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Airport Information For EFHK

Terminal Charts For EFHK

Revision Letter For Cycle 15-2013

Change Notices

Notebook

General Information

Location: Helsinki Fin
IATA Code: HEL
Lat/Long: N60° 19.0' E024° 57.8'
Elevation: 179 ft

Airport Use: Public
Magnetic Variation: 8.1°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: 0132 Z
Sunset: 1921 Z,

Runway Information

Runway: 04L
Length x Width: 10039 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 139 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 04R
Length x Width: 11286 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 160 ft
Lighting: Edge, ALS, Centerline
Displaced Threshold: 787 ft
Stopway: 164 ft

Runway: 15
Length x Width: 9518 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 162 ft
Lighting: Edge, ALS, Centerline, TDZ

Runway: 22L
Length x Width: 11286 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 164 ft
Lighting: Edge, ALS, Centerline, TDZ

Stopway: 197 ft

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

Runway: 33
Length x Width: 9518 ft x 197 ft
Surface Type: asphalt
TDZ-Elev: 147 ft
Lighting: Edge, ALS, Centerline

Communication Information

ATIS 135.075 Arrival Service
ATIS 114.2 Departure Service
Helsinki Tower 119.7
Helsinki Tower 118.85
Helsinki Tower 118.6
Helsinki Delivery Ground Control 118.125
Helsinki Ground Control 121.8
Helsinki Apron Ramp/Taxi Control 121.65
Helsinki Approach Control 119.7
Helsinki Approach Control 119.1
Helsinki Arrival Control 124.325
Helsinki Arrival Control 119.9
Helsinki Arrival Control 119.7
Helsinki Radar 129.85
Helsinki Radar 119.7
Helsinki Radar 119.1

1. GENERAL

1.1. ATIS

D-ATIS Arrival 135.07
D-ATIS Departure 114.2

1.2. NOISE ABATEMENT PROCEDURES**1.2.1. GENERAL**

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

1.2.2. PREFERENTIAL RUNWAY SYSTEM**LANDINGS**

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

DEPARTURES

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

Selection of RWY-in-use is based on safety aspects and temporary restrictions concerning RWY availability.

RWY 15 is not used for departures and RWY 33 for landings, except between 0600-2300LT for turbo-props and other propeller-driven ACFT.

1.2.3. NIGHTTIME RESTRICTIONS

ACFT may be vectored to ILS approach from IAF LAKUT in order to reduce noise impact.

1.2.4. RUN-UP TESTS

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

1.2.5. REVERSE THRUST

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

1.2.6. AUXILIARY POWER UNIT (APU)

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

1.2.7. 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. GENERAL**

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

1. GENERAL

1.3.2. ARRIVAL

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

1.3.3. DEPARTURE

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

1.3.4. CAT II APPROACHES

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

1.4. 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.

1.5. TAXI PROCEDURES

1.5.1. GENERAL

For wingspan restrictions refer to 10-9 charts.

Reduced wingtip clearances exist between ACFT on parallel TWYs as well as between ACFT and objects including parked ACFT and vehicles on service roads. Adhere strictly to TWY centerline markings.

Taxiing on apron is always subject to clearances and instructions given by Ground.

ATC issues clearances for taxiing only within area of Apron Control competence.

ACFT taxiing on the apron shall follow the yellow taxi guidance lines. No deviations or shortcuts are permitted except under guidance of a Follow-me car or after special instructions by ATC.

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

1.5.2. 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. GENERAL

1.6. PARKING INFORMATION

Stands 12 thru 20 and 25 thru 29 equipped with docking guidance system.
Stands 21 thru 24, 30 thru 38 and 141 thru 143 equipped with docking guidance system SAFEDOCK.
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.

Restrictions to the use of stands:

Stand 12: The longitudinal clearance distance for ACFT type Avro RJ85 is 7'/2.2m.

Stands 13 thru 22: The longitudinal clearance distance between ACFT engine and passenger bridge for ACFT type A319 is 6'/1.8m and for ACFT type E170 6'/1.9m.

Docking is allowed only with special permission.

Stands 31 thru 38: Clearance distances between the stands and the passenger bridges for all ACFT types are 6'/1.8m longitudinal and 4'/1.25m lateral.

2. ARRIVAL

2.1. NOISE ABATEMENT PROCEDURES

Standard Arrival Routes depicted on Helsinki STAR charts are also minimum noise routings.

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

2.2. CAT II OPERATIONS

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

2. ARRIVAL

2.3. RWY OPERATIONS

2.3.1. 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.

The ACFT vacating RWY has priority to other taxiing traffic.

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

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

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

2.4. TAXI PROCEDURES

2.4.1. GENERAL

ACFT landed at RWY 22L shall not vacate via TWY ZG unless otherwise instructed by ATC.

ACFT using RWY 04R/22L or 15/33 shall contact Ground immediately after vacating the RWY for taxi clearance within area of Apron Control competence.

ACFT vacating RWY 04L/22R shall 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.

2.4.2. 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. ARRIVAL

2.5. OTHER INFORMATION

2.5.1. SIMULTANEOUS OPERATIONS

Dependent parallel approaches will be used on RWYs 04L/R or 22L/R.

ATIS broadcast will contain the following information:

"Simultaneous dependent ILS approaches in progress on runways 22R and 22L (04R and 04L)."

Independent parallel approaches will be used on RWYs 04L/R or 22L/R.

ATIS broadcast will contain the following information:

"Simultaneous independent ILS approaches in progress on runways 22R and 22L (04R and 04L)."

3. DEPARTURE

3.1. DIGITAL DEPARTURE CLEARANCE (DCL)

Digital en-route clearance shall be requested MAX 15 minutes prior to EOBT. A digital en-route 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 en-route 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 en-route 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.

Optional free text messages are ignored by ATC.

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

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

3. DEPARTURE

3.2. DE-ICING

3.2.1. 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 0330-2230 UTC through HELSINKI De-icing Coordinator on 127.02. 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.

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.

When requesting route clearance, pilots must also tell ATC which de-icing stand has been allocated by the de-icing coordinator. If pilots are directed to the Remote De-icing Apron for de-icing they should notify this as the appropriate apron.

3.2.2. DE-ICING STANDS

Stands 122D and 124D are de-icing stands.

3.2.3. 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 133.85).

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.

3.3. START-UP, PUSH-BACK & TAXI PROCEDURES

3.3.1. COLLABORATIVE DECISION MAKING PROCEDURES (CDM)

3.3.1.1. 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 ACFTs 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 doesn't replace the pilots responsibility to keep the adequate flight plan valid and within the given limits.

