IFR Kronoberg (V1.6)

Flight created on 07.01.2022 (14.10.2023 V1.5 English)
(Amended on 14.01.2024, V1.6: Many untranslated and incorrect texts corrected.)

Estimated flight duration 1.5 - 2h

Difficulty easy-difficult (depending on flight mode)

Task: Fly IFR to Kronoberg.

Introduction

Boss: I have a special order for you. You're going to jail!

Me: Is this a joke?

Boss: No, because you're going to Sweden, sort of "on Swedish vacation." For you, that was the same as "going to jail".

Me: All right, I'm going to Sweden. What am I supposed to do there?

Boss: Remember the colleague who went "on Swedish vacation" for 3 years?

His parents are back from the world trip, so you will pick up the colleague.

The colleague is in Älmhult, you will pick him up from the nearby airport Växjö/Kronoberg (ESMX).

The flight

Because of bad visibility, 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 on 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 taking an instrument rating exam flight. The examiner wants you to fly everything yourself without using the autopilot.
- All autopilot switches are prohibited (AP, HDG, NAV, ALT, etc.).
- 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 options, 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 11000 feet immediately, so read carefully what altitude the air traffic control gives.

Start

Follow the instructions of the air traffic control.

Take off, climb to 11000 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.
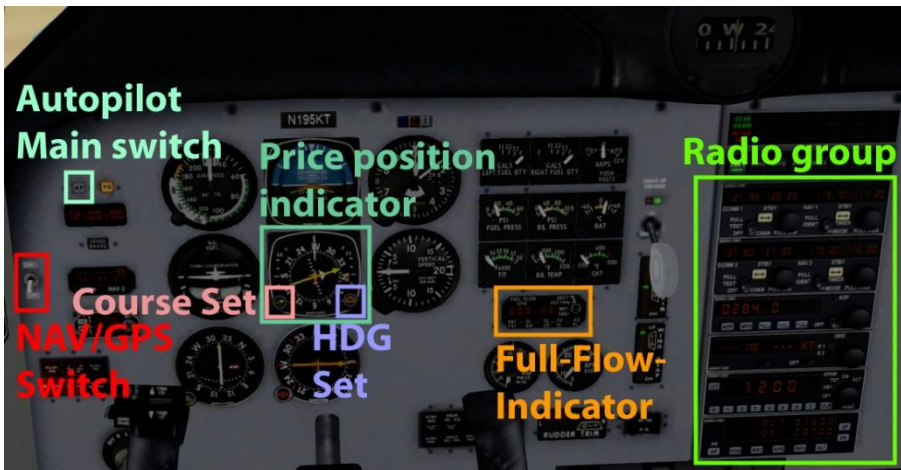

Help

Here you get extended help:

Activate the GPS in the menu Vehicle/InstrumetPanel.

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.
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.

Active/Standby-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.

Height -> ALT 0 1 6 0 0
ClimbRate -> VS 0 0 7 0 0

UP
DN

PR
AP   HDG   NAV   APR   REV   ALT

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.