# 1. GENERAL

## 1.1. ATIS

D-ATIS Arrival 135.07
D-ATIS Departure 114.2

## 1.2. NOISE ABATEMENT PROCEDURES

### 1.2.1. GENERAL

In order to reduce ACFT noise impact on residential areas in the vicinity of Helsinki APT the following procedures will be applied:
Flights below 2000' over the city of Helsinki must be avoided unless lower altitude is necessary for take-off or landing.

### 1.2.2. PREFERENTIAL RUNWAY SYSTEM

**LANDINGS**
1. Rwy 15 2. Rwy 22L 3. Rwy 04L 4. Rwy 04R 5. Rwy 22R 6. Rwy 33

**DEPARTURES**
1. Rwy 22R 2. Rwy 22L 3. Rwy 04R 4. Rwy 33 5. Rwy 04L 6. Rwy 15

Selection of RWY-in-use is based on safety aspects and temporary restrictions concerning RWY availability.
RWY 15 is not used for departures and RWY 33 for landings, except between 0600-2300LT for turbo-props and other propeller-driven ACFT.

### 1.2.3. NIGHTTIME RESTRICTIONS

In order to reduce ACFT noise and emissions between 2300-0600LT, ATC may give clearances for continuous descent approaches (CDA), situation permitting.
ACFT may be vectored to ILS approach from IAF LAKUT and ORM in order to reduce noise impact.

### 1.2.4. RUN-UP TESTS

Scheduled maintenance run-ups, excluding idle power, must be performed on the run-up area and shall be avoided between 2200-0700LT and on Sundays. Exceptions only as agreed with the TWR.

### 1.2.5. REVERSE THRUST

Pilots are recommended to avoid reverse thrust except idle thrust after landings.

### 1.2.6. AUXILIARY POWER UNIT (APU)

The use of APU shall be restricted only to unavoidable situations.

## 1.3. LOW VISIBILITY PROCEDURES (LVP)

### 1.3.1. GENERAL

- All RWYs are approved for LVP for take-offs when the RVR is 550m or less.
- Low Visibility Procedures become effective when TDZ RVR decreases to 600m or the ceiling decreases below 200'.
- The application of LVP will be informed to the pilots via ATIS or by ATC.
- ATC will always report the TDZ RVR. Mid RVR and roll-out RVR will only be reported if they are less than the TDZ RVR and below 800m, or when less than 400m, or requested by pilot.
- In case the APT is unable to comply with LVP, pilots are informed either via ATIS or by ATC:
  "Airport unable to comply with Low Visibility Procedures."

### 1.3.2. ARRIVAL

After landing pilots shall maintain on Tower frequency and report "RUNWAY VACATED" not until the ACFT has either completely passed the CAT II/III holding position sign or is on the TWY parallel to RWY.

### 1.3.3. DEPARTURE

Departing ACFT taxiing on manoeuvring area shall not pass CAT II/III holding positions and stop bar lights unless cleared by ATC and stop bar lights are switched off.




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# 1. GENERAL

### 1.3.4. CAT II APPROACHES

P-RNAV approved ACFT may intercept the ILS LOC by own navigation using RNAV transition, or may request radar vectoring. Other ACFT will be vectored so, that the intercept of ILS LOC is not less than 10 NM before touchdown.

## 1.4. TAXI PROCEDURES

### 1.4.1. GENERAL

For wingspan restrictions refer to 10-9 charts.

Reduced wingtip clearances exist between ACFT on parallel TWYs as well as between ACFT and objects including parked ACFT and vehicles on service roads.
Adhere strictly to TWY centerline markings.
Taxiing on apron is always subject to clearances and instructions given by Ground.
ATC issues clearances for taxiing only within area of Apron Control competence.
ACFT taxiing on the apron shall follow the yellow taxi guidance lines. No deviations or shortcuts are permitted except under guidance of a Follow-Me car or after special instructions by ATC.

ACFT taxiing on TWYs W, Y and Z shall give priority to ACFT vacating RWY.

### 1.4.2. APRON SPOT COORDINATION POINTS

Apron spots (An orange circle with two digits, painted DAY markings only) will be used as coordination points for traffic to and from aprons. Apron spots will not be used if the markings are temporarily covered by ice or snow. Apron spots shall not be used as parking stands.

## 1.5. PARKING INFORMATION

Stands 12 thru 33 equipped with docking guidance system.

CHANGES: New page.

# 2. ARRIVAL

## 2.1. SPEED RESTRICTIONS

Unless otherwise instructed by ATC, the ACFT shall follow speed limit MAX 250 KT at HEL 30 DME.
Speed restrictions for RNAV STARs are published on charts concerned.

## 2.2. NOISE ABATEMENT PROCEDURES

Standard Arrival Routes depicted on Helsinki STAR charts are also minimum noise routings.
Due to VFR traffic flying below IFR traffic an ACFT carrying out visual approach shall maintain an altitude of at least 2000' until 7 DME HEL, and established on final. The final stage of a visual approach shall be performed at descent profile equivalent to at least 3°.

## 2.3. CAT II OPERATIONS

RWYs 04L and 22L approved for CAT II operations, special aircrew and ACFT certification required.

## 2.4. RUNWAY OPERATIONS

### 2.4.1. MINIMUM RWY OCCUPANCY TIME

Pilots are reminded that rapid exit from the RWY enables ATC to apply minimum spacing on final approach that will achieve maximum RWY utilisation and will minimize the occurence of go-arounds.
The ACFT vacating RWY has priority to other taxiing traffic.

Pilots should prepare their landings so that they are able to vacate the RWYs in accordance with the following table when RWY conditions permit:

| Preferred turn-offs | | | |
|---|---|---|---|
| RWY | TWY | Dist from THR to turn-off | Class |
| 04L | WK | 5620'/1713m | All |
| 04R | ZG | 4833'/1473m | |
| | ZD | 6657'/2029m | Heavy |
| 15 | YF | 5066'/1544m | Medium Jet<br>Medium Prop/Light |
| | YH | 6102'/1860m | Heavy |
| | YL | 7927'/2416m | |
| 22L | ZH | 4967'/1514m | All |
| | ZJ | 5856'/1785m | Heavy |
| 22R | WL | 3484'/1062m | Medium Prop/Light |
| | WP | 4478'/1365m | All |
| | WS | 5807'/1770m | Heavy |
| 33 | YF | 3812'/1162m | Medium Prop/Light |
| | Z | 6804'/2074m | Heavy<br>Medium Jet |

In order to ensure minimum RWY occupancy time, it is recommended to name the expected turn-off during the approach briefing.




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# 2. ARRIVAL

## 2.5. TAXI PROCEDURES

### 2.5.1. GENERAL

ACFT landed at RWY 22L shall not vacate via TWY ZG unless otherwise instructed by ATC.
ACFT using RWY 04R/22L or 15/33 shall contact Ground immediately after vacating the RWY for taxi clearance within area of Apron Control competence.
ACFT vacating RWY 04L/22R shall maintain the appropriate Tower frequency unless otherwise instructed.
If no other instruction than ACFT stand is given, ACFT shall use the TWY parallel to the RWY to the TWY closest to the assigned ACFT stand.

### 2.5.2. APRON SPOT COORDINATION POINTS

After receiving taxi instruction to an apron spot proceed to the appropriate apron spot. Hold ACFT nose on the spot until further taxi instructions have been issued by ATC.

## 2.6. OTHER INFORMATION

### 2.6.1. SIMULTANEOUS OPERATIONS

Dependent parallel approaches will be used on RWYs 04L/R or 22L/R.
ATIS broadcast will contain the following information:
"Simultaneous dependent ILS approaches in progress on runways 22R and 22L (04R and 04L)."

Independent parallel approaches will be used on RWYs 04L/R or 22L/R.
ATIS broadcast will contain the following information:
"Simultaneous independent ILS approaches in progress on runways 22R and 22L (04R and 04L)."

# 3. DEPARTURE

## 3.1. DE-ICING

### 3.1.1. GENERAL

ACFT de-icing may only be carried out in areas specifically designated by the APT.
De-icing may also be performed on Remote De-icing Apron (Apron 6).
De-icing must always be requested through HELSINKI De-icing Coordinator on 131.8.
The de-icing coordinator will then inform the pilot of which de-icing stand or area to use and will forward the request to the de-icing company. Pilots are recommended to monitor the de-icing coordinator's frequency.
All queries regarding de-icing requests shall initially be made direct to the de-icing coordinator.
Pilots must always request route clearance from ATC before de-icing begins (when the ACFT is ready to begin de-icing). This requirement also applies when de-icing is to be carried out in ACFT parking areas.
When requesting route clearance, pilots must also tell ATC which de-icing stand has been allocated by the de-icing coordinator. If pilots are directed to the Remote De-icing Apron for de-icing they should notify this as Apron 6.

### 3.1.2. SPECIAL PROCEDURES FOR REMOTE DE-ICING APRON (APRON 6)

When de-icing is performed on the Remote De-icing Apron (Apron 6), ATC will hand over the ACFT at the perimeter of the apron to the Remote De-icing Coordinator (normally on 121.75).
When notifying the coordinator, pilots shall use their ACFT tail number for identification. The coordinator will direct the ACFT to one of the de-icing stands 601 thru 608.
The Remote De-icing Apron (Apron 6), including its entry and exit taxi lines, lies outside the normal manoeuvring area. Pilots are reminded to proceed with extreme CAUTION within this area so as not to endanger other personnel or vehicles operating in the area.
Pilots must avoid using excessive power when taxiing within this apron.
De-icing is complete when the pilot has received final notification (in accordance with the AEA anti-icing code) by radio. In the Remote De-icing Apron, the final notification is considered as including the "all clear" signal. The anti-icing code cannot be given unless all the conditions of the "all clear" signal have been met.
Pilots must remain on the coordinator's frequency until the anti-icing code has been received and the pilot has received instructions to contact ATC again.
In the initial call to ATC the pilot shall notify them of the flight's radio call sign and the de-icing stand number being used. The ACFT must not move until taxiing instructions have been received from ATC and acknowledged.

## 3.2. START-UP, PUSH-BACK & TAXI PROCEDURES

### 3.2.1. GENERAL

Departing flights will receive ATC clearance as follows:
- 0600-2400LT: HELSINKI Delivery
- 2400-0600LT: HELSINKI Ground

Route clearance shall be requested from appropriate ATC unit not earlier than 10 minutes before the estimated start-up. However, the route clearance must always be requested before de-icing begins. Type of ACFT, ATIS received and (when appropriate) the request to use other RWY than the RWY in use shall be stated.

### 3.2.2. START-UP & PUSH-BACK

Contact Ground for start-up and push-back clearance. The stand of the ACFT shall be stated in the initial contact with the ATC unit.

### 3.2.3. TAXIING

Unless otherwise instructed ACFT shall use shortest possible way to TWY parallel to the RWY.
ACFT leaving apron to manoeuvring area shall give priority to the ACFT taxiing on TWYs Y and Z.




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# 3. DEPARTURE

### 3.2.4. APRON SPOT COORDINATION POINTS

After receiving taxi instruction to enter an apron spot proceed to the appropriate apron spot and hold ACFT nose on the spot. Do not enter a TWY until a further taxi clearance has been issued by ATC.

## 3.3. SPEED RESTRICTIONS

MAX 250 KT up to 4000 ' unless otherwise instructed by ATC.

## 3.4. NOISE ABATEMENT PROCEDURES

After take-off ACFT shall climb as rapidly as practicable to at least 2000'. Standard Instrument Departure Routes depicted on Helsinki SID charts are also minimum noise routings.
Moderately quiet jets (ACFT with take-off noise level less than 89 EPNdB according to ICAO Annex 16, Chapter 3) are allowed to use some PROP/TURBOPROP SID routes. These routes are indicated on the charts concerned.

## 3.5. RWY OPERATIONS

### 3.5.1. MINIMUM RWY OCCUPANCY TIME

On receipt of line-up clearance pilots should ensure, commensurate with safety and standard operating procedures, that they are able to taxi into correct position at the hold and line-up on the RWY as soon as the preceeding ACFT has commenced its take-off roll or landing run.

Pilots shall ensure that cockpit checks have been completed prior to line-up and that they are able to commence the take-off roll immediately after clearance for departure has been issued.

Pilots not able to comply with these requirements should notify ATC.

## 3.6. OTHER INFORMATION

Due to jetblast hazard, ACFT departing RWY 22L from TWY Y or ZD intersection shall use idle power until clearance for departure has been issued.

# ARRIVAL INSTRUCTIONS

**1. HOLDINGS**
**If traffic situation demands, holdings may be performed as specified in the table below:**

| IDENT & POSITION | LEVEL | INBOUND COURSE | TURN DIRECTION | MAX SPEED | TIME |
|---|---|---|---|---|---|
| ESPOO<br>N60 14.9 E024 47.8 | 3000'-FL140 | 041° | LEFT | 230 KT | 1 MIN |
| INTOR<br>(TALLINN FIR)<br>N59 49.7 E025 11.2 | FL100-FL140<br>FL150-FL200 | 016°<br>016° | RIGHT<br>RIGHT | 230 KT<br>240 KT | 1 MIN<br>1.5 MIN |
| KORSO<br>N60 22.3 E025 04.1 | 3000'-FL140 | 220° | LEFT | 230 KT | 1 MIN |
| LAKUT<br>N60 26.3 E023 52.6 | FL70-FL140<br>FL150-FL200 | 077°<br>077° | LEFT<br>LEFT | 230 KT<br>240 KT | 1 MIN<br>1.5 MIN |
| ORIMAA<br>N60 50.0 E025 45.7 | FL100-FL140<br>FL150-FL200 | 212°<br>212° | RIGHT<br>RIGHT | 230 KT<br>240 KT | 1 MIN<br>1.5 MIN |
| PEXEN<br>N59 54.8 E023 49.5 | FL100-FL140<br>FL150-FL200 | 060°<br>060° | RIGHT<br>RIGHT | 230 KT<br>240 KT | 1 MIN<br>1.5 MIN |
| PORVOO<br>N60 17.7 E025 35.3 | 3000'-FL140<br>FL150-FL160 | 220°<br>220° | LEFT<br>LEFT | 230 KT<br>240 KT | 1 MIN<br>1.5 MIN |

**2. FPL/DESCENT CLEARANCE**
**FPL for inbound IFR traffic to EFHK shall be closed on the following IAFs:**
**INTOR, LAKUT, ORIMAA, PEXEN or PORVOO.**
**If unable to comply inform ATC immediately.**

**Traffic inbound IAF LAKUT, ORIMAA or PEXEN:**
**ACC will normally give descent clearance to FL100.**

**Traffic inbound IAF PORVOO:**
**ACC/APP will normally give descent clearance to FL100 (from GOGLA and LEDUN to FL160). If flight level given in FPL is lower than FL100 aircraft shall be cleared to maintain FL90.**

**Traffic inbound from TALLINN airspace:**
**TALLINN ACC/APP will normally give descent clearance via IAF INTOR to FL100. If the flight level given in FPL is lower than FL100 aircraft shall be cleared to maintain FL90.**

**Other directions:**
**ACC will normally give descent clearance to FL100.**

**3. SPEED RESTRICTIONS**
**Speed restrictions to all aircraft:**
**Unless otherwise instructed by ATC the aircraft shall follow speed limit MAX 250 KT at HEL 30 DME.**

**Speed restrictions for RNAV STARs are published on charts concerned.**

**4. ALTITUDE RESTRICTIONS.**
**Unless otherwise cleared by ATC the descent profile shall be planned so that clearance altitude can be reached at HEL 30 DME.**




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# ARRIVAL INSTRUCTIONS

**5. INITIAL CONTACT**
**At first contact with HELSINKI Approach state**
**- designator of the last received ATIS broadcast**
**- type of aircraft**
**- level**
**- RNAV STAR or radar heading given by ATC**

**To avoid frequency congestion when changing from HELSINKI Radar to HELSINKI Arrival state:**
**HELSINKI Arrival + call sign**

**When changing from Approach Control frequency to Tower frequency state:**
**HELSINKI Tower + call sign + runway**

**6. RNAV STAR**
**Final approach can not be performed without appropriate clearance.**
**ATC will give descent clearances.**

**7. INBOUND CLEARANCE**
**Arriving traffic will be cleared normally to follow RNAV STAR serving the runway in use. An aircraft unable to utilize the given RNAV STAR shall inform ATC immediately ("NEGATIVE P-RNAV APPROVAL") and will then be cleared by ATC to leave IAF on radar heading.**

**8. VISUAL APPROACH PROCEDURES**
**Due to VFR traffic flying below IFR traffic an aircraft carrying out visual approach shall maintain an altitude of at least 2000' until HEL 7 DME and established on final.**

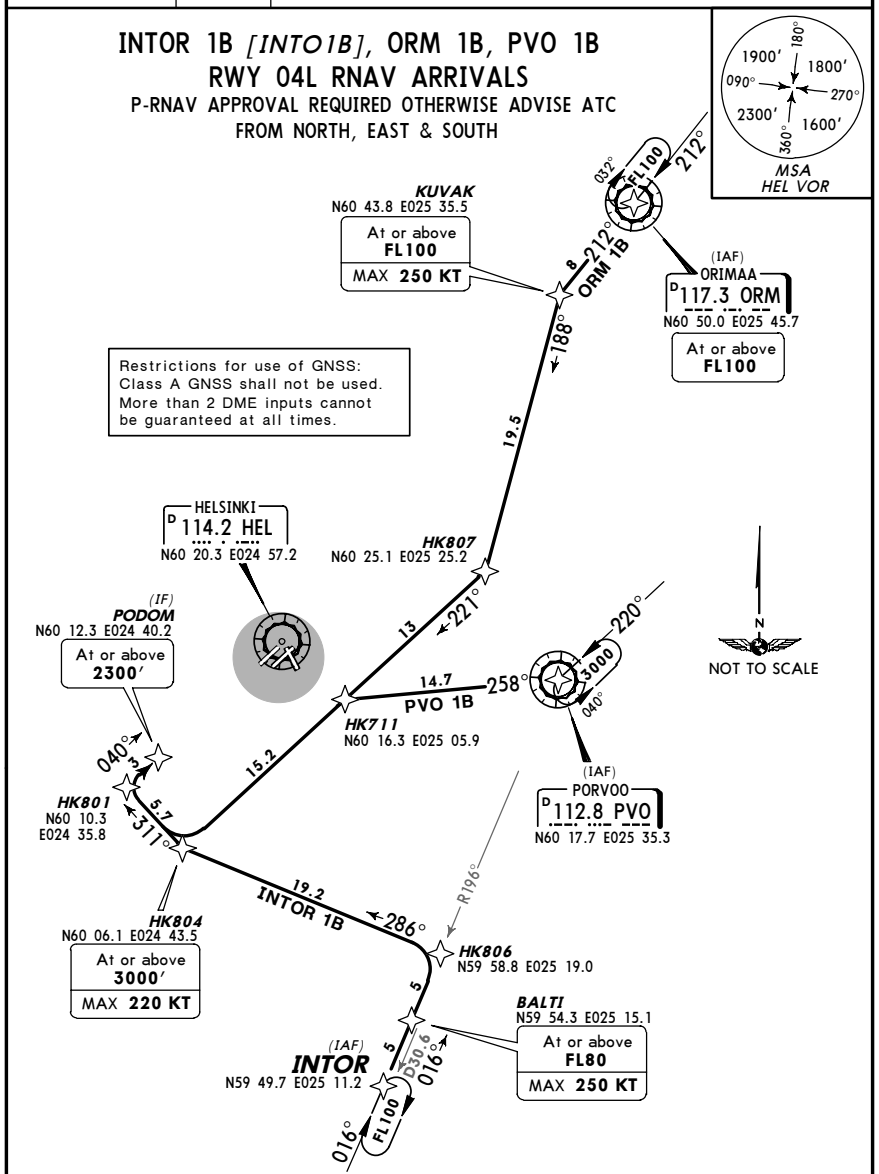
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2B) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev |
|---|---|
| 135.07 | 179′ |

Alt Set: hPa Trans level: By ATC Trans alt: 5000′
**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

## INTOR 1B *[INTO1B]*, ORM 1B, PVO 1B
## RWY 04L RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1B** | INTOR - BALTI **(FL80**+; K250-) - HK806 - HK804 **(3000′**+; K220-) - HK801 - PODOM **(2300′+).** |
| **ORM 1B** | ORM **(FL100+)** - KUVAK **(FL100**+; K250-) - HK807 - HK711 - HK804 **(3000′**+; K220-) - HK801 - PODOM **(2300′+).** |
| **PVO 1B** | PVO - HK711 - HK804 **(3000′**+; K220-) - HK801 - PODOM **(2300′+).** |

