

Introduction

From 1 November until 31 December 2005 a trial with Continuous Descent Arrivals from cruising level down to the runway will be held at Amsterdam Airport Schiphol. Maastricht UAC, ATC the Netherlands, Martinair and Transavia have agreed to conduct this trial in order to assess how the advanced aircraft capabilities can be used during the arrival phase of flight to improve the ATM System. The impact on ATM System predictability, flight time, fuel consumption, ATC and cockpit workload, ATC co-ordination procedures and aircraft noise will be the prime focus of this trial.

Conditions for conducting CDA trial

The conditions for conducting CDAs during any night are identical to the conditions for use of the RNAV transitions:

- RWY 06 or 18R is in use.
- ILS of the RWY in use is operational.
- RVR ≥ 550 m and cloud base ≥ 200 ft for RWY in use.
- no system degradation that affects the trial is in place at either Amsterdam or MUAC.

Description of the CDA trial

The CDA trial will be held at night (i.e. in a low density environment) provided the conditions for conducting the trial are met (see inset). During the CDA trial individual flights of Transavia and Martinair (A320 and MD11 only) that meet the requirements for participation (see inset) execute an aircraft optimised CDA. The CDA consists of a continuous descent arrival from the FMC calculated top of descent down to the runway via existing lateral routing (arrival and transition). In order to accommodate the vertical trajectory preferred by individual flights while maintaining a predictable ATC environment, the aircraft performing a CDA must apply a fixed speed schedule.

Requirements for individual flights

You are welcome to execute a CDA provided:

- your flight enters the Amsterdam FIR via BEDUM, TEMLU, SOMPA, KUBAT, DOBAK, NORKU, HELEN or DENUT.
- your aircraft has the required RNAV capabilities to perform a RNAV transition (ref. AIP the Netherlands, AD 2.EHAM-34, paragraph 2.6.1.4).
- your aircraft has an FMC with VNAV capabilities.
- your ETA at EHAM is between 2330 and 0500 LT.

During the CDA trial, data must be manually downloaded from the participating aircraft for evaluation purposes. Also, upper wind information may be provided to the aircraft.

Flight Crew Instructions – Preparations for the CDA

- **Check** (e.g. via ATIS) if the conditions for conducting the CDA trial are met (see inset).
- **Check** if your flight meets the requirements for executing a CDA (see inset).
- **Plan** the lateral route in your FMC as follows based on the FIR entry point and the landing RWY in use. The landing RWY in use is available via ATIS (digital or voice). If ATIS is not available, you may request the RWY in use from MUAC.

FIR entry point	RWY	STAR	Transition
BEDUM, TEMLU, SOMPA, KUBAT, or DOBAK	06	EELDE 1A	ARTIP 2A
BEDUM, TEMLU, SOMPA, KUBAT, or DOBAK	18R	EELDE 1A	ARTIP 2C
NORKU	06	NORKU 1A	ARTIP 2A
NORKU	18R	NORKU 1A	ARTIP 2C
HELEN	06	HELEN 1A	RIVER 2A
HELEN	18R	HELEN 1A	RIVER 2B
DENUT	06	DENUT 1A	RIVER 2A
DENUT	18R	DENUT 1A	RIVER 2B

- **Apply** the following changes to the vertical profile in your FMC:
 - **Delete** the published speed and level restriction at the FIR entry point (BEDUM, TEMLU, SOMPA, KUBAT, DOBAK, NORKU, HELEN or DENUT).
 - **Delete** the published entry levels for the Schiphol TMA (MAX FL 100 at 30 DME SPL). The published speed and altitude restrictions at other waypoints in the TMA (i.e. NARIX, SOKSI, NIRSI and the EH... waypoints on final approach) remain in effect.
 - **Maintain** DESCENT Mach number to the FMC default.
 - **Set** DESCENT speed in the FMC to 300 KIAS (above FL 100 and below Mach transition).
 - **Apply** a maximum speed of 250 KIAS below FL 100.

