon touchdown, the lift-dumpers will auto-deploy (green light ON)
Press LDP 2 <sup>nd</sup> time	To close (green light OFF)	To disarm (green light OFF)

- |              |  |
|--------------|--|
| 30. FDN      | - Flight Dynamic warning light. Will lit on when aircraft goes into stress-mode (i.e. steep turns) |
| 31. OVS      | - Overspeed warning light  |
| 32. STL      | - Stall warning light  |
| 33. EFIS NAV | - Selector switch. See also number 45  |

*The NAV-switch on the glare shield selects three modes:*

1. VOR - for normal VOR navigation
2. FSN - for GPS auto-navigation through FSNavigator
3. GPS - for GPS auto-navigation through FS2002

*Note: FSNav functions are not available unless you activate FSNavigator (F9 from your keyboard).*

- |                          |  |
|--------------------------|--|
| 34. PULL-UP              | - Warns when below glide-slope or too low  |
| 35. Master Caution       | - When 'on', all electrical components are simulated powered by the battery. Set to 'off' by pressing the two buttons <b>O 25</b> from the OVERHEAD-panel. |
| 36. Flaps down indicator | - Indicates flaps are down   |
| 37. Flaps gates          | - Use mouse for flap settings 0, 8, 15, 25 or 42 degrees   |
| 38. Park brake           | - Use mouse to park or release   |
| 39. Auto brake           | - Use RTO for take-off's and LO, MED, HI for gear brake pressure after touch-down.   |
| 40. Landing gear lever   | - Use mouse to lower or retract gear   |
| 41. Set barometer        | - Adjust barometer pressure according to ATC   |
| 42. DHxxxx               | - Use mouse to set Decision Height in feet AGL. Use for indication during approach.  |
| 43. Clock / Timer        | - Fully functional clock / timer   |
| 44. Position indicator   | - Position indicators for ailerons, rudder, elevator and trim  |

45. FSnav buttons - The 5 FSNAV-pushbuttons control FSNavigator directly from the panel. See also number 33

*PLAN* – toggles on/off 'Fly Flight Plan'  
*M1M2* - toggles between the FMS options 'Mode1' and 'Mode2'  
*HOLD* - toggles on/off 'Fly Holding Patterns'  
*PREV* - selects the previous waypoint of the flight plan  
*NEXT* - selects the next waypoint of the flight plan

46. Pushback - Press for straight pushback. Use keyboard 1 or 2 for left or right tail turn (standard FS keyboard)  
 47. ADF/VOR - Selectors

**(O) Overhead panel gauges**

- 1. APU battery power feed - On / off button
- 2. APU start - On / off button
- 3. Seat-belt - On / off toggle switch
- 4. No-smoke - On / off toggle switch
- 5. Passenger's door - Open / close button
- 6. NAV light - On / off toggle switch
- 7. Beacon light - On / off toggle switch
- 8. Strobe light - On / off toggle switch
- 9. Logo lights - On / off toggle switch
- 10. Wing lights - On / off toggle switch
- 11. Taxi lights - On / off toggle switch
- 12. Landing lights - On / off toggle switch
- 13. Landing lights - On / off toggle switch
- 14. Panel illumination light - On / off toggle switch
- 15. All lights ON - One switch for all lights on / off
- 16. Low fuel warning left tank - Lights red when low on fuel
- 17. Low fuel warning center tank - Lights red when low on fuel
- 18. Low fuel warning right tank - Lights red when low on fuel
- 19. Fuel valves - Left / center / right tanks
- 20. Fuel quantity - In weight (1,000 of Kilograms) for left / center / right tanks and total
- 21. Fuel pump - Left / right engines
- 22. Engine starters - Left / right button
- 23. Engine auto start - One switch to auto-start both engines
- 24. Master Caution warning light - Press the two alternators switches (25) to make the warning light go off.
- 25. Alternator left/right - Should be ON (dimmed) when engines are running.
- 26. Battery power available - Fake switches
- 27. Standby vacuum pump - Switch
- 28. Battery on/off - Master switch button
- 29. Battery power available - Indicators. Should indicate 24 volts
- 30. De-icing - For wings and stabilizers
- 31. Air-conditioning - 4 packs independent control for cockpit, first class, coach and backup
- 32. Pitot heaters - 3 heater units for left / center / right pitot's
- 33. Cabin pressure indicator - Simulates cabin pressure
- 34. Engine smoke system - Simulates engine dark smoke (not contrails)
- 35. Engine Fan-speed - Indicators
- 36. VSI - Vertical Speed Indicator required to measure cabin pressure
- 37. Pushback - Press for straight pushback. Use keyboard 1 or 2 for left or right tail turn.
- 38. GPWS test - Fake button
- 39. GPWS lights - Fake button
- 40. Flap inhibit test - Fake button
- 41. PULL-UP warning - Warns when below glide-slope or too low