*CHANGES:* RNAV TRANS replaced by RNAV STARS; chart redrawn.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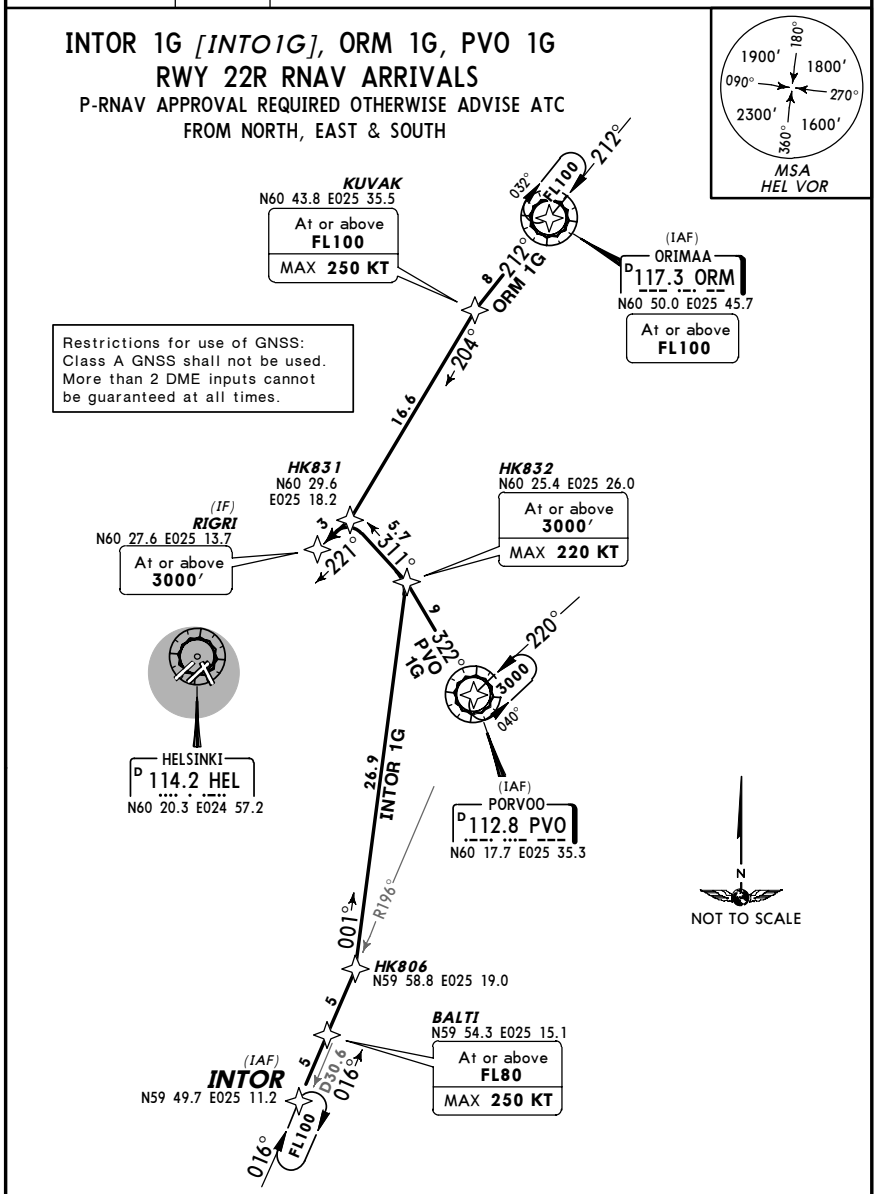
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2C) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev |
|---|---|
| 135.07 | 179′ |

Alt Set: hPa Trans level: By ATC Trans alt: 5000′
**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

## INTOR 1G *[INTO1G]*, ORM 1G, PVO 1G
## RWY 22R RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1G** | INTOR - BALTI **(FL80**+; K250-) - HK806 - HK832 **(3000′**+; K220-) - HK831 - RIGRI **(3000′+).** |
| **ORM 1G** | ORM **(FL100+)** - KUVAK **(FL100**+; K250-) - HK831 - RIGRI **(3000′+).** |
| **PVO 1G** | PVO - HK832 **(3000′**+; K220-) - HK831 - RIGRI **(3000′+).** |

*CHANGES:* RNAV TRANS replaced by RNAV STARS; chart redrawn.
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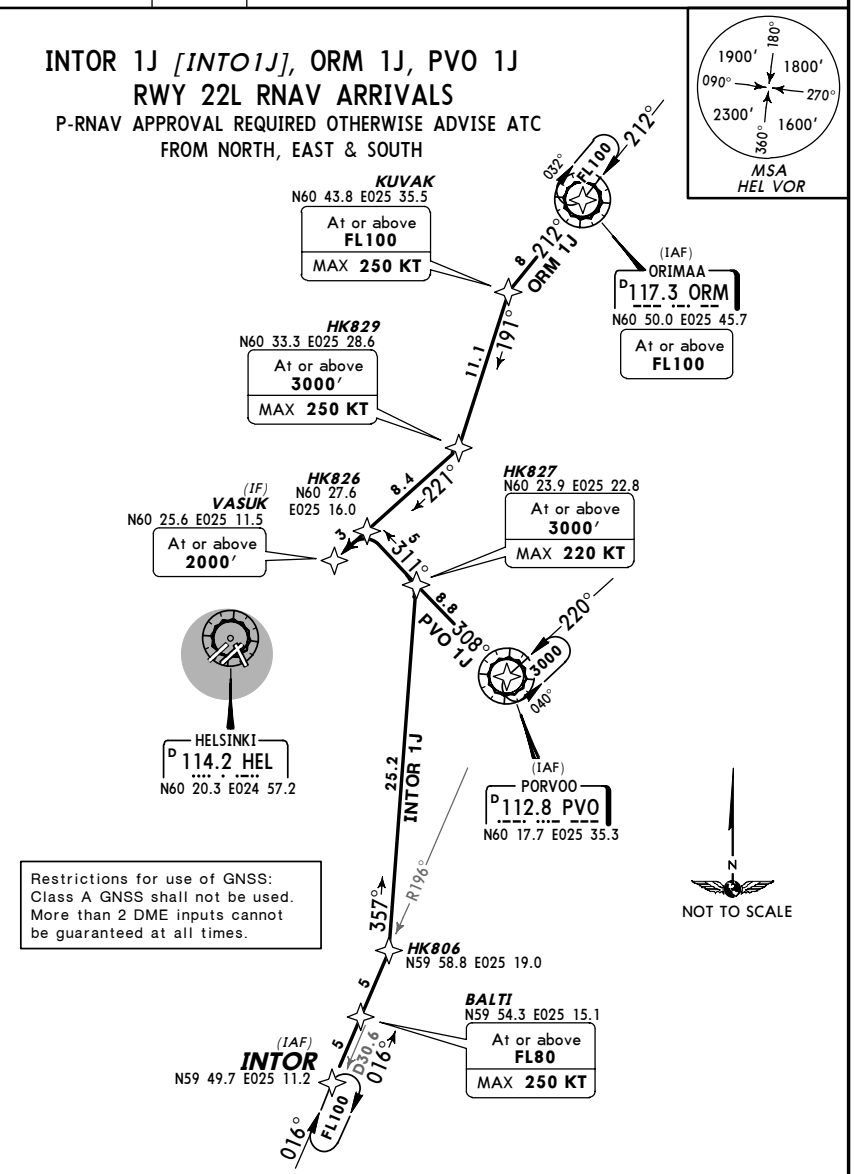
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2D) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev |
|---|---|
| 135.07 | 179′ |

Alt Set: hPa Trans level: By ATC Trans alt: 5000′
**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

## INTOR 1J *[INTO1J]*, ORM 1J, PVO 1J
## RWY 22L RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1J** | INTOR - BALTI **(FL80+;** K250-) - HK806 - HK827 **(3000′+;** K220-) - HK826 - VASUK **(2000′+).** |
| **ORM 1J** | ORM **(FL100+)** - KUVAK **(FL100+;** K250-) - HK829 **(3000′+;** K250-) - HK826 - VASUK **(2000′+).** |
| **PVO 1J** | PVO - HK827 **(3000′+;** K220-) - HK826 - VASUK **(2000′+).** |

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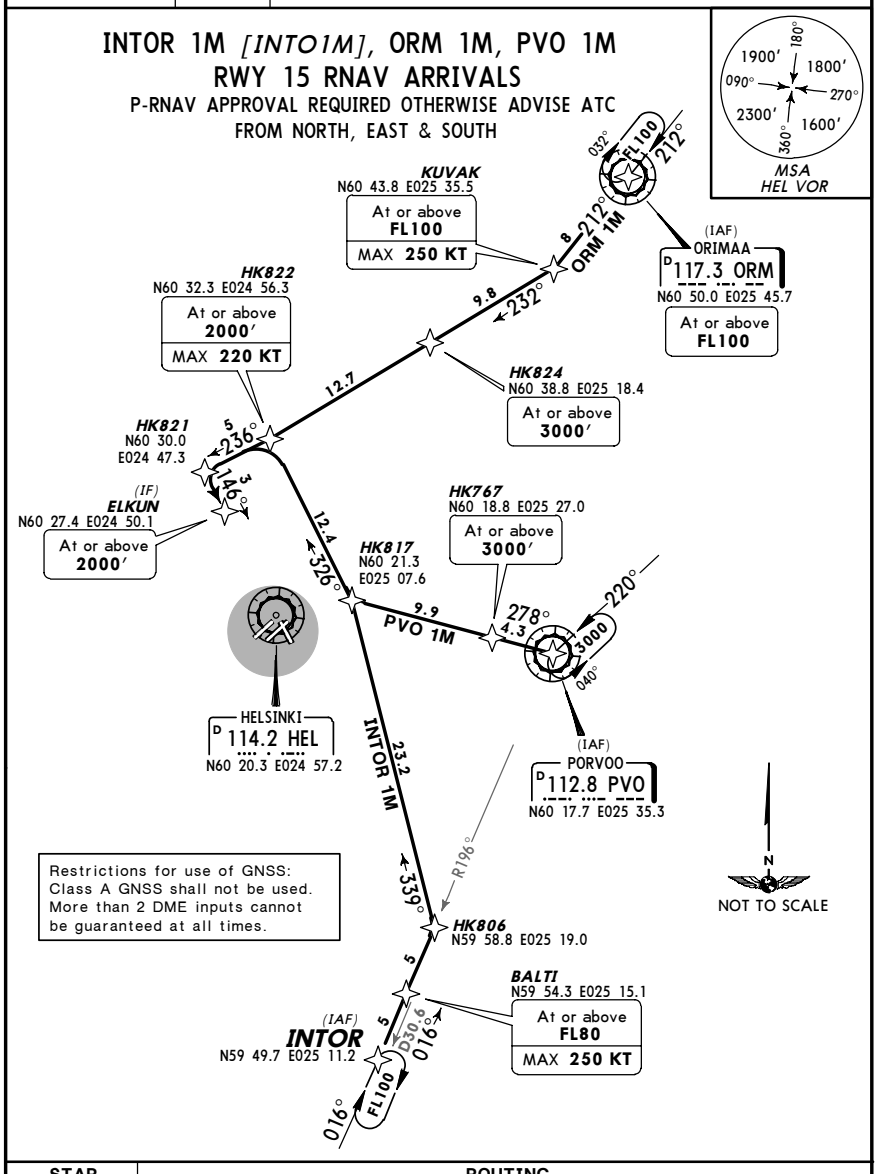
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2E) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev |
|---|---|
| 135.07 | 179′ |

Alt Set: hPa Trans level: By ATC Trans alt: 5000′
**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

## INTOR 1M *[INTO1M]*, ORM 1M, PVO 1M
## RWY 15 RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1M** | INTOR - BALTI **(FL80+;** K250-) - HK806 - HK817 - HK822 **(2000′+;** K220-) - HK821 - ELKUN **(2000′+).** |
| **ORM 1M** | ORM **(FL100+)** - KUVAK **(FL100+;** K250-) - HK824 **(3000′+)** - HK822 **(2000′+;** K220-) - HK821 - ELKUN **(2000′+).** |
| **PVO 1M** | PVO - HK767 **(3000′+)** - HK817 - HK822 **(2000′+;** K220-) - HK821 - ELKUN **(2000′+).** |

# EFHK/HEL VANTAA

RNAV (GNSS - DME/DME)

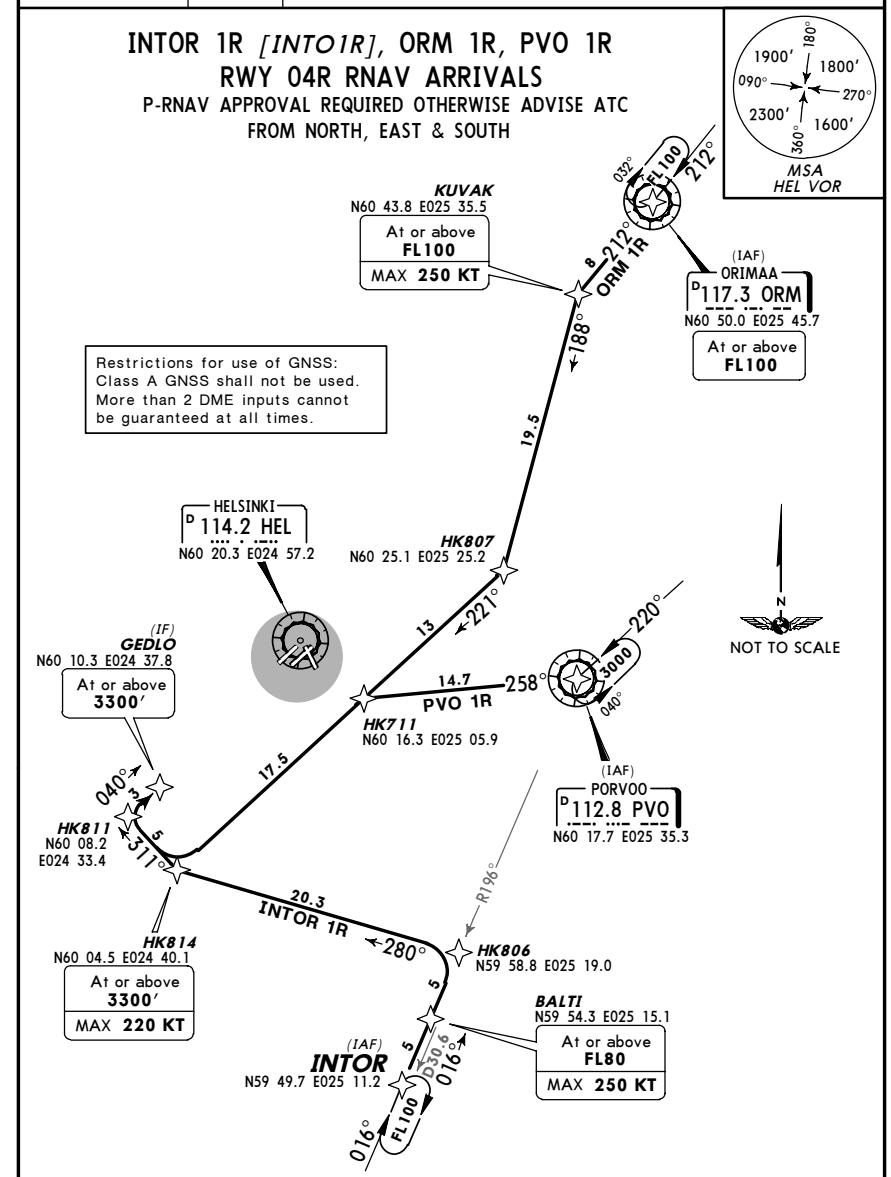
JEPPESEN 11 NOV 05 (10-2F) Eff 24 Nov

# HELSINKI, FINLAND

RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## INTOR 1R *[INTO1R]*, ORM 1R, PVO 1R
## RWY 04R RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1R** | INTOR - BALTI **(FL80+;** K250-) - HK806 - HK814 **(3300′+;** K220-) - HK811 - GEDLO **(3300′+).** |
| **ORM 1R** | ORM **(FL100+)** - KUVAK **(FL100+;** K250-) - HK807 - HK711 - HK814 **(3300′+;** K220-) - HK811 - GEDLO **(3300′+).** |
| **PVO 1R** | PVO - HK711 - HK814 **(3300′+;** K220-) - HK811 - GEDLO **(3300′+).** |

*CHANGES:* RNAV TRANS replaced by RNAV STARS; chart redrawn.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# EFHK/HEL VANTAA

RNAV (GNSS - DME/DME)

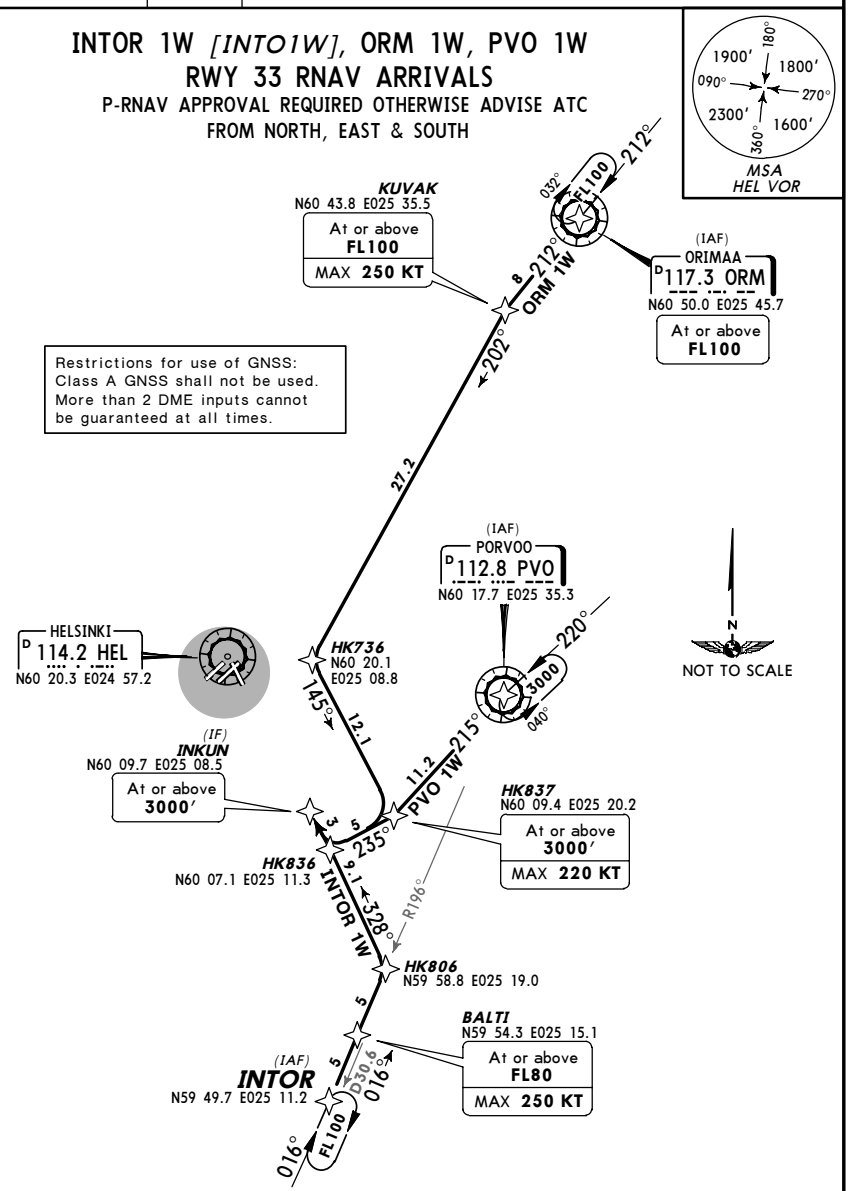
JEPPESEN 11 NOV 05 (10-2G) Eff 24 Nov

# HELSINKI, FINLAND

RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## INTOR 1W *[INTO1W]*, ORM 1W, PVO 1W
## RWY 33 RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH




| STAR | ROUTING |
|---|---|
| **INTOR 1W** | INTOR - BALTI **(FL80+;** K250-) - HK806 - HK836 - INKUN **(3000′+).** |
| **ORM 1W** | ORM **(FL100+)** - KUVAK **(FL100+;** K250-) - HK736 - HK837 **(3000′+;** K220-) - HK836 - INKUN **(3000′+).** |
| **PVO 1W** | PVO - HK837 **(3000′+;** K220-) - HK836 - INKUN **(3000′+).** |

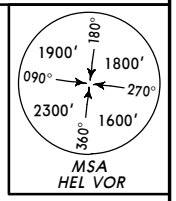
*CHANGES:* RNAV TRANS replaced by RNAV STARS; chart redrawn.

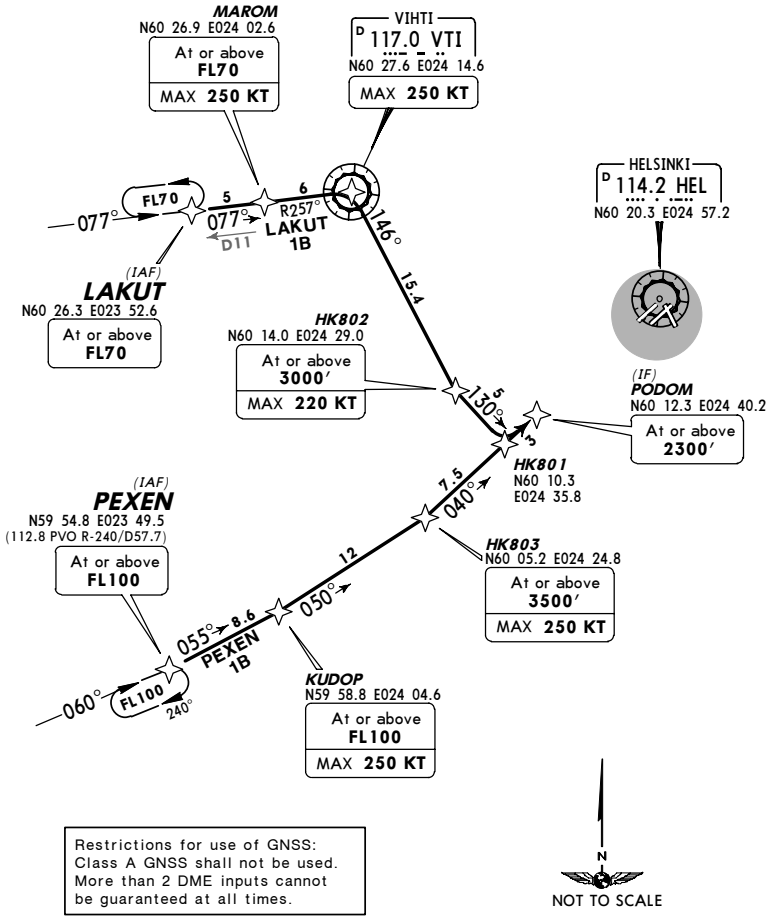
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2H) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1B *[LAKU1B]*, PEXEN 1B *[PEXE1B]*
## RWY 04L RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




Restrictions for use of GNSS:
Class A GNSS shall not be used.
More than 2 DME inputs cannot be guaranteed at all times.

| STAR | ROUTING |
|---|---|
| **LAKUT 1B** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK802 **(3000′+**; K220-) - HK801 - PODOM **(2300′+).** |
| **PEXEN 1B** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK803 **(3500′+**; K250-) - HK801 - PODOM **(2300′+).** |

*CHANGES:* New chart.



