

GEN 2.8 ARRESTING GEAR SYSTEMS AT DANISH AIR BASES

1. Types

Only hook arresting gear systems are used in Denmark. Three types of hook arresting gear systems are installed on Danish air bases/aerodromes:

- BAK 12/14 CABLE (RC) : Hookwire only. Approach end arrestment on request.
- 34D-1F CABLE : Hookwire only. Approach end arrestment on request.
- 34D-1F CABLE (Mod.) : Hookwire only. Departure end engagement only.

2. System Description

2.1 BAK 12/14 CABLE (RC)

Type	: BAK-12/14 Cable is a remote controlled arresting system. The cable is lowered into a slot in the runway surface and may be raised by input from TWR. It is bi-directional - also for arrested landings.
Used on	: EKYT Aalborg, EKKA Karup and EKSP Skrydstrup.
Reaction time	: Approx. 5 seconds from up to down or vise versa + personnel reaction time.
Standard setting	: When jet fighters operate: UP (positioned for engagement) in the departure end. DOWN in the approach end. Approach end arrestment on request.
Location	: Installed on primary runways approx. 1200 – 2000 ft from end of RWY. See AD 2 section (or RDAF/CENOR FLIP), Aerodrome Chart for exact location.
Max. capacity	: 40.000 lbs. aircraft weight with 190 kts. (Higher weight = lower engagement speed). See hookload diagram on page GEN 2.8-3
Max. run out	: 1200 ft (366 m).

2.2 34D-1F CABLE

Type	: 34D-1F Water Twister (Cable). The cable is held above the runway by spaced rubber discs. Rigging and derigging is done manually. The system is bi-directional - also for arrested landings.
Used on	: EKYT Aalborg, EKKA Karup, EKSP Skrydstrup and EKRN Rønne (civil aerodrome).
Reaction time	: From 15 MIN to 1 HR PN, depending on aerodrome. See AD 2 section (for EKRN Roenne RDAF/CENOR FLIP), Aerodrome Chart for details.
Standard setting	: When jet fighters operate: RIGGED (positioned for engagement) in the departure end. DERIGGED in the approach end. Approach end arrestment on request.
Location	: Installed on secondary runways (and EKRN Roenne departure end RWY 11) approx. 1000 – 2000 ft from end of RWY. See AD 2 section (for EKRN Roenne RDAF/CENOR FLIP), Aerodrome Chart for exact location.
Max. capacity	: 44.000 lbs. aircraft weight with 122 kts. 35.200 lbs. aircraft weight with 185 kts. See hookload diagram on page GEN 2.8-4
Max. run out	: 886 ft (270 m).

2.3 34D-1F (Mod.) CABLE

Type	: 34D-1F Water Twister (Cable). The system is the same as 34D-1F but with a shorter run out and lower capacity.
Used on	: EKSP Skrydstrup (as backup cables on the primary RWY) EKRN Roenne (departure end of RWY 29)
Reaction time	: EKSP Skrydstrup: None (always rigged) EKRN Roenne: 1 HR PN

- Standard setting : EKSP Skrydstrup: Always rigged (in the overrun). Usable in departure direction only.
Caution note: Landing short of runway threshold with hook down may cause substantial damage to the aircraft. Use the primary BAK-12/14 cable for approach end arrestment.
 EKRN Roenne: When jet fighters operate:
 RIGGED (positioned for engagement) in the departure end.
 DERIGGED in the approach end. Approach end arrestment on request.
- Location : See AD 2 section (for EKRN Roenne RDAF/ CENOR FLIP), Aerodrome Chart for exact location.
- Max. capacity : 44.000 lbs. aircraft weight with 89 kts.
 35.300 lbs. aircraft weight with 142 kts
 See hookload diagram on page GEN 2.8-5
- Max. run out : 590 ft (180 m).

3. Overview Of Installed Systems

Air Base / Airport	Rwy	Primary system	Backup system
EKYT Aalborg	08L/26R	BAK 12/14 CABLE (RC)	
	08R/26L	34D-1F CABLE	
EKKA Karup	09R/27L	BAK 12/14 CABLE (RC)	
	09L/27R	34D-1F CABLE	
EKSP Skrydstrup	11L/29R	BAK 12/14 CABLE (RC)	34D-1F CABLE (Mod.)
	11R/29L	34D-1F CABLE	
EKRN Roenne *)	11	34D-1F CABLE	
	29	34D-1F CABLE (Mod.)	

*) Civil airport