

Klagenfurt 1(e) (V2.0)

Flight created 06.01.2020 (07.12.2023 English)

Estimated flight time 1h

Difficulty level easy - extremely difficult (depending on flight mode)

Task: Deliver fireworks from Klagenfurt to Salzburg.

Prerequisite: **The "Aero Commander AC 500" is absolutely essential for this flight.**

Download this airplane here:

<https://www.rikoooo.com/downloads/viewdownload/51/796>

Falls der Download-Link nicht funktioniert, kontaktiere mich:
p3d@andi20.ch

Introduction:

You are at Klagenfurt airport in Austria.

Your boss wants you to deliver (completely legal, of course 😊) fireworks to Salzburg.

The red line shows the route.



After take-off, fly approximately heading 305 to "Zell am See", then heading 015 towards "Salzburg".

Start:

The weather is bad, visibility is minimal, so you have to make an IFR flight (flight according to instrument flight rules). Always follow the instructions of air traffic control.

Failure to adhere to the route, altitude or climb angle may well end in a mountain!

At the beginning you can select the flight variant.

1) Random flight path (standard)

Interesting mode, because you don't know what's going to happen!

2) No problems

You will reach your destination airport without any problems.
An easy flight during which you make an interesting discovery in Salzburg...

(...if you leave the runway too early.)

3) Slight problems, you will reach the destination airport relatively safely.

You should be able to reach Salzburg here, provided you can still make it up the mountain if you have engine problems.

4) Hard problem, maybe you will reach an airport.

You have the chance to land in "Zell Am See" or in "Salzburg". You may have to make an emergency landing somewhere.

5) Very difficult problem, you will have to make an emergency landing.

No chance of reaching an airport, the emergency landing will not be easy.

6) Extremely difficult (random flight and autopilot do not work).

Der Autopilot ist defekt, du musst alles von Hand fliegen.

You can then switch help on/off:

- With help

You are often supported during the flight, among other things you are shown directional aids / landing options, or it is pointed out to retract / extend landing gear / flaps.

Air traffic control is relaxed, +/-200 feet (60 meters) deviation from the specified altitude is not a problem.

You are a beginner/casual flyer, don't know the AC500, don't know when you have to reduce the mixture, adjust the propeller speed, etc.? Fine, you can get help here.

- Without help

You won't get any tips or help here.

In addition, air traffic control is extremely tricky:

If you deviate +/-100 feet (30 meters) in altitude, or +/-1000 feet (305 meters) sideways from the course, air traffic control will complain, and after a short time the flight will fail if you don't correct it in time!

Are you a professional and know the AC500 very well? Fine, that's your mode!

Note on "unaided":

Air traffic control is very tough, because 100feet in altitude and especially 1000feet laterally is extremely little:



On course (top), left off course (bottom)



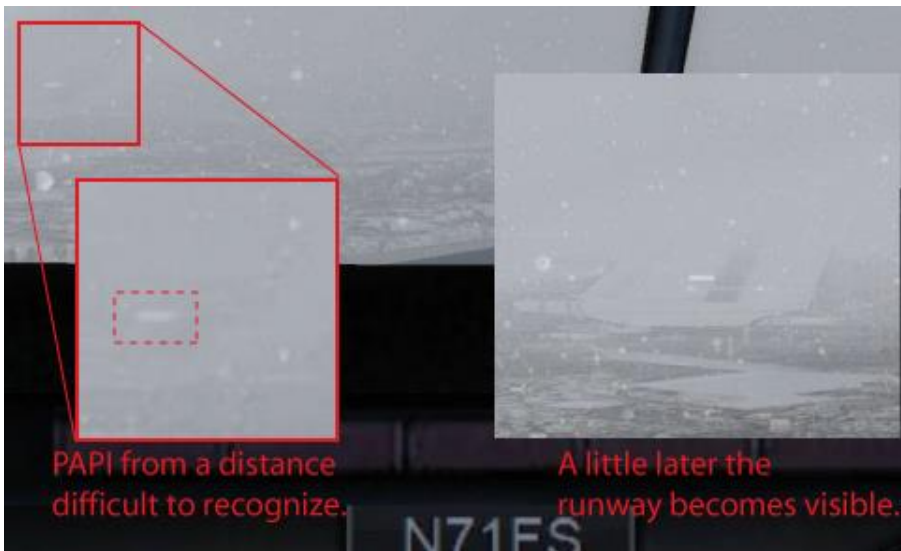
Only minimally visible deviation at zoom 10nm, nevertheless air traffic control will complain. Recommendation: Set the GPS zoom to 1-2nm.

The flight:

- Depending on the route you choose, you will either reach your destination airport or have to make an emergency landing.

- If you make it to Salzburg, the tower will guide you into the approach. At some point the tower will say: "Descend to 3000 feet and report when the runway is in sight".

At P3dV4 you will probably see the 4 lights of the PAPI first, the runway will appear out of the fog a short time later.



Immediately disengage the autopilot, fly towards the runway, follow the PAPI (descend) and land.

For beginners:

PAPI ("Precision Approach Path Indicator") is a landing aid system which indicates the glide path with 4 lights.