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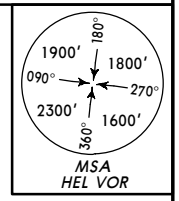
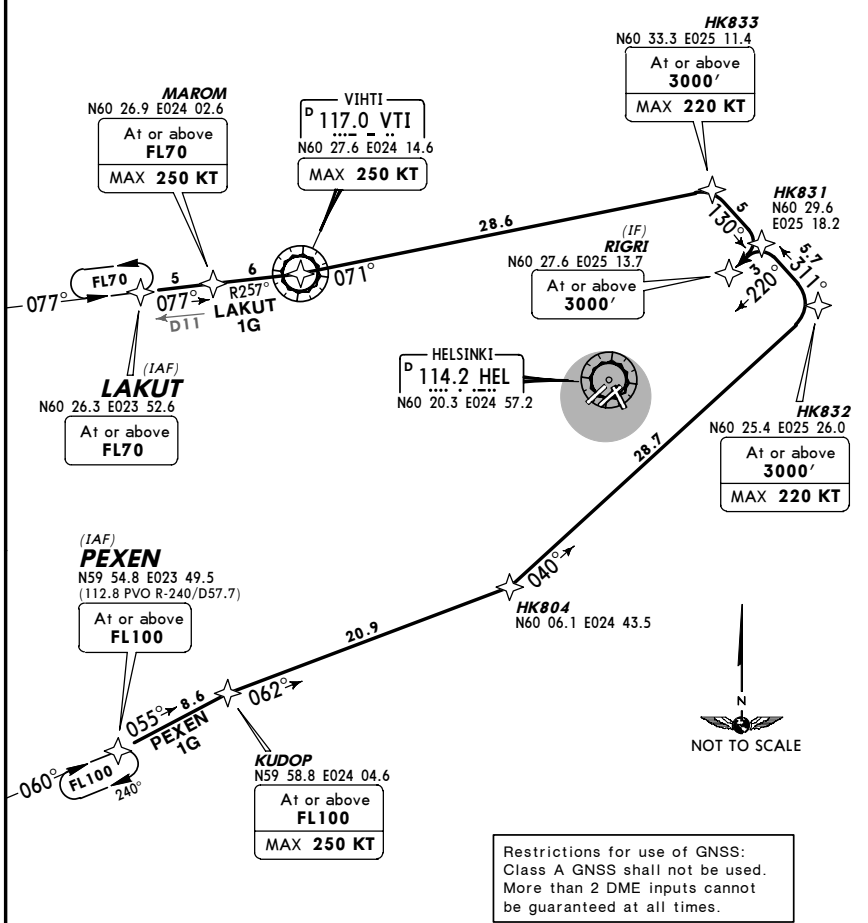
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2J) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1G *[LAKU1G]*, PEXEN 1G *[PEXE1G]*
## RWY 22R RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




Restrictions for use of GNSS:
Class A GNSS shall not be used.
More than 2 DME inputs cannot be guaranteed at all times.

| STAR | ROUTING |
|---|---|
| **LAKUT 1G** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK833 **(3000′+**; K220-) - HK831 - RIGRI **(3000′+).** |
| **PEXEN 1G** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK804 - HK832 **(3000′+**; K220-) - HK831 - RIGRI **(3000′+).** |

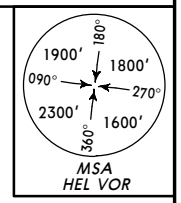
*CHANGES:* New chart.

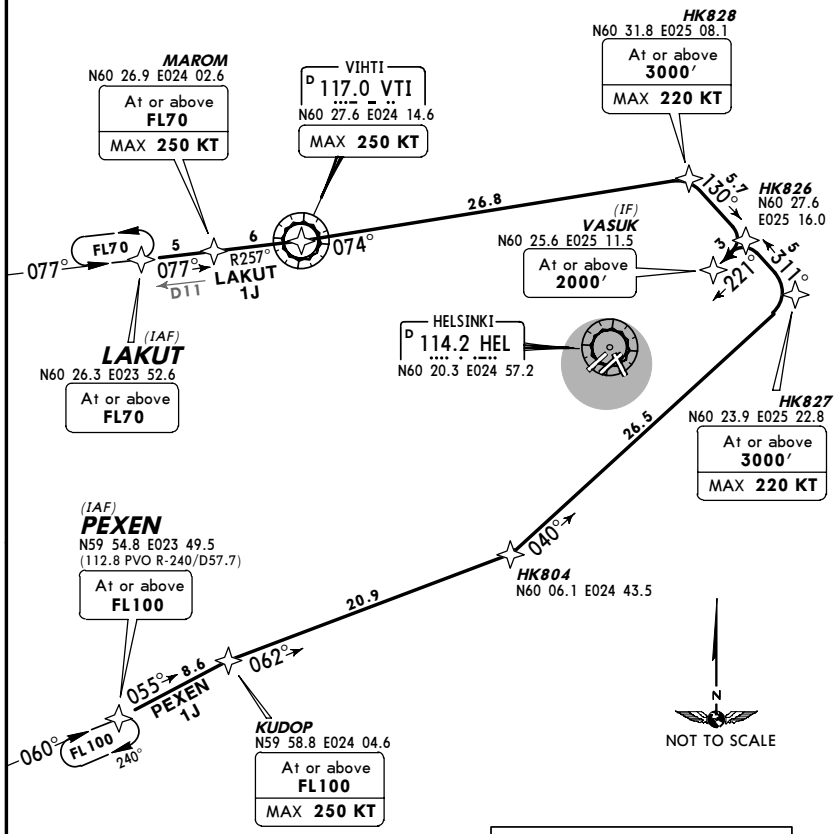
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2K) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1J *[LAKU1J]*, PEXEN 1J *[PEXE1J]*
## RWY 22L RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




Restrictions for use of GNSS:
Class A GNSS shall not be used.
More than 2 DME inputs cannot be guaranteed at all times.

| STAR | ROUTING |
|---|---|
| **LAKUT 1J** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK828 **(3000′+**; K220-) - HK826 - VASUK **(2000′+).** |
| **PEXEN 1J** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK804 - HK827 **(3000′+**; K220-) - HK826 - VASUK **(2000′+).** |

*CHANGES:* New chart.



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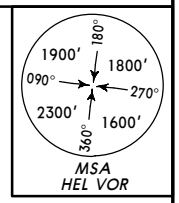
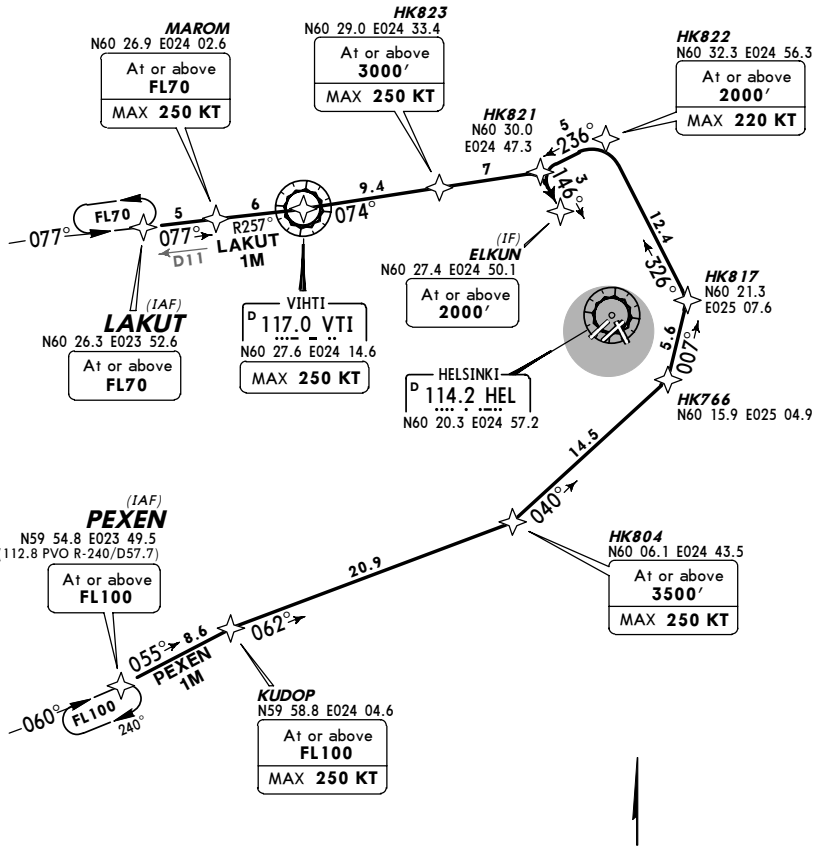
# EFHK/HEL VANTAA — RNAV (GNSS - DME/DME) — HELSINKI, FINLAND

JEPPESEN 11 NOV 05 (10-2L) Eff 24 Nov — RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1M *[LAKU1M]*, PEXEN 1M *[PEXE1M]*
## RWY 15 RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




Restrictions for use of GNSS:
Class A GNSS shall not be used.
More than 2 DME inputs cannot be guaranteed at all times.

| STAR | ROUTING |
|---|---|
| **LAKUT 1M** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK823 **(3000′+**; K250-) - HK821 - ELKUN **(2000′+).** |
| **PEXEN 1M** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK804 **(3500′+**; K250-) - HK766 - HK817 - HK822 **(2000′+**; K220-) - HK821 - ELKUN **(2000′+).** |

*CHANGES:* New chart.

# EFHK/HEL VANTAA

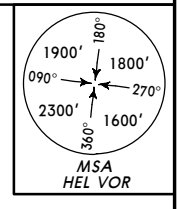
RNAV (GNSS - DME/DME) — JEPPESEN — 11 NOV 05 (10-2M) Eff 24 Nov

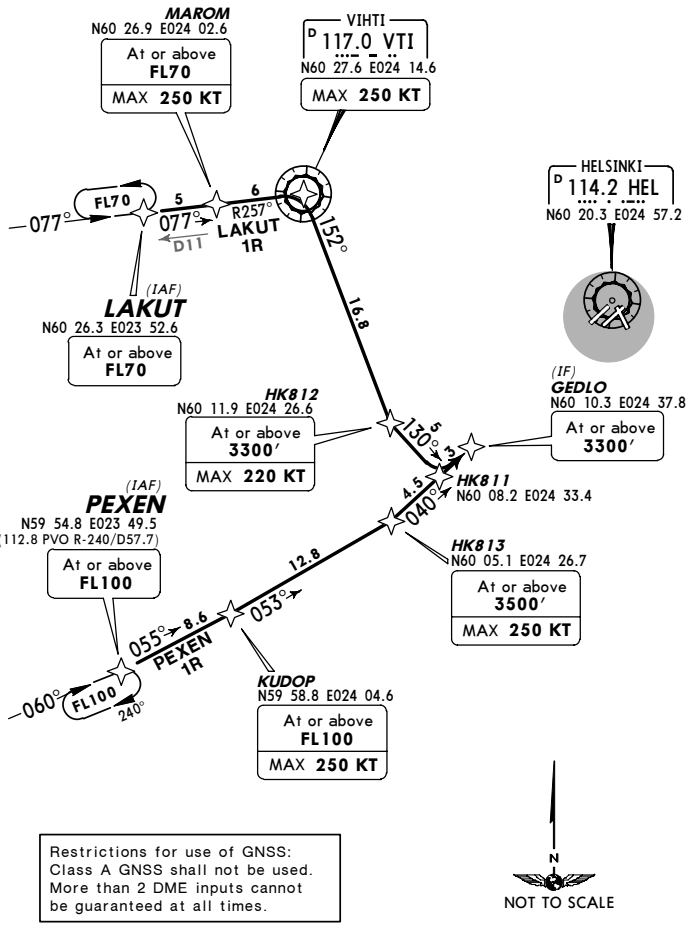
# HELSINKI, FINLAND

RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1R *[LAKU1R]*, PEXEN 1R *[PEXE1R]*
## RWY 04R RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




| STAR | ROUTING |
|---|---|
| **LAKUT 1R** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK812 **(3300′+**; K220-) - HK811 - GEDLO **(3300′+).** |
| **PEXEN 1R** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK813 **(3500′+**; K250-) - HK811 - GEDLO **(3300′+).** |

*CHANGES:* New chart.



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# EFHK/HEL VANTAA

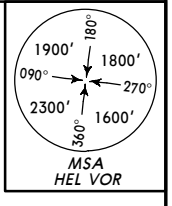
RNAV (GNSS - DME/DME) — JEPPESEN — 11 NOV 05 (10-2N) Eff 24 Nov

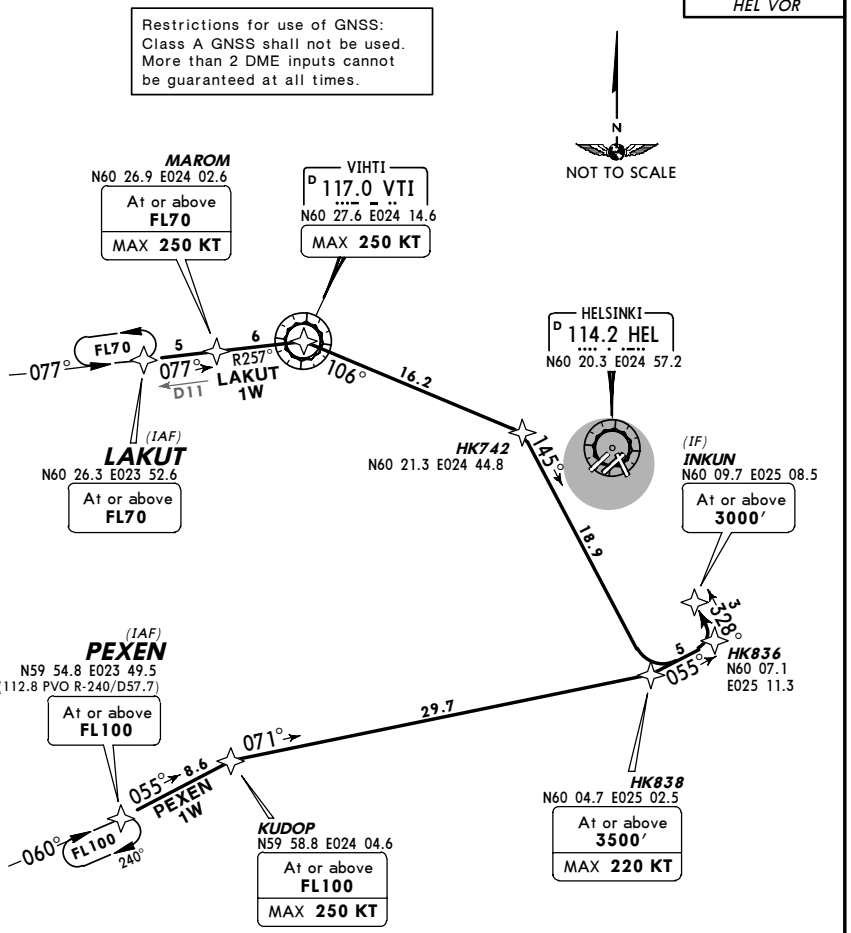
# HELSINKI, FINLAND

RNAV STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa Trans level: By ATC Trans alt: 5000′<br>**1.** ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.<br>**2.** STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required. |

## LAKUT 1W *[LAKU1W]*, PEXEN 1W *[PEXE1W]*
## RWY 33 RNAV ARRIVALS
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST




| STAR | ROUTING |
|---|---|
| **LAKUT 1W** | LAKUT **(FL70+) -** MAROM **(FL70+**; K250-) - VTI (K250-) - HK742 - HK838 **(3500′+**; K220-) - HK836 - INKUN **(3000′+).** |
| **PEXEN 1W** | PEXEN **(FL100+)** - KUDOP **(FL100+**; K250-) - HK838 **(3500′+**; K220-) - HK836 - INKUN **(3000′+).** |

*CHANGES:* New chart.

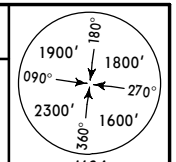
# EFHK/HEL VANTAA

JEPPESEN
11 NOV 05 (10-2P) Eff 24 Nov

# HELSINKI, FINLAND

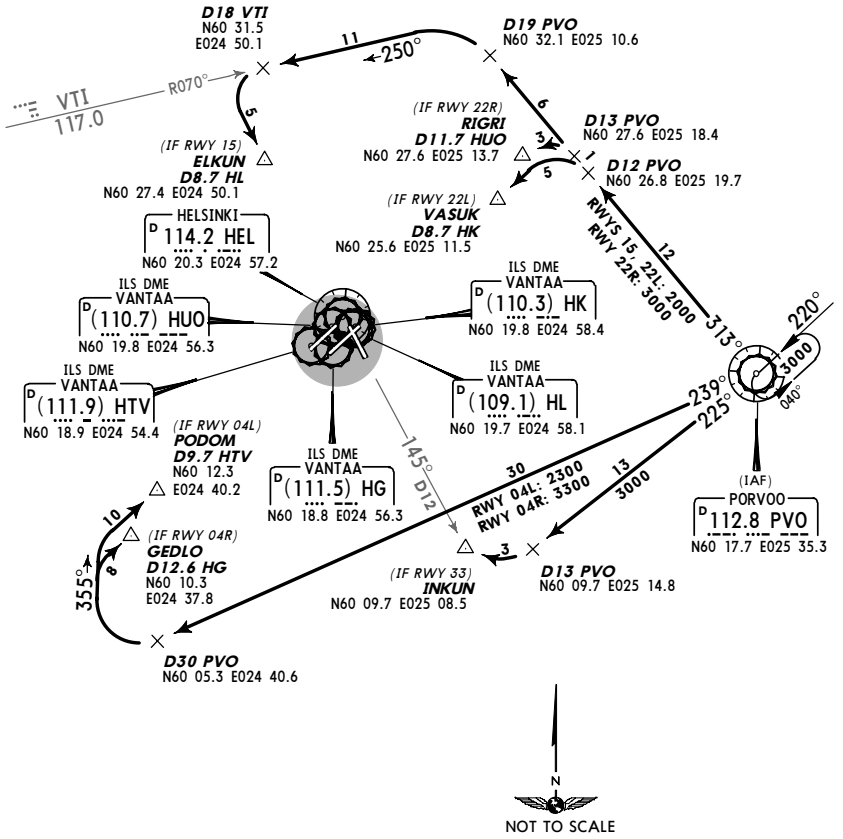
STAR

| D-ATIS | Apt Elev | |
|---|---|---|
| 135.07 | 179′ | Alt Set: hPa<br>Trans level: By ATC Trans alt: 5000′ |



MSA
HEL VOR

## RWYS 04L/R, 15, 22L/R, 33
## NON-RNAV LOST COMM PROCEDURES
DME AND VOR REQUIRED
CONVENTIONAL INITIAL APCH PROCEDURE FROM PVO FOR ALL RWYS




**LOST COMM ROUTING**

If RNAV STAR has been given and acknowledged follow STAR to the respective RWY and execute instrument approach and land.

During radar vectoring after IAF proceed to PVO holding at last assigned and acknowledged altitude/FL or MHA if higher. Leave holding at **3000′** (RWY 04R: **3300′**) according to current flight plan ETA and execute instrument approach for last acknowledged RWY.

Aircraft equipped with onboard telephone dial +358 9 8277 3324.

RNAV aircraft use RNAV STAR to join instrument approach.

*CHANGES:* New chart.



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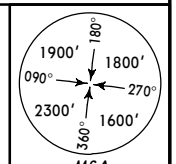
# EFHK/HEL VANTAA

JEPPESEN
30 DEC 05 (10-3)

# HELSINKI, FINLAND

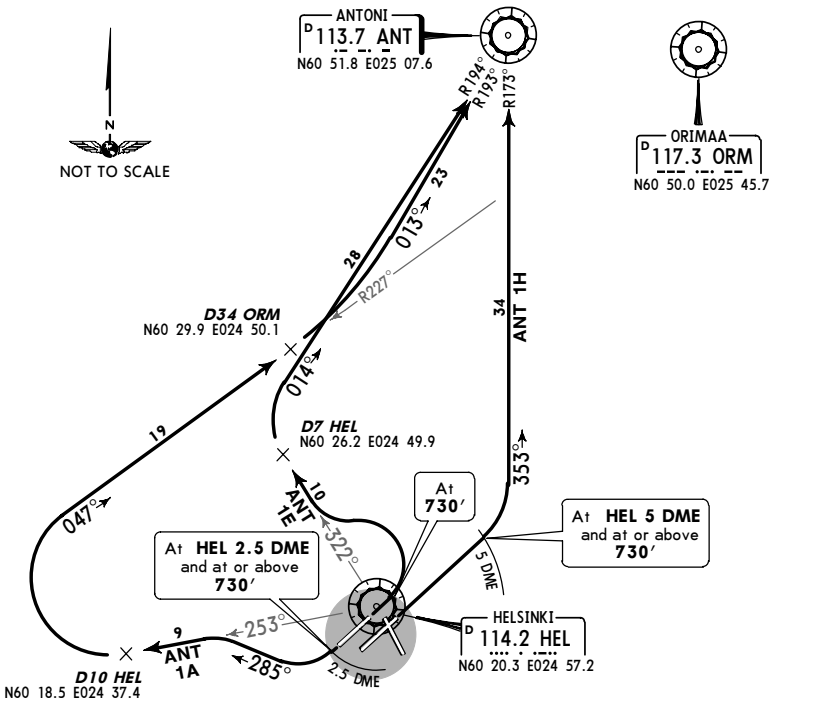
SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWYS 22R, 04R: EXPECT close-in obstacles. |



MSA
HEL VOR

## ANT 1A, ANT 1E, ANT 1H
## RWYS 22R, 04L/R DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **ANT 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to D10 HEL, turn RIGHT, intercept ORM R-227 inbound to D34 ORM, turn LEFT, intercept ANT R-193 inbound to ANT. |
| **ANT 1E** | **04L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-322 to D7 HEL, turn RIGHT, intercept ANT R-194 inbound to ANT. |
| **ANT 1H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn LEFT, intercept ANT R-173 inbound to ANT. |

*CHANGES:* SID ANT 1H text description.

