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Airport Information For EFHK
Terminal Charts For EFHK
Revision Letter For Cycle 03-2020
Change Notices
Notebook
General Information

Location: HELSINKI FIN
ICAO/IATA: EFHK / HEL
Lat/Long: N60° 19.03', E024° 57.80'
Elevation: 180 ft

Airport Use: Public
Daylight Savings: Observed
UTC Conversion: -2:00 = UTC
Magnetic Variation: 9.0° E

Fuel Types: Jet A-1
Repair Types: Major Airframe, Major Engine
Customs: Yes
Airport Type: IFR
Landing Fee: Yes
Control Tower: Yes
Jet Start Unit: No
LLWS Alert: No
Beacon: No

Sunrise: 0625 Z
Sunset: 1444 Z

Runway Information

Runway: 04L
Length x Width: 10039 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 140 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 04R
Length x Width: 11483 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 162 ft
Lighting: Edge, ALS, Centerline
Displaced Threshold: 984 ft

Runway: 15
Length x Width: 9518 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 163 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 22L
Length x Width: 11483 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 165 ft
Lighting: Edge, ALS, Centerline, TDZ
Runway: 22R
Length x Width: 10039 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 177 ft
Lighting: Edge, ALS, Centerline, TDZ
Displaced Threshold: 196 ft

Runway: 33
Length x Width: 9518 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 148 ft
Lighting: Edge, ALS, Centerline

Communication Information

ATIS: 114.200 Departure Service
ATIS: 135.075 Arrival Service
Helsinki Tower: 119.700
Helsinki Tower: 118.850
Helsinki Tower: 118.600
Helsinki Ground: 118.125
Helsinki Ground: 121.800
Helsinki Ramp/Taxi: 121.650
Helsinki Radar Approach: 119.100
Helsinki Radar Approach: 119.700
Helsinki Radar Approach: 129.850
Helsinki Arrival: 124.325
Helsinki Arrival: 119.900
Helsinki De-Icing Operations: 127.025
Remote De-Icing Operations: 133.850
1. GENERAL

1.1. ATIS
D-ATIS Arrival 135.075
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
Depatures
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 used for departures and RWY 33 for landings only in exceptional cases and between 0600-2300LT for turbo-props and other propeller-driven ACFT based on ATC considerations.

Wind Speed Criteria
- RWY is clear, dry or damp:
  - MAX crosswind component is 20 KT/MAX tailwind component is 5 KT (RWY 04L/22R, 04R/22L, 15/33).
- RWY is wet and braking action is medium to good or better:
  - MAX crosswind component is 20 KT/MAX tailwind component is 5 KT (RWY 04L/22R, 04R/22L);
  - MAX crosswind component is 15 KT/MAX tailwind component is 5 KT (RWY 15/33).
- RWY is contaminated and braking action is medium to good or better:
  - MAX crosswind component is 15 KT/MAX tailwind component is 5 KT (RWY 04L/22R, 04R/22L, 15/33)

1.2.3. NIGHTTIME RESTRICTIONS

2100-0600LT
Traffic approaching RWY 04R or 22L will not be cleared below the intermediate approach altitude (3300'/3000') before final approach course.

0000-0600LT
ACFT may expect to follow the STAR without shortcuts, except for RWY 15. ACFT may be vectored for approach for RWY 15 in order to reduce noise impact.
Visual approaches are not allowed.
Approaching traffic will not be cleared below FL70 at a distance more than 25NM from RWY touchdown.
ATC is not allowed to cancel speed restrictions.
1. General

1.2.4. Run-up Tests

Maintenance run-ups, excluding idle power, must be performed on the run-up area and shall be avoided between 2200-0700LT and on Sundays and public holidays. Exceptions only as agreed with the Apron Control.

When wind conditions prevent the use of the engine run-up area for maintenance purposes, the primary procedure is to perform engine run-ups at a time when the wind conditions are more suitable. If it is not possible to postpone an engine run-up, maintenance run-ups above idle power can be carried out elsewhere in the APT area.

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.

1.2.7. Continuous Descent Operations

In order to reduce ACFT noise and emissions, ATC gives clearances allowing continuous descent, traffic situation permitting. Continuous descent can be planned based on track distance information of the STAR or, when vectored, on estimated track distance provided by ATC.

1.3. Low Visibility Procedures (LVP)

1.3.1. CAT II/III Approaches

RNAV 1 or 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 to intercept ILS LOC.

1.4. Surface Movement Guidance and Control System

1.4.1. Advanced Surface Movement Radar Utilising Mode S

ACFT operators should ensure that Mode S transponders (if equipped) are able to operate when the ACFT is on the ground.

Flight crew of a Mode S-equipped ACFT shall
- select the assigned code and activate the Mode S transponder from request of push-back or taxi, whichever is earlier;
- keep transponder activated after landing, continuously until ACFT is fully parked on stand;
- set the Mode A code 2000 immediately after parking, before selecting OFF or STAND-BY.

Activation of the Mode S transponder means selecting AUTO mode, ON, XPNDR, or the equivalent, according to the specific installation. Selection of the STAND-BY mode will NOT activate the Mode S transponder.

Flight crew of ACFT equipped with Mode S having an ACFT identification feature should also set the ACFT identification. This setting is the ACFT ident specified in item 7 of the flight plan. ACFT ident should be entered from the request for push-back or taxi, whichever is earlier, through FMS or transponder control panel.
1. GENERAL

1.5. TAXI PROCEDURES

1.5.1. GENERAL

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 HELSINKI Ground 121.8 or 118.125.

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.

Taxiing on TWY AP by towing only.

Pilots are to use the minimum power necessary when maneuvering on the TWY system. This is of particular importance when maneuvering in the apron, where jet blast can affect adjacent stands.

1.5.2. 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.

1.6. PARKING INFORMATION

Stands 12 thru 31, S43, S45 thru S55, W40 thru W48B, 171 and 172 equipped with docking guidance system.

Stands 12 thru 30:
Clearance distances between the stand and the passenger bridge for ACFT of code letter C thru E: 9'/2.7m longitudinal, 4'/1.25m lateral.

Stands 13, 14 and 20 thru 22:
The longitudinal clearance distance between ACFT engine and passenger bridge for ACFT type A319 and E170 is 6'/1.8m.
Docking is allowed only with special permission.

Stand 31:
Clearance distances between the stands and the passenger bridges for all ACFT types are 6'/1.8m longitudinal and 4'/1.25m lateral.

1.7. OTHER INFORMATION

Helicopter operations.
2. ARRIVAL

2.1. ARRIVAL INSTRUCTIONS

2.1.1. ENTRY POINTS FOR FLIGHT PLANNING
Arriving traffic shall file the flight plan via the entry points DIVAM, INTOR, LAKUT, LUSEP, ROPAM or VEPIN.
The term DCT should not be presented after TMA entry point.

2.1.2. INITIAL CONTACT
At first contact with HELSINKI Approach, report:
- Call sign;
- Type of ACFT;
- Wake turbulence category, if HEAVY or SUPER;
- Level;
- Speed, if ordered by previous ATC unit;
- Designator of the last received ATIS broadcast.
In order to avoid frequency congestion, when changing from HELSINKI Radar frequency to HELSINKI Arrival frequency, state only:
HELSINKI ARRIVAL + [call sign].
When changing from approach control frequency to tower frequency, state only:
HELSINKI TOWER + [call sign] + RWY.

2.1.3. RNAV STAR
Final approach cannot be performed without appropriate clearance.
Level(s) specified as level restrictions at waypoints of RNAV STAR, do not allow descending to the level(s) specified.
In case there are two RNAV STAR published from an entry point to the same RWY, designator of the other route differs from the normal naming principle of arrival routes. Instead of the first waypoint, the other RNAV STAR is named after the second waypoint on the route.

2.1.4. INBOUND CLEARANCE
Arriving traffic will normally be cleared to follow RNAV STAR serving the RWY in use. An ACFT unable to utilize the given RNAV STAR shall inform the ATC immediately.

2.2. COMMUNICATION FAILURE PROCEDURES
RNAV STAR has been given and acknowledged:
- Follow STAR until last waypoint and proceed to IAF of the last given and acknowledged RWY.
- If RADAR-vectored, continue 2 minutes on last assigned and acknowledged HDG and ALT/FL, then resume STAR until last waypoint and proceed to IAF of the last given and acknowledged RWY.

RNAV STAR has not been given and acknowledged:
- Continue 2 minutes on last assigned and acknowledged HDG and ALT/FL and proceed to IAF of the last given and acknowledged RWY.
- From IAF, execute IAP to the acknowledged RWY and vacate.

