

IFR Kronoberg Part2 (V2.6)

Flight created on 05.02.2022 (15.10.2023 V2.5 English)
(Amended on 20.01.2024, V2.6: Many untranslated and incorrect
texts corrected.)

Estimated flight duration 1.5 - 2h

Difficulty easy-difficult (depending on flight mode)

Task: Fly IFR from Kronoberg to Rostock-Laage.

Introduction

The boss wants you to pick up the colleague who has been "on
Swedish vacation" for 3 years.
You have just flown the outbound flight (flight: **IFR Kronoberg**).

Now you are standing at the gas station waiting for your
colleague.

Because of bad visibility, all takeoffs/landings are stopped.

As soon as the weather improves, you can ask for permission to
take off. Unfortunately, it is already late afternoon. The landing
will take place at night.

The flight

Because the flight ends at darkness, you have to fly according to
IFR rules (IFR = Instrument Flight Rules).
So that beginners can cope with it, there are several flight
modes:

With help (Easy):

- The mission compass shows you the current destination.
- Help to propeller, mixture, altitude, flaps, landing gear, etc.
- Help on radio (COM), NAV, HDG and GPS.
- Help to air traffic control (reply, switch frequency, etc.).

Without help (medium):

- All of the above help is disabled. You can surely do it by
yourself!

Without autopilot (Hard):

*Imagine that you are doing a test flight for instrument rating.
The examiner wants you to fly everything yourself without using
the autopilot.*

- All autopilot switches are prohibited (AP, HDG, NAV, ALT, etc.).
- So set COM, NAV frequencies correctly.

- Set HDG and NAV heading correctly and follow GPS, or ATC required heading as needed.
- Keep to the specified altitude (+/-300 feet).

Real (speak English with air traffic control):

- In the above flight variants, German is spoken. In this flight the "Real air traffic control" (of the flight simulator) is used, so everything is in English.
- Attention: Sometimes you don't have to climb to 12000 feet immediately, so read carefully what altitude the air traffic control gives.
- The frequency from Tower Kronoberg has been changed from 118.15 to 118.16 in P3dV6. This frequency cannot be set in RadioStack (the possible steps are 118.15 / 118.17). Therefore the frequency can only be set via ATC menu, with the item "Tune Kronoberg Tower on 118.16".

Launch

Follow the instructions of the air traffic control.

Take off, climb to 12000 feet and follow the GPS for now.

Once you reach cruising altitude, reduce power to about 80% and reduce propeller RPM to 90%.

Important:

After landing and leaving the runway, you must stop and request taxi permission to the refueling station.

Help

Here you get extended help:

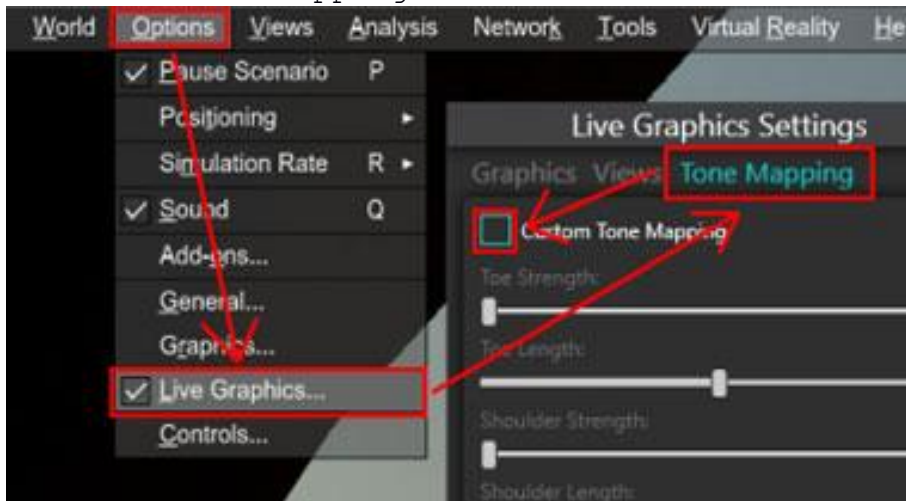
- Activate GPS in the menu Vehicle/Instrument/Panel.
- Also activate the Overhead Panel, because only here you can switch on the instrument illumination.

The same switch in the Virtual Cockpit does not work.