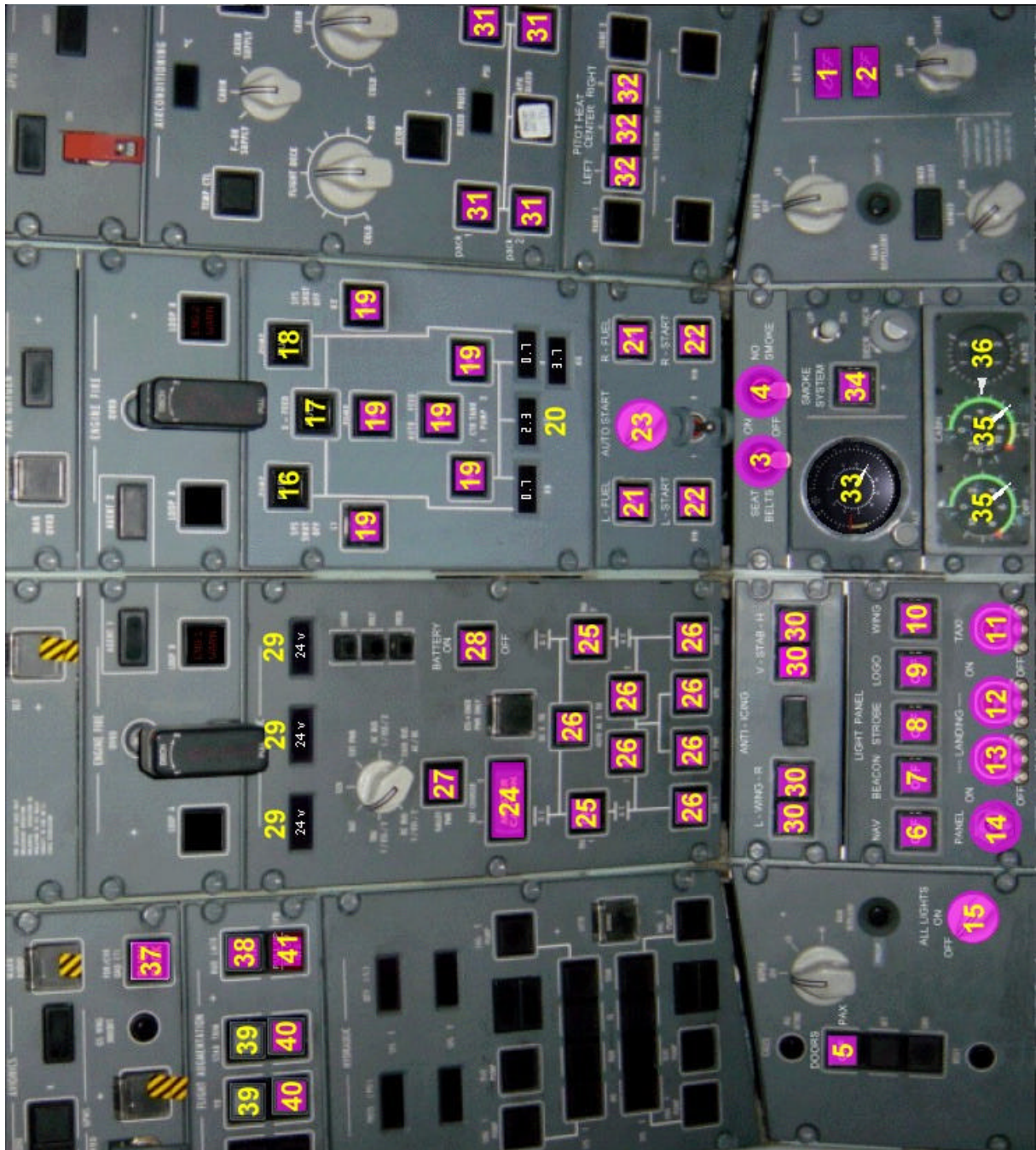
**(P) Pedestal panel gauges**

- 1. Radio's - On / off button
- 2. Fuel selector sliders - Left / right engines
- 3. Thrust Levers - Left / right engines
- 4. Flap gates - Use mouse to set flap 0, 8, 15, 25 or 42 degrees
- 5. Speed brake - To arm, open and close the airbrakes. Same function as M 28
- 6. Engine start switches - Left / right engines
- 7. Fuel cross feed - Left / right fuel tank selector
- 8. Altimeter - Setting (mB / inHg)
- 9. Illumination lights - Illuminates the panel
- 10. Park brake - Selector
- 11. COM frequency knob - Use left / right mouse clicks or wheel to adjust standby frequency
- 12. NAV1 frequency knob - Use left / right mouse clicks or wheel to adjust standby frequency
- 13. Transponder frequency knobs - Use left / right mouse clicks or wheel to adjust standby frequency
- 14. ADF frequency knob - Use left / right mouse clicks or wheel to adjust standby frequency
- 15. NAV2 frequency knob - Use left / right mouse clicks or wheel to adjust standby frequency
- 16. Active/standby frequency - Toggles between above frequency is active and below frequency is standby
- 17. Elevator trim indicator - Just an indicator

# MAIN PANEL



# OVERHEAD PANEL



# PEDESTAL PANEL