2.3. NOISE ABATEMENT PROCEDURES
Due to VFR traffic flying below IFR traffic an ACFT carrying out visual approach shall maintain an altitude of at least 2000’ until HEL 7 DME, and established on final. The final stage of a visual approach shall be performed at descent profile equivalent to at least 3°.
2. ARRIVAL

2.4. CAT II/III OPERATIONS
RWY 22L approved for CAT II operations and RWYs 04L and 22R approved for CAT III operations, special aircrew and ACFT certification required.

2.5. RWY OPERATIONS

2.5.1. 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 occurrence of go-arounds.
Pilots should prepare their landings so that they are able to vacate the RWYs in accordance with the following table when RWY conditions permit.
ATC must be informed as early as possible if TWY YP, YN or CN has to be used to vacate RWY 15.

<p>| Preferred Turn-offs |
|---------------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>RWY</th>
<th>TWY</th>
<th>Dist from THR to Turn-off</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>04L</td>
<td>WK</td>
<td>5620'/1713m</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>WM</td>
<td>4498'/1371m</td>
<td>Medium Prop/Light</td>
</tr>
<tr>
<td>04R</td>
<td>ZG</td>
<td>4833'/1473m</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>ZD</td>
<td>6657'/2029m</td>
<td>Heavy</td>
</tr>
<tr>
<td>15</td>
<td>YF</td>
<td>5066'/1544m</td>
<td>Medium Jet</td>
</tr>
<tr>
<td></td>
<td>YH</td>
<td>6102'/1860m</td>
<td>Medium Prop/Light</td>
</tr>
<tr>
<td></td>
<td>YL</td>
<td>7917'/2413m</td>
<td>Heavy</td>
</tr>
<tr>
<td>22L</td>
<td>ZH</td>
<td>4967'/1514m</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>ZJ</td>
<td>5856'/1785m</td>
<td>Heavy</td>
</tr>
<tr>
<td>22R</td>
<td>WL</td>
<td>3484'/1062m</td>
<td>Medium Prop/Light</td>
</tr>
<tr>
<td></td>
<td>WP</td>
<td>4478'/1365m</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>WS</td>
<td>5807'/1770m</td>
<td>Heavy</td>
</tr>
<tr>
<td>33</td>
<td>YF</td>
<td>3812'/1162m</td>
<td>Medium Prop/Light</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>6804'/2074m</td>
<td>Heavy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medium Jet</td>
</tr>
</tbody>
</table>

2.6. TAXI PROCEDURES

2.6.1. 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 or FATO 16/34 shall contact HELSINKI Ground 121.8 immediately after vacating the RWY/FATO for taxi clearance.

ACFT vacating RWY 04L/22R shall remain on 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.

2.6.2. 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.
2.7. OTHER INFORMATION

2.7.1. 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 RWYs 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 RWYs 22R and 22L (04R and 04L).”
3. DEPARTURE

3.1. DEPARTURE INSTRUCTIONS

3.1.1. EXIT POINTS FOR FLIGHT PLANNING

Departing traffic shall file the flight plan via the exit points ADIVO, ARVEP, IDEPI, KOIVO, KUVEM, NEPEK, NUNTO, RENKU, TEVRU or VALOX.

The term DCT should not be presented before TMA exit point.

3.2. DIGITAL DEPARTURE CLEARANCE (DCL)

Digital enroute clearance shall be requested MAX 25 minutes prior to EOBT. A digital enroute clearance contains:

- APT of destination;
- Designated departure RWY;
- Standard instrument departure (SID) or heading and altitude after departure;
- TMA exit point;
- SSR-code;
- ADT (Approved Departure Time = CTOT, if applicable);
- Next frequency;
- CTOT (if applicable);
- QNH;
- TSAT (if applicable).

Examples of digital enroute clearances:

HDG/ALT:

ABC123 CLRD TO ESSA OFF 22R
HDG 280 CLIMB TO 4000 FT VECTORS RUNEN
SQUAWK 2202 ADT 1110
NEXT FREQ 118.125
CTOT 1110
QNH 1013
TSAT 1103

The following procedure applies:

The pilot shall acknowledge the enroute clearance by means of a Departure Clearance Readback message (CDA) downlink within 5 minutes; otherwise a negative FSM (Flight System Message) will be issued and pilot shall revert to voice procedures.

Only the following optional free text messages are noticed:

- REQ[RWY]
- REQ NON PRNAV

When using the DCL service pilots shall maintain a listening watch on the channel published for HELSINKI Ground 118.125.

An en-route clearance issued by RTF always supersedes an enroute clearance transmitted via the DCL service.
3. DEPARTURE

3.3. DE-ICING

3.3.1. 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 and 8).

De-icing must be requested between 0530-0030LT (winter time) through HELSINKI De-icing Coordinator on 127.025. 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.

Other times de-icing must be requested via de-icing company.

Pilots are recommended to monitor the de-icing coordinator’s frequency.

De-icing shall be requested 20 minutes prior to Target Off Block Time (TOBT).

Request for manual treatment shall be included.

Pilots using ground handling at Finavia’s business flight terminal shall inquire de-icing coordination from the ground handling officer.

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.

3.3.2. DE-ICING STANDS

Stands 122D, 124D, 600 thru 604 and 811 thru 814B are de-icing stands.

3.3.3. SPECIAL PROCEDURES FOR REMOTE DE-ICING APRON

When de-icing is performed on the Remote De-icing Apron, ATC will hand over the ACFT at the perimeter of the apron to the Remote De-icing Coordinator (normally on 133.850).

When notifying the coordinator, pilots shall use their ACFT call sign for identification. The coordinator will direct the ACFT to one of the de-icing stands.

The Remote De-icing Aprons, including their entry and exit taxi lines, lie 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. DEPARTURE

3.4. START-UP, PUSH-BACK AND TAXI PROCEDURES

3.4.1. COLLABORATIVE DECISION MAKING PROCEDURES (CDM)

3.4.1.1. TARGET OFF BLOCK TIME (TOBT)

TOBT is the estimated time when ACFT is ready for immediate engines start-up and/or push-back after receiving clearance from TWR. An exception exists in de-icing procedures when the TOBT owned by the airline operator excludes time consumed for de-icing operations at the ACFT's original parking position. In this case TOBT is the time when an ACFT is ready to start the de-icing process.

If the ACFT is not ready within +/-5 minutes of the last informed TOBT the TOBT must be updated accordingly. TOBT can be updated as described below. Observe, that the Target Start-up Time (TSAT) is generated based on the TOBT. Operators are encouraged to adjust TOBT as close to real as possible.

CDM TOBT procedure does not replace the pilots responsibility to keep the adequate flight plan valid and within the given limits.

3.4.1.2. TARGET START-UP APPROVAL TIME (TSAT)

Time in which the flight crew can request ATC for engines start-up (and push-back).

TSAT is provided by the ATC in order to optimize departure sequence with regard to EOBT, TOBT, ATFM restrictions (CTOT), de-icing and local conditions.

First TSAT will be issued after submission of the first TOBT, but not earlier than 40 minutes prior EOBT. ATC informs pilots of the TSAT in connection of the enroute clearance.

In interval TSAT +/-5 minutes the flight crew shall request start-up and in case of NOSE-IN stand, push-back. Engines start-up or push-back shall be commenced immediately after receiving the clearance.

If the crew does not request start-up clearance within the interval TSAT +/-5 minutes and TOBT is not updated the flight is excluded from the sequence until a new TOBT is submitted.

In general, TSAT is not changed during the last TSAT -20 minutes period. However, improvement to the TSAT can be accepted by confirming (or updating) TOBT during this time manually directly to the CDM application.

Also other constraints, like change in CTOT, may cause an update to the TSAT.

Changed TSAT times can be obtained via ATC (R/T), cockpit laptop (CDM application), docking guidance system (where available) or your ground handling agent.

Due to operational reasons ATC may provide start-up clearance regardless of the existing TSAT.

After receiving the TSAT the pilot does not need to update FPL and TOBT accordingly. However, TOBT and FPL EOBT always have to encounter with each other (TOBT has to fit to the flight plan window).

3.4.1.3. CDM DE-ICING PROCEDURES

De-icing event is part of the CDM process. Obtaining the optimum departure sequence should the de-icing order be done as early as possible. Placing a de-icing order will cause a recount in the departure and start-up sequence.

If the de-icing stand has been assigned to the original parking position, TSAT is always after the calculated end of the de-icing process. Note that also other constraints for the TSAT assignment, like CTOT, may exist.