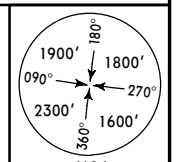
# EFHK/HEL
VANTAA

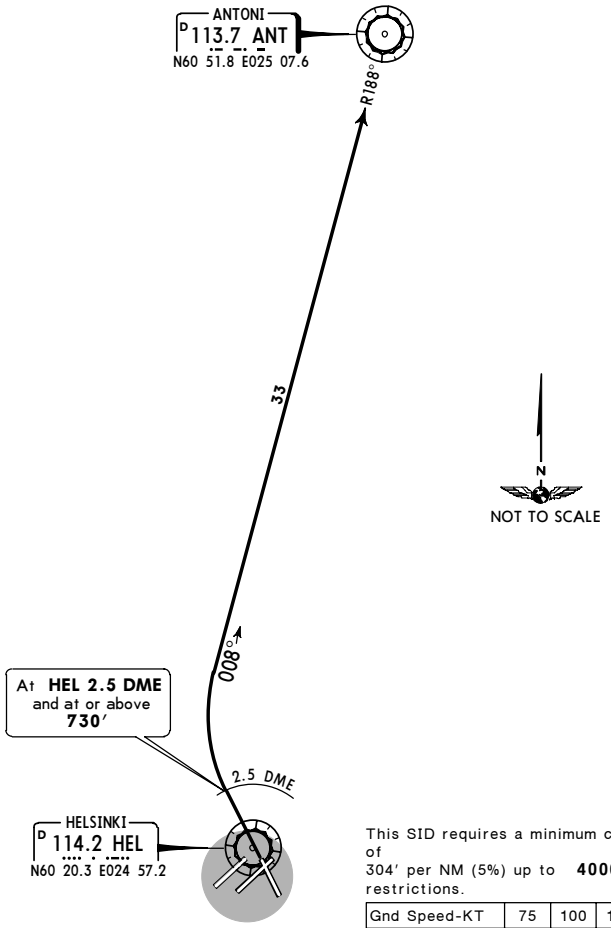
JEPPESEN
30 DEC 05 (10-3A)

# HELSINKI, FINLAND
SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. |

## ANT 1V
## RWY 33 DEPARTURE
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




This SID requires a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

**ROUTING**

Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, intercept ANT R-188 inbound to ANT.

*CHANGES:* None.





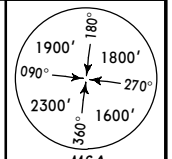
# EFHK/HEL
VANTAA

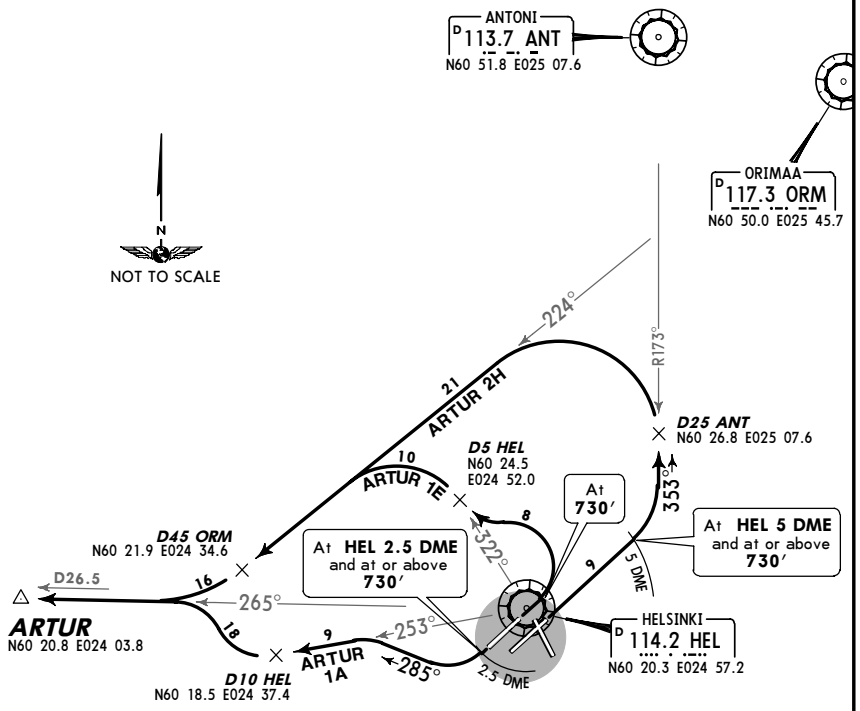
JEPPESEN
10 NOV 06 (10-3B) Eff 23 Nov

# HELSINKI, FINLAND
SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWYS 22R, 04R: EXPECT close-in obstacles. |

## ARTUR 1A *[ARTU1A]*, ARTUR 1E *[ARTU1E]*
## ARTUR 2H *[ARTU2H]*
## RWYS 22R, 04L/R DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **ARTUR 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to D10 HEL, turn RIGHT, intercept HEL R-265 to ARTUR. |
| **ARTUR 1E** | **04L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-322 to D5 HEL, turn LEFT, intercept ORM R-224 to D45 ORM, turn RIGHT, intercept HEL R-265 to ARTUR. |
| **ARTUR 2H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn LEFT, intercept ANT R-173 inbound to D25 ANT, turn LEFT, intercept ORM R-224 to D45 ORM, turn RIGHT, intercept HEL R-265 to ARTUR. |

*CHANGES:* SID ARTUR 1H renumbered 2H, crossing withdrawn.

# EFHK/HEL VANTAA

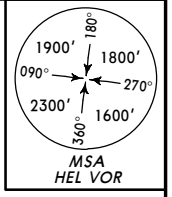
JEPPESEN 10 NOV 06 (10-3C) Eff 23 Nov

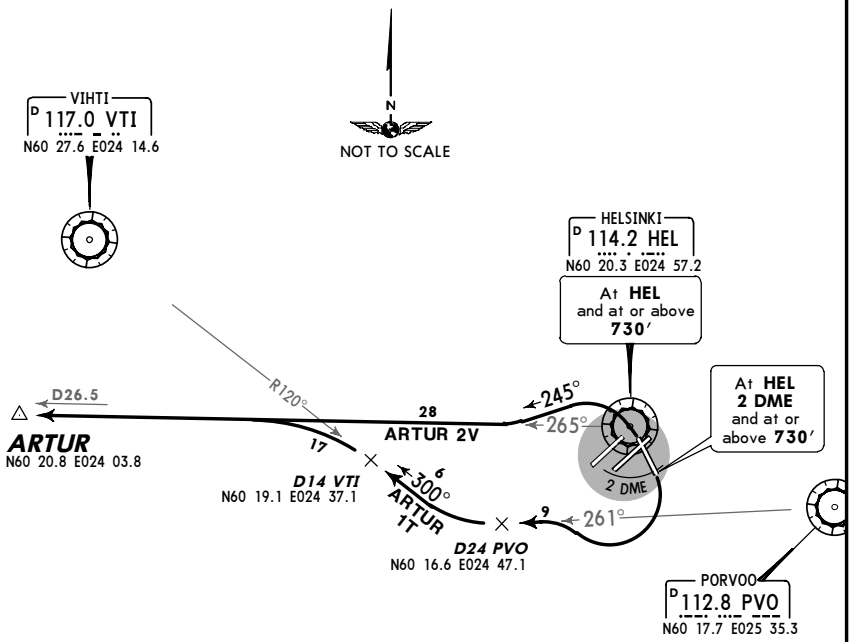
# HELSINKI, FINLAND

SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles. |

## ARTUR 1T *[ARTU1T]*, ARTUR 2V *[ARTU2V]*
## RWYS 15, 33 DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **ARTUR 1T** | **15** | Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, intercept PVO R-261 to D24 PVO, turn RIGHT, intercept VTI R-120 inbound to D14 VTI, turn LEFT, intercept HEL R-265 to ARTUR. |
| **ARTUR 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn LEFT, 245° track, intercept HEL R-265 to ARTUR. |

*CHANGES:* SID ARTUR 1V renumbered 2V, crossing withdrawn.



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# EFHK/HEL VANTAA

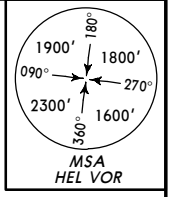
JEPPESEN 16 NOV 07 (10-3D) Eff 22 Nov

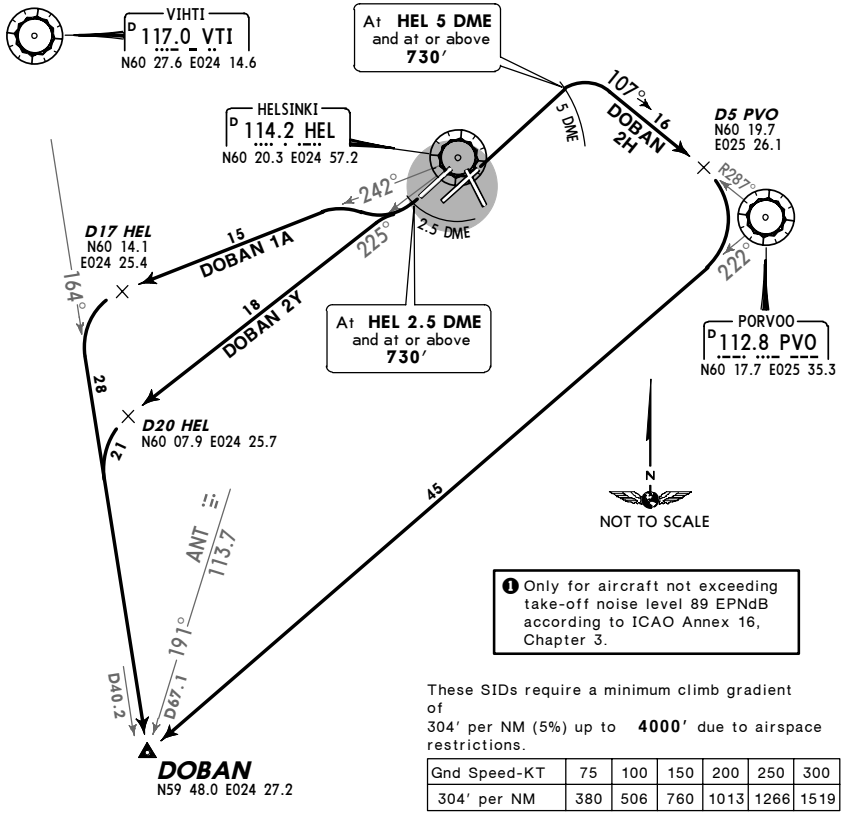
# HELSINKI, FINLAND

SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 119.1 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles. |

## DOBAN 1A *[DOBA1A]*, DOBAN 2H *[DOBA2H]*
## DOBAN 2Y *[DOBA2Y]*
## RWYS 22R, 04R DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




ⓘ Only for aircraft not exceeding take-off noise level 89 EPNdB according to ICAO Annex 16, Chapter 3.

These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **DOBAN 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, intercept HEL R-242 to D17 HEL, turn LEFT, intercept VTI R-164 to DOBAN. |
| **DOBAN 2H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn RIGHT, intercept PVO R-287 inbound to D5 PVO, turn RIGHT, intercept PVO R-222 to DOBAN. |
| **DOBAN 2Y** ⓘ | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, intercept HEL R-225 to D20 HEL, turn LEFT, intercept VTI R-164 to DOBAN. |

*CHANGES:* None.

# EFHK/HEL VANTAA

JEPPESEN 16 NOV 07 (10-3E) Eff 22 Nov

# HELSINKI, FINLAND

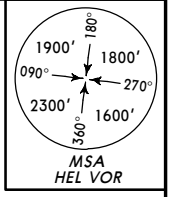
SID

| HELSINKI Radar | Apt Elev |
|---|---|
| 119.1 | 179′ |

Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles.

## DOBAN 1T *[DOBA1T]*
## DOBAN 2V *[DOBA2V]*
## RWYS 15, 33 DEPARTURES

***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***







These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **DOBAN 1T** | **15** | Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, intercept PVO R-261 to D28 PVO, turn LEFT, intercept HEL R-242 to D18 HEL, turn LEFT, intercept VTI R-164 to DOBAN. |
| **DOBAN 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn LEFT, 235° track, intercept HEL R-253 to D16 HEL, turn LEFT, intercept VTI R-164 to DOBAN. |

*CHANGES:* SID DOBAN 1K withdrawn.



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# EFHK/HEL VANTAA

JEPPESEN 16 NOV 07 (10-3F) Eff 22 Nov

# HELSINKI, FINLAND

SID

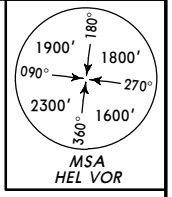
| HELSINKI Radar | Apt Elev |
|---|---|
| 119.1 | 179′ |

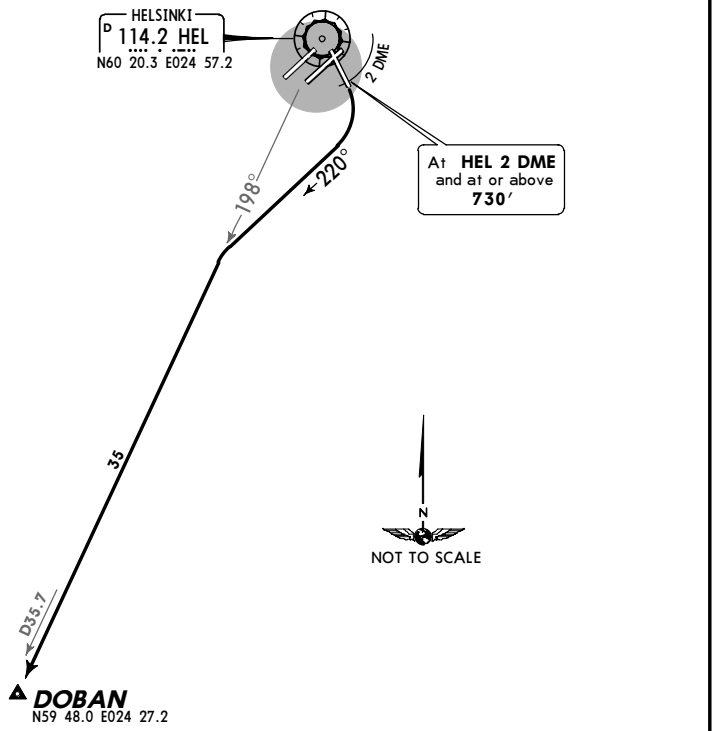
Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles.

## DOBAN 1L *[DOBA1L]*
## RWY 15 DEPARTURE

PROP/TURBOPROP ONLY
ONLY FOR ACFT NOT EXCEEDING TAKE-OFF NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3

***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




This SID requires a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

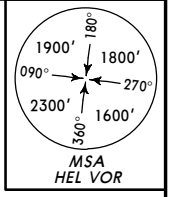
**ROUTING**

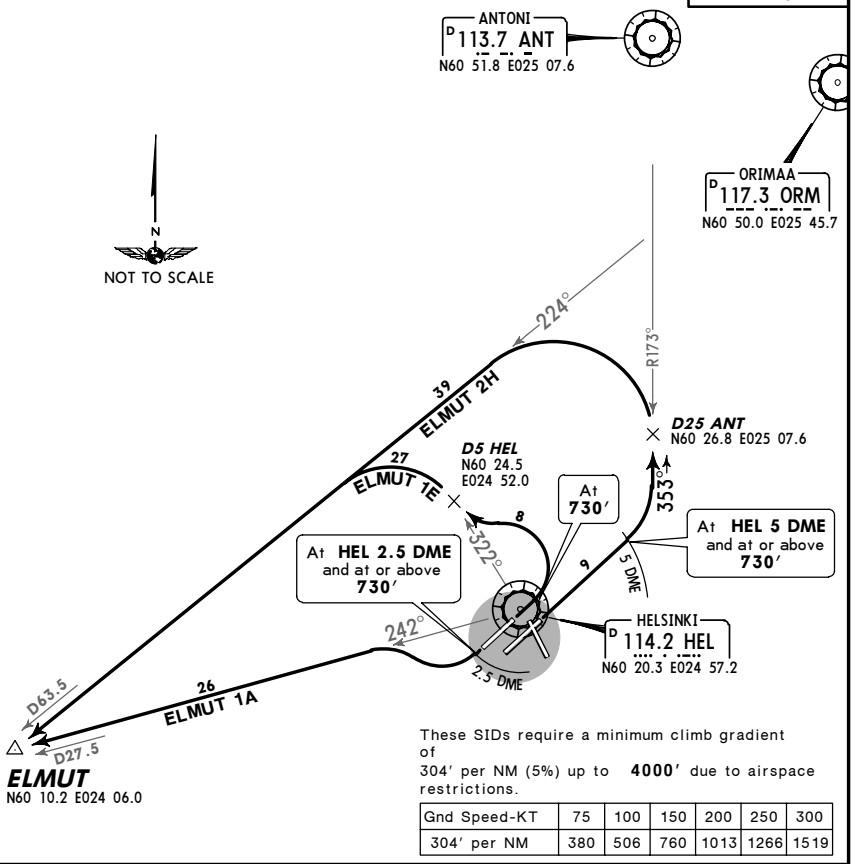
Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, 220° track, intercept HEL R-198 to DOBAN.

*CHANGES:* SID DOBAN 1X withdrawn.

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWYS 22R, 04R: EXPECT close-in obstacles. |

## ELMUT 1A *[ELMU1A]*, ELMUT 1E *[ELMU1E]*
## ELMUT 2H *[ELMU2H]*
## RWYS 22R, 04L/R DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **ELMUT 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, intercept HEL R-242 to ELMUT. |
| **ELMUT 1E** | **04L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-322 to D5 HEL, turn LEFT, intercept ORM R-224 to ELMUT. |
| **ELMUT 2H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn LEFT, intercept ANT R-173 inbound to D25 ANT, turn LEFT, intercept ORM R-224 to ELMUT. |

*CHANGES:* None.



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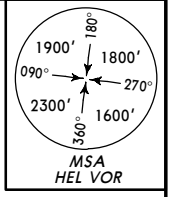
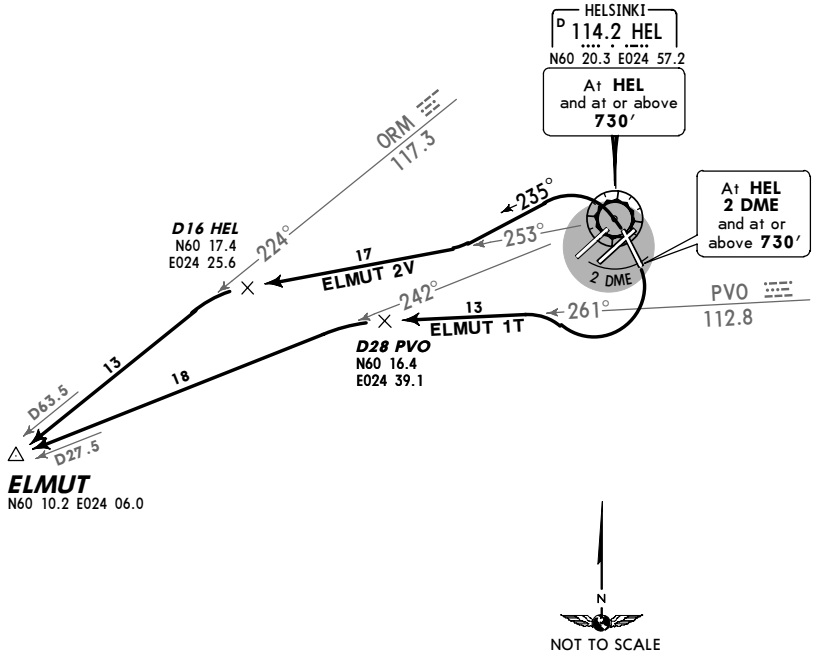
| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles. |

## ELMUT 1T *[ELMU1T]*, ELMUT 2V *[ELMU2V]*
## RWYS 15, 33 DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **ELMUT 1T** | **15** | Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, intercept PVO R-261 to D28 PVO, turn LEFT, intercept HEL R-242 to ELMUT. |
| **ELMUT 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn LEFT, 235° track, intercept HEL R-253 to D16 HEL, turn LEFT, intercept ORM R-224 to ELMUT. |

*CHANGES:* SID ELMUT 1V renumbered 2V, crossing withdrawn.