PAPI	Aircraft position	Glide path
○ ○ ○ ○		Too high
● ○ ○ ○		Slightly too high
● ● ○ ○		Just right
● ● ● ○		Slightly too deep
● ● ● ●		Too deep

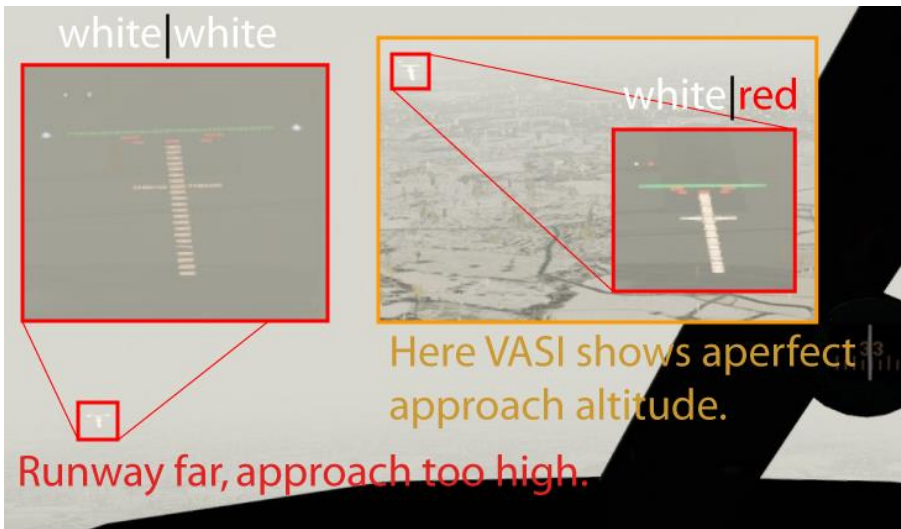
PAPI is designed for a glide angle of 3 degrees.

For this aircraft, at 120MPH, this corresponds to a sink rate of 500 feet/min.

- If you see 4 white lights, you are too high, sink at approx. 1000 feet/min.
- If you see 1 red, 3 white, you are slightly too high, sink at approx. 750ft/min.
- If you see 2 red, 2 white, you are exactly on the glide path, descend at approx. 500ft/min.
- If you see 3 red, 1 white, you are slightly too low, descend at approx. 250 feet/min.
- If you see 4 red, 0 white, you are too low, do not descend any further until you see white lights again.

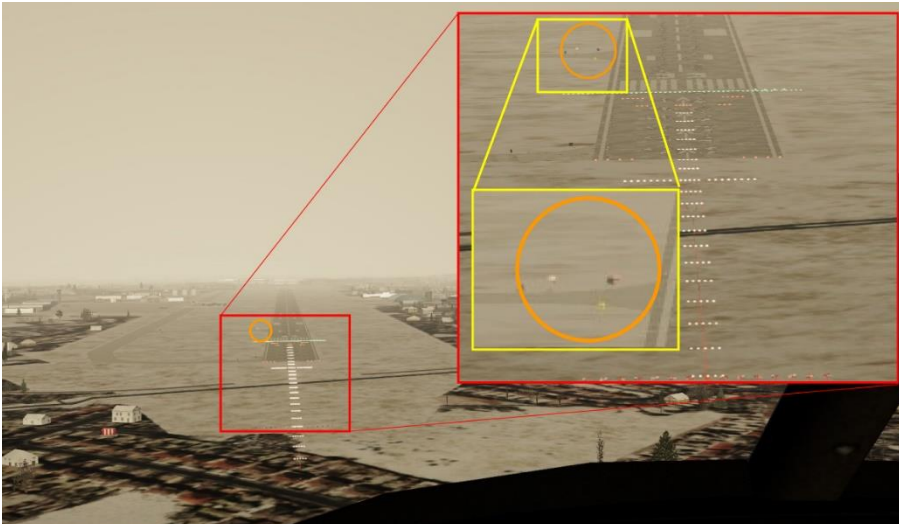
If you see 4 red lights, do not climb to reach the glide angle again, just fly horizontally until you reach the glide angle again!

At P3dV5 and P3dV6 you will first see the runway lighting.



The landing system was changed from PAPI to VASI because this probably corresponds to the real system used at this airport.

In P3dV6 the landing system VASI is unfortunately difficult to recognize.



For beginners:

VASI ("Visual Approach Slope Indicator") works in a similar way to PAPI.

VASI	Aircraft position	Glide path
○ ○		Too high
● ○		Just right
● ●		Too deep

VASI is designed for a glide angle of 3 degrees.

For this aircraft, at 120MPH, this corresponds to a sink rate of 500 feet/min.

- If you see 2 white lights, you are too high, sink at approx. 1000 feet/min.

- If you see 1 red, 1 white, you are exactly on the glide path, sink at approx. 500ft/min.

- If you see 2 red lights, you are too low, do not descend any further until you see another white light.
If you see 2 red lights, do not climb to reach the glide angle again, just fly horizontally until you reach the glide angle again!

Landing in Klagenfurt:

After landing, air traffic control will direct you to the truck. Follow the instructions of air traffic control exactly (or deliberately take a wrong taxiway because there is still something to discover...).