Missing the valid TSAT due to de-icing reasons (gate de-icing) shall be immediately reported to your de-icing agent or to the ATC TWR.
3. DEPARTURE

3.4.2. GENERAL
Departing IFR flights will receive enroute clearance via datalink or from HELSINKI Ground 118.125.

Route clearance shall be requested from appropriate ATC unit not earlier than 25 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.

An ACFT unable to utilise cleared SID route shall inform ATC immediately for an alternative clearance.

3.4.3. START-UP AND 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.

3.4.4. TAXIING
Unless otherwise instructed ACFT shall use shortest possible way to TWY parallel to the RWY.

3.4.5. 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 or FATO until a further taxi clearance has been issued by ATC.

3.5. 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.

Noise Abatement Departure Procedure RWY 22L
In order to minimize the noise impact, departures of jet aeroplanes shall be conducted in accordance with a specific noise abatement procedure except in conditions that may preclude the safe execution of the procedure.

Appropriate noise mitigation can be achieved by applying the following altitudes in take-off and climb procedure that is otherwise defined as for NADP 1:
- Performing take-off with the applied take-off power until a thrust reduction altitude of at least 1500’.
- Maintaining the speed of $V_2 + (10$ to $20$ KT) until an acceleration altitude of at least 3000’.
3.6. COMMUNICATION FAILURE PROCEDURES

If the flight has acknowledged an initial or intermediate clearance to climb to a level other than the one specified in the current flight plan for the enroute phase of the flight, it shall, if no time or geographical limit was included in the climb clearance, maintain for a period of seven minutes the level to which it was cleared and then continue its flight in accordance with the current flight plan.

A departing controlled flight being vectored by RADAR away from the route specified in its current flight plan and experiencing two-way radio communication failure should proceed in the most direct manner to the route specified in the current flight plan.

3.7. RWY OPERATIONS

3.7.1. MINIMUM RWY OCCUPANCY TIME

By default, ATC will use the following RWY intersections or departure points, unless otherwise requested by the pilot:

<table>
<thead>
<tr>
<th>RWY</th>
<th>DEFAULT INT</th>
<th>RMK</th>
</tr>
</thead>
<tbody>
<tr>
<td>04L</td>
<td>WZ</td>
<td></td>
</tr>
<tr>
<td>22R</td>
<td>WD</td>
<td></td>
</tr>
<tr>
<td>04R</td>
<td>ZR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ZS</td>
<td>For ACFT parking or de-icing taking place on APN 8</td>
</tr>
<tr>
<td></td>
<td>ZT</td>
<td>For ACFT parking or de-icing taking place on APN 8</td>
</tr>
<tr>
<td>22L</td>
<td>Y</td>
<td>Propeller / turboprop / quiet jet ACFT</td>
</tr>
<tr>
<td></td>
<td>ZD</td>
<td>Propeller / turboprop / quiet jet ACFT</td>
</tr>
<tr>
<td></td>
<td>ZB</td>
<td>Propeller / turboprop / quiet jet ACFT</td>
</tr>
<tr>
<td>15</td>
<td>DEP POINT V</td>
<td>Propeller / turboprop / quiet jet ACFT</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>Propeller / turboprop / quiet jet ACFT</td>
</tr>
<tr>
<td></td>
<td>YB</td>
<td>If LVP operations are in use</td>
</tr>
<tr>
<td></td>
<td>YA</td>
<td>If de-icing takes place on APN 6</td>
</tr>
<tr>
<td>33</td>
<td>CN</td>
<td>For ACFT parking taking place on APN 4</td>
</tr>
<tr>
<td></td>
<td>YN</td>
<td></td>
</tr>
</tbody>
</table>

The take-off positions on the RWY are not marked by painted markings or sign boards with the exception of DEP POINT V which is provided with a sign board. When cleared for take-off, ATC will expect and has planned on seeing movement within 10 seconds of take-off clearance being issued.

Pilots unable to comply with this requirement shall notify ATC before entering the RWY.

To increase RWY capacity and to comply with slot times, ATC may reorder departure sequence at any time.

3.8. 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.
Alt Set: hPa Trans level: By ATC Trans alt: 5000
1. This chart may only be used for cross-checking of altitudes assigned while the aircraft is identified.
2. Sectors do not constitute controlled airspace, nor do they attract any special airspace regulation in their own right.
3. Altitudes ensure obstacle clearance within the area concerned plus a 3NM buffer area.

CHANGES: EFIN FIR renamed.
<table>
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<th>REFER TO CHART</th>
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<td>DIVAM 2W, INTOR 6W</td>
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<td>ROPAM 2W, VEPIN 2W</td>
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</table>

CHANGES: RNAV STAR NAPUN 1V renumbered 2V.
CHANGES: RNAV STARs renumbered & revised.

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. AIC vectors the aircraft to final approach if traffic situation requires.
5. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC. Altitude/FL/speed constraints must always be followed as published unless explicitly cancelled by ATC.
7. STARs must be flown according to the defined waypoint sequence as labelled on chart. Plan continuous descent path according to ATC, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.
8. Descent by ATC if traffic permits. Plan continuous descent path according to STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

WA = 2200

Avs

0 5 15 25 35 45 55 65

0 5 10 15 20 25 30 35 40 45 50

0 5 10 15 20 25 30 35 40 45 50 55 60


Max 250 KT

Max 220 KT

Max 200 KT
LAKUT 7B [LAKU7B]  
LUSEP 2B [LUSE2B]  
RWY 04L RNAV ARRIVALS

For Radio Communication Failure procedures refer to 10-1P pages.

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**CHANGES:**  
RNAV STARs renumbered & revised.

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CHANGES: RNAV STARS renumbered & revised.
10-1P pages.

For Radio Communication Failure procedures refer to 10-1P pages.

ROPAM 2B [ROPA2B], VEPIN 2B [VEPI2B]

ROPAM 2B

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
5. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
6. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
7. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
8. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
9. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
10. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.

RWY 04L RNAV ARRIVALS

135° 07F

1. Alt: set hPa. Trans level: by ATC.
2. RNAV (DME/DME or GNSS).
3. RNAV 1 or P-RNAV.
4. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
5. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
6. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
7. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
8. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
9. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
10. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.

RWY 04L RNAV ARRIVALS

135° 07F

1. Alt: set hPa. Trans level: by ATC.
2. RNAV (DME/DME or GNSS).
3. RNAV 1 or P-RNAV.
4. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
5. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
6. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
7. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
8. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
9. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
10. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.

RWY 04L RNAV ARRIVALS

135° 07F

1. Alt: set hPa. Trans level: by ATC.
2. RNAV (DME/DME or GNSS).
3. RNAV 1 or P-RNAV.
4. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
5. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
6. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
7. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
8. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
9. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
10. STARs must be flown according to the defined course, STAR clearance until the last waypoint is required.
RNAV STAR renumbered & revised.

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV. Alt Set: hPa Trans level: By ATC.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. Descent clearance will be given by ATC. Plan continuous descent path according to STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.
5. STARS must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC. Plan continuous descent path according to STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.
7. Altitude/FL/speed constraints must always be followed as required or the aircraft is unable to utilize given RNAV STAR.
8. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.

For Radio Communication Failure procedures refer to 10-1P pages.

CHANGES: RNAV STAR renumbered & revised.
RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
5. STARS must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
5. STARS must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

HOLDING OVER LAKUT

STAR
LAKUT (FL100+) - MAROM (K250-) - HK871 - HK937 - HK932 - NEKKU (K220-; 3300+) - MALKE (K220-; 3300+).

ROUTING
LUSEP (FL100+) - NAPUN (K250-) - HK890 - HK897 - HK932 - NEKKU (K220-; 3300+) - MALKE (K220-; 3300+).
For Radio Communication Failure procedures refer to 10-1P pages.
RNAV STARs renumbered & revised.

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. A/T vectors the aircraft to final approach if traffic situation requires or if the aircraft is unable to utilize given RNAV STAR.
5. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required. ATC clearance will be given by ATC.
6. Descent clearance will be given by ATC.
7. Altitude/F.L./speed constraints must always be followed as published unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

CHANGES: RNAV STARs renumbered & revised.

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RNAV STARs renumbered & revised.
For Radio Communication Failure procedures refer to 10-1P pages.

Changes: RNAV STARs renumbered & reised.