3. DEPARTURE

3.3.1.2. 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 MIN prior EOBT. ATC informs pilots of the TSAT in connection of the en-route 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 flight plan (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).

3.3.1.3. 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 deicing) shall be immediately reported to your de-icing agent or to the ATC TWR.

3.3.2. GENERAL

Departing IFR flights will receive enroute clearance as follows:
- H24: HELSINKI Delivery

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

3.3.3. START-UP & PUSH-BACK

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

3. DEPARTURE

3.3.4. TAXIING

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

ACFT leaving apron to manoeuvring area shall give priority to the ACFT taxiing on TWYs Y and Z.

3.3.5. 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 until a further taxi clearance has been issued by ATC.

3.4. NOISE ABATEMENT PROCEDURES

After take-off ACFT shall climb as rapidly as practicable to at least 2000'. Standard Instrument Departure Routes depicted on Helsinki SID charts are also minimum noise routings.

Moderately quiet jets (ACFT with flyover noise level less than 89 EPNdB according to ICAO Annex 16, Chapter 3) are allowed to use some PROP/TURBOPROP SID routes. These routes are indicated on the charts concerned.

3.5. RWY OPERATIONS

3.5.1. MINIMUM RWY OCCUPANCY TIME

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

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

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

3.6. OTHER INFORMATION

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

3. Altitudes ensure obstacle clearance within the area concerned plus a 3NM buffer area.



ARRIVAL INSTRUCTIONS

1. NON-RNAV HOLDINGS

IDENT & POSITION	MINIMUM LEVEL	INBOUND COURSE	TURN DIRECTION	MAX SPEED	TIME
ESPOO N60 14.9 E024 47.8	3000'	040°	LEFT	230 KT	1 MIN
KORSO N60 22.3 E025 04.1	3000'	220°	LEFT	230 KT	1 MIN
PORVOO (PVO) N60 17.7 E025 35.3	3000'	219°	LEFT	230 KT	1 MIN

2. FPL/DESCENT CLEARANCE

FPL for inbound IFR traffic to EFHK shall be closed on the following IAFs:
ELPIR, INTOR, LAKUT, OKLOR or PEXEN. IAF ELPIR is available only
for traffic via LEDUN.

If unable to comply inform ATC immediately.

Traffic inbound from TAMPERE airspace:

ACC will normally give descent clearance to arriving traffic to FL100.

Traffic inbound from ST PETERSBURG airspace:

ACC will normally give descent clearance to traffic via IAF ELPIR to FL140.

Traffic inbound from TALLINN airspace:

ACC/APP will normally give descent clearance via IAF INTOR to FL100.

If the flight level given in FPL is lower than FL100 aircraft shall be cleared
to maintain FL90.

3. SPEED RESTRICTIONS

Speed restrictions to all aircraft:

Unless otherwise instructed by ATC the aircraft shall follow speed limit
MAX 250 KT at HEL 30 DME.

Speed restrictions for RNAV STARs are published on charts concerned.

4. INITIAL CONTACT

At first contact with HELSINKI Approach state

- designator of the last received ATIS broadcast
- type of aircraft
- level
- RNAV STAR or radar heading given by ATC.

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

When changing from approach control frequency to tower frequency state:
HELSINKI Tower + call sign + runway.

ARRIVAL INSTRUCTIONS

5. RNAV STAR

Final approach can not be performed without appropriate clearance.
ATC will give descent clearances.

In case there are two RNAV STARs published from an IAF 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.

6. INBOUND CLEARANCE

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

7. RNAV STAR LOST COMM PROCEDURE

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

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

Aircraft equipped with onboard telephone dial +358 20 708 3324.

RNAV aircraft use RNAV STAR to join instrument approach.

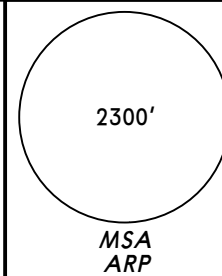
D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

ELPIR 1B [ELP11B]
INTOR 2B [INTO2B], OKLOR 1B [OKLO1B]
RWY 04L RNAV ARRIVALS
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



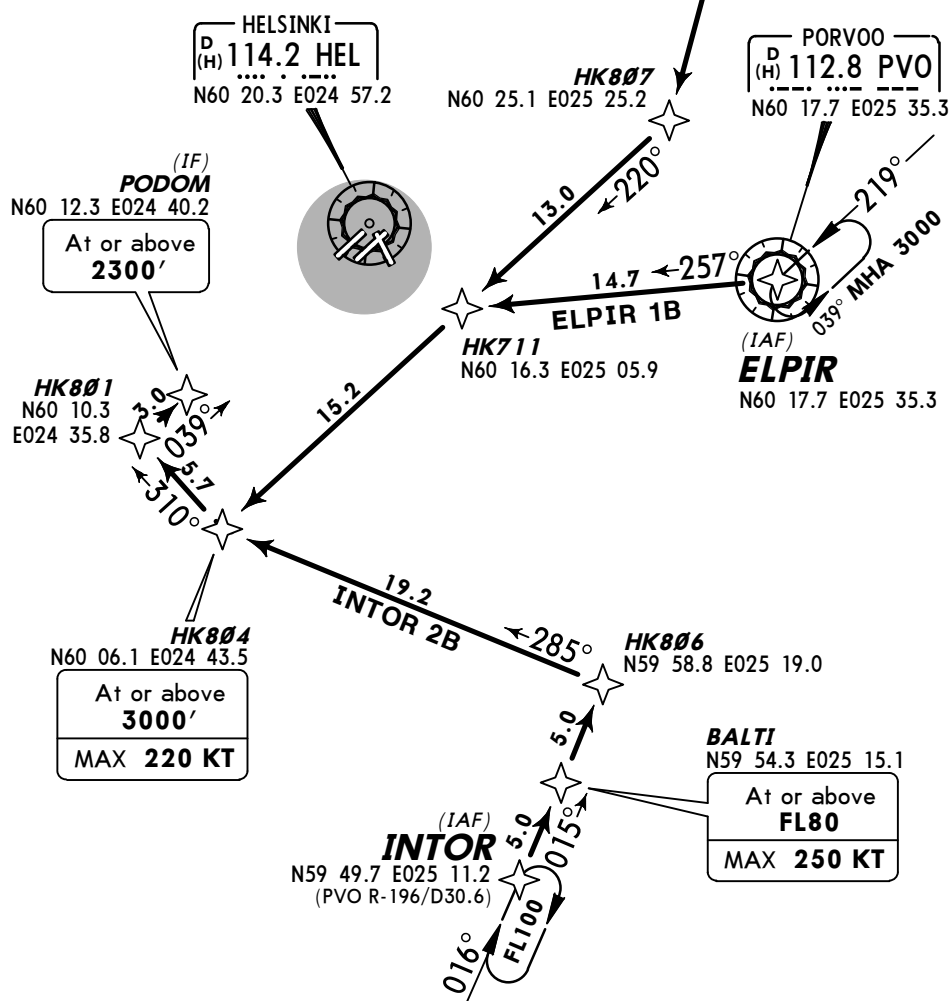
LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ SWWOC 150T ▲ SWWOC 150T

