Pilot Briefing

This briefing is intended for pilots flying in or out of Copenhagen, Kastrup airport (IATA: CPH // ICAO: EKCH) on the VATSIM network. This briefing is only intended for IFR flights on the VATSIM network and none of the contents in this briefing is intended for real world use!

Version history:

<table>
<thead>
<tr>
<th>Version no.</th>
<th>Date of changes</th>
<th>Changed by</th>
<th>Release notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>------</td>
<td>Lukas Agerskov</td>
<td>Original release</td>
</tr>
<tr>
<td>2.0</td>
<td>15/04/2016</td>
<td>Gustav Kauman</td>
<td>Graphical update, update of stand assignments, change of pictures, added contact information.</td>
</tr>
</tbody>
</table>
Intentionally left blank
Table of Contents

1. Anatomy of Kastrup Airport
   a. General
   b. Scenery for Kastrup
   c. Departure
   d. SID restrictions
   e. Arrival
   f. Direct arrival points

2. Airlines and destinations
   a. Major Airlines
   b. Gateway to Europe
   c. Worldwide destinations
   d. Domestic operations

3. Layout
   a. Runway layout
   b. Standard taxi route system
   c. Apron layout and taxiway layout
   d. Gate allocation

4. ATC procedures
   a. ATC clearance
   b. Taxi clearance
   c. Takeoff clearance
   d. Arrival
   e. Radiofrequencies

5. Contact
Anatomy of Kastrup Airport

General
Kastrup can be a lot different from other airports you might fly to. Complex routes, strict stand allocations, and different categories of runways, makes it a challenge for even a skilled VATSIM pilot. Let us start with the runways. There are three:

- RWY 04R/22L
- RWY 22R/04L
- RWY 12/30

All runways are equipped with ILS, and CAT IIIB approach is available for 22L and 04L. VOR approaches is available for 22L/04R and VISUAL approaches are also available for ALL runways.

### Preferential Runways

<table>
<thead>
<tr>
<th>Preferential Runways</th>
<th>TAKEOFF</th>
<th>LANDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depending on wind:</td>
<td>22R &amp; 04R</td>
<td>22L &amp; 04L</td>
</tr>
<tr>
<td>Upon request, and ATC discretion</td>
<td>-----</td>
<td>30</td>
</tr>
<tr>
<td>ONLY with x-wind component of more than 15 knots</td>
<td>30/12</td>
<td>30/12</td>
</tr>
</tbody>
</table>

Charts for Copenhagen airport are available at this link on Naviair’s website: [http://goo.gl/w14DPn](http://goo.gl/w14DPn). Naviair is the company that is managing the ATC service in the real world.

Scenery for Kastrup
There are several sceneries for Kastrup. Here they are:

- Scansim Fly to Copenhagen Kastrup (FS9) (Payware) ([http://goo.gl/0QjZQv](http://goo.gl/0QjZQv))
- Scansim Fly to Copenhagen Kastrup (FSX/P3D) (Payware) ([http://goo.gl/gckyNd](http://goo.gl/gckyNd))
- FlyTampa EKCH (FSX/P3D) (Payware) (Our recommendation) ([http://goo.gl/9x2CRD](http://goo.gl/9x2CRD))
- RBDesign EKCH (FS9) (Freeware) ([http://goo.gl/mEeq59](http://goo.gl/mEeq59))
- FSX compatibility patch of the RBDesign scenery (FSX) (Freeware) ([http://goo.gl/f5D150](http://goo.gl/f5D150))
- RBDesign (X-Plane) (Freeware) ([http://goo.gl/koOvFE](http://goo.gl/koOvFE))
Departure
There are several SIDs. Some are for JET, some for PROP and some for BOTH. This is a bit hairy, so hang on!