Max 250 KT

Max 220 KT
RNAV STARs renumbered & revised. For Radio Communication Failure procedures refer to 10-1P pages.
HOLDING OVER LAKUT

STAR

LAKUT 4A
LAKUT (FL100+) - MAROM (K250+) - VIBEP - HK942 - HK951 - LASTU (3000+) - KAAVI (K220; 3000+).

LUSEP 3A
LUSEP (FL100+) - NAPUN (K250-) - HK902 - KUKKA (3000+).

CHANGES:
RNAV STARs renumbered & revised.

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Changes: RNAV STARS renumbered & revised.

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to use given RNAV, SIACT, RNAV STAR.
5. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on direct course. ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed as published unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according to STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

For Radio Communication Failure procedures refer to 10-1P pages.
DIVAM 3V [DIVA3V], INTOR 4V [INTO4V]
RWY 22R RNAV ARRIVALS

For Radio Communication Failure procedures refer to 10-1P pages.

DIVAM MAX 250 KT
(HEL R226/D50.4) FL100
MHA FL100
058°
238°

INTOR MAX 250 KT
(HEL R158/D31.5) FL120
MHA FL120
040°

STAR ROUTING

DIVAM 3V DIVAM (FL100+) - PEXEN (K250-) - HK952 - HK897 - MILLI (K220; 2000+).

INTOR 4V INTOR (FL120+) - BALTI (K250-) - HK944 - HK946 - NOFOX (K220; 2000+).

1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
5. STAR's must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed as published unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

10-25

CHANGES: RNAV STARS renumbered & revised.

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For Radio Communication Failure procedures refer to 10-1P pages.

LAKUT 4V [LAKU4V]
LUSEP 4V [LUSE4V]
RWY 22R RNAV ARRIVALS

Alt Set: hPa  Trans level: By ATC
1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs cannot be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
5. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed as published unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.
RNAV STAR MAROM 1V [MAR01V] NAPUN 2V [NAPU2V] RWY 22R RNAV ARRIVALS

For Radio Communication Failure procedures refer to 10-1P pages.

Marom 1V

Napun 2V

ForRadio Communication Failure procedures refer to 10-1P pages.

FANNI MAX 250 KT

MILLI MAX 220 KT

HOLDING OVER LAKUT

MAROM 1V [MAR01V]

NAPUN 2V [NAPU2V]

RWY 22R RNAV ARRIVALS

Changes: RNAV STAR NAPUN 1V renumbered 2V & revised.

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Alt Set: hPa Trans level: By ATC
1. RNAV (DME/DME or GNSS).
2. RNAV 1 or P-RNAV.
3. DME/DME OPS: more than 2 DME inputs can not be guaranteed all times.
4. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
5. STARs must be flown according to the defined waypoint sequence until the last waypoint. Then continue on defined course, ATC clearance is always required.
6. Descent clearance will be given by ATC.
7. Altitude/FL/speed constraints must always be followed as published unless explicitly cancelled by ATC.
8. Continuous descent by ATC if traffic permits. Plan continuous descent path according STAR, followed by direct intercept to IAF of the acknowledged IAP or as advised by ATC.

For Radio Communication Failure procedures refer to 10-1P pages.

ROPAM 2W [ROPA2W], VEPIN 2W [VEPI2W]
RWY 33 RNAV ARRIVALS

HOLDING OVER VEPIN

ROPAM (HEL R113/D23.0) - TOPPI (K220-) - HK948 - HK949 - TOPPI (K220; 3000+).
VEPIN (FL100+) - MAMOP (K250-) - HK949 - HK948 - TOPPI (K220; 3000+).

CHANGES: New chart (RNAV STARs renumbered & revised).

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<tr>
<th>RNAV SID DESIGNATION</th>
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<td>NEPEK 2D, TEVRU 2D</td>
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<tr>
<td>NEPEK 2N, TEVRU 2N</td>
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<td>NEPEK 2P, TEVRU 2P</td>
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<td>NEPEK 2Z, TEVRU 2Z</td>
<td>10-3F</td>
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<td>ARVEP 3C, IDEPI 3C</td>
<td>10-3G</td>
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<td>ROPAM 1S</td>
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<td>KOIVU 3C, RENKU 3C, VALOX 3C</td>
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<td>ADIVO 2Z, KUVEM 2Z, NUNTO 2Z</td>
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<tr>
<td>OMNIDIRECTIONAL DEPARTURES</td>
<td>10-3X5</td>
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</tbody>
</table>

CHANGES: RNAV SIDs renumbered & revised.
Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV 1.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions,
   etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

These SIDs require a minimum climb gradient of
300 per NM (5.0%) up to 4000 due to airspace
restrictions.

Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300
---|---|---|---|---|---|---
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPEK 3C</td>
<td>(680+) - HK416 - LULAB (K250-) - NEPEK.</td>
</tr>
<tr>
<td>TEVRU 3C</td>
<td>(680+) - HK416 - LULAB (K250-) - TEVRU.</td>
</tr>
</tbody>
</table>
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.

5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPEK 2D</td>
<td>(680+) - HK914 (K250-) - HK919 (K250-) - HK918 - NEPEK.</td>
</tr>
<tr>
<td>TEVRU 2D</td>
<td>(680+) - HK914 (K250-) - HK919 (K250-) - HK918 - TEVRU.</td>
</tr>
</tbody>
</table>
Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

**NEPEK 2N [NEPE2N], TEVRU 2N [TEVR2N]**

**RWY 22R RNAV DEPARTURES**

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPEK 2N</td>
<td>Climb on runway track to D2.5 HEL, turn RIGHT, 284° track to HK461 - HK931 (K250-) - NEPEK.</td>
</tr>
<tr>
<td>TEVRU 2N</td>
<td>Climb on runway track to D2.5 HEL, turn RIGHT, 284° track to HK461 - HK931 (K250-) - TEVRU.</td>
</tr>
</tbody>
</table>

**INITIAL CLIMB CLEARANCE**

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

**NEPEK**

**TEVRU**

**NOT TO SCALE**

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

For Radio Communication Failure procedures refer to 10-1P pages.
HELSINKI Radar 119.100

Apt Elev 180

Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

NEPEK 2P [NEPE2P], TEVRU 2P [TEVR2P]

RWY 33 RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

NEPEK 2Z [NEPE2Z], TEVRU 2Z [TEVR2Z]

RWY 04L RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
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<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by 
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, 
   etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by 
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, 
   etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ARVEP 3C [ARVE3C]
IDEPI 3C [IDEP3C]
RWY 04R RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300
---|---|---|---|---|---|---
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARVEP 3C</td>
<td>(680+) - HK416 - HK912 (K250-) - ARVEP.</td>
</tr>
<tr>
<td>IDEPI 3C</td>
<td>(680+) - HK416 - IDEPI.</td>
</tr>
</tbody>
</table>

NOT TO SCALE

For Radio Communication Failure procedures refer to 10-1P pages.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300
---|---|---|---|---|---|---
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARVEP 3C</td>
<td>(680+) - HK416 - HK912 (K250-) - ARVEP.</td>
</tr>
<tr>
<td>IDEPI 3C</td>
<td>(680+) - HK416 - IDEPI.</td>
</tr>
</tbody>
</table>
For RNAV SIDs:

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

These SIDs require a minimum climb gradient of:
- 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Grid speed-KT
- 75 100 150 200 250 300
Grid speed-KT
- 380 506 760 1013 1266 1519

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

For Radio Communication Failure procedures refer to 10-1P pages.
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. SIDs are also minimum noise routings.
6. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
7. EXPECT close-in obstacles.

ARVEP 2F [ARVE2F]
IDEP 2F [IDEP2F]

RWY 22L RNAV DEPARTURES
ONLY FOR AIRCRAFT IN WAKE TURBULENCE CATEGORY L OR M AND NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Grid speed-KT: 75 100 150 200 250 300
300 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.

<table>
<thead>
<tr>
<th>SID ROUTING</th>
<th>ARVEP 2F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(730+) - VAVIS (K230-) - HK924 (K230-) - PENAD - ARVEP.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SID ROUTING</th>
<th>IDEPI 2F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(730+) - VAVIS (K230-) - HK924 (K230-) - PENAD - IDEPI.</td>
<td></td>
</tr>
</tbody>
</table>
ARVEP 2N [ARVE2N], IDEPI 2N [IDEP2N]
RWY 22R RNAV DEPARTURES

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

For Radio Communication Failure procedures refer to 10-1P pages.