# EFHK/HEL
## VANTAA

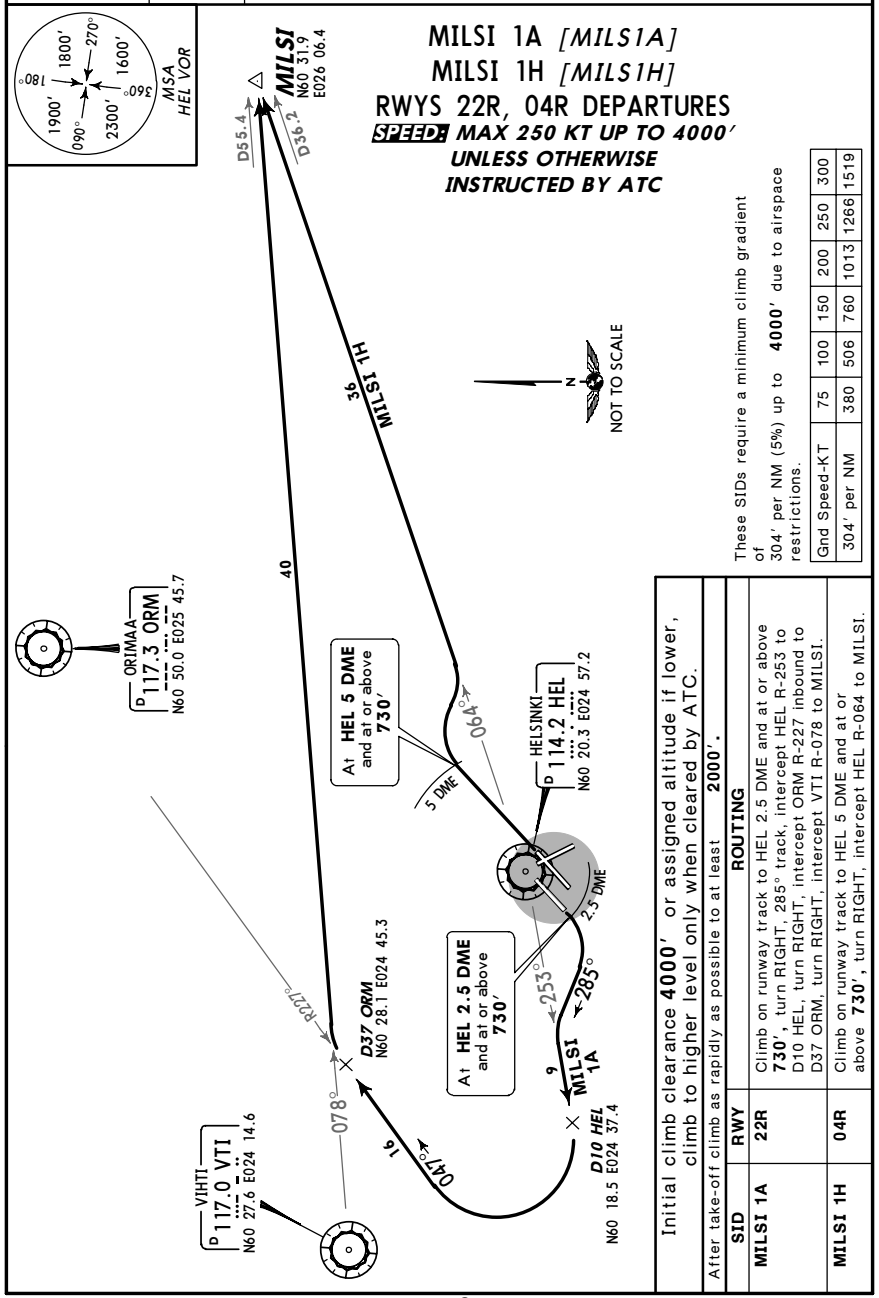
JEPPESEN
10 NOV 06 (10-3J) Eff 23 Nov

# HELSINKI, FINLAND
SID

| HELSINKI Radar<br>MILSI 1A:<br>129.85<br>MILSI 1H:<br>119.1 | Apt Elev<br>179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles. |
|---|---|---|

MSA
HEL VOR
1900′ 1800′ 270° 1600′ 2300′ 090° 180° 360°

## MILSI 1A *[MILS1A]*
## MILSI 1H *[MILS1H]*
## RWYS 22R, 04R DEPARTURES
**SPEED: MAX 250 KT UP TO 4000′ UNLESS OTHERWISE INSTRUCTED BY ATC**




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **MILSI 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to D10 HEL, turn RIGHT, intercept ORM R-227 inbound to D37 ORM, turn RIGHT, intercept VTI R-078 to MILSI. |
| **MILSI 1H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn RIGHT, intercept HEL R-064 to MILSI. |

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# EFHK/HEL
## VANTAA

JEPPESEN
16 NOV 07 (10-3K) Eff 22 Nov

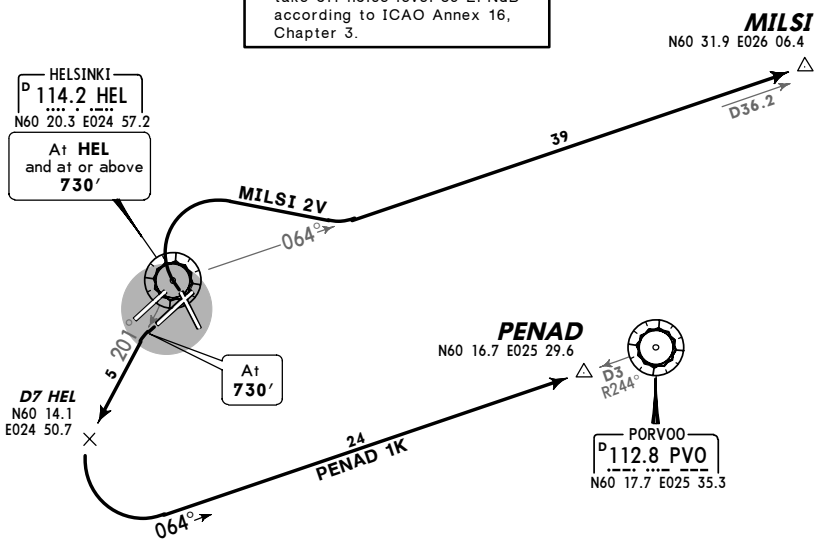
# HELSINKI, FINLAND
SID

| HELSINKI Radar<br>119.1 | Apt Elev<br>179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 22L: EXPECT close-in obstacles. |
|---|---|---|

MSA
HEL VOR
1900′ 1800′ 180° 090° 270° 2300′ 1600′ 360°

## MILSI 2V *[MILS2V]*, PENAD 1K *[PENA1K]* ❶
## RWYS 33, 22L DEPARTURES
**SPEED: MAX 250 KT UP TO 4000′ UNLESS OTHERWISE INSTRUCTED BY ATC**

❶ Only for aircraft not exceeding take-off noise level 89 EPNdB according to ICAO Annex 16, Chapter 3.




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **MILSI 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn RIGHT, intercept HEL R-064 to MILSI. |
| **PENAD 1K** ❶ | **22L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-201 to D7 HEL, turn LEFT, intercept PVO R-244 inbound to PENAD. |

# EFHK/HEL VANTAA

JEPPESEN 16 NOV 07 (10-3L) Eff 22 Nov

# HELSINKI, FINLAND

SID

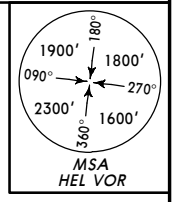
| HELSINKI Radar | Apt Elev |
|---|---|
| 129.85 | 179′ |

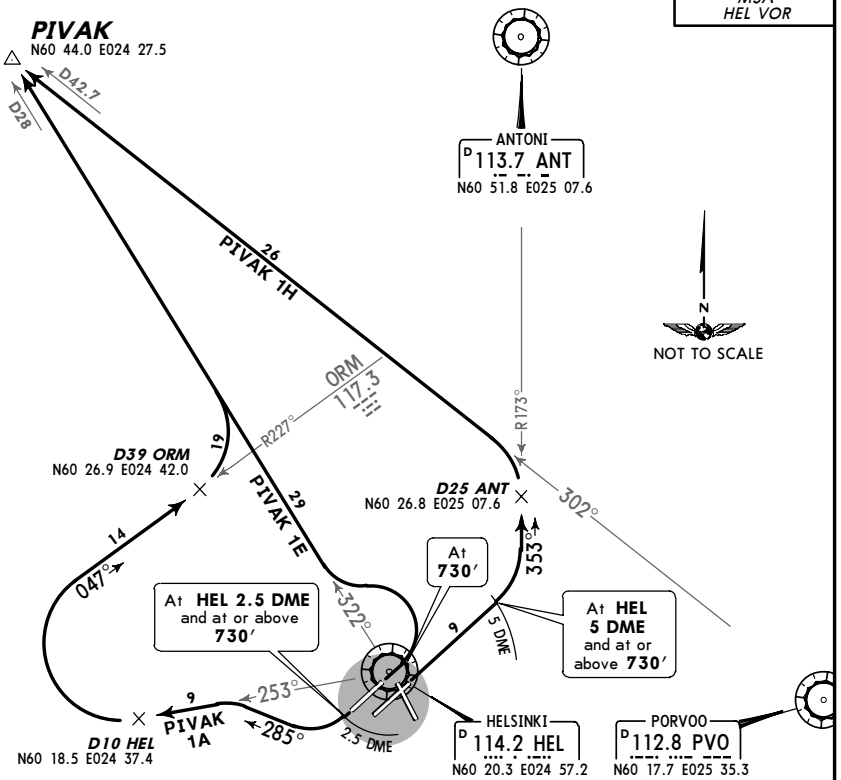
Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWYS 22R, 04R: EXPECT close-in obstacles.

## PIVAK 1A *[PIVA1A]*, PIVAK 1E *[PIVA1E]* PIVAK 1H *[PIVA1H]*

## RWYS 22R, 04L/R DEPARTURES

***SPEED: MAX 250 KT UP TO 4000′ UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **PIVAK 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to D10 HEL, turn RIGHT, intercept ORM R-227 inbound to D39 ORM, turn LEFT, intercept HEL R-322 to PIVAK. |
| **PIVAK 1E** | **04L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-322 to PIVAK. |
| **PIVAK 1H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn LEFT, intercept ANT R-173 inbound to D25 ANT, turn LEFT, intercept PVO R-302 to PIVAK. |

*CHANGES:* None.



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# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (10-3M) Eff 24 Nov

# HELSINKI, FINLAND

SID

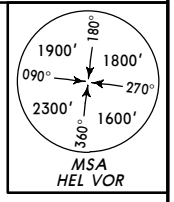
| HELSINKI Radar | Apt Elev |
|---|---|
| 129.85 | 179′ |

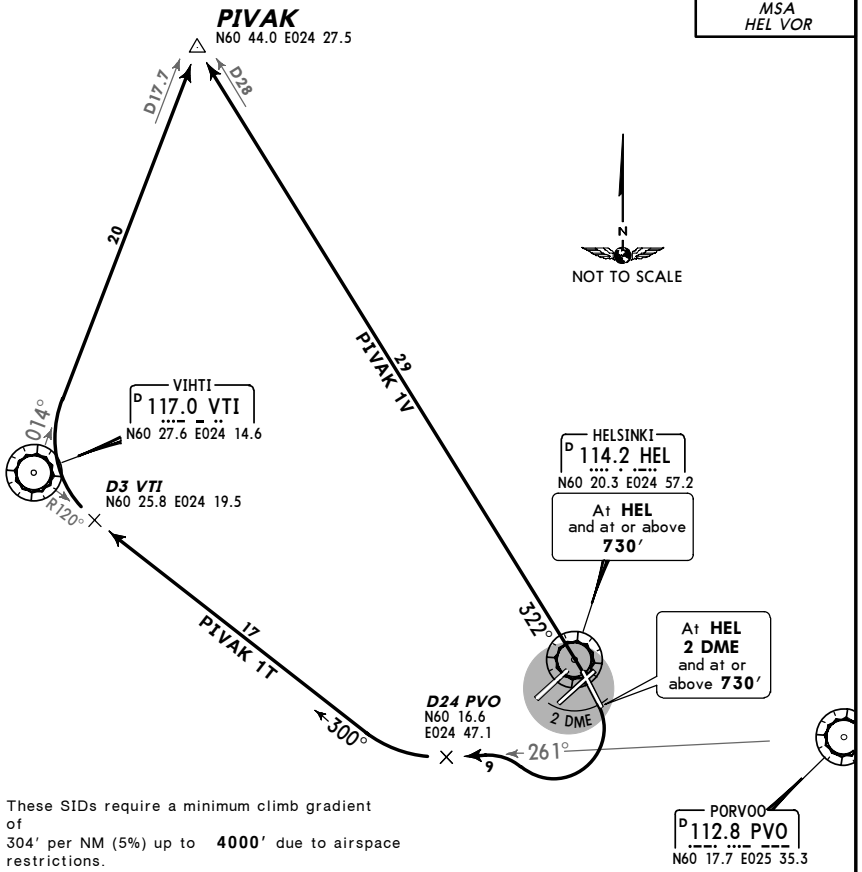
Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles.

## PIVAK 1T *[PIVA1T]*, PIVAK 1V *[PIVA1V]*

## RWYS 15, 33 DEPARTURES

***SPEED: MAX 250 KT UP TO 4000′ UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **PIVAK 1T** | **15** | Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, intercept PVO R-261 to D24 PVO, turn RIGHT, intercept VTI R-120 inbound to D3 VTI, turn RIGHT, intercept VTI R-014 to PIVAK. |
| **PIVAK 1V** | **33** | Climb on runway track to HEL and at or above **730′,** HEL R-322 to PIVAK. |

*CHANGES:* SIDs completely revised; chart redrawn.

# EFHK/HEL VANTAA

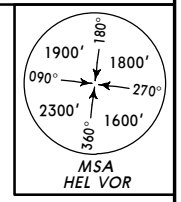
JEPPESEN 11 NOV 05 (10-3N) Eff 24 Nov

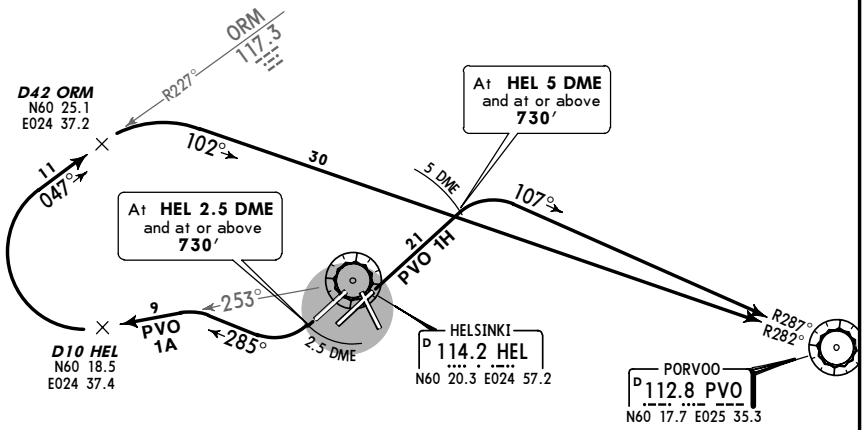
# HELSINKI, FINLAND

SID

| HELSINKI Radar PVO 1A: 129.85 PVO 1H: 119.1 | Apt Elev 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles. |
|---|---|---|

## PVO 1A, PVO 1H
## RWYS 22R, 04R DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***





These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **PVO 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to D10 HEL, turn RIGHT, intercept ORM R-227 inbound to D42 ORM, turn RIGHT, intercept PVO R-282 inbound to PVO. |
| **PVO 1H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn RIGHT, intercept PVO R-287 inbound to PVO. |

*CHANGES:* SIDs completely revised.



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# EFHK/HEL VANTAA

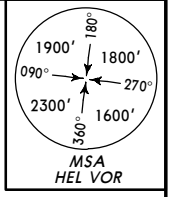
JEPPESEN 16 NOV 07 (10-3P) Eff 22 Nov

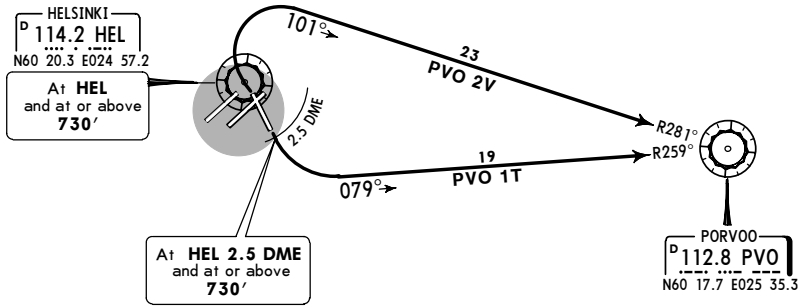
# HELSINKI, FINLAND

SID

| HELSINKI Radar 119.1 | Apt Elev 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles. |
|---|---|---|

## PVO 1T, PVO 2V
## RWYS 15, 33 DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***





These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **PVO 1T** | **15** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn LEFT, intercept PVO R-259 inbound to PVO. |
| **PVO 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn RIGHT, intercept PVO R-281 inbound to PVO. |

*CHANGES:* SID PVO 1K withdrawn.

# EFHK/HEL
## VANTAA

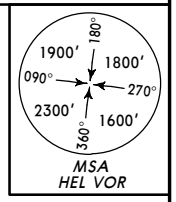
JEPPESEN
16 NOV 07 (10-3Q) Eff 22 Nov

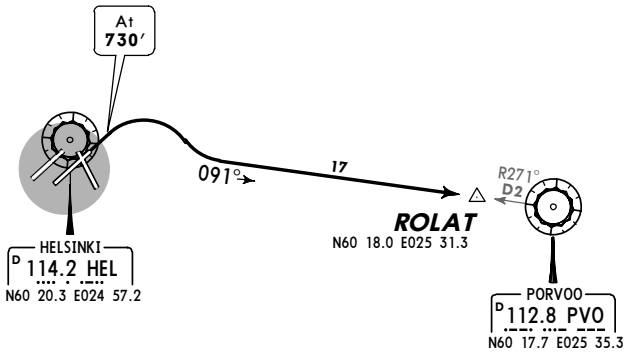
# HELSINKI, FINLAND
SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 119.1 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles. |

## ROLAT 1X *[ROLA1X]*
## RWY 04R DEPARTURE

PROP/TURBOPROP ONLY
ONLY FOR ACFT NOT EXCEEDING TAKE-OFF NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***





This SID requires a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

**ROUTING**

Climb on runway track to **730′,** turn RIGHT, intercept PVO R-271 inbound to ROLAT.

*CHANGES:* SID PVO 2X replaced by ROLAT 1X.



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# EFHK/HEL
## VANTAA

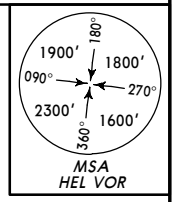
JEPPESEN
10 NOV 06 (10-3S) Eff 23 Nov

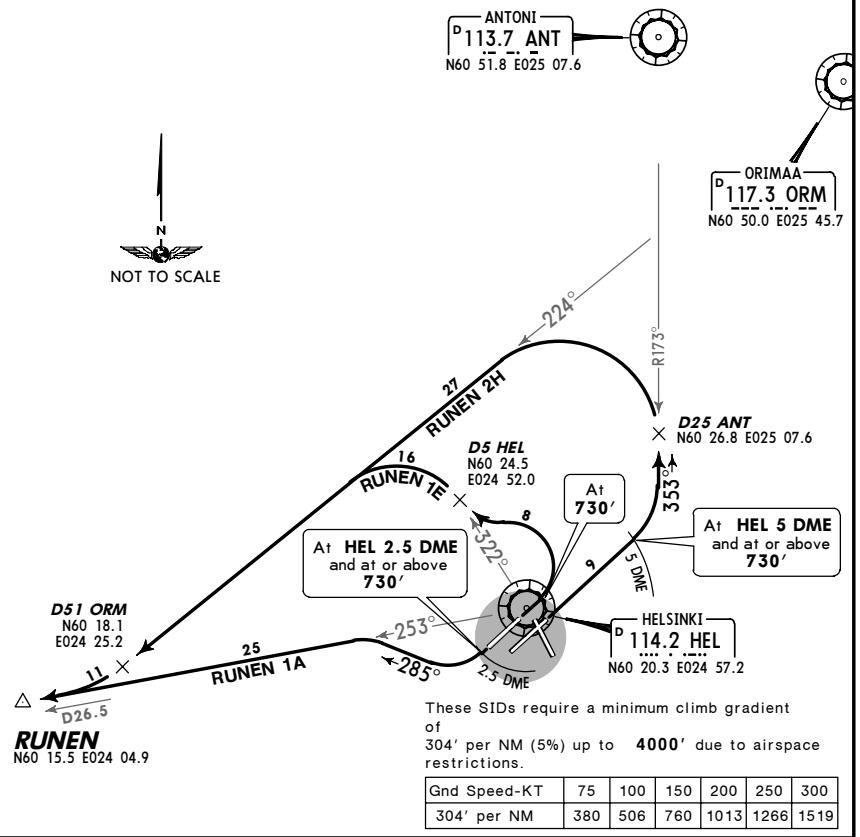
# HELSINKI, FINLAND
SID

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWYS 22R, 04R: EXPECT close-in obstacles. |

## RUNEN 1A *[RUNE1A]*, RUNEN 1E *[RUNE1E]*
## RUNEN 2H *[RUNE2H]*
## RWYS 22R, 04L/R DEPARTURES

***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

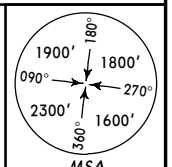
After take-off climb as rapidly as possible to at least **2000′.**

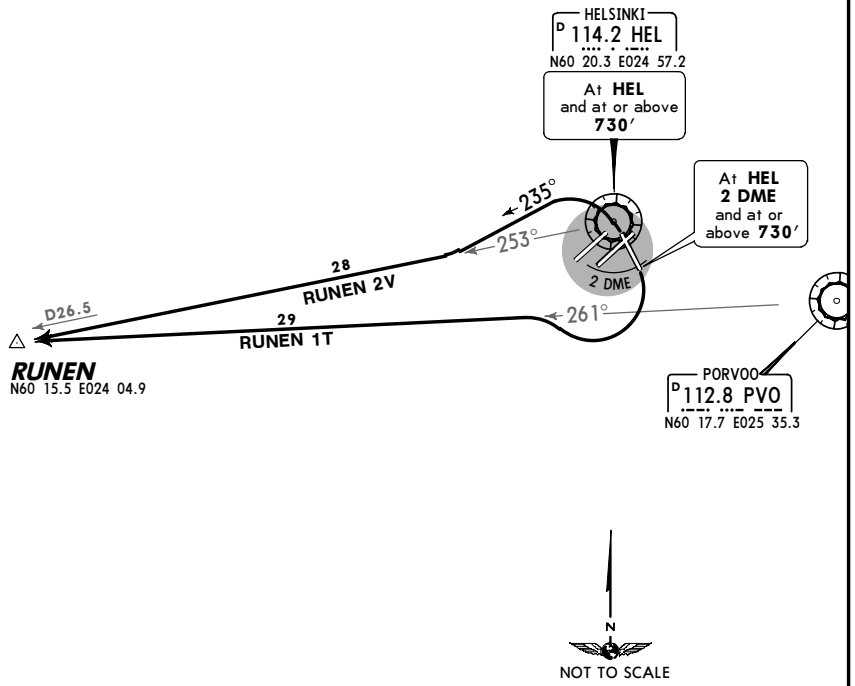
| SID | RWY | ROUTING |
|---|---|---|
| **RUNEN 1A** | **22R** | Climb on runway track to HEL 2.5 DME and at or above **730′,** turn RIGHT, 285° track, intercept HEL R-253 to RUNEN. |
| **RUNEN 1E** | **04L** | Climb on runway track to **730′,** turn LEFT, intercept HEL R-322 to D5 HEL, turn LEFT, intercept ORM R-224 to D51 ORM, turn RIGHT, intercept HEL R-253 to RUNEN. |
| **RUNEN 2H** | **04R** | Climb on runway track to HEL 5 DME and at or above **730′,** turn LEFT, intercept ANT R-173 inbound to D25 ANT, turn LEFT, intercept ORM R-224 to D51 ORM, turn RIGHT, intercept HEL R-253 to RUNEN. |

*CHANGES:* SID RUNEN 1H renumbered 2H, crossing withdrawn.

| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 129.85 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** RWY 15: EXPECT close-in obstacles. |

## RUNEN 1T *[RUNE1T]*, RUNEN 2V *[RUNE2V]*
## RWYS 15, 33 DEPARTURES
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




These SIDs require a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| SID | RWY | ROUTING |
|---|---|---|
| **RUNEN 1T** | **15** | Climb on runway track to HEL 2 DME and at or above **730′,** turn RIGHT, intercept PVO R-261 to RUNEN. |
| **RUNEN 2V** | **33** | Climb on runway track to HEL and at or above **730′,** turn LEFT, 235° track, intercept HEL R-253 to RUNEN. |

*CHANGES:* SID RUNEN 1V renumbered 2V, crossing withdrawn.