KUVAK
N60 43.8 E025 35.5
At or above
FL70
MAX **250 KT**

(IAF)
OKLOR
N60 50.0 E025 45.7
(HEL R-031/D38.2)
At or above
FL100

More than 2 DME inputs cannot
be guaranteed at all times.

Direct distance from PODOM to:
Vantaa **11 NM**



STAR	ROUTING
ELPIR 1B	ELPIR - HK711 - HK804 (3000'+; K220-) - HK801 - PODOM (2300'+).
INTOR 2B	INTOR - BALTI (FL80+; K250-) - HK806 - HK804 (3000'+; K220-) - HK801 - PODOM (2300'+).
OKLOR 1B	OKLOR (FL100+) - KUVAK (FL70+; K250-) - HK807 - HK711 - HK804 (3000'+; K220-) - HK801 - PODOM (2300'+).

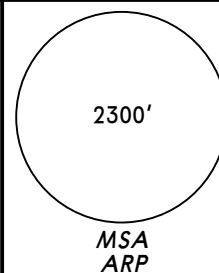
D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

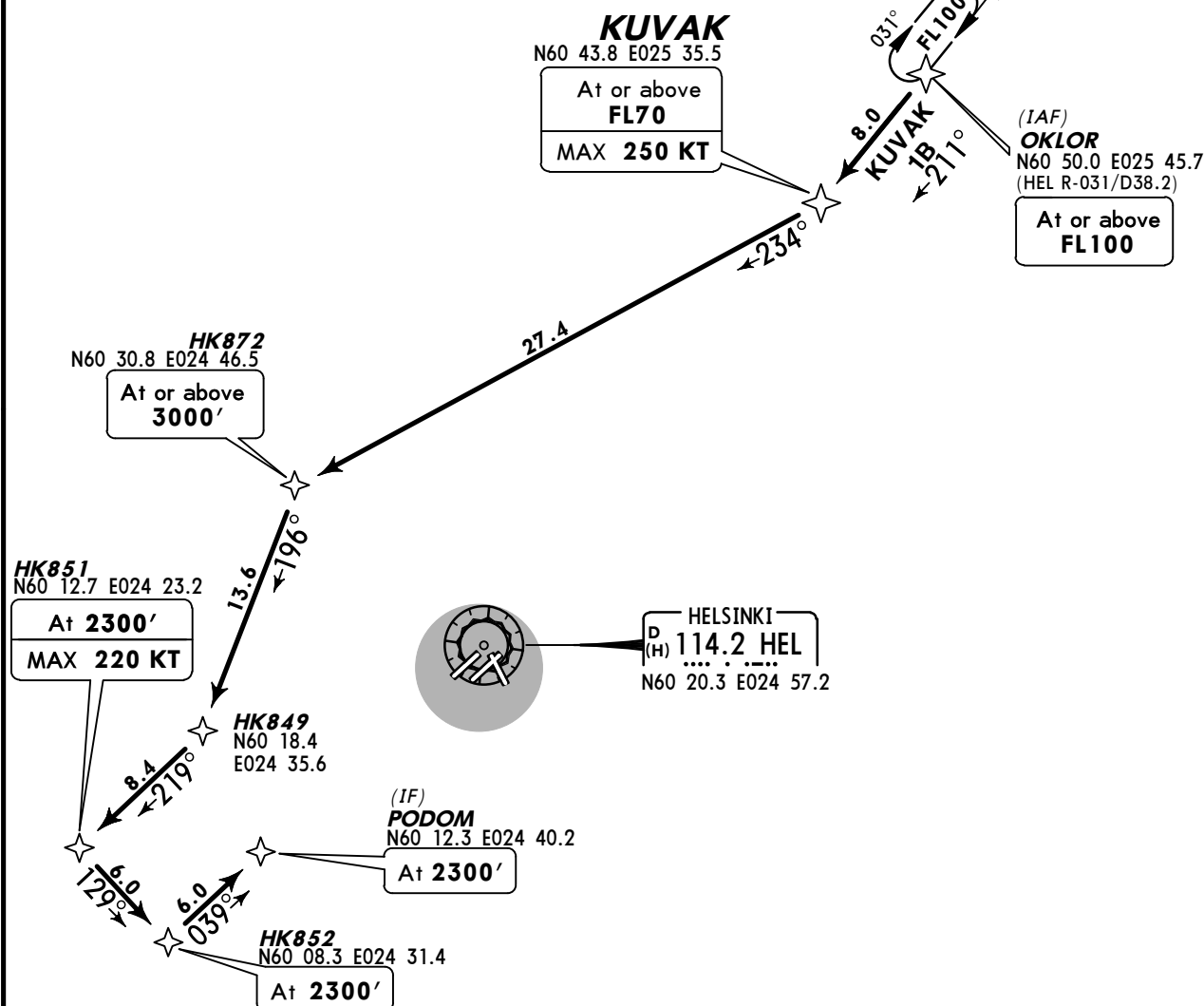
KUVAK 1B [KUVA1B]
RWY 04L RNAV ARRIVAL
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ S W W O C I S O T ▲ S W W O C I S O T

More than 2 DME inputs cannot
be guaranteed at all times.

Direct distance from PODOM to:
Vantaa **11 NM**

**ROUTING**

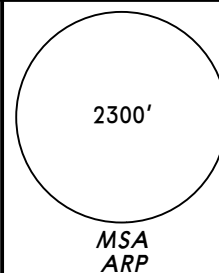
OKLOR (FL100+) - KUVAK (FL70+; K250-) - HK872 (3000'+) - HK849 - HK851 (2300'; K220-) - HK852 (2300') - PODOM (2300').

D-ATIS
135.07Apt Elev
179'

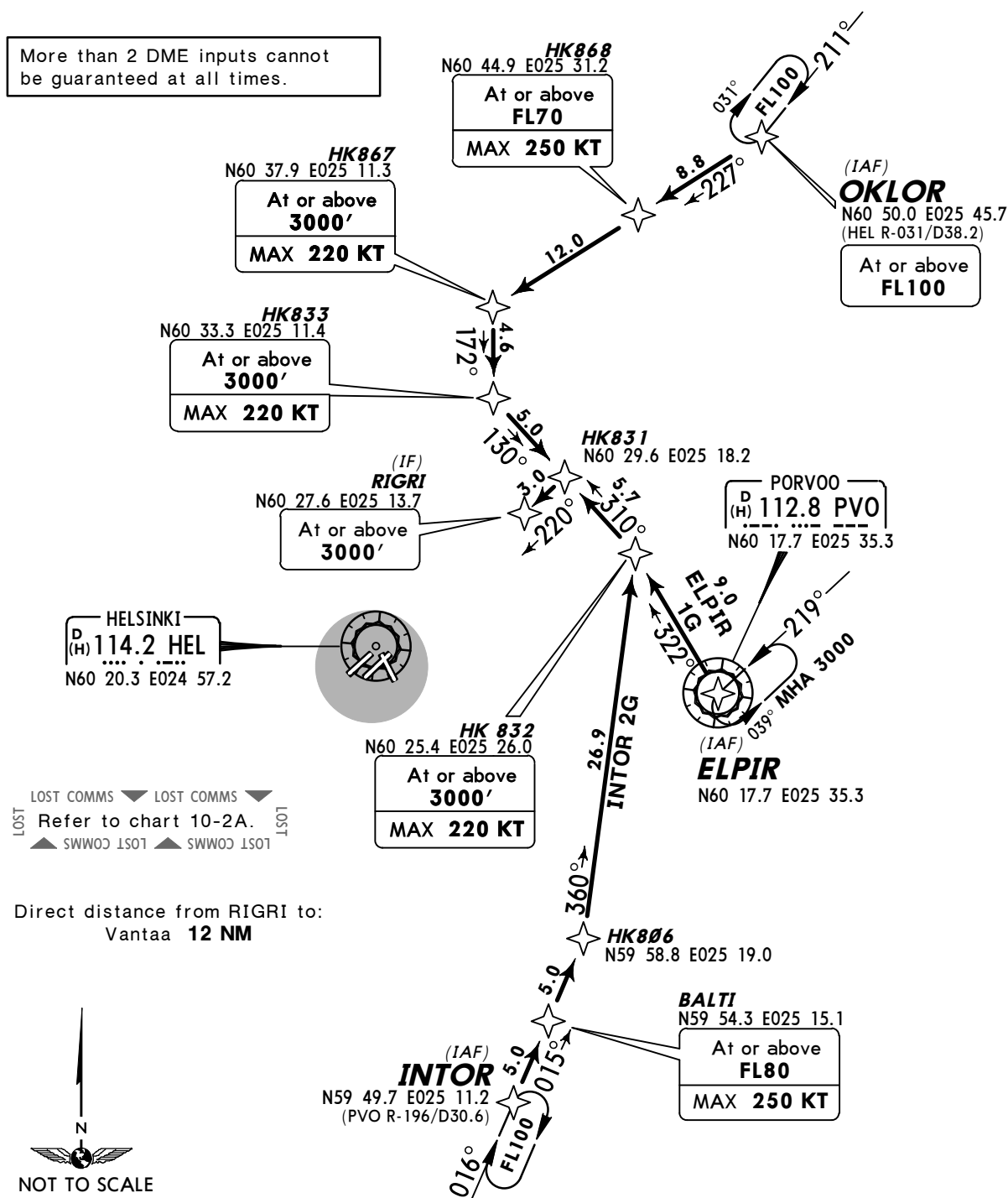
Alt Set: hPa Trans level: By ATC Trans alt: 5000'

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

ELPIR 1G [ELPI1G]
INTOR 2G [INTO2G], OKLOR 2G [OKLO2G]
RWY 22R RNAV ARRIVALS
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



More than 2 DME inputs cannot be guaranteed at all times.



STAR

ROUTING

ELPIR 1G

ELPIR - HK832 (3000'+; K220-) - HK831 - RIGRI (3000'+).

INTOR 2G

INTOR - BALTI (FL80+; K250-) - HK806 - HK832 (3000'+; K220-) - HK831 - RIGRI (3000'+).

OKLOR 2G

OKLOR (FL100+) - HK868 (FL70+; K250-) - HK867 (3000'+; K220-) - HK833 (3000'+; K220-) - HK831 - RIGRI (3000'+).

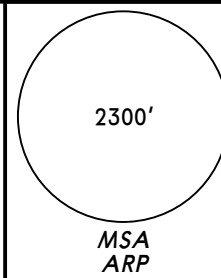
D-ATIS
135.07Apt Elev
179'

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

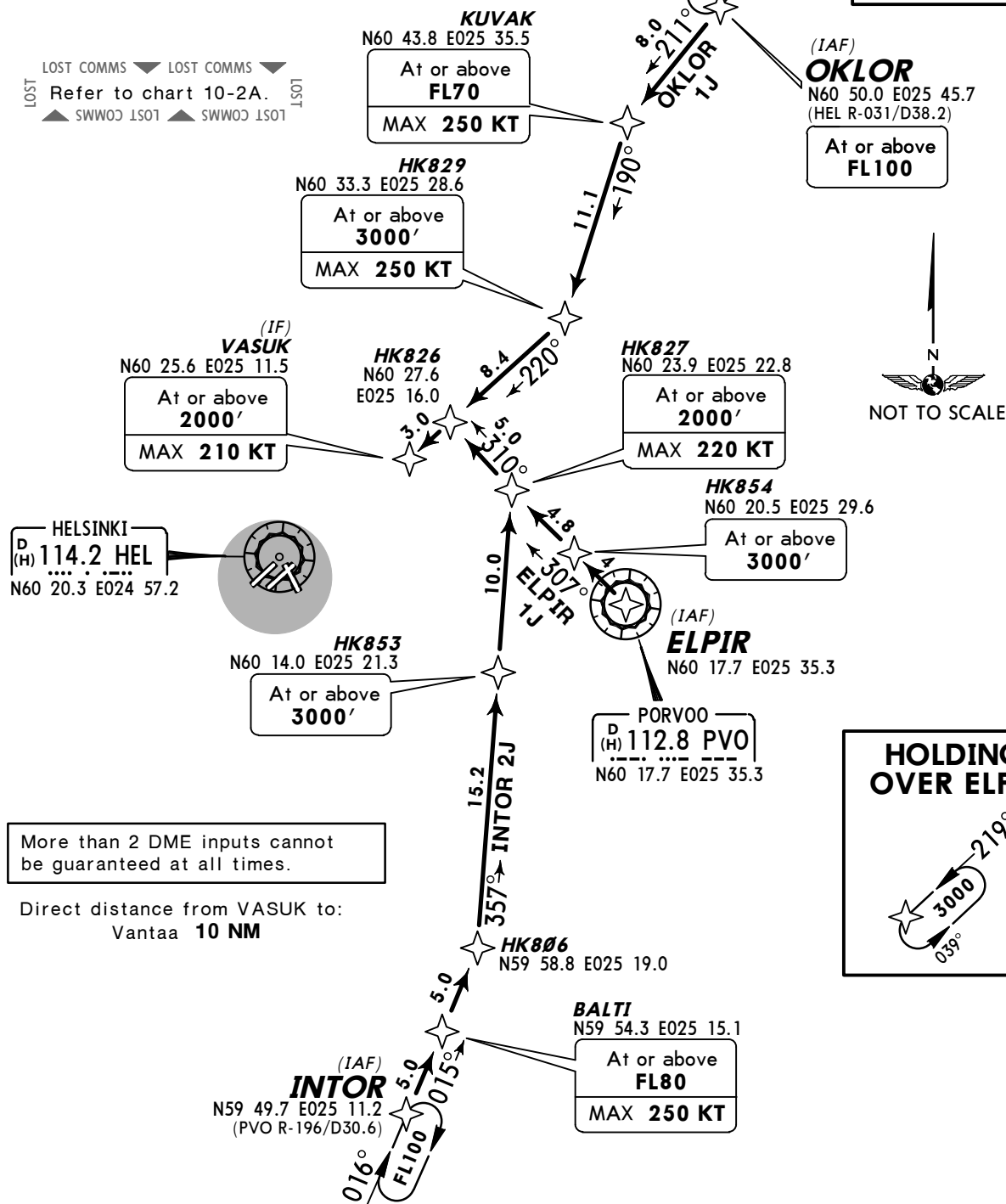
1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

ELPIR 1J [ELP11J]
INTOR 2J [INTO2J], OKLOR 1J [OKLO1J]
RWY 22L RNAV ARRIVALS
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ SWWOC LSOT ▲ SWWOC LSOT



STAR

ROUTING

ELPIR 1J	ELPIR - HK854 (3000'+) - HK827 (2000'+; K220-) - HK826 - VASUK (2000'+; K210-).
INTOR 2J	INTOR - BALTI (FL80+; K250-) - HK806 - HK853 (3000'+) - HK827 (2000'+; K220-) - HK826 - VASUK (2000'+; K210-).
OKLOR 1J	OKLOR (FL100+) - KUVAK (FL70+; K250-) - HK829 (3000'+; K250-) - HK826 - VASUK (2000'+; K210-).

D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

**VAKAT 3J [VAKA3J]
RWY 22L RNAV ARRIVAL**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC

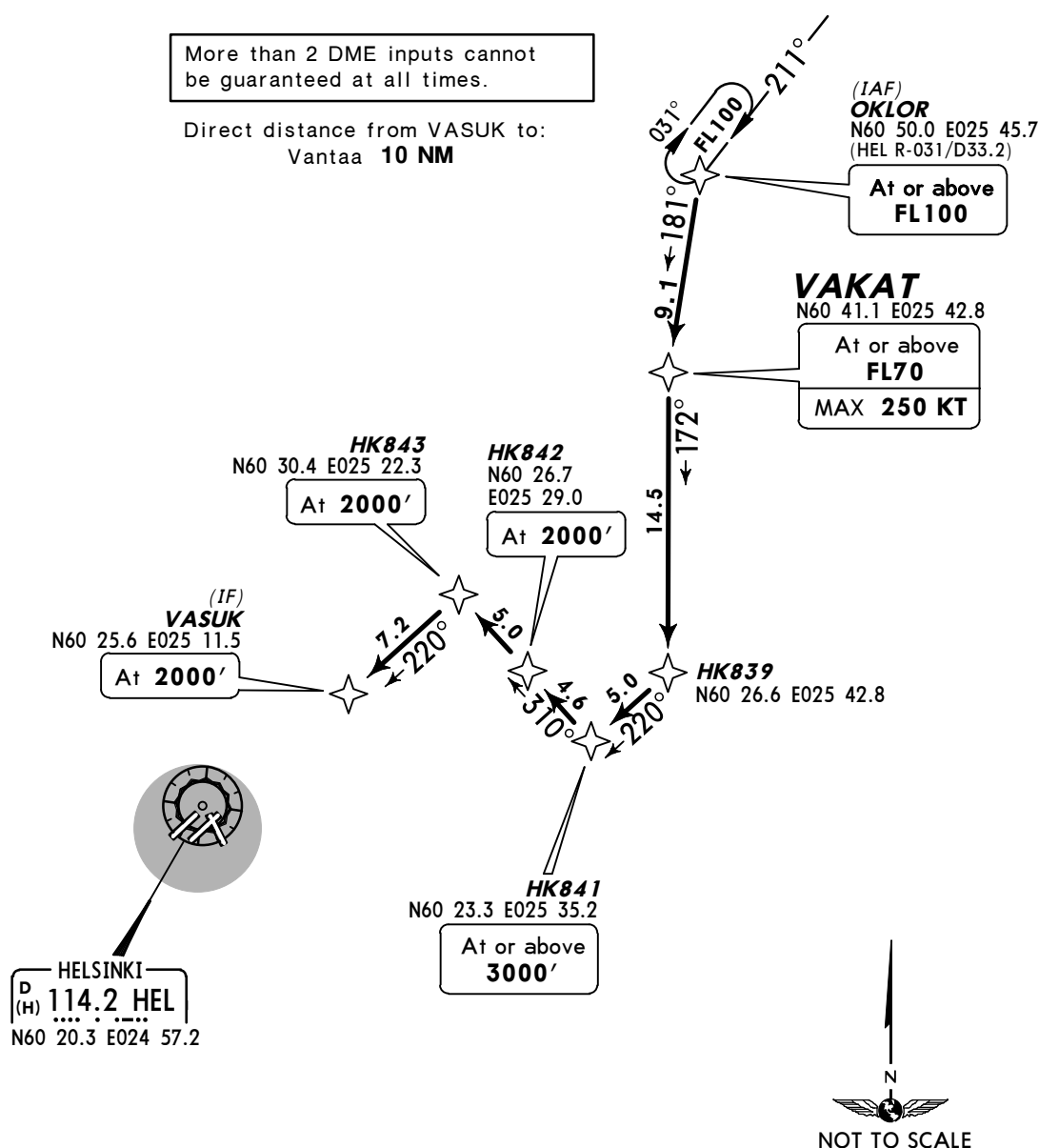
2300'

MSA
ARP

LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
LOST ▲ SWWOC ISOT ▲ SWWOC ISOT

More than 2 DME inputs cannot
be guaranteed at all times.

Direct distance from VASUK to:
Vantaa **10 NM**

**ROUTING**

OKLOR (FL100+) - VAKAT (FL70+; K250-) - HK839 - HK841 (3000'+) - HK842 (2000') -
HK843 (2000') - VASUK (2000').

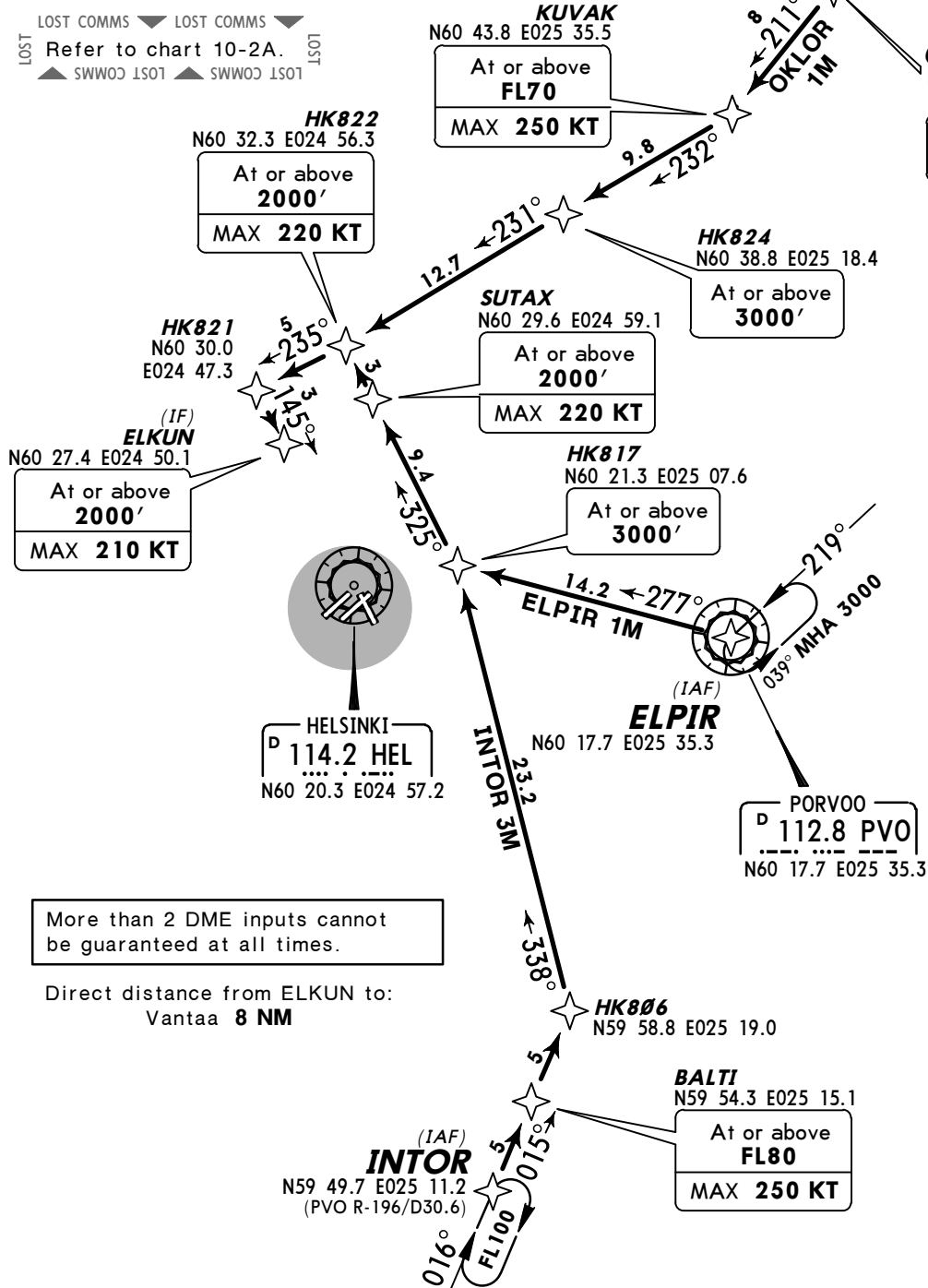
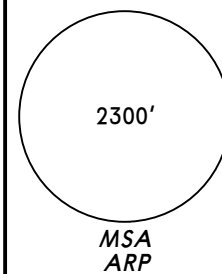
D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

ELPIR 1M [ELPI1M]
INTOR 3M [INTO3M], OKLOR 1M [OKLO1M]
RWY 15 RNAV ARRIVALS
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH



STAR	ROUTING
ELPIR 1M	ELPIR - HK817 (3000'+) - SUTAX (2000'+; K220-) - HK822 (2000'+; K220-) - HK821 - ELKUN (2000'+; K210-).
INTOR 3M	INTOR - BALTI (FL80+; K250-) - HK806 - HK817 (3000'+) - SUTAX (2000'+; K220-) - HK822 (2000'+; K220-) - HK821 - ELKUN (2000'+; K210-).
OKLOR 1M	OKLOR (FL100+) - KUVAK (FL70+; K250-) - HK824 (3000'+) - HK822 (2000'+; K220-) - HK821 - ELKUN (2000'+; K210-).

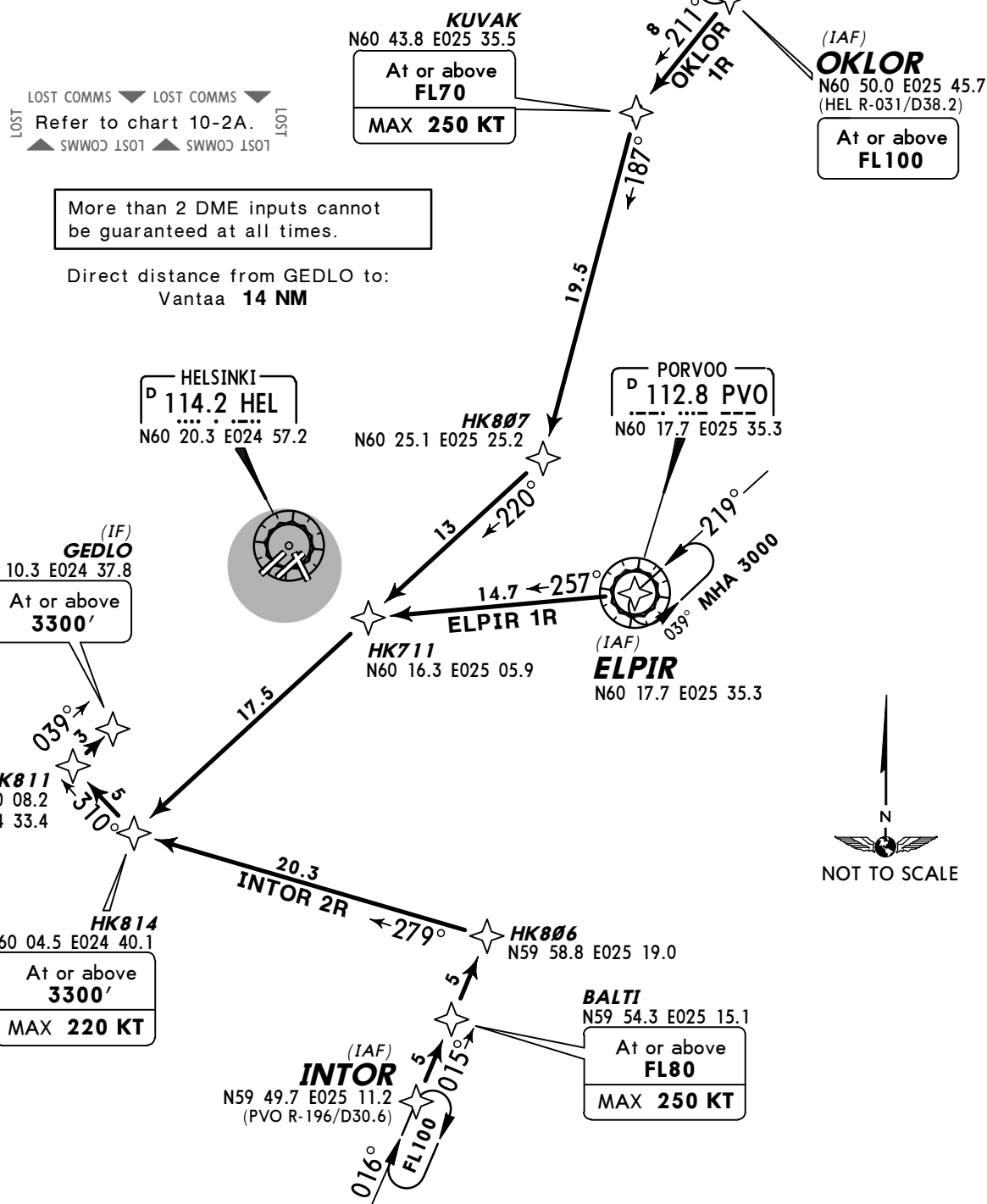
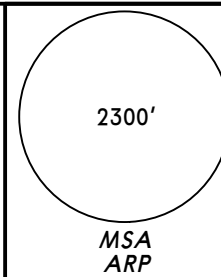
D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

ELPIR 1R [ELPI1R]
INTOR 2R [INTO2R], OKLOR 1R [OKLO1R]
RWY 04R RNAV ARRIVALS
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM NORTH, EAST & SOUTH



STAR	ROUTING
ELPIR 1R	ELPIR - HK711 - HK814 (3300'+; K220-) - HK811 - GEDLO (3300'+).
INTOR 2R	INTOR - BALTI (FL80+; K250-) - HK806 - HK814 (3300'+; K220-) - HK811 - GEDLO (3300'+).
OKLOR 1R	OKLOR (FL100+) - KUVAK (FL70+; K250-) - HK807 - HK711 - HK814 (3300'+; K220-) - HK811 - GEDLO (3300'+).

D-ATIS
135.07Apt Elev
179'

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

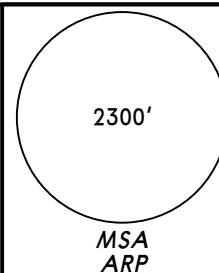
1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

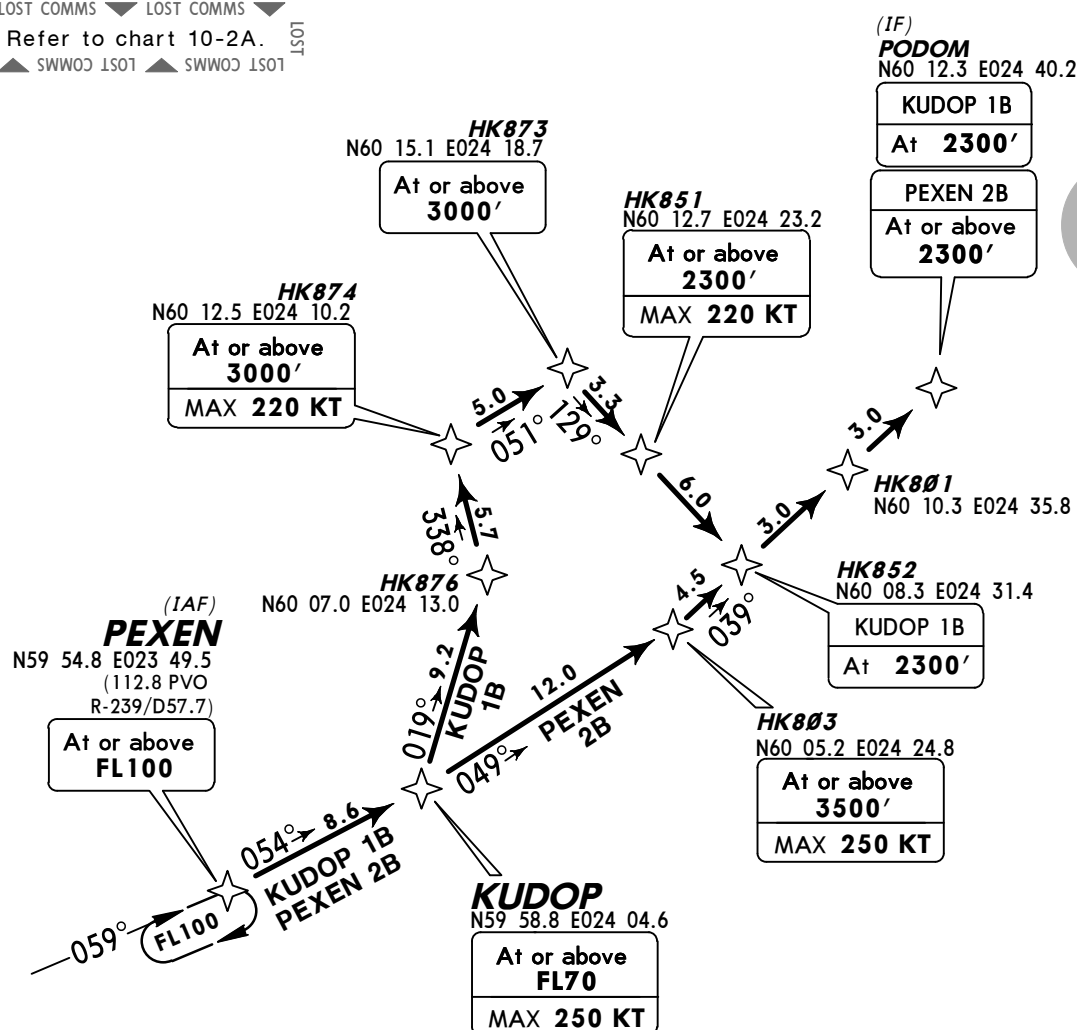
**KUDOP 1B [KUDO1B], PEXEN 2B [PEXE2B]
RWY 04L RNAV ARRIVALS**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ SWW03 1S0T ▲ SWW03 1S0T



STAR	ROUTING
KUDOP 1B	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK876 - HK874 (3000'+; K220-) - HK873 (3000') - HK851 (2300'; K220-) - HK852 (2300') - PODOM (2300').
PEXEN 2B	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK803 (3500'+; K250-) - HK801 - PODOM (2300'+).

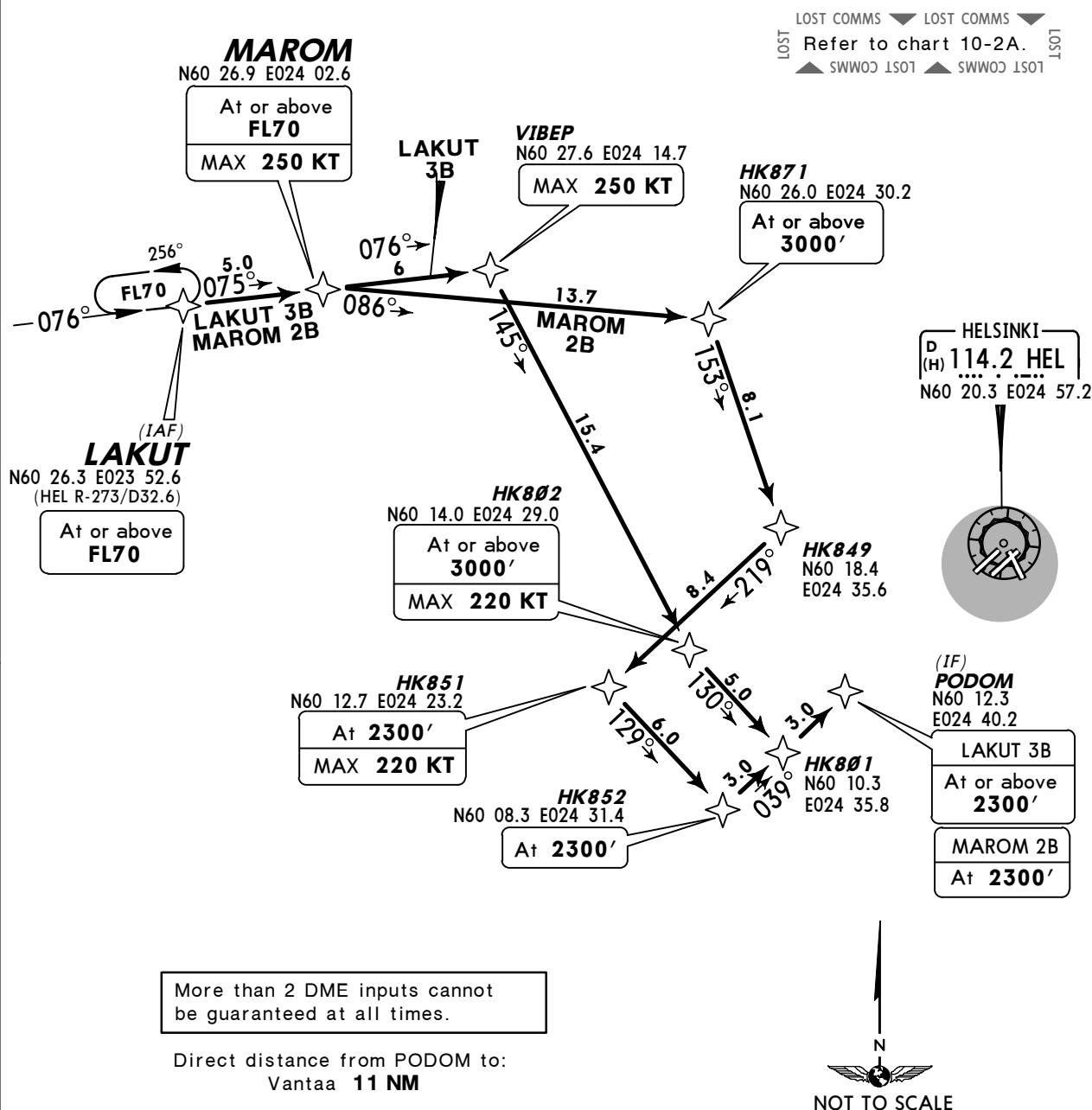