Climb on runway track to D2.5 HEL, turn RIGHT, 284° track to HK461 - HK931 (K250-) - ENUTO - ARVEP.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
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<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

ARVEP 2P [ARVE2P], IDEPI 2P [IDEP2P]
RWY 33 RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT  75 100 150 200 250 300
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARVEP 2P</td>
<td>(680+) - IDMOP (K230-) - ARVEP.</td>
</tr>
<tr>
<td>IDEPI 2P</td>
<td>(680+) - IDMOP (K230-) - IDEPI.</td>
</tr>
</tbody>
</table>
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1F [ROPA1F]
RWY 22L RNAV DEPARTURE

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by
   ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc)
   may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.
Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

ROPAM 1S [ROPA1S]
RWY 04R RNAV DEPARTURE
PROP/TURBOPROP ONLY
ONLY FOR AIRCRAFT NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB
ACCORDING TO ICAO ANNEX 16, CHAPTER 3

This SID requires a minimum climb gradient of
300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

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

KOIVU 3C [KOIV3C], RENKU 3C [RENK3C]
VALOX 3C [VALO3C]
RWY 04R RNAV DEPARTURES

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
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<tr>
<td>300 per NM</td>
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<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT   75  100  150  200  250  300
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOIVU 2D</td>
<td>(680+)  - NIDAG (K250-) - KOIVU.</td>
</tr>
<tr>
<td>RENKU 2D</td>
<td>(680+)  - NIDAG (K250-) - RENKU.</td>
</tr>
<tr>
<td>VALOX 2D</td>
<td>(680+)  - NIDAG (K250-) - VALOX.</td>
</tr>
</tbody>
</table>

For Radio Communication Failure procedures refer to 10-1P pages.
KOIVU 2F [KOIV2F], RENKU 2F [RENK2F], VALOX 2F [VALO2F]

RWY 22L RNAV DEPARTURES

ONLY FOR AIRCRAFT IN WAKE TURBULENCE CATEGORY L OR M AND NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SIDs or RADAR heading given by ATC and level.
5. SIDs are also minimum noise routings.
6. Instructions containing deviations from SIDs (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
7. EXPECT close-in obstacles.

Transfer: 5000

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SIDs or RADAR heading given by ATC and level.
5. SIDs are also minimum noise routings.
6. Instructions containing deviations from SIDs (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
7. EXPECT close-in obstacles.

KOIVU 2F [KOIV2F], RENKU 2F [RENK2F], VALOX 2F [VALO2F]

RWY 22L RNAV DEPARTURES

ONLY FOR AIRCRAFT IN WAKE TURBULENCE CATEGORY L OR M AND NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT | 75 | 100 | 150 | 200 | 250 | 300
300 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.
**KOIVU 2N [KOIV2N], RENKU 2N [RENK2N]**

**VALOX 2N [VALO2N]**

**RWY 22R RNAV DEPARTURES**

---

**HELINKO Radar**

Apt Elev

180

---

**Trans alt:** 5000

1. **RNAV (GNSS) (DME/DME not supported).**
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELINKO Radar.
4. At first contact with HELINKO Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

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**For Radio Communication Failure procedures refer to 10-1P pages.**

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**Hazard Beacon**

1214

---

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

---

**Gnd speed-KT**

<table>
<thead>
<tr>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
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<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

---

**匪**

**Climb on runway track to D2.5 HEL, turn RIGHT, 274° track to HK451 - HK926 (K250-) - HK927 - KOIVU.**

---

**Climb on runway track to D2.5 HEL, turn RIGHT, 274° track to HK451 - HK926 (K250-) - HK927 - RENKU.**

---

**Climb on runway track to D2.5 HEL, turn RIGHT, 274° track to HK451 - HK926 (K250-) - HK927 - VALOX.**

---

**Chart reindexed; RNAV SIDs renumbered; track update.**

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1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
**KOIVU 2Q [KOIV2Q], RENKU 2Q [RENK2Q]
VALOX 2Q [VAL02Q]

**RWY 22R RNAV DEPARTURES**

**ONLY FOR AIRCRAFT IN WAKE TURBULENCE CATEGORY L OR M AND NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB ACCORDING TO ICAO ANNEX 16, CHAPTER 3**

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. SIDs are also minimum noise routings.
6. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
7. After take-off climb as rapidly as possible to at least 2180.

**Routing**

- Climb on runway track to D2.5 HEL, turn direct to HK428 - UREDA (K250-) - KOIVU.
- Climb on runway track to D2.5 HEL, turn direct to HK428 - UREDA (K250-) - RENKU.
- Climb on runway track to D2.5 HEL, turn direct to HK428 - UREDA (K250-) - VALOX.

---

**Sid Changers:**

- RNAV (GNSS) (DME/DME not supported).
- RNAV 1 or P-RNAV.

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

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

---

**Gnd speed-KT 75 100 150 200 250 300**

| 300 per NM | 380 | 506 | 760 | 1013 | 1266 | 1519 |

---

For Radio Communication Failure procedures refer to 10-1P pages.
KOIVU 2Z [KOIV2Z], RENKU 2Z [RENK2Z]
VALOX 2Z [VALO2Z]
RWY 04L RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
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<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

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

For Radio Communication Failure procedures refer to 10-1P pages.
A DIVO 3C [ADIV3C], KUVE 3C [KUVE3C]
NUNTO 3C [NUNTO3C]
RWY 04R RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
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<tr>
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<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
<th>300 per NM</th>
<th>380</th>
<th>506</th>
<th>760</th>
<th>1013</th>
<th>1266</th>
<th>1519</th>
</tr>
</thead>
</table>

For Radio Communication Failure procedures refer to 10-1P pages.

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
8. EXPECT close-in obstacles.

Initial climb clearance 4000 or assigned altitude if lower, climb to higher level only when cleared by ATC.
For Radio Communication Failure procedures refer to 10-1P pages.

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>380</td>
<td>506</td>
<td>760</td>
<td>1013</td>
<td>1266</td>
<td>1519</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADIVO 3D</td>
<td>(680+) - HK921 (K220-) - RIPVI (K250-) - ADIVO.</td>
</tr>
<tr>
<td>KUVEM 3D</td>
<td>(680+) - HK921 (K220-) - RIPVI (K250-) - KUVEM.</td>
</tr>
<tr>
<td>NUNTO 3D</td>
<td>(680+) - HK921 (K220-) - RIPVI (K250-) - NUNTO.</td>
</tr>
</tbody>
</table>

3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT
75 100 150 200 250 300
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADIVO 2N</td>
<td>Climb on runway track to D2.5 HEL, turn RIGHT, 284° track to HK461 - ADIVO.</td>
</tr>
<tr>
<td>KUVE2N</td>
<td>Climb on runway track to D2.5 HEL, turn RIGHT, 274° track to HK451 - HK926 (K250-) - KUVE2N.</td>
</tr>
<tr>
<td>NUNTO 2N</td>
<td>Climb on runway track to D2.5 HEL, turn RIGHT, 274° track to HK451 - HK926 (K250-) - NUNTO.</td>
</tr>
</tbody>
</table>

1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.
HELSINKI Radar
129.850
Apt Elev 180

Trans alt: 5000
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

ADIVO 2P [ADIV2P], KUVEM 2P [KUVE2P], NUNTO 2P [NUNT2P]
RWY 33 RNAV DEPARTURES

These SIDs require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT  | 75  | 100 | 150 | 200 | 250 | 300
300 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.

<table>
<thead>
<tr>
<th>SID</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADIVO 2P</td>
<td>(680+) - HK928 (K250-) - ADIVO.</td>
</tr>
<tr>
<td>KUVEM 2P</td>
<td>(680+) - HK928 (K250-) - KUVEM.</td>
</tr>
<tr>
<td>NUNTO 2P</td>
<td>(680+) - HK928 (K250-) - NUNTO.</td>
</tr>
</tbody>
</table>

For Radio Communication Failure procedures refer to 10-1P pages.
1. RNAV (GNSS) (DME/DME not supported).
2. RNAV 1 or P-RNAV.
3. Maintain Tower frequency until passing 1500, then contact HELSINKI Radar.
4. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
5. After take-off climb as rapidly as possible to at least 2180.
6. SIDs are also minimum noise routings.
7. Instructions containing deviations from SID (temporary altitude restrictions, etc) may be included in the ATC clearance prior to take-off.

HELSINKI Radar
129.850

Apt Elev
180

Trans alt: 5000

For Radio Communication Failure procedures refer to 10-1P pages.

Hazard Beacon
1214

MAX 250 KT
MAX 230 KT

300 per NM (5.0%) up to 4000 due to airspace restrictions.

Gnd speed-KT: 75 100 150 200 250 300
300 per NM: 380 506 760 1013 1266 1519

These SIDs require a minimum climb gradient of
climb to higher level only when cleared by ATC.