If the instruments in P3dV6 are not readable, because it is already pitch dark in the cockpit at 3:30pm, you have 3 possibilities to improve:

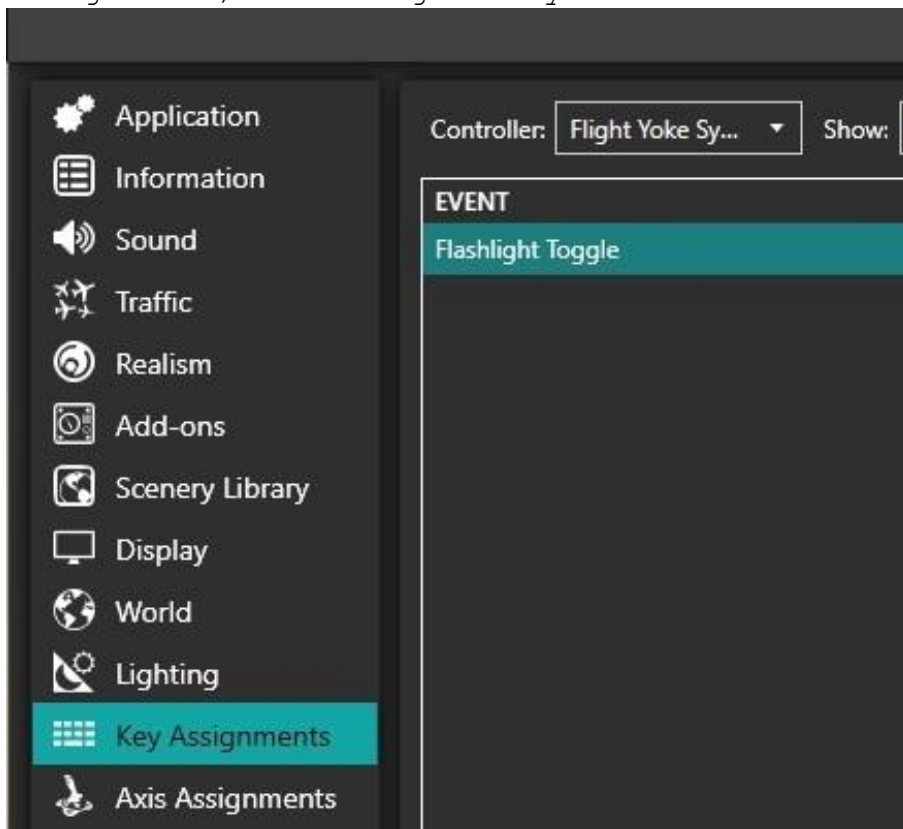
1) Activate under Options, Live Graphics, Tone Mapping the item "Custom Tone Mapping".



This brightens the entire display. You can use the sliders to brighten it further, but this will also overexpose the landscape unnaturally.

2) Use the flashlight:

Search for "Flashlight Toggle" in the keyboard assignments (Key Assignments) and assign a key to the command.



Now you can use this button to turn on the flashlight (white or red light), which follows the mouse pointer.

Improve visibility with flashlight:

(without, white, red)



3) The radio stack is not usable despite the flashlight?
Activate the "Radio Stack" under Vehicle, Instrument Panel.



Cockpit overview:



Cockpit details:

The **NAV/GPS-Switch** is set to GPS during takeoff, for the ILS approach it must be set to NAV.

Full-Flow-Indicator (Treibstoffflussanzeige) is helpful when climbing.

As altitude increases, you must lean the mixture.

The higher the full-flow values, the smoother the engine will run.

Detail **Altimeter**:



During this flight, the weather changes and so does the air pressure.

You will have to adjust the setting on instruction of the air traffic control.

Rectangle = current setting (2992).

The circle shows the adjustment knob.

Here are details of the **Course position indicator**:



- The button at the bottom right sets the HDG course, the arrow of the same color shows the set course (here in the image to the north).
- The button at the bottom left sets the NAV course, the yellow arrow in the middle of the instrument shows the set course (here in picture 340).
- The yellow line in the middle area also shows whether you are deviating left or right from the course. This is valid for GPS and NAV mode. In this picture, the line is to the left of the yellow arrow, so you have to correct to the left.
- To the left and right, below the "GS" text, yellow markers appear during the ILS approach, which show whether you are too high or too low on the approach path. In this picture the markings are at the top, so you are flying too low. However, you should not climb to get on the correct approach path, but continue flying horizontally until the arrows are lowered. (ILS approach is always started with horizontal flight below the approach path).

The `radio group` is used intensively in this flight, therefore more detailed explanations below:
 (Com2/NAV2 is not used in this flight).



Detail Com1/NAV1:

The active frequency cannot be changed.
So set standby frequency first, then
press the changeover switch.



Detail Nav-Ident:

The air traffic control gives you a squawk.
Set this number here, so that the
air traffic control can identify you unambiguously.



Autopilot detail:

Click on the numbers at altitude or climb rate, to enter the desired value.

Below are the buttons to activate Autopilot, HDG, NAV, APR and Altitude.



Autopilot main switch

HDG Switch

NAV Switch

APR switch (approach course)

REV switch (opposite course)

Höhe Switch

I hope you enjoyed this flight, if so please give feedback to p3d@andi20.ch . Also send error messages (spelling mistakes, wrong information, etc.) to p3d@andi20.ch, I appreciate any feedback.