

T2 - AFIS

T2 Endorsement for AFIS operations in EKDK

By reading this training document, you will gain an understanding of how to control an AFIS airport in the EKDK FIR.

After completing this page, you will need to pass a small test, covering the subjects mentioned in this document.

After completion of the test, you will receive the T2 Endorsement for all AFIS stations within EKDK FIR

You cannot get your S3 rating without completion of this course as some APP airspace provides top-down for AFIS airports.

Introduction

In Denmark, we have 7 RMZ//TIA/TIZ(AFIS) AD:

- EKOD - Odense (TIZ/RMZ)
- EKEB - Esbjerg (TIZ/RMZ & TIA/RMZ)
- EKSB - Sønderborg (TIZ/RMZ)
- EKSJ - Sindal (TIZ/RMZ)
- EKVD - Vamdrup (TIZ/RMZ)
- EKST - Stauning (TIZ/RMZ)

The 3 later mentioned do not hold any commercial traffic.

RMZ - Radio Mandatory Zone / TIA - Traffic Information Area / TIZ - Traffic Information Zone
AFIS - Aerodrome Flight Information Service

All airspaces are class G meaning:

- IFR & VFR receive Flight information
- Maximum speed 250 knots IAS
- IFR - Two-way radio communication
- IFR have SSR mode A+C
- No clearance

However, when controlling an RMZ//TIA/TIZ some extra rules apply, these are:

SSR mode A+C for VFR (If fitted) & Two-way radio communication for VFR

The AFIS Station itself does not have radar, hence you will rely only on the information given by the pilots.

To simulate this in Euroscope, you can:

If on an I_TWR, minimize ES, use a static chart for reference, launch a sim for tower view

If providing top-down, XCorelate the tag. You will still see their position, but not any information.

The video in the bottom, showcases how a session in I_TWR could look like for both IFR and VFR

Phraseology

Since all AFIS is class G, you cannot control the planes, therefore a lot of the normal instructions & clearances have to be modified.

Situation	Normal Instruction	AFIS instruction
Landing	"Cleared to land"	"No reported traffic on the runway. (Report vacated)"
ATC clearance	"Cleared to..."	"Copenhagen control clears you to..."
Startup	"Startup approved"	"Startup on own discretion \[Give Departure information\]" ¹
Takeoff	"Cleared for Takeoff"	"No reported traffic in the zone (Report airborne/passing...)"

Taxi	"Taxi Via A & B to holding point runway 24"	"Runway 24 in use, no traffic on the apron. I suggest you to taxi via A & B"
Departure and arrival information		
Departure information should be given to departing aircraft and must contain:		
Runway in use Transition Level Weather QNH		

Example on AFIS Phraseology

Arrival into Sønderborg/EKSB

- Sønderborg information, MMD122 inbound LIBRI planning on ILS RWY32
- MMD122, Sønderborg information. RWY32 in use, TL 030 QNH 1019. No reported traffic in the TIZ, report final. Do you require the latest MET-Report?
- Roger RWY32 TL030 QNH1010, Negative, we have the latest METAR onboard, and will report final. MMD122
- On Final RWY32 MMD122
- MMD122, Roger, No reported traffic on the runway, report vacated.
- Wilco, MMD122
- Runway vacated via B, MMD122
- MMD122, Roger I suggest you taxi to apron, no traffic reported on the apron.
- Taxiing to the Apron via B, MMD122

Departure out of Sønderborg/EKSB

- Sønderborg information, MMD121 request IFR to EKCH
- MMD121, Sønderborg information. Copenhagen Control clears you to EKCH via KOR, climb FL040, level change enroute, squawk 1234. RWY 32 in use. Do you require the MET-Report?
- RWY 32 in use, cleared to EKCH via KOR, FL040, level change en-route, squawk 1234. And affirm we require the met-report. MMD121

- MMD121, roger, readback correct. Automatic report from 1450Z Winds 220 at 8 kt. variable 190 to 250. Visibility 10km. or greater Few clouds at FL120 Temperature -2 dewpoint -5, QNH1019. Report ready for taxi.
- Roger QNH1019, and WILCO, MMD121
- Ready for taxi MMD121
- MMD121, roger no reported traffic on the apron and runway. I suggest you taxi via B, backtrack and lineup RWY32, and report ready for departure.
- Roger, we will taxi via B, backtrack and line up RWY32 and report ready MMD121
- Ready for Departure MMD121
- MMD121, Roger winds 220/08, no reported traffic in the TIZ, report passing 3000 ft.
- Roger, will report passing 3000 ft. MMD121
- Passing 3000 for FL040 MMD121
- MMD121, roger contact Copenhagen on 136.485 - Moin
- Copenhagen on 136.485 MMD121, Moin!

Top-Down coverage

When providing top-down service, it is important to distinguish between when the plane is in controlled airspace and when in Class-G.

As Class G airspace goes up to 3500ft an upper sector may only clear an aircraft to 4000ft.

As the aircraft approaches 4000ft the following must be said:

"C/S, leaving controlled airspace, radar service terminated. Report..."

When giving an inbound aircraft information about an aerodrome, the only thing you dictate is the runway that is in use, all other decisions i.e. approach type, are solely at the discretion of the PIC of the aircraft.

"C/S, Runway 14 in use in Sønderborg. TL030, report expected approach."

Phraseology example:

- MMD122 RWY32 in use in Sønderborg, report expected approach
- RWY32 in use, we are expecting the ILS RWY32, MMD122
- MMD122, Roger, proceed DCT LIBRI, when ready descend FL040. TL in Sønderborg is TL035
- Roger, When ready Descend FL040 DCT LIBRI, TL035, MMD122

- ...
- MMD122, leaving controlled airspace, radar service terminated. QNH in Sønderborg 0988. No reported traffic in the zone, report final RWY32. Do you require the latest MET report?
- Roger, radar service terminated, QNH 0988, will report final RWY32, and negative we have the weather onboard, MMD122
- ...
- On final RWY32 MMD122
- MMD122, roger, no reported traffic on the runway, winds 300/14, report vacated.
- No reported traffic, will report vacated, MMD122
- ...
- Vacated RWY32 via B, MMD122
- MMD122, roger. No reported traffic on the apron. I suggest you taxi to parking via B. Moine
- Roger, we will be using B to parking, MMD122, Moin!

How to handle the traffic

As an AFIS airport doesn't have any radar, the operator must rely solely on the reports from the pilots.

Operation

This video demonstrates both operations and phraseology to use

https://www.youtube.com/embed/kKIPOi_6CrM

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