Initial climb clearance 4000 or assigned altitude if lower,

CHANGES: RNAV SIDs renumbered; track update.
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OMNIDIRECTIONAL DEPARTURES

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

These departures require a minimum climb gradient of 300 per NM (5.0%) up to 4000 due to airspace restrictions.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 per NM</td>
<td>375</td>
<td>500</td>
<td>750</td>
<td>1000</td>
<td>1250</td>
<td>1500</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>RWY</th>
<th>ROUTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>04L/R, 15</td>
<td>Climb straight ahead to at or above 680.</td>
</tr>
<tr>
<td>22R, 33</td>
<td>Climb straight ahead to at or above 730.</td>
</tr>
</tbody>
</table>

CHANGES: Initial climb clearance established.
LOW VISIBILITY PROCEDURES

- 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."

General:
- 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.
- All pilots are informed for LVP for take-offs when the RVR is 550m or less.
- The implementation of LVP will be informed to the pilot 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."

For MORE DETAILS SEE 10-9A
**HOT SPOTS**
(For information only, not to be construed as ATC instructions.)

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

**HS2** Wide apron. Make sure of correct turn before runway when taxiing to Rwy 04R.
Angled twy, no sight to the final approach area.

### Standard

#### TAKE-OFF

<table>
<thead>
<tr>
<th>Low Visibility Take-off</th>
<th>Day: RL &amp; RCLM Night: RL or CL</th>
<th>Day: RL or RCLM Night: RL or CL</th>
<th>Adequate vis ref (Day only)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> HIRL, CL &amp; relevant RVR</td>
<td>RL, CL &amp; relevant RVR</td>
<td>RL &amp; CL</td>
<td></td>
</tr>
<tr>
<td><strong>B</strong> TDZ, MID, RO RVR 125m</td>
<td>TDZ, MID, RO RVR 150m</td>
<td>RVR 200m</td>
<td>400m</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td></td>
<td>RVR 300m</td>
<td>500m</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CHANGES:** HSTs added. © JEPPESEN, 2000, 2020. ALL RIGHTS RESERVED.
<table>
<thead>
<tr>
<th>STAND No.</th>
<th>COORDINATES</th>
<th>ELEV</th>
<th>STAND No.</th>
<th>COORDINATES</th>
<th>ELEV</th>
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</thead>
<tbody>
<tr>
<td>5 thru 8</td>
<td>N60 18.8 E024 58.5</td>
<td>149</td>
<td>9</td>
<td>N60 18.5 E024 58.8</td>
<td>151</td>
</tr>
<tr>
<td>10, 11</td>
<td>N60 18.9 E024 58.4</td>
<td>150</td>
<td>12</td>
<td>N60 18.5 E024 58.9</td>
<td>150</td>
</tr>
<tr>
<td>13</td>
<td>N60 19.0 E024 58.4</td>
<td>151</td>
<td>14, 15</td>
<td>N60 19.0 E024 58.3</td>
<td>152</td>
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<tr>
<td>16</td>
<td>N60 19.0 E024 58.3</td>
<td>153</td>
<td>17</td>
<td>N60 19.0 E024 58.3</td>
<td>155</td>
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<tr>
<td>18</td>
<td>N60 19.1 E024 58.2</td>
<td>157</td>
<td>19 thru 21</td>
<td>N60 19.1 E024 58.2</td>
<td>158</td>
</tr>
<tr>
<td>22 thru 24</td>
<td>N60 19.2 E024 58.1</td>
<td>158</td>
<td>22, 26</td>
<td>N60 19.2 E024 58.0</td>
<td>158</td>
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<tr>
<td>27</td>
<td>N60 19.1 E024 58.0</td>
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<td>28, 29</td>
<td>N60 19.1 E024 57.9</td>
<td>159</td>
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<tr>
<td>30, 31</td>
<td>N60 19.1 E024 57.8</td>
<td>159</td>
<td>121</td>
<td>N60 19.3 E024 58.1</td>
<td>158</td>
</tr>
<tr>
<td>124</td>
<td>N60 19.2 E024 57.9</td>
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<td>125</td>
<td>N60 19.2 E024 57.8</td>
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<td>126</td>
<td>N60 19.1 E024 57.8</td>
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<td>N60 19.1 E024 57.5</td>
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<td>133</td>
<td>N60 19.1 E024 57.5</td>
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<td>161</td>
<td>W40</td>
<td>N60 18.9 E024 57.5</td>
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<td>W46</td>
<td>N60 18.8 E024 57.3</td>
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<td>W48A</td>
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<td>W48B</td>
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<td>S43</td>
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<td>158</td>
</tr>
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<td>S47, S49</td>
<td>N60 18.8 E024 57.4</td>
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<td>S52</td>
<td>N60 18.9 E024 57.7</td>
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<td>W48B</td>
<td>N60 18.8 E024 57.2</td>
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<td>N60 18.8 E024 57.8</td>
<td>157</td>
<td>S54</td>
<td>N60 18.8 E024 57.8</td>
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<td>S55</td>
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<td>157</td>
<td>171, 171A</td>
<td>N60 18.7 E024 57.7</td>
<td>155</td>
</tr>
<tr>
<td>171B</td>
<td>N60 18.7 E024 57.7</td>
<td>156</td>
<td>172, 172A</td>
<td>N60 18.7 E024 57.7</td>
<td>157</td>
</tr>
<tr>
<td>172B</td>
<td>N60 18.7 E024 57.6</td>
<td>158</td>
<td>201 thru 203</td>
<td>N60 18.7 E024 58.5</td>
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<tr>
<td>204</td>
<td>N60 18.6 E024 58.6</td>
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<td>N60 18.6 E024 58.6</td>
<td>149</td>
</tr>
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<td>221, 222</td>
<td>N60 18.7 E024 58.7</td>
<td>149</td>
<td>222B</td>
<td>N60 18.6 E024 58.7</td>
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<td>223</td>
<td>N60 18.7 E024 58.7</td>
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<td>301</td>
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<td>302</td>
<td>N60 18.5 E024 58.7</td>
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<tr>
<td>303</td>
<td>N60 18.5 E024 58.8</td>
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<td>304</td>
<td>N60 18.5 E024 58.8</td>
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<td>N60 18.5 E024 58.9</td>
<td>152</td>
<td>306</td>
<td>N60 18.5 E024 58.9</td>
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</tr>
<tr>
<td>311 thru 313</td>
<td>N60 18.5 E024 58.8</td>
<td>153</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DE-ICING VISUAL GUIDANCE SYSTEM

The aircraft visual guidance system is in use on Apron 6 and Apron 8.

The visual guidance system is an informative source of de-icing process displayed to all pilots.
All communication between de-icing truck and pilots occurs via VHF radio.

REMOTE DE-ICING 133.850
Remote de-icing Apron 6 and Apron 8 queuing boards inform the pilot the remote de-icing frequency.

601
Visual guidance system at standby mode displays deicing bay number.

CALL BRAKES SET
When taxiing to the de-icing bay the pilot will be instructed to contact after the parking brakes are set.

STOP DE-ICING IN PROGRESS
Commencing de-icing.

DEICING COMPLETE
Hold position at de-icing bay until the traffic lights have been turned on green and message “DEICING COMPLETE” is shown.
ATC will give permission to taxi to the manoeuvring area.

601
Visual guidance system returns to standby mode.
VISUAL NOSE-IN DOCKING GUIDANCE SYSTEM

Display:
- a) Display indicating: Aircraft type, Distance to stop, "STOP", "OK", "TOO FAR", "WAIT", "SLOW", "ID/FAIL".
- b) The floating arrows indicating that the system is ready for aircraft to start docking procedure.
- c) Red arrow indicating the direction to turn.
- d) Yellow arrow shows position in relation to the centerline.
- e) Closing rate bar.

System is ready for aircraft.

System is tracking the aircraft and giving guidance:
In this picture the aircraft is 39.4'/12m from stop position and LEFT of the centerline.
The red arrow indicates to steer RIGHT.