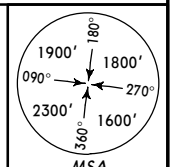


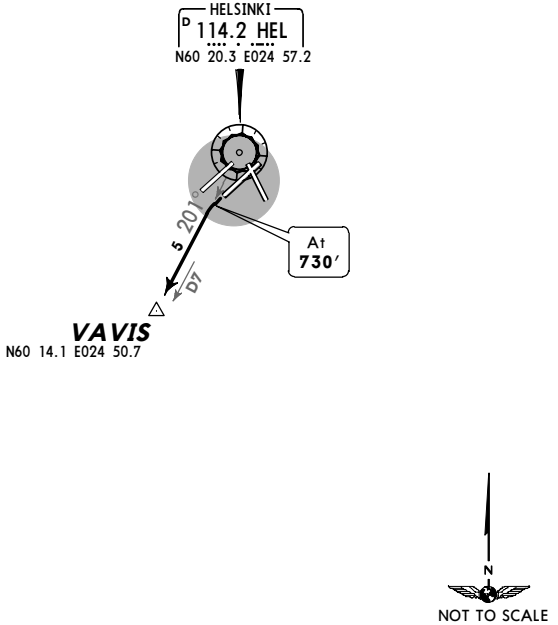




| HELSINKI Radar | Apt Elev | |
|---|---|---|
| 119.1 | 179′ | Trans level: By ATC Trans alt: 5000′ **1.** Maintain Tower frequency until passing 1500′, then contact HELSINKI Radar. **2.** At first contact with HELSINKI Radar report SID or radar heading given by ATC and level. **3.** SIDs are also minimum noise routings. **4.** Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off. **5.** EXPECT close-in obstacles. |

## VAVIS 1K *[VAVI1K]*
## RWY 22L DEPARTURE
ONLY FOR ACFT NOT EXCEEDING TAKE-OFF NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3
***SPEED: MAX 250 KT UP TO 4000′***
***UNLESS OTHERWISE INSTRUCTED BY ATC***




This SID requires a minimum climb gradient of 304′ per NM (5%) up to **4000′** due to airspace restrictions.

| Gnd Speed-KT | 75 | 100 | 150 | 200 | 250 | 300 |
|---|---|---|---|---|---|---|
| 304′ per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

Initial climb clearance **4000′** or assigned altitude if lower, climb to higher level only when cleared by ATC.

After take-off climb as rapidly as possible to at least **2000′.**

| ROUTING |
|---|
| Climb on runway track to **730′,** turn LEFT, intercept HEL R-201 to VAVIS. |

*CHANGES:* SID MATUD 1K replaced by VAVIS 1K.

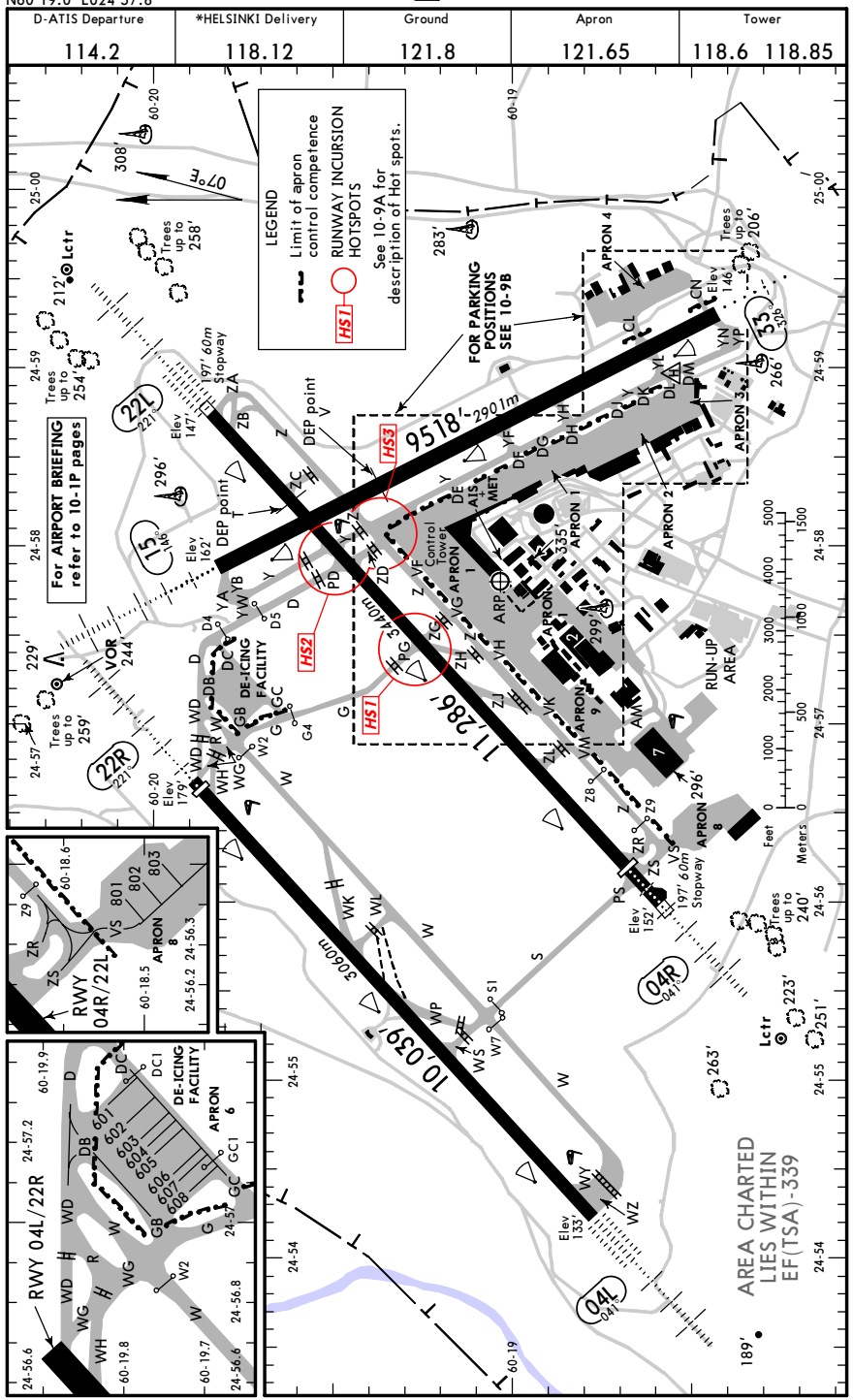
# EFHK/HEL

Apt Elev 179'
N60 19.0 E024 57.8

JEPPESEN
19 OCT 07 (10-9) Eff 25 Oct

# HELSINKI, FINLAND
VANTAA

| D-ATIS Departure | *HELSINKI Delivery | Ground | Apron | Tower |
|---|---|---|---|---|
| 114.2 | 118.12 | 121.8 | 121.65 | 118.6 118.85 |




ADDITIONAL RUNWAY INFORMATION

| RWY | | | USABLE LENGTHS — LANDING BEYOND Threshold | Glide Slope | TAKE-OFF | WIDTH |
|---|---|---|---|---|---|---|
| 04L | HIRL (60m) CL (15m) HIALS-II TDZ PAPI-L (3.0°) | RVR | | 9045' 2757m | ❶ | 197' 60m |
| 22R | HIRL (60m) CL (15m) HIALS PAPI-L (3.0°) | RVR | 9843' 3000m | 8806' 2684m | | |

ALS (red) also available

❶ TAKE-OFF RUN AVAILABLE

| RWY 04L: | | RWY 22R: | |
|---|---|---|---|
| From rwy head | 10,039' (3060m) | From rwy head | 10,039' (3060m) |
| twy WY int | 9682' (2951m) | twy WH int | 9662' (2945m) |
| twy WS int | 6371' (1942m) | twy WK/WL int | 6089' (1856m) |
| twy WP int | 5689' (1734m) | | |

| RWY | | | USABLE LENGTHS — LANDING BEYOND Threshold | Glide Slope | TAKE-OFF | WIDTH |
|---|---|---|---|---|---|---|
| 04R | HIRL (60m) CL (15m) HIALS PAPI-L (3.0°) | RVR | 10,499' 3200m | 9527' 2904m | ❷ | 197' 60m |
| 22L | HIRL (60m) CL (15m) HIALS-II TDZ PAPI-L (3.0°) | RVR | | 10,314' 3144m | | |

ALS (red) also available

❷ TAKE-OFF RUN AVAILABLE

| RWY 04R: | | RWY 22L: | |
|---|---|---|---|
| From rwy head | 11,286' (3440m) | From rwy head | 11,286' (3440m) |
| twy ZS int | 10,771' (3283m) | twy ZB int | 10,994' (3351m) |
| twy ZR int | 10,499' (3200m) | twy ZC int | 9505' (2897m) |
| twy ZL int | 8432' (2570m) | DEP point T | 9255' (2821m) |
| twy ZJ int | 6591' (2009m) | twy Y int | 8196' (2498m) |
| twy ZH int | 5604' (1708m) | twy ZD int | 7808' (2380m) |
| twy ZG int | 5374' (1638m) | twy ZG int | 5991' (1826m) |

| RWY | | | USABLE LENGTHS — LANDING BEYOND Threshold | Glide Slope | TAKE-OFF | WIDTH |
|---|---|---|---|---|---|---|
| 15 | HIRL (60m) CL (15m) HIALS TDZ PAPI-L (3.0°) | RVR | | 8523' 2598m | ❸ | 197' 60m |
| 33 | HIRL (60m) CL (15m) HIALS PAPI-L (3.5°) | RVR | | | | |

ALS (red) also available

❸ TAKE-OFF RUN AVAILABLE

| RWY 15: | | RWY 33: | |
|---|---|---|---|
| From rwy head | 9518' (2901m) | From rwy head | 9518' (2901m) |
| DEP point V | 6398' (1950m) | twy YL/CL int | 8281' (2524m) |
| | | twy YJ int | 6499' (1981m) |
| | | twy YF int | 5420' (1652m) |

## RUNWAY INCURSION "HOT SPOTS"

(For information only, not to be construed as ATC instructions.)

HS1 HS2 Frequency change before crossing runway. An explicit crossing clearance shall be received before proceeding over the runway.

HS3 Wide apron. Make sure of correct turn before runway when taxiing to Rwy 04R.

JAR-OPS — TAKE-OFF ❶

All Rwys — LVP must be in Force

| Approved Operators | HIRL, CL & mult. RVR req | RL, CL & mult. RVR req | RL & CL | RCLM (DAY only) or RL | RCLM (DAY only) or RL | NIL (DAY only) |
|---|---|---|---|---|---|---|
| A | 125m | 150m | 200m | 250m | 400m | 500m |
| B | | | | | | |
| C | | | | | | |
| D | 150m | 200m | 250m | 300m | | |

❶ Operators applying U.S. Ops Specs: CL required below 300m; approved guidance system required below 150m.

CHANGES: Notes transferred to 10-1P pages. Twys.



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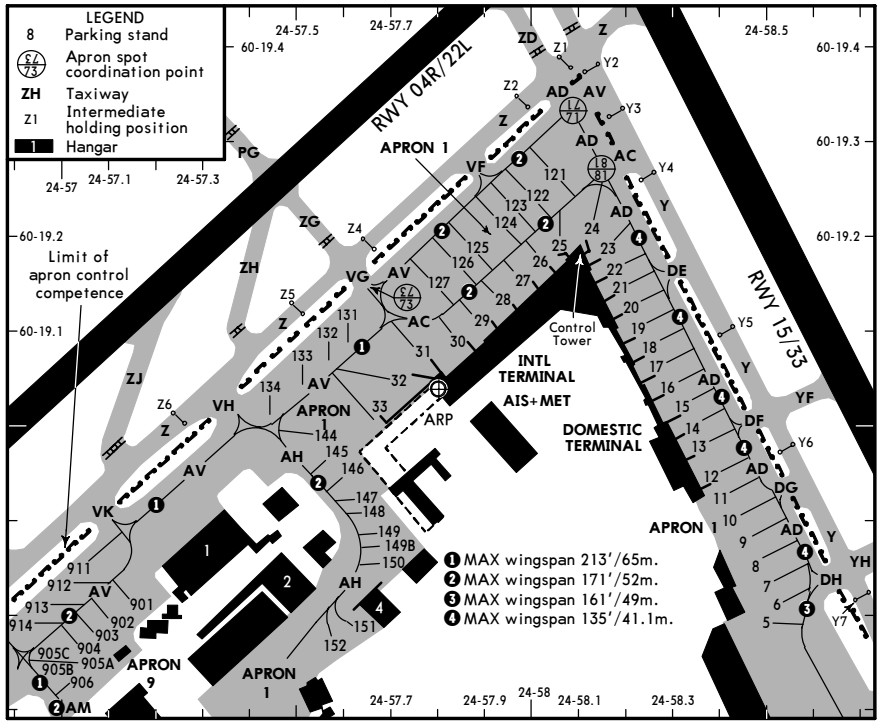
EFHK/HEL
JEPPESEN
19 OCT 07 (10-9A) Eff 25 Oct
HELSINKI, FINLAND
VANTAA

CHANGES: Notes transferred to 10-1P pages.




*CHANGES:* Notes transferred to 10-1P pages. Stands. Twys.



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## INS COORDINATES

| STAND No. | COORDINATES | ELEV | STAND No. | COORDINATES | ELEV |
|---|---|---|---|---|---|
| 5 thru 8 | N60 18.8 E024 58.5 | 148 | 221 thru 223 | N60 18.7 E024 58.7 | 148 |
| 9 | N60 18.9 E024 58.5 | 149 | 224, 225 | N60 18.7 E024 58.7 | 147 |
| 10 | N60 18.9 E024 58.4 | 149 | 301 | N60 18.6 E024 58.7 | 148 |
| 11, 12 | N60 18.9 E024 58.4 | 151 | 302 | N60 18.5 E024 58.7 | 149 |
| 13 | N60 19.0 E024 58.4 | 151 | 303, 304 | N60 18.5 E024 58.8 | 152 |
| 14 | N60 19.0 E024 58.3 | 151 | 305 | N60 18.5 E024 58.9 | 151 |
| 15 | N60 19.0 E024 58.3 | 152 | 306 | N60 18.5 E024 58.9 | 150 |
| 16 | N60 19.0 E024 58.3 | 154 | 311 thru 313 | N60 18.5 E024 58.8 | 152 |
| 17 | N60 19.0 E024 58.3 | 155 | 314 | N60 18.5 E024 58.8 | 151 |
| 18 | N60 19.1 E024 58.2 | 156 | 315 | N60 18.5 E024 58.8 | 151 |
| 19 thru 21 | N60 19.1 E024 58.2 | 157 | 316 | N60 18.5 E024 58.9 | 151 |
| 22 thru 24 | N60 19.2 E024 58.1 | 158 | 317 | N60 18.5 E024 58.9 | 149 |
| 25, 26 | N60 19.2 E024 58.0 | 158 | 318 | N60 18.5 E024 58.9 | 150 |
| 27 | N60 19.1 E024 58.0 | 158 | 319 | N60 18.5 E024 58.9 | 151 |
| 28, 29 | N60 19.1 E024 57.9 | 158 | 321 | N60 18.6 E024 58.8 | 151 |
| 30, 31 | N60 19.1 E024 57.8 | 158 | 322 | N60 18.6 E024 58.8 | 150 |
| 32 | N60 19.0 E024 57.7 | 159 | 323 | N60 18.6 E024 58.8 | 149 |
| 33 | N60 19.0 E024 57.7 | 161 | 351 | N60 18.5 E024 58.9 | 151 |
| 121 | N60 19.3 E024 58.0 | 156 | 352 | N60 18.5 E024 58.9 | 150 |
| 122, 123 | N60 19.2 E024 58.0 | 156 | 401 | N60 18.5 E024 59.6 | 144 |
| 124 | N60 19.2 E024 57.9 | 156 | 402 | N60 18.6 E024 59.6 | 144 |
| 125 | N60 19.2 E024 57.9 | 155 | 403, 404 | N60 18.6 E024 59.5 | 144 |
| 126 | N60 19.2 E024 57.8 | 155 | 405 | N60 18.7 E024 59.5 | 144 |
| 127 | N60 19.1 E024 57.8 | 156 | 408 | N60 18.8 E024 59.4 | 145 |
| 131 | N60 19.1 E024 57.6 | 161 | 441 | N60 18.7 E024 59.3 | 142 |
| 132 | N60 19.1 E024 57.5 | 160 | 442, 443 | N60 18.7 E024 59.3 | 142 |
| 133 | N60 19.1 E024 57.5 | 159 | 801 | N60 18.5 E024 56.4 | 150 |
| 134 | N60 19.0 E024 57.4 | 160 | 802, 803 | N60 18.5 E024 56.5 | 150 |
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| 146 | N60 18.9 E024 57.6 | 159 | 902, 903 | N60 18.8 E024 57.1 | 158 |
| 147 | N60 18.9 E024 57.6 | 157 | 904, 905A | N60 18.7 E024 57.1 | 157 |
| 148 | N60 18.9 E024 57.7 | 156 | 905B, 905C | N60 18.7 E024 57.0 | 156 |
| 149 | N60 18.9 E024 57.7 | 155 | 906 | N60 18.7 E024 57.1 | 157 |
| 149B | N60 18.9 E024 57.7 | 154 | 911 | N60 18.9 E024 57.0 | 160 |
| 150 | N60 18.9 E024 57.7 | 155 | 912 | N60 18.8 E024 57.0 | 158 |
| 151 | N60 18.8 E024 57.6 | 157 | 913 | N60 18.8 E024 56.9 | 156 |
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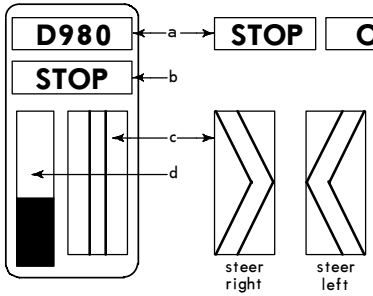
| 201 thru 203 | N60 18.7 E024 58.5 | 149 | | | |
| 204, 205 | N60 18.6 E024 58.6 | 149 | | | |
| 206 | N60 18.6 E024 58.6 | 148 | | | |

*CHANGES:* Notes transferred to 10-1P pages. Stands.

## VISUAL NOSE-IN DOCKING GUIDANCE SYSTEM




**Display:**

a) Display indicating: Aircraft type, "STOP", "OK", "TOO/FAR", "BRIN".
b) Display indicating:"STOP".
c) Centerline beacon: side-in guidance.
d) Closing rate indication. Fully yellow coloured closing rate indicator indicates that aircraft position is at least 46'/14m to stop position.

**Instructions:**

1. Follow taxi-in line and the centerline beacon guidance.
2. Check correct aircraft type is flashing. MAX approach speed is 11 km/h(3m/sec). If exceeded, display indicates "SLOW DOWN".
3. Fully yellow coloured closing rate indicator indicates that aircraft position is at least 46'/14m to stop position. When distance is 43'/13m to stop position the yellow coloured closing rate indication starts to shorten from the bottom.
4. When stop position is reached, display indicates "STOP". Correct parking is indicated as "OK".
5. If aircraft overshoots the limit for correct parking, display indicates "TOO/FAR".
6. "BRIN": Bridge not in parking position
7. Display automatically shuts down after parking.
8. In case of malfunction in the docking guidance system interrupt taxiing and contact HELSINKI Apron.

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JEPPESEN
JeppView 3.5.2.0



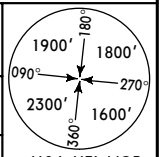
BRIEFING STRIP™

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

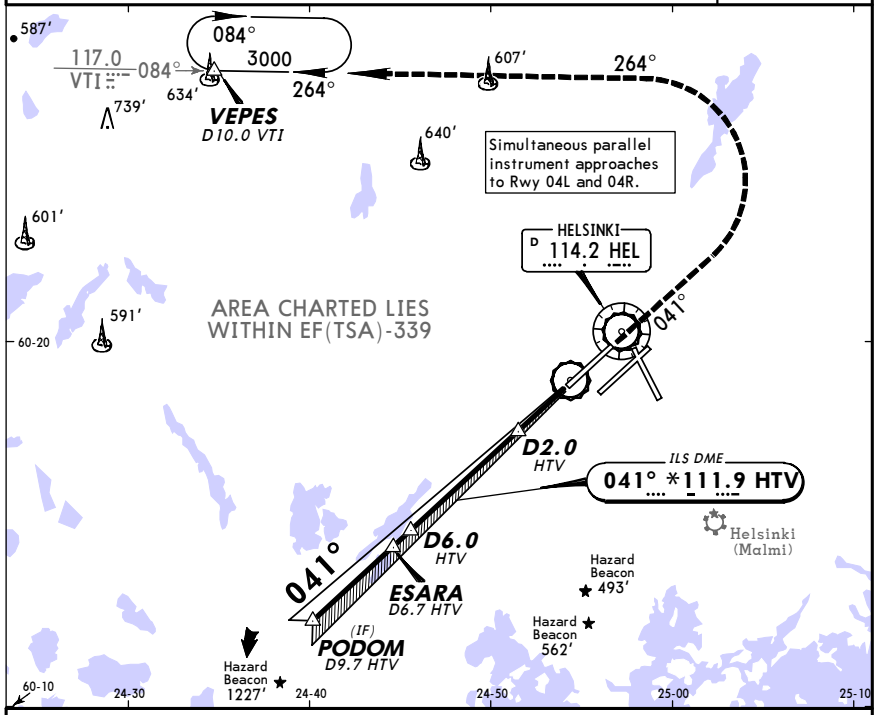
| LOC HTV | Final Apch Crs | GS | ILS DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| *111.9 | 041° | D6.0 HTV 2077' (1944') | 333' (200') | Apt Elev 179' / RWY 133' |

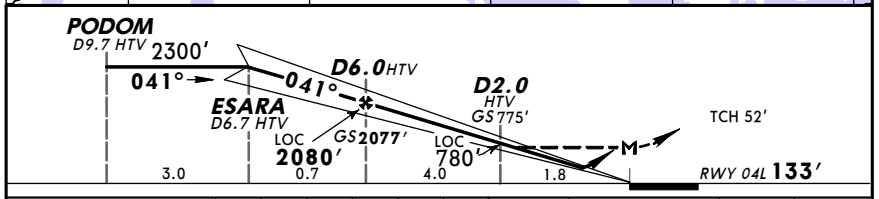
**MISSED APCH:** Climb on 041° to 580', then turn LEFT to VEPES climbing to 3000'. VOR or Radar required.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000'
1. **DME REQUIRED.** 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.