At the truck you have to open the door to unload the fireworks. I'm sure you know how to open the door from my previous missions, if not, have a look at the keyboard layout.

Help for the AC500:

Instruments overview:



- Main ads: Details below.

- Power InHg: For this flight, you must reduce the power to 18 InHg (approx. 90% power lever) when you reach cruising altitude. You can read the correct value here.

- Prop.RPM: For this flight you must reduce the propeller speed to 2400RPM (approx. 90% propeller lever) when reaching cruising altitude. You can read off the correct value here.

- Rad-Alt: The radar altimeter shows you exactly how high above the ground you are currently flying. Helpful in poor visibility, but it does not show whether there is a mountain in front of you.

- FuelFlow: This display shows the fuel flow. With the AC500, this display is a good indicator of whether the mixture setting is good. The higher the value, the better the mixture setting.
- Trim wheel without function: The elevator trim wheel is usually located here. In the AC500 you will find the trim wheel overhead.
- Show GPS: If you are following the GPS route without autopilot and do not want to look down all the time, you can use this button to show a flying GPS window.
- Fade in radio: If you do not have an external hardware autopilot panel,



click on this button to fade in the radio group with autopilot. More on this below.

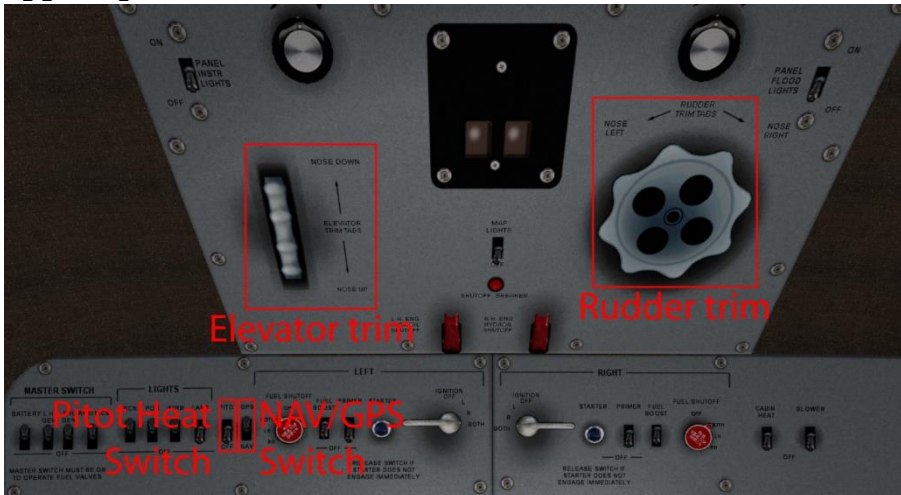
- Alt-Air: You can activate the alternative air supply for the engines with the two white levers. If the engine loses power due to icing, these levers are usually activated. Unfortunately, in this flight the engine only loses more power when activated, so do not use them!

- Landing gear: The landing gear lever on the left and the indicator on the right. If all 3 lights are green, the landing gear is fully extended. If the engine fails, the landing gear does not extend or does not extend fully. Here the left main landing gear is not fully extended, so crank it out manually with "ctrl+G".



- Flaps and flap display: If the engine fails, the flaps do not extend or do not extend completely. Therefore, pay attention to the flap display!

Upper panel:



The Pitot Heat switch is activated if the speed display, altimeter and/or variometer fail due to icing.

Main display details:



You should actually be familiar with the 8 instruments, so here are just the specific ones:

Airspeed Indicator:



On most airplanes, the display is in knots, here in MPH. The small inner circle shows the speed in knots.

NAV1:



This instrument only shows NAV course, if you have to follow the GPS course (as required in this mission), stick to the GPS display.

GPS :



Actually you should know the GPS, but here is this information:

- Shown here in the picture, you are 1000 feet to the left of the course, hard to see because the zoom is at 10nm. Click on the down arrow at the top right of "RNG" to zoom in closer.

- Click on the "TERR" button to show the terrain. This allows you to recognize mountains (dark) and valleys (light).

- If you find it annoying that "MSG" is constantly flashing, you can deactivate this by clicking 6 times on "MSG".

Autopilot:

The AC500 has apparently been retrofitted with modern autopilot. The old autopilot control behind the steering horn is difficult to access and not really suitable because some functions are missing.



Therefore, click on the Show radio button to show the radio group with modern autopilot.



You should be familiar with the radio group, but here is this information anyway:



Eigentlich benötigst du nur den unteren Teil, mit dem Autopilot:



Autopilot main switch

HDG Switch

NAV Switch

APR switch (approach course)

REV switch (opposite course)

Höhe Switch

Final remark:

If you have flown the flight several times, you know that e.g. air traffic control will soon say "turn to 015", so you prepare everything already and as soon as the message comes you **immediately** turn to 015.

Not good, because I have timed the instructions so that you must/should first read and then act.

If you plan ahead, you are too fast, enter the turn too early and you may end up in the mountain or simply fly past the destination airport.

10 seconds too early can really make a difference on approach!

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.