Instructions:
1. Follow taxi-in line and the centerline lights guidance.
2. Check correct aircraft type is displayed.
3. The floating arrows indicate that the system is ready for aircraft to start docking procedure. When the system is tracking the aircraft, the floating arrows are replaced by the closing rate bar.
4. The pilot must not proceed beyond the bridge, unless the floating arrows have been superseded by the closing rate bar.
5. During bad weather conditions the visibility for the docking system can be reduced. In that case the display will disable the floating arrows and display aircraft type and "SLOW". As soon as the system detects the approaching aircraft, the closing rate bar will appear.
6. "STOP/ID FAIL": Aircraft type verification is failed. Interrupt taxiing and contact HELSINKI Apron.
7. When stop position is reached, display indicates "STOP". Correct parking is indicated as "OK".
8. If aircraft overshoots the limit for correct parking, display indicates "TOO FAR".
9. "WAIT": Some object is blocking the view, aircraft is lost during tracking or system is not ready. Wait until the message is superseded by closing rate indicator and aircraft type.
10. Display automatically shuts down after parking.
11. In case of malfunction in the docking guidance system interrupt taxiing and contact HELSINKI Apron.
### STRAIGHT-IN RWY

<table>
<thead>
<tr>
<th></th>
<th>DA(H) / MDA(H)</th>
<th>RVR (ALS/ALS out)</th>
</tr>
</thead>
<tbody>
<tr>
<td>04L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAT 2 ILS</td>
<td>234' (100')</td>
<td>RA 105' - 300m</td>
</tr>
<tr>
<td>ILS</td>
<td>334' (200')</td>
<td>500m / 1000m</td>
</tr>
<tr>
<td>LOC</td>
<td>500' (366')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>LOC 1</td>
<td>780' (646')</td>
<td>1000m / 1000m</td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>370' (236')</td>
<td>550m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>416' (282')</td>
<td>600m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>570' (436')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>04R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ILS</td>
<td>352' (200')</td>
<td>500m / 1000m</td>
</tr>
<tr>
<td>LOC</td>
<td>550' (398')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>LOC 1</td>
<td>800' (648')</td>
<td>1000m / 1000m</td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>445' (293')</td>
<td>600m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>460' (308')</td>
<td>750m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>580' (428')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ILS</td>
<td>363' (200')</td>
<td>500m / 1000m</td>
</tr>
<tr>
<td>LOC</td>
<td>600' (437')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>LOC 1</td>
<td>800' (637')</td>
<td>1000m / 1000m</td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>428' (265')</td>
<td>600m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>465' (314')</td>
<td>750m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>610' (447')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>22L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAT 2 ILS</td>
<td>249' (100')</td>
<td>RA 112' - 300m</td>
</tr>
<tr>
<td>ILS</td>
<td>349' (200')</td>
<td>500m / 1000m</td>
</tr>
<tr>
<td>LOC</td>
<td>590' (441')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>LOC 1</td>
<td>800' (651')</td>
<td>1000m / 1000m</td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>428' (279')</td>
<td>600m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>463' (314')</td>
<td>750m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>610' (447')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>22R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAT 2 ILS</td>
<td>279' (100')</td>
<td>RA 97' - 300m</td>
</tr>
<tr>
<td>ILS</td>
<td>379' (200')</td>
<td>500m / 1000m</td>
</tr>
<tr>
<td>LOC</td>
<td>550' (371')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>LOC 1</td>
<td>820' (641')</td>
<td>1000m / 1000m</td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>413' (233')</td>
<td>550m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>459' (279')</td>
<td>600m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>610' (430')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RNP (LPV)</td>
<td>450' (303')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV/VNAV)</td>
<td>466' (319')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>RNP (LNAV)</td>
<td>580' (433')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>VOR</td>
<td>580' (433')</td>
<td>800m / 1000m</td>
</tr>
<tr>
<td>VOR 1</td>
<td>1270' (1123')</td>
<td>1000m / 1000m</td>
</tr>
</tbody>
</table>

1. W/o D2.0 HTV.
2. W/o D2.0 HG.
3. W/o D2.0 HL.
4. W/o D2.0 HK.
5. W/o D2.0 NUO.
6. W/o D5.0 HEL.

### TAKE-OFF RWY 04L/R, 15, 22L/R, 33

<table>
<thead>
<tr>
<th>RL/FATO LTS, RCLM &amp; RVR info</th>
<th>Unit/unmarked defined RWY/FATO</th>
<th>Nil Facilities DAY</th>
<th>Nil Facilities NIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>150m</td>
<td>200m</td>
<td>200m</td>
<td>250m</td>
</tr>
</tbody>
</table>

1. Without Low Visibility Take-off approval 400m are stipulated.
2. Or rejected take-off distance whichever is the greater.
INDEX

D-ATIS Arrival 135.075
HEL Radar (APP) 119.1
HEL Arrival (APP) 129.850
HEL Tower 119.9
HEL Ground 124.325

HELSINKI, FINLAND

CHANGES:

None.

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BRIEFING STRIP

HELSINKI Arrival (APP) HELSINKI Tower

135.075 119.1 129.850 119.9 124.325

LOC

Final Apch Crs

GS D6.0 HTV

CAT III B, IIIA & II ILS

Apt Elev 180'

Rwy 134'

MISSED APCH: Climb STRAIGHT AHEAD to 580', then turn LEFT onto 355° climbing to 2000'.

Do not turn before threshold. Expect radar vectoring.

MISSED APCH:

1. DME required.
2. MIA 150 KT until 4 NM from TDZ. Otherwise advise ATC.

PANS OPS

Gnd speed-Kts

70 90 100 120 140 160

3.00° 372 478 531 637 743 849

GS

CAT III ILS CAT IIIA ILS CAT II ILS

ABC RA 105' RA 109' RA 110'

DH 50' D DA(H) 234'(100') DA(H) 238'(104') DA(H) 239'(105')

RVR 75m RVR 200m RVR 300m

Simultaneous parallel instrument approaches to Rwy 04L and 04R.
CHANGES: Chart reindexed.
**Missed Approach:**

Climb STRAIGHT AHEAD to D2.3 HL, then turn LEFT onto 080° climbing to 2000'. Expect radar vectoring.

**Chart Index:**
- **D-ATIS Arrival:** 135.075
- **HELSEKI Radar (APP):** 119.1 129.850 119.9 124.325
- **HELSEKI Arrival (APP):** 118.6 118.850
- **HELSEKI Tower:** 118.125 121.8

**BRIEFING STRIP:**

- **Alt Set:** hPa
- **Rwy Elev:** 6 hPa
- **Trans level:** By ATC
- **Trans alt:** 5000'

1. DME required. 2. MIM 150 KT until 4 NM from TDZ. Otherwise advise ATC.

---

**Gnd speed-Kts**

<table>
<thead>
<tr>
<th>110</th>
<th>120</th>
<th>130</th>
<th>140</th>
<th>150</th>
</tr>
</thead>
<tbody>
<tr>
<td>372</td>
<td>478</td>
<td>531</td>
<td>637</td>
<td>743</td>
</tr>
</tbody>
</table>

**ILS Descent Angle**

<table>
<thead>
<tr>
<th>3.00°</th>
<th>3.75°</th>
<th>4.50°</th>
<th>5.25°</th>
<th>6.00°</th>
</tr>
</thead>
<tbody>
<tr>
<td>375</td>
<td>482</td>
<td>536</td>
<td>643</td>
<td>750</td>
</tr>
</tbody>
</table>

**MAP at D1.0 HL**

- **DA(H):** 363° (200°)
- **CDFA DA/MDA(H):** 600° (437°)
- **CDFA W/o D2.0 HL:** 800° (637°)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVR 550m</td>
<td>RVR 550m</td>
<td>RVR 1200m</td>
<td>RVR 1300m</td>
</tr>
</tbody>
</table>

**PANS-OPS**

1. W/o HUD/AP/FD: RVR 750m
**MISSED APCH:** Climb on STRAIGHT AHEAD to D2.5 HK, then turn LEFT onto 185° climbing to 2000'. Expect radar vectoring.

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

1. DME required.  
2. MIM 150 KT until 4 NM from TDZ. Otherwise advise ATC.

---

**CHANGES:** Chart reindexed.
**EFHK/HEL VANTAA**

**HELSEINKI, FINLAND**

**CAT II ILS Rwy 22L**

**D-ATIS Arrival** 135.075

**HELSEINKI Radar (APP)** 119.1 129.850

**HELSEINKI Arrival (APP)** 119.9 124.325

**HELSEINKI Tower** 118.6 118.850

**Ground** 118.125 121.8

<table>
<thead>
<tr>
<th>LOC HK</th>
<th>Final Apch Crs</th>
<th>GS D5.7 HK</th>
<th>CAT II ILS RA/DA(H) Refer to Minimums</th>
<th>Apt Elev 180' Rwy 149'</th>
</tr>
</thead>
<tbody>
<tr>
<td>110.3</td>
<td>218°</td>
<td>1997' (1848')</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MISSAPCH:** Climb on STRAIGHT AHEAD to D2.5 HK, then turn LEFT onto 185° climbing to 2000'. Expect radar vectoring.

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

1. DME required.  2. MIM 150 KT until 4 NM from TDZ. Otherwise advise ATC.

---

**Simultaneous parallel instrument approaches to Rwy 22L and 22R.**

---

**Printed from JeppView for Windows 5.3.0.0 on 06 Feb 2020; Terminal chart data cycle 03-2020; Notice: After 20 Feb 2020, 0000Z, this chart may no longer be valid**
BRIEFING STRIP
TM
EFHK/HEL
0 5 5 10
MISSED APCH:
LOC
*110.7
Final
Aphc Crs
GS
1789'(1610')
Alt Set: hPa
Rwy Elev: 7 hPa
Trans level: By ATC
Trans alt: 5000'

MISSED APCH: Climb STRAIGHT AHEAD to 580', then turn RIGHT onto 265° climbing to 2000'.
Do not turn before displaced threshold. Expect radar vectoring.

Simultaneous parallel instrument approaches to Rwy 22L and 22R.

TCH displ thresh 52'
Rwy 179'

Gnd speed-Kts
70 90 100 120 140 160
GS 3.0° 372 478 531 637 743 849

Standard
CAT II ILS
CAT IIIB ILS
CAT IIIA ILS
CAT III ILS

RA 97'
RA 99'
RA 100'

DA(H) 279'(100')
DA(H) 281'(102')
DA(H) 283'(104')

DH 50'

RVR 75m
RVR 200m
RVR 300m

Changes: Chart reindexed.
**EFHK/HEL VANTAA**

<table>
<thead>
<tr>
<th>D-ATIS Arrival</th>
<th>HELSINKI Radar (APP)</th>
<th>HELSINKI Arrival (APP)</th>
<th>HELSINKI Tower</th>
<th>Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>135.075</td>
<td>119.1 129.85</td>
<td>119.9 124.325</td>
<td>118.6 118.85</td>
<td>118.125 121.8</td>
</tr>
</tbody>
</table>

**LOCAL (LOC)**: HG 111.5

**Final Approach Crs**: 038°

**GS**

<table>
<thead>
<tr>
<th>GS</th>
<th>ILS DA(H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>954' (802')</td>
<td>352' (200')</td>
</tr>
</tbody>
</table>

**Apt Elev 180'**

**MSA ARP**: 2200

**D2.5 HG**

**ILS**: DME

**EXEVO**

<table>
<thead>
<tr>
<th>EXEVO D5.4 HG</th>
<th>EXEVO MAX 170 KT 2300'</th>
<th>D2.5 HG</th>
</tr>
</thead>
<tbody>
<tr>
<td>D5.4 HG</td>
<td>D2.5 HG</td>
<td></td>
</tr>
</tbody>
</table>

**TCH displ thresh 52'**

**Rwy 152'**

**D3.6 HG**

**038°...111.5 HG**

**038°**

**1200'**

**1800'**

**PAPI**

<table>
<thead>
<tr>
<th>Gnd speed-Kts</th>
<th>70 90 100 120 140 160</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS 3.00°</td>
<td>372 478 531 637 743 849</td>
</tr>
</tbody>
</table>

**STRAIGHT-IN LANDING RWY 04R**

**ILS**

<table>
<thead>
<tr>
<th>ILS DA(H)</th>
<th>ALS out</th>
</tr>
</thead>
<tbody>
<tr>
<td>352' (200')</td>
<td></td>
</tr>
</tbody>
</table>

**CHANGES:** Chart reindexed.

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### BRIEFING STRIP

- **Alt Set:** hPa
- **Rwy Elev:** 6 hPa
- **Trans level:** By ATC
- **Trans alt:** 5000'

### MISSED APCH:

Proceed towards HK866 for RIGHT turn on 085° climbing to 2000’. Expect radar vectoring.

1. Simultaneous parallel instrument approaches to RWY 04L and 04R.
2. Baro-VNAV not authorized below -20°C.

### Ground speed-Kts

<table>
<thead>
<tr>
<th>70</th>
<th>90</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
</tbody>
</table>

### Gnd speed-Kts

- **70:** 120
- **90:** 124
- **100:** 118.6
- **120:** 118.850
- **140:** 119.1
- **160:** 124.325

### Final Apch Crs

**Ap Chs:**
- **Final:** 038°
- **1200’:** 1948’

### Transmit level

- **By ATC:**
- **Trans alt:** 5000’

### LNAV/VNAV

- **LNAV:** MAP at RW~4R
- **LNAV/VNAV:** MAP at DA

### Standard APCH

- **LPV:**
  - **DA(H):** A: 445’ (293’), B: 458’ (306’), C: 466’ (314’), D: 476’ (324’)
  - **CDFA:**
    - **LNAV:**
      - **DA:** A: 460’ (308’), B: 472’ (320’), C: 481’ (339’)
      - **CDFA:**
        - **LNAV:**
          - **DA/M DA (H):** 580’ (428’)

### PANS OPS

- **PAPI:**
  - **ALS out:**
    - **RVR 750m:**
      - **RVR 1400m:**
        - **RVR 1300m:**
          - **RVR 2000m:**

### CHANGES:

- **EGNOS Notes:** Minimums.
- **Printed from JeppView for Windows 5.3.0.0 on 06 Feb 2020; Terminal chart data cycle 03-2020; Notice: After 20 Feb 2020, 0000Z, this chart may no longer be valid**
MISSED APCH: Proceed towards HK859 for LEFT turn onto 080° climbing to 2000'. Except radar vectoring.

- RNP Apch
- Alt Set: hPa
- Rwy Elev: 6 hPa
- Trans level: By ATC
- Trans alt: 5000'

Baro-VNAV not authorized below -20°C.

Except radar vectoring.

CHANGES:

- EGNOS. Note. Minimums.

With TDZ & CL & HUD: RVR 600m.
With TDZ & CL & HUD: RVR 650m.
With TDZ & CL & HUD: RVR 700m.

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MISSED APCH: Proceed towards HK864 for LEFT turn on 185° climbing to 2000'. Expect radar vectoring.

1. Simultaneous parallel instrument approaches to RWY 22L and 22R.
2. Baro-VNAV not authorized below -20°C.
**BRIEFING STRIP**

**EFHK/HEL**

**TARGETS**

- **Ch 62371 E22B**
- **XELBU**
- **MEHAK**

**MISSED APCH:** Proceed towards HK611 for RIGHT turn on track 265° climbing to 2000'. Expect radar vectoring.

1. Simultaneous parallel instrument approaches to RWY 22L and 22R.
2. Baro-VNAV not authorized below -20°C.

**RNP Apc | Alt Set: hPa | Apt Elev: 7 hPa | Trans level: By ATC | Trans alt: 5000'**

**CHANGES:**
- **EGNOS** Missed approach. Notes. Minimums.
EFHF
Helsinki (Malmi)

VANTAA
HELSINKI, FINLAND

Apt Elev
Rwy
180'
147'

Gnd speed-Kts
70 90 100 120 140 160

PAPI

HSAIL

MISSED APCH: Proceed on 324° climbing to 2000'. Expect radar vectoring.

RNP Apch   Alt Set: hPa   Rwy Elev: mt hPa   Trans level: By ATC   Trans alt: 5000'

Baro-VNAV not authorized below -20°C.

CAUTION: HELSINKI (MALMI) airport lies under final approach course 4.0 NM before threshold 33 and may be mistaken for HELSINKI (VANTAA).
MISSED APCH: Climb on 324° to 2000'. Expect radar vectoring.

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

1. DME required. 2. Final approach track offset 1° from rwy centerline.

CAUTION: HELSINKI (MALMI) airport lies under final approach course 4.0 NM before threshold 33 and may be mistaken for HELSINKI (VANTAA).
Chart changes since cycle 02-2020

ADD = added chart, REV = revised chart, DEL = deleted chart.

<table>
<thead>
<tr>
<th>ACT</th>
<th>PROCEDURE IDENT</th>
<th>INDEX</th>
<th>REV DATE</th>
<th>EFF DATE</th>
</tr>
</thead>
</table>

HELSINKI, (VANTAA - EFHK)
TERMINAL CHART CHANGE NOTICES

No Chart Change Notices for Airport EFHK

Chart Change Notices for Country FIN

Type: Gen Tmnl  
Effectivity: Temporary  
Begin Date: Immediately  
End Date: Until Further Notice

STARs and SIDs are also minimum noise routings.