<table>
<thead>
<tr>
<th>Direction of FlightPlan</th>
<th>JET</th>
<th>PROP</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH</td>
<td>VEDAR</td>
<td>VEDAR</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>KEMAX</td>
<td>ASTOS</td>
</tr>
<tr>
<td>NORTHWEST</td>
<td>MIKSI</td>
<td>GOLGA</td>
</tr>
<tr>
<td>SOUTH</td>
<td>LANGO</td>
<td>KOPEX</td>
</tr>
<tr>
<td>SOUTHEAST</td>
<td>SIMEG</td>
<td>BALOX</td>
</tr>
<tr>
<td>SOUTHWEST</td>
<td>NEXEN</td>
<td>BETUD</td>
</tr>
<tr>
<td>WEST</td>
<td>ODN</td>
<td>ODN</td>
</tr>
</tbody>
</table>

The SIDs are named like this: [WAYPOINT]+[VERSION NO.]+[LETTER ACCORDING TO RWY]. An example is this: KEMAX4C. This is the fourth edition of the KEMAX SID for RWY 22R. Here is the letter codes:

- 04R = A
- 04L = E
- 12 = B
- 22R = C
- 22L = F
- 30 = D

SID restrictions

<table>
<thead>
<tr>
<th>INITIAL ALTITUDE</th>
<th>SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWY 04L/R + 22L/R</td>
<td>FL070, 250 below FL70</td>
</tr>
<tr>
<td>RWY 12 + 30</td>
<td>4000′, 250 below FL70</td>
</tr>
</tbody>
</table>
Arrival

Normally you will get a STAR. There are two different STARs with the same name pr. runway. An RNAV STAR and a NON RNAV STAR. You will **ALWAYS** get the NON RNAV. The STARs called N and M, are not usually used in to Kastrup airport. All other STARs use vectors to final approach.

The holdings are located at the end of the STAR’s and are as follows:

- **SVD**: IND COURSE 179 L TURN (1:30 min) FL100
- **ALM**: INB COURSE 294 R TURN (1:30 min) FL70
- **CDN**: INB COURSE 051 R TURN 3500 FT – FL140
- **ROSBI**: INB COURSE 103 L TURN 3500 FT – FL140
- **LUGAS**: INB COURSE 073 R TURN 3500 FT – FL140
**Direct arrival points**

We have 8 points around the airport, which are used for direct routing towards the airport. These points may be used instead of a STAR.

Approaches are executed from 3000 feet or 2000 feet per ATC discretion. ALL visual approaches are executed from 2000 feet.

The points are as follows:

- **RWY 04L**
  - BASLO, DOPEM, ERPUK

- **RWY 22L**
  - LAMOX, ADOVI, ABEGI

- **RWY 12**
  - EPOXO, ERPUK, ABEGI

- **RWY 30**
  - ULTIS, DOPEM, ADOVI

Expect to be leveled at 3000 feet by these points except ULTIS, where you should expect to be leveled at 2000 feet due to the fact that it lies closer to the runway than the other points do to their runway. Here is a visual representation of it:
Airlines and destinations

Major airlines

Copenhagen is the destination of many airlines throughout Europe. Most of the capitals in Europe have an airline flying to Copenhagen; it is almost always possible to takeoff with your local airline from your local hub, and fly non-stop to Copenhagen. If this is not the case, some charter companies are based in Copenhagen as well, so don’t hesitate to take one of their planes.

Copenhagen has some airlines of its own; the largest airlines are as follows

**Scandinavian Airlines**

SAS have been based in Copenhagen since 1946. Being one of the world’s oldest airlines, this one has had the time and resources to become by far the largest player in Copenhagen. SAS features Domestic, European and transcontinental operations. SAS mainly operates A320-family and CRJ900 from Copenhagen, but 737s are a common sight as well. Copenhagen also used to be the hub of their MD80 fleet and their Dash8 fleet.

**Norwegian**

Norwegian is the new popular guy in school. After Sterling’s collapse, Norwegian invaded the Danish marked. It primarily operates 737-800 to many European destinations, charters, as well as long haul on its new 787 fleet.

**easyJet**

To challenge Norwegian, Easyjet has started more and more operations from Copenhagen. These are done with the A320 series, and features British and European destinations. Easyjet are dominating the new low cost terminal in Copenhagen.