Flight Crew Instructions – Execution of the CDA

Nominal

- On first contact with Maastricht UAC **report** 'requesting CDA for Schiphol Airport'.
Depending on the actual operational situation (i.e. traffic, weather) Maastricht UAC will approve or refuse your request.
- Within 5 minutes prior to reaching the TOD, manually **download** ACARS data:
 - In the FMC, **select** ACARS MENU > AADT TRIAL > AADT TRIAL DOWNLINK.
- Once **cleared** for descent:
 - Start** your descent at the FMC calculated TOD based on the lateral routing and vertical profile described above.
 - Use** the lateral and vertical navigations functions of the FMC throughout the entire CDA.
- When transferred to each next ATC unit, **report** 'on CDA' on initial contact.
- During the CDA, standard ATC procedures apply. You will for instance receive clearances to intermediate flight levels. ATC will endeavour to provide a clearance to a lower level before you reach this intermediate flight level.

Deviation from lateral or vertical path

If ATC instructs you to deviate from the lateral or vertical path AFTER you have passed top of descent, **comply** with the ATC instructions, and thereafter please act as follows:

- Once cleared to proceed (direct or on original route, or to descend):
 - Use** 'heading select' to accomplish lateral manœuvres, thus preserving original flight plan route and vertical path. DO NOT USE 'direct to waypoint' function.
 - Use** vertical speed with thrust and/or speed brake as necessary to return to vertical path.
 - Complete** recapture of lateral and vertical paths as quickly as practicable.
- If, for any reason, you do not believe it practical to return to lateral or vertical path, **report** to ATC: 'cancel CDA, due...'
- If the ATC controller finds your flight's return to original path to be too disruptive, he/she will inform you and provide further instructions.

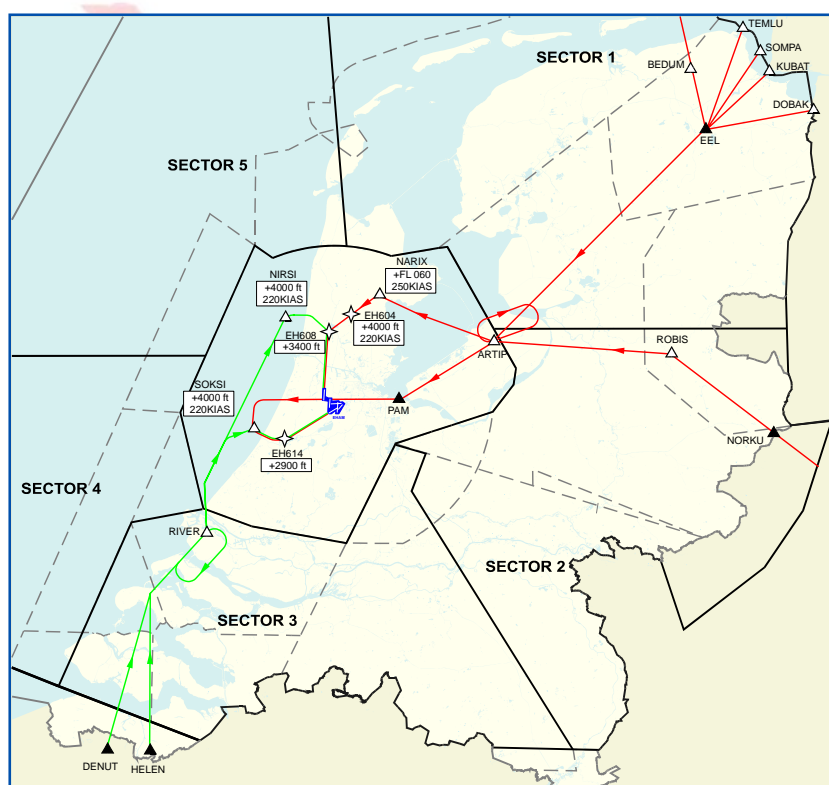
Radio communication failure

In the event of a radio communication failure, **apply** the published communication failure procedures for traffic via a standard arrival route or on a transition (ref. AIP the Netherlands, AD 2.EHAM-36/37, paragraph 2.9).



Cancellation of the CDA

Based on the actual operational situation, both ATC (e.g. due to a separation conflict) and the flight crew may cancel the CDA at any time ('cancel CDA due...').



Contact

For further information...

Colophon

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