MSA HEL VOR




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS 3.00° or LOC Descent Gradient 5.2% | 377 | 485 | 539 | 647 | 755 | 862 |
| D6.0 HTV to MAP 5.8 | 4:58 | 3:52 | 3:29 | 2:54 | 2:29 | 2:11 |

HIALS-II PAPI

580' 041° 3000' LT VEPES

**JAR-OPS** STRAIGHT-IN LANDING RWY 04L

| | ILS DA(H) 333'(200') | | LOC (GS out) MDA(H) 660'(527') | |
|---|---|---|---|---|
| | FULL | ALS out | | ALS out |
| A | RVR 550m | RVR 1000m | RVR 1000m | RVR 1500m |
| B | | | RVR 1200m | |
| C | | | | RVR 2000m |
| D | | | RVR 1600m | |

PANS OPS 4

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-1A) Eff 24 Nov

# HELSINKI, FINLAND CAT II ILS Rwy 04L

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

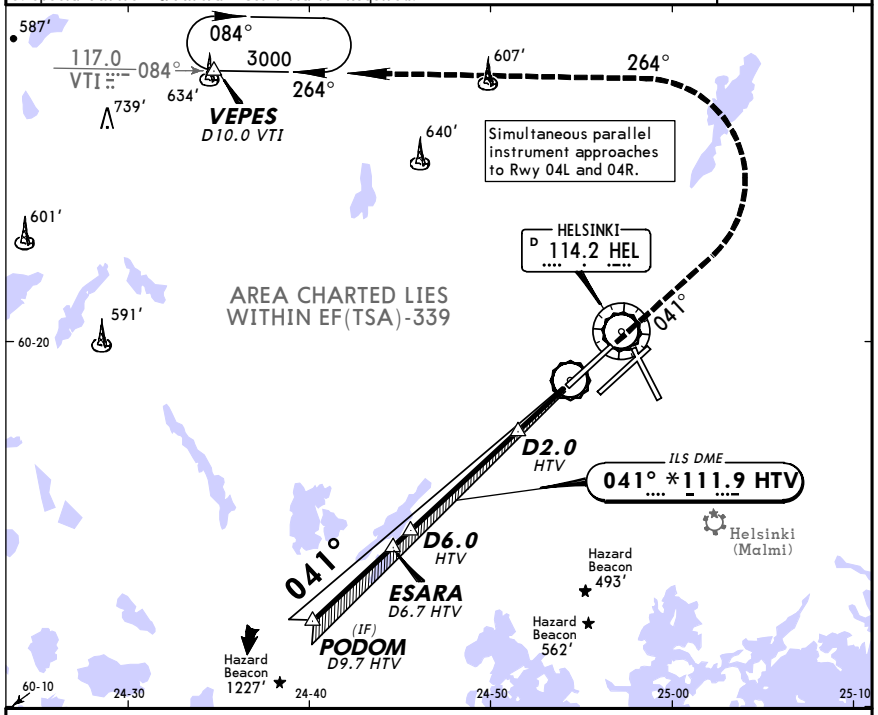
BRIEFING STRIP

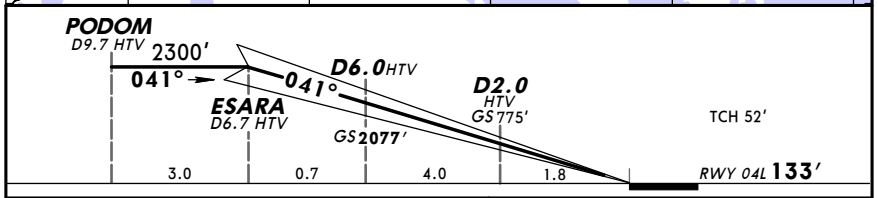
| LOC | Final Apch Crs | GS | CAT II ILS RA/DA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| HTV *111.9 | 041° | D6.0 HTV 2077′ (1944′) | Refer to Minimums | RWY 133′ |

MISSED APCH: Climb on 041° to 580′, then turn LEFT to VEPES climbing to 3000′. VOR or Radar required.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.
3. Special Aircrew & Aircraft Certification Required.

MSA HEL VOR




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II PAPI 580′ on 041° 3000′ LT VEPES

JAR-OPS

STRAIGHT-IN LANDING RWY 04L
CAT II ILS

| ABC | D |
|---|---|
| RA 105′ | RA 108′ |
| DA(H) 233′ (100′) | DA(H) 236′ (103′) |

RVR 300m 1

1 Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

CHANGES: Chart reindexed. Procedure.





# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-2) Eff 24 Nov

# HELSINKI, FINLAND ILS or LOC Rwy 04R

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

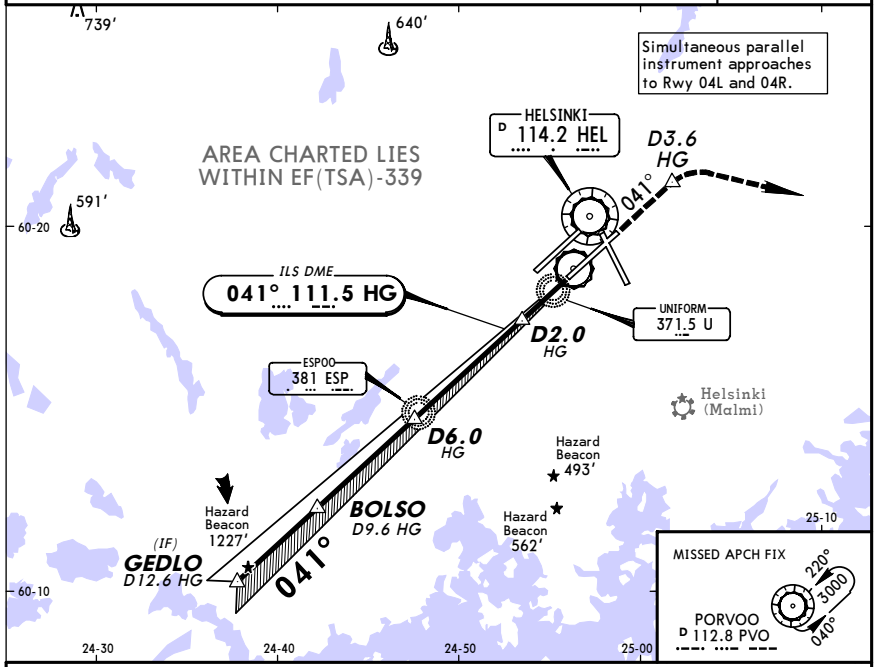
BRIEFING STRIP

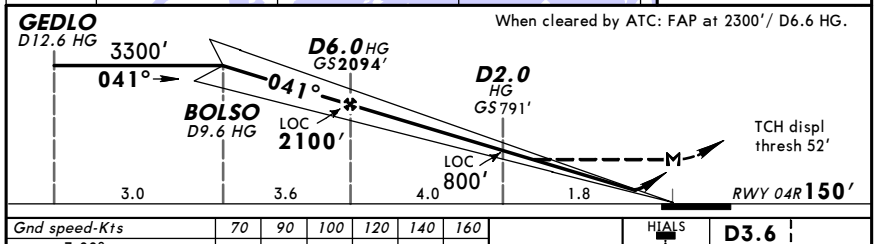
| LOC | Final Apch Crs | GS | ILS DA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| HG 111.5 | 041° | D6.0 HG 2094′ (1944′) | 350′ (200′) | RWY 150′ |

MISSED APCH: Climb on 041° to D3.6 HG, then turn RIGHT to PVO VOR climbing to 3000′. VOR or Radar required.

Alt Set: hPa Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.

MSA HEL VOR




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| ILS GS 3.00° or LOC Descent Gradient | 5.2% | 377 | 485 | 539 | 647 | 755 | 862 |
| D6.0 HG to MAP | 5.8 | 4:58 | 3:52 | 3:29 | 2:54 | 2:29 | 2:10 |

HIALS PAPI D3.6 HG on 041°

JAR-OPS

STRAIGHT-IN LANDING RWY 04R

| | ILS DA(H) 350′ (200′) FULL | ILS DA(H) 350′ (200′) ALS out | LOC (GS out) MDA(H) 610′ (460′) | LOC (GS out) MDA(H) 610′ (460′) ALS out |
|---|---|---|---|---|
| A | RVR 550m | RVR 1000m | RVR 1000m | RVR 1500m |
| B | | | RVR 1200m | |
| C | | | | RVR 2000m |
| D | | | RVR 1600m | |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-3) Eff 24 Nov

# HELSINKI, FINLAND ILS or LOC Rwy 15

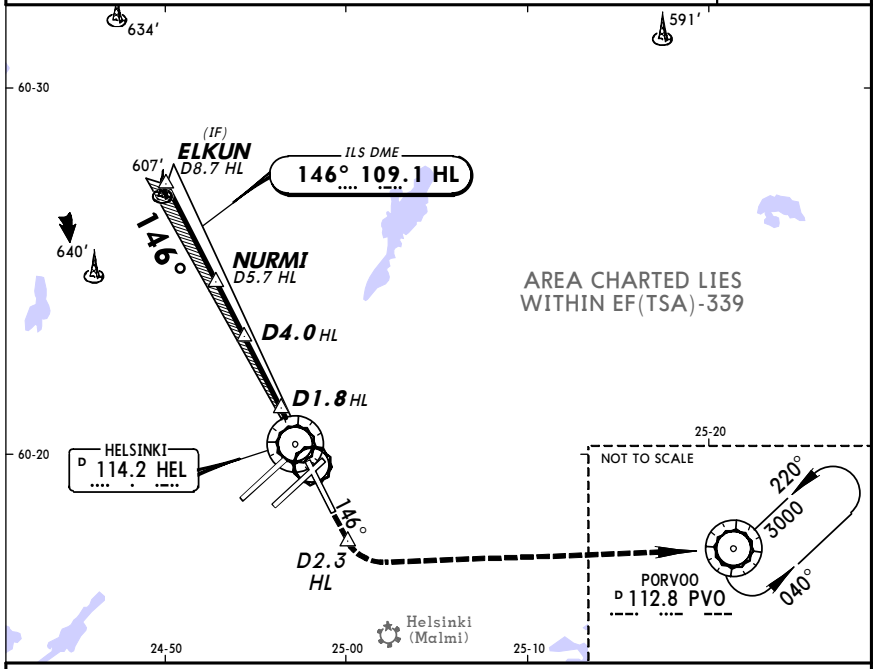
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

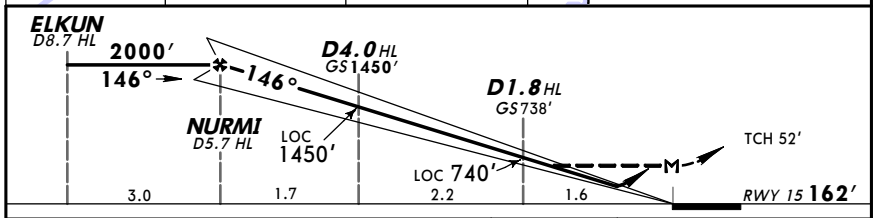
| LOC | Final Apch Crs | GS | ILS | Apt Elev 179′ |
|---|---|---|---|---|
| HL | | D4.0 HL | DA(H) | |
| 109.1 | 146° | 1450′ (1288′) | 362′ (200′) | RWY 162′ |

MISSED APCH: Climb on 146° to D2.3 HL, then turn LEFT to PVO VOR climbing to 3000′. VOR or Radar required.

Alt Set: hPa Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.

MSA HEL VOR




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS 3.00° or | 377 | 485 | 539 | 647 | 755 | 862 |
| LOC Descent Gradient 5.2% | | | | | | |
| NURMI to MAP 5.5 | 4:43 | 3:40 | 3:18 | 2:45 | 2:21 | 2:04 |

HIALS PAPI

D2.3 HL on 146°

JAR-OPS

STRAIGHT-IN LANDING RWY 15

| | ILS DA(H) 362′ (200′) | | LOC (GS out) MDA(H) 620′ (458′) | | w/o D1.8 HL MDA(H) 740′ (578′) | |
|---|---|---|---|---|---|---|
| | FULL | ALS out | | ALS out | | ALS out |
| A | RVR 550m | RVR 1000m | RVR 1000m | RVR 1500m | RVR 1000m | RVR 1500m |
| B | | | RVR 1200m | | RVR 1200m | |
| C | | | RVR 2000m | | | RVR 2000m |
| D | | | RVR 1600m | | RVR 1600m | |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.





# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-4) Eff 24 Nov

# HELSINKI, FINLAND ILS or LOC Rwy 22L

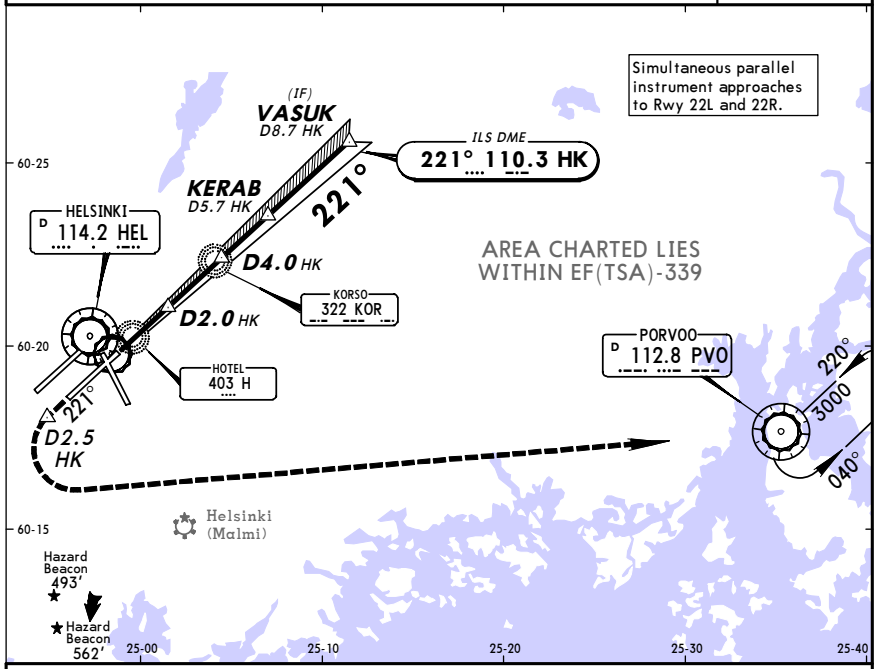
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

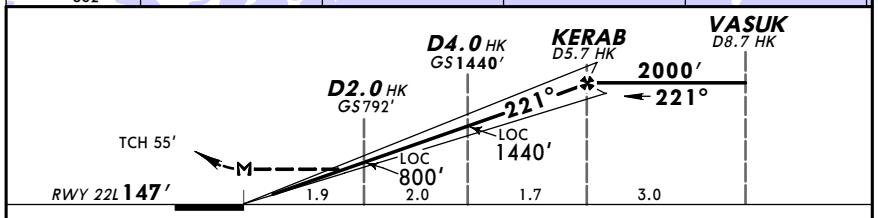
| LOC | Final Apch Crs | GS | ILS | Apt Elev 179′ |
|---|---|---|---|---|
| HK | | D4.0 HK | DA(H) | |
| 110.3 | 221° | 1440′ (1293′) | 347′ (200′) | RWY 147′ |

MISSED APCH: Climb on 221° to D2.5 HK or 600′, whichever is later, then turn LEFT to PVO VOR climbing to 3000′. MAX 240 KT. VOR or Radar required.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.

MSA HEL VOR




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| ILS GS 3.00° or | 377 | 485 | 539 | 647 | 755 | 862 |
| LOC Descent Gradient 5.2% | | | | | | |
| KERAB to MAP 5.6 | 4:48 | 3:44 | 3:22 | 2:48 | 2:24 | 2:06 |

HIALS-II PAPI

240 KT MAX

D2.5 HK 600′ whichever is later

JAR-OPS

STRAIGHT-IN LANDING RWY 22L

| | ILS DA(H) 347′ (200′) | | LOC (GS out) MDA(H) 600′ (453′) | |
|---|---|---|---|---|
| | FULL | ALS out | | ALS out |
| A | RVR 550m | RVR 1000m | RVR 1000m | RVR 1500m |
| B | | | RVR 1200m | |
| C | | | | RVR 2000m |
| D | | | RVR 1600m | |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-4A) Eff 24 Nov

# HELSINKI, FINLAND CAT II ILS Rwy 22L

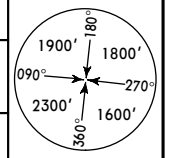
BRIEFING STRIP

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | | Ground |
|---|---|---|---|---|
| 135.07 | 119.1 | 118.6 | 118.85 | 121.8 |

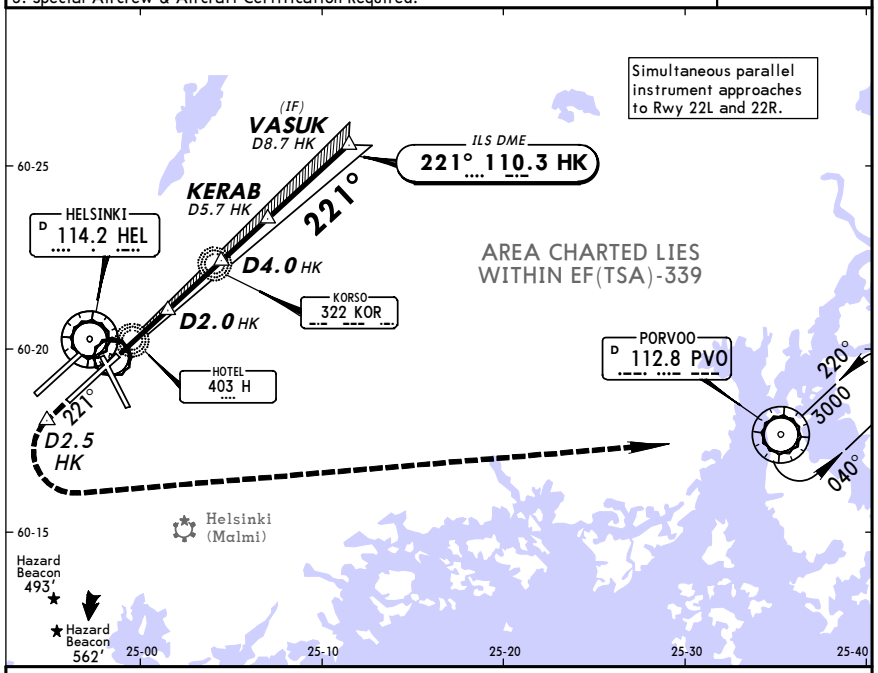
| LOC HK | Final Apch Crs | GS | CAT II ILS RA/DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| 110.3 | 221° | D4.0 HK 1440′ (1293′) | Refer to Minimums | Apt Elev 179′ RWY 147′ |

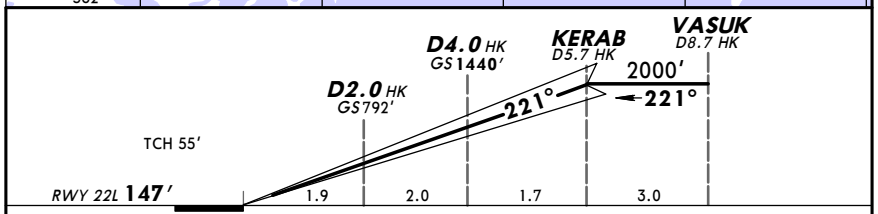
**MISSED APCH:** Climb on 221° to D2.5 HK or 600′, whichever is later, then turn LEFT to PVO VOR climbing to 3000′. MAX 240 KT. VOR or Radar required.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000′
1. **DME REQUIRED.** 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.
3. Special Aircrew & Aircraft Certification Required.




MSA HEL VOR




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| GS | 3.00° | 377 | 485 | 539 | 647 | 755 | 862 |

HIALS-II PAPI | 240 KT MAX | D2.5 HK | 600′ whichever is later

**JAR-OPS** STRAIGHT-IN LANDING RWY 22L CAT II ILS

| ABC | D |
|---|---|
| RA 113′ | RA 125′ |
| DA(H) 247′ (100′) | DA(H) 257′ (110′) |

RVR 300m 1

1 Operators applying U.S. Ops Specs: Autoland or HGS required below RVR 350m.

PANS OPS 4

CHANGES: Procedure.





# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (11-5) Eff 24 Nov

# HELSINKI, FINLAND ILS or LOC Rwy 22R

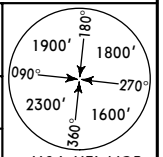
BRIEFING STRIP

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | | Ground |
|---|---|---|---|---|
| 135.07 | 119.1 | 118.6 | 118.85 | 121.8 |

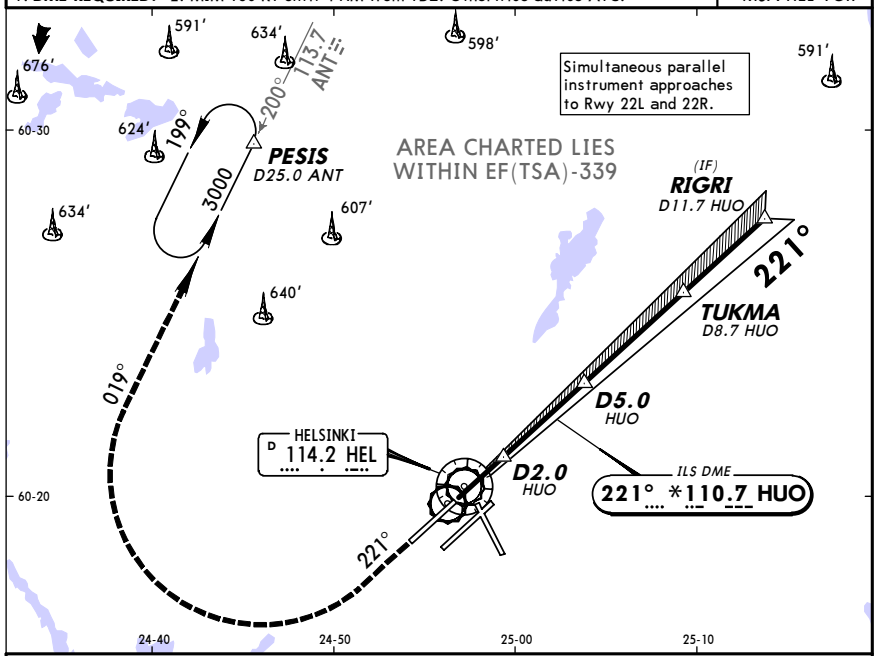
| LOC HUO | Final Apch Crs | GS | ILS DA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| *110.7 | 221° | D5.0 HUO 1789′ (1611′) | 378′ (200′) | Apt Elev 179′ RWY 178′ |

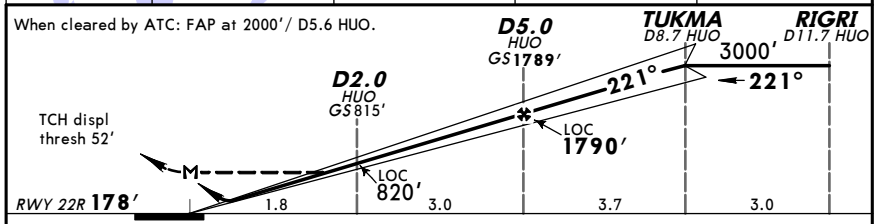
**MISSED APCH:** Climb on 221° to 580′, then turn RIGHT to PESIS climbing to 3000′. VOR or Radar required.