**Jettime**

Jettime is a fantastic story. It is not well known throughout Europe, but it was two Sterling captains, sick of the way things were run in their company, and decided to make their own. Started in 2004, they had only two leased planes, and ran charter on behalf of SAS. Times have been good to Jettime, and they now have 26 planes, 737 classic, 737 NG as well as ATR. They fly Charter and Wet Lease, so you can potentially fly Jettime to every destination in Europe.
Once it was PremiAir, then it was MyTravel, now it is Thomas Cook Airlines Scandinavia. The Scandinavian part of the larger charter company flies A321 and A330 out of Copenhagen to various charter destinations in Europe, Americas and Asia.

Gateway to Europe

Copenhagen has the advantage of being in range of many major airports both in the north, south east and west. No matter where your favourite airport is in Europe, there is a route towards Copenhagen. Below you can see the most staffed airports on VATSIM and who flies to Copenhagen.
Worldwide destinations

SAS and Norwegian are the only Copenhagen-based airlines operating trans continental, but several airlines air operating Long-Haul to Copenhagen. This is easier explained in pictures than in words:
Domestic operations
Domestic operation is also a large part of the traffic in and out of Copenhagen. These routes are serviced by, SAS, Jettim, Danish air transport and Norwegian. A lot of wonderful routings are available, and plenty of add-on scenery is available. Let’s take a look:

Add-on scenery is available for all the Danish airports.

- Denmark Scenery  http://library.avsim.net/download.php?DLID=172569
  o Old scenery but better than nothing covers, EKBI EKYT EKEB EKKA EKSB
- Vidan design http://www.vidandesign.com/
  o EKSB(Payware) EKRN(Payware) EKAH (Freeware)
- Drzewiecki Design
  o EKRN (Payware) http://www.drzewiecki-design.net/prodBornholm_X.htm
Where Copenhagen truly stands out, is its taxiway system. This airport was founded in 1926, and buildings have been erected, torn down, new runways paved and then removed again. This is ground for confusion amongst VATSIM pilots. Let us explain the procedures here

Runway layout

As said before in this briefing we have 3 runways in Kastrup. Here they are:
They have the following headings:

- RWY 04L: 38,7° MAG
- RWY 04R: 38,7° MAG
- RWY 12: 120,7° MAG
- RWY 22R: 218,7° MAG
- RWY 22L: 218,7° MAG
- RWY 30: 300,7° MAG

Standard taxi route system

In Kastrup there is a standard taxi route system that ONLY is applicable for landing aircraft. This will obvious when you see it:
So the procedure in text is:

- For landing on RWY 04L: You vacate the runway via A7-A1 and taxi via TWY A to hold short RWY 12/30. Tower would then make you cross the runway and hand you over to apron if applicable.
- For landing on RWY 22L: If you vacate via B5 you are to hold short immediately after vacating. If you vacate on B4 or later you are to vacate and taxi via TWY B to hold short TWY C.

Note the restrictions if you are flying larger aircraft types, namely A345/6 and B772/3/L/W.

**Apron layout and taxiway layout**

The routings at the terminal are a little bit more complicated, but hang on!:

- The two red taxiways in the middle are Z and Y. Z is used for getting the traffic out of the airport and Y to get the traffic in to the stands.
- The blue taxiway is K and that is used for departures on RWY 12 and landings on RWY 30.
- The brown taxiway is J and that is used for the traffic going to the western A-stands.
- The dark green taxiway is L and that is used to get the traffic out from the A-stands, into the western part of the A-pier or get traffic onto taxiway J.
• The yellow taxiway is M. It is used to get traffic in/out of the stands on the eastern part of the A-pier or the western part of the B-pier.
• The magenta taxiway is P. It is used to get traffic in/out of the stands on the eastern part of the B-pier.
• The cyan taxiway is Q that is used to get traffic in/out of the stands on the western part of the C-pier.
• The two light green taxiways are R and S. R is used to get traffic in/out of the stands on the eastern part of the C-pier, to get traffic up to the D-stands and get traffic to taxiway W. S is used to get traffic in/out of the eastern D-stands and get traffic to taxiway W.
• The purple taxiway is W. It is used to get traffic in to the CPH Go terminal (low F-stands) and the high F-stands.
• The orange taxiway is V. It is used to get traffic to the high F-stands and get traffic to RWY 22L if that is used for take off. It may also be used as a transit taxiway.

The right orange circle is the cargo area and the left one is the VIP terminal.

Gate allocation
At Kastrup the gate allocation can be a bit hard to swallow... We have made a map so that it should be easier to understand:
ATC procedures

ATC clearance
In Copenhagen you don’t request startup like in German airports, but you request clearance. Upon first contact you MUST supply following items to ATC controller:

- Callsign
- Aircraft type
- ATIS letter
- QNH
- Clearence request

Example: “Kastrup Tower. SAS123, type 737, with information A, QNH1013, request clearance for Stockholm”

You will get the clearance and read back. Next will be your request for startup and pushback, if required.

Taxi clearance
99% of the time taxi clearances will involve some action upon runway 12/30. Listen carefully and write your taxi clearance down!! Either on a paper OR, as we do it in the real world, on the scratchpad on your FMC.

- NGX/777: press the scratch area, a green bar will appear and you can use your keyboard.
- AIRBUSX: gray vertical bare, left of the number 1 on your keypad.
- PMDG 747, same gray vertical bar, BUT on the right side of the CDU

When both tower and apron is online expect to HOLD SHORT RUNWAY 30/12.

EXAMPLES:
- SAS123, taxi via L, Z and A, hold short runway 30  Runway is to be hold short of.
- SAS123, taxi Runway 22R via L, Z and A, cross runway 30  Runway is crossed.
- SAS123, taxi Runway 22R via L, K3, Runway 30 and A  Runway is used as taxiway.
Takeoff clearance

At Kastrup it is expected, that you contact DEPARTURE automatically after departure when passing 1000’!

The controller will remind you though. Upon contacting APPROACH/DEPARTURE you should supply following info:

- Callsign
- Passing altitude
- Cleared level/altitude (FL70 on runways 22L/R & 04L/R) (4000’ on runway 12/30)

APPROACH/DEPARTURE will clear you to a higher level.

Arrival

ATC procedures for arrival are pretty standard. What you need to supply to approach on initial contact is:

- Callsign
- Aircraft Type
- ATIS LETTER
- Passing Level
- Cleared Level

Example: “Copenhagen Approach SAS123, Type 737 Information “A”, FL135 descending FL80”

Radiofrequencies

<table>
<thead>
<tr>
<th>ID</th>
<th>Frequency</th>
<th>Callsign</th>
</tr>
</thead>
<tbody>
<tr>
<td>EKCH_DEL</td>
<td>119.900</td>
<td>Kastrup Delivery</td>
</tr>
<tr>
<td>EKCH_GND</td>
<td>121.900</td>
<td>Kastrup Apron</td>
</tr>
<tr>
<td>EKCH_TWR</td>
<td>118.100</td>
<td>Kastrup Tower</td>
</tr>
<tr>
<td>EKCH_DEP</td>
<td>120.250</td>
<td>Kastrup Departure</td>
</tr>
<tr>
<td>EKCH_APP</td>
<td>119.800</td>
<td>Copenhagen Approach</td>
</tr>
<tr>
<td>EKCH_F_APP</td>
<td>119.100</td>
<td>Kastrup Final</td>
</tr>
<tr>
<td>EKDK_CTR</td>
<td>135.275</td>
<td>Copenhagen Control</td>
</tr>
</tbody>
</table>
Contact

If you have any questions you can contact a mentor on TeamSpeak or via the forum. They can also be directed to the Pilot Coordinator (ACCSCA14), the Director of Copenhagen FIR (ACCSCA3) or the Training Assistant Denmark (ACCSCA22)

Links:

Pilot Coordinator: pilot@vatsim-scandinavia.org
Director of Copenhagen FIR: denmark@vatsim-scandinavia.org
Training Assistant Denmark: training-denmark@vatsim-scandinavia.org
Main website: www.vatsim-scandinavia.org
Forum: forum.vatsim-scandinavia.org
End of Document