Alt Set: hPa Rwy Elev: 7 hPa Trans level: By ATC Trans alt: 5000′
1. **DME REQUIRED.** 2. MIM 160 KT until 4 NM from TDZ. Otherwise advise ATC.




MSA HEL VOR




| Gnd speed-Kts | | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|---|
| ILS GS | 3.00° or | 377 | 485 | 539 | 647 | 755 | 862 |
| LOC Descent Gradient | 5.2% | | | | | | |
| D5.0 HUO to MAP | 4.8 | 4:07 | 3:12 | 2:53 | 2:24 | 2:03 | 1:48 |

HIALS PAPI | 580′ on 221° | 3000′ RT | PESIS

**JAR-OPS** STRAIGHT-IN LANDING RWY 22R

| | ILS DA(H) 378′ (200′) | | LOC (GS out) MDA(H) 620′ (442′) | |
|---|---|---|---|---|
| | FULL | ALS out | | ALS out |
| A | RVR 550m | RVR 1000m | RVR 900m | RVR 1500m |
| B | | | RVR 1000m | |
| C | | | | RVR 1800m |
| D | | | RVR 1400m | RVR 2000m |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (13-1) Eff 24 Nov

# HELSINKI, FINLAND VOR Rwy 04L

BRIEFING STRIP

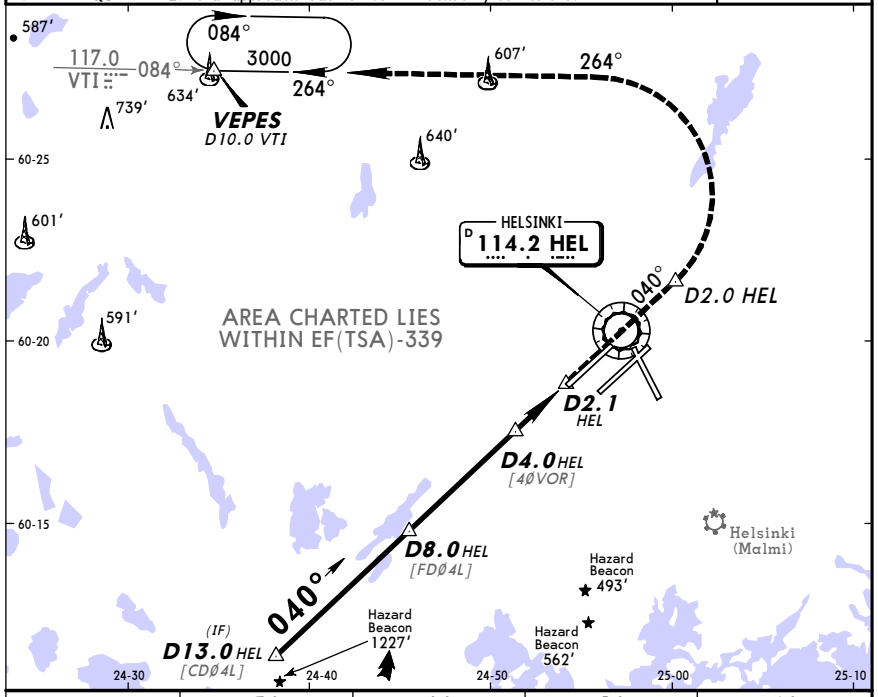
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

| VOR | Final Apch Crs | Minimum Alt | MDA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| HEL 114.2 | 040° | D8.0 HEL 2060′ (1927′) | (CONDITIONAL) 550′ (417′) | RWY 133′ |

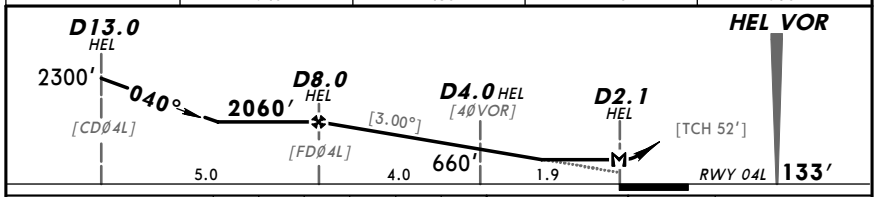
MISSED APCH: Climb on 040° to D2.0 HEL, then turn LEFT to VEPES climbing to 3000′.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. Final approach track offset 1° from rwy centerline.

MSA HEL VOR




| HEL DME | 7.0 | 6.0 | 5.0 | 4.0 |
|---|---|---|---|---|
| ALTITUDE | 1740′ | 1430′ | 1110′ | 790′ |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| Descent Gradient 5.24% or Descent angle [3.00°] | 372 | 478 | 531 | 637 | 743 | 849 |
| MAP at D2.1 HEL | | | | | | |

HIALS-II PAPI

D2.0 HEL on 040°

JAR-OPS STRAIGHT-IN LANDING RWY 04L

| | MDA(H) 550′ (417′) ALS out | MDA(H) 660′ (527′) W/o D4.0 HEL ALS out |
|---|---|---|
| A | RVR 900m | RVR 1500m |
| B | RVR 1000m | RVR 1000m RVR 1500m |
| C | | RVR 1200m RVR 1800m |
| D | RVR 1400m | RVR 2000m RVR 1600m RVR 2000m |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.





# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (13-2) Eff 24 Nov

# HELSINKI, FINLAND VOR Rwy 15

BRIEFING STRIP

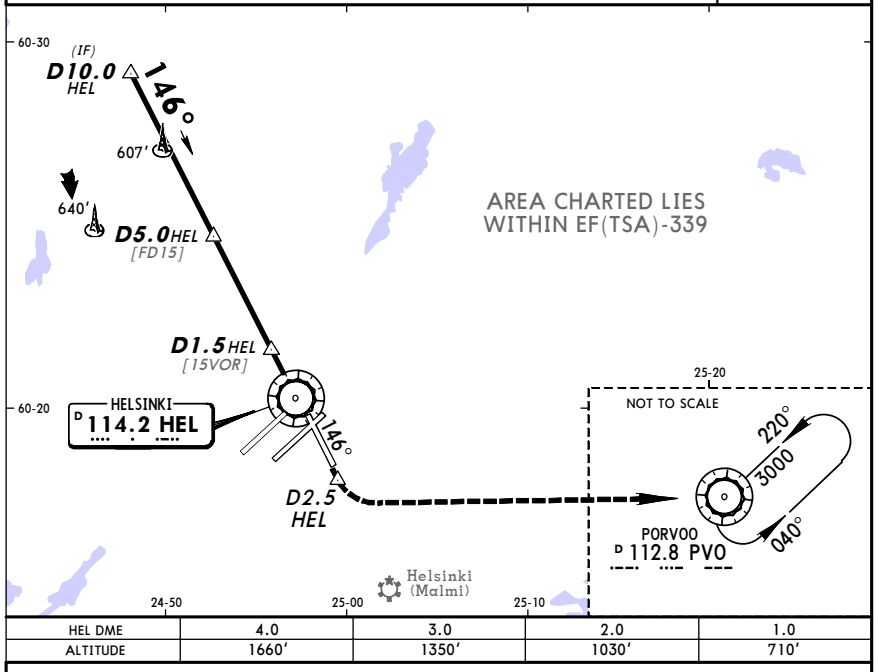
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

| VOR | Final Apch Crs | Minimum Alt | MDA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| HEL 114.2 | 146° | D5.0 HEL 2000′ (1838′) | (CONDITIONAL) 620′ (458′) | RWY 162′ |

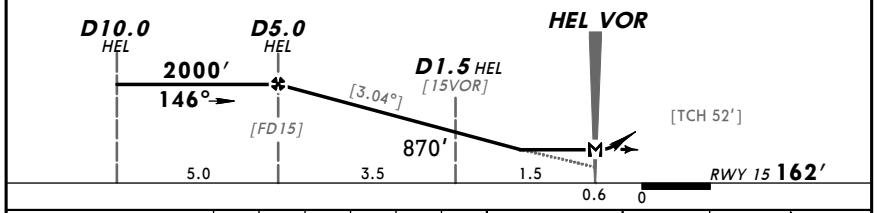
MISSED APCH: Climb on 146° to D2.5 HEL, then turn LEFT to PVO VOR climbing to 3000′.

Alt Set: hPa Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000′
DME REQUIRED.

MSA HEL VOR




| HEL DME | 4.0 | 3.0 | 2.0 | 1.0 |
|---|---|---|---|---|
| ALTITUDE | 1660′ | 1350′ | 1030′ | 710′ |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| Descent Gradient 5.30% or Descent angle [3.04°] | 376 | 484 | 538 | 645 | 753 | 861 |
| MAP at VOR | | | | | | |

HIALS PAPI

D2.5 HEL on 146°

JAR-OPS STRAIGHT-IN LANDING RWY 15

| | MDA(H) 620′ (458′) ALS out | W/o D1.5 HEL MDA(H) 870′ (708′) ALS out |
|---|---|---|
| A | RVR 1000m | RVR 1500m RVR 1200m RVR 1500m |
| B | RVR 1200m | RVR 1400m |
| C | | RVR 2000m RVR 2000m |
| D | RVR 1600m | RVR 1800m |

PANS OPS 4

CHANGES: Chart reindexed. Procedure. Minimums.

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (13-3) Eff 24 Nov

# HELSINKI, FINLAND VOR Rwy 33

BRIEFING STRIP

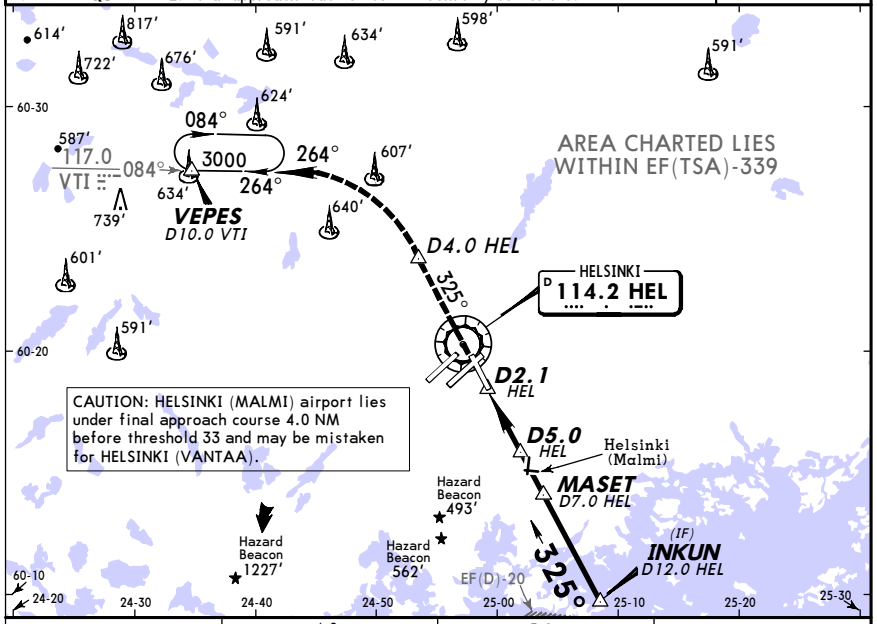
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

| VOR | Final Apch Crs | Minimum Alt | MDA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| HEL 114.2 | 325° | MASET 2000′ (1854′) | (CONDITIONAL) 530′ (384′) | RWY 146′ |

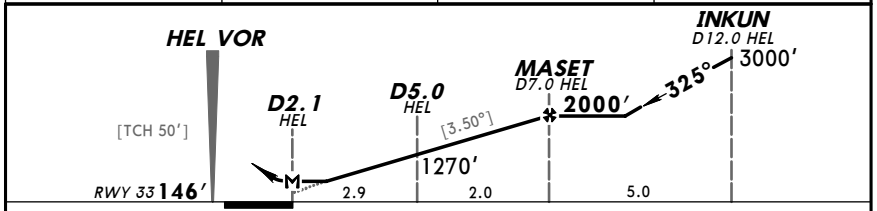
MISSED APCH: Climb on 325° to D4.0 HEL, then turn LEFT to VEPES climbing to 3000′.

Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000′
1. DME REQUIRED. 2. Final approach track offset 1° from rwy centerline.

MSA HEL VOR




| HEL DME | 4.0 | 5.0 | 6.0 |
|---|---|---|---|
| ALTITUDE | 900′ | 1270′ | 1640′ |




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| Descent Gradient 6.10% or Descent angle [3.50°] | 434 | 557 | 619 | 743 | 867 | 991 |
| MAP at D2.1 HEL | | | | | | |

HIALS PAPI

D4.0 HEL on 325°

JAR-OPS STRAIGHT-IN LANDING RWY 33

| | MDA(H) 530′ (384′) ALS out | W/o D5.0 HEL MDA(H) 1270′ (1124′) ALS out |
|---|---|---|
| A | RVR 1200m | RVR 1500m |
| B | RVR 1300m | RVR 1500m |
| C | RVR 1400m | RVR 1800m |
| D | RVR 1600m | RVR 2000m |

PANS OPS 4

CHANGES: Chart reindexed. Procedure.





# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (16-1) Eff 24 Nov

# HELSINKI, FINLAND NDB Rwy 04R

BRIEFING STRIP

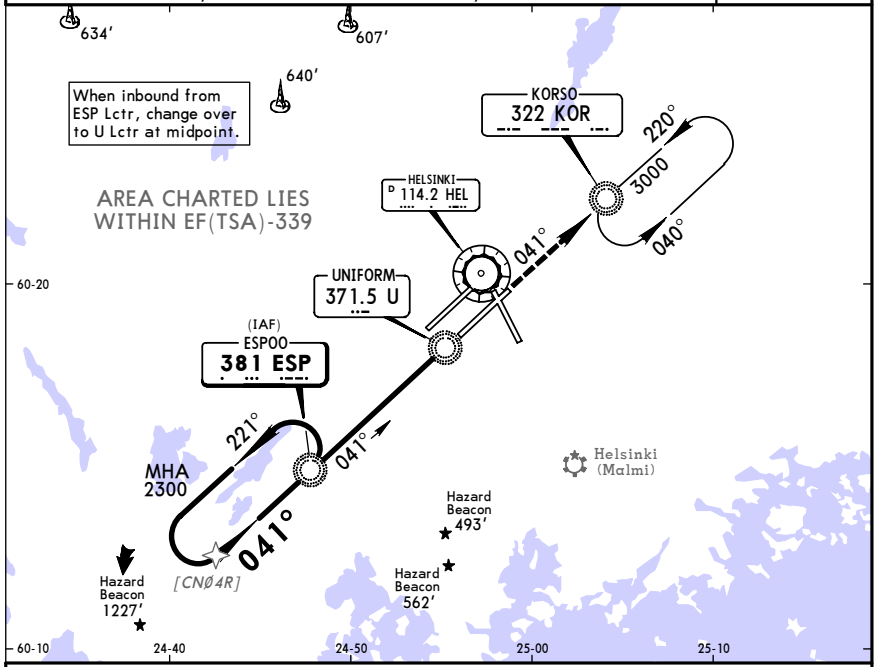
| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

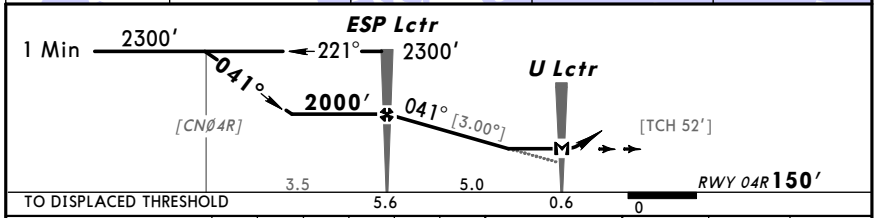
| Lctr | Final Apch Crs | Minimum Alt | MDA(H) | Apt Elev 179′ |
|---|---|---|---|---|
| ESP 381 | 041° | ESP Lctr 2000′ (1850′) | 660′ (510′) | RWY 150′ |

MISSED APCH: Climb STRAIGHT AHEAD to KOR Lctr to 3000′.

Alt Set: hPa Rwy Elev: 6 hPa Trans level: By ATC Trans alt: 5000′

MSA ESP Lctr




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| Descent Gradient 5.24% or Descent angle [3.00°] | 372 | 478 | 531 | 637 | 743 | 849 |
| MAP at U Lctr | | | | | | |

HIALS PAPI

3000′ KOR 322

JAR-OPS STRAIGHT-IN LANDING RWY 04R

| | MDA(H) 660′ (510′) ALS out |
|---|---|
| A | RVR 1000m |
| B | RVR 1200m |
| C | RVR 1200m |
| D | RVR 1600m |

PANS OPS 4

CHANGES: Procedure.

# EFHK/HEL VANTAA

JEPPESEN 11 NOV 05 (16-2) Eff 24 Nov

# HELSINKI, FINLAND NDB Rwy 22L

BRIEFING STRIP TM

| D-ATIS Arrival | HELSINKI Approach (R) | HELSINKI Tower | Ground |
|---|---|---|---|
| 135.07 | 119.1 | 118.6 118.85 | 121.8 |

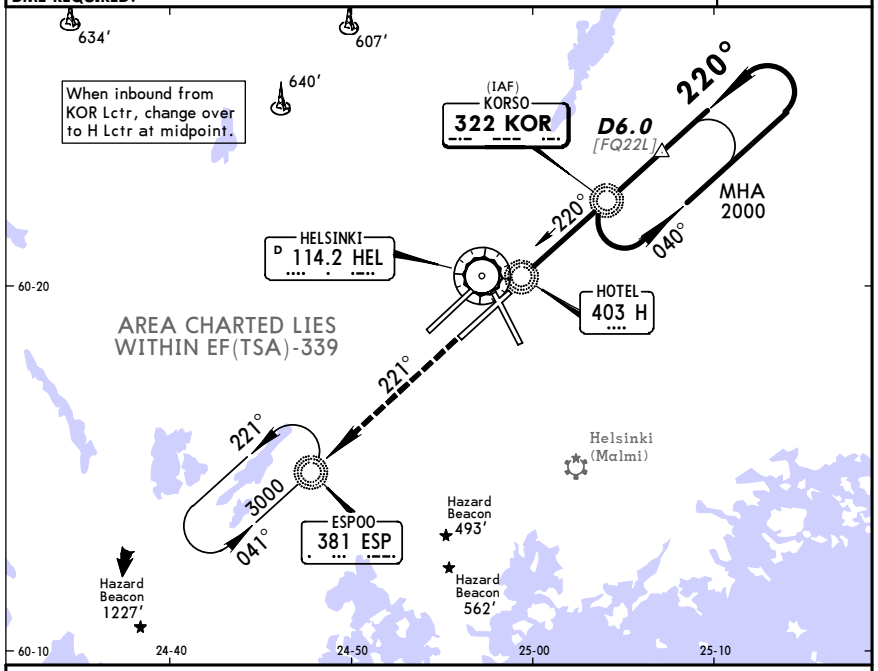
| Lctr | Final Apch Crs | Minimum Alt | MDA(H) | Apt Elev / RWY |
|---|---|---|---|---|
| KOR | 220° | D6.0 2000′ (1853′) | 620′ (473′) | Apt Elev 179′ / RWY 147′ |
| 322 | | | | |

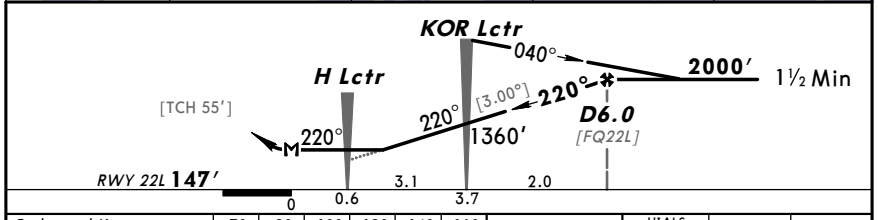
MISSED APCH: Climb STRAIGHT AHEAD to ESP Lctr to 3000′.

Alt Set: hPa | Rwy Elev: 5 hPa | Trans level: By ATC | Trans alt: 5000′

DME REQUIRED.

MSA KOR Lctr: 1900′ (090°–180°), 1800′ (180°–270°), 2300′ (270°–360°), 1600′ (360°–090°)




| Gnd speed-Kts | 70 | 90 | 100 | 120 | 140 | 160 |
|---|---|---|---|---|---|---|
| Descent Gradient 5.24% or Descent angle [3.00°] | 372 | 478 | 531 | 637 | 743 | 849 |
| D6.0 to MAP 5.7 | 4:53 | 3:48 | 3:25 | 2:51 | 2:27 | 2:08 |

HIALS PAPI | 3000′ | ESP 381

PANS OPS 4

JAR-OPS

STRAIGHT-IN LANDING RWY 22L

MDA(H) 620′ (473′)

| | ALS out | |
|---|---|---|
| A | RVR 1000m | RVR 1500m |
| B | RVR 1200m | |
| C | | RVR 2000m |
| D | RVR 1600m | |

CHANGES: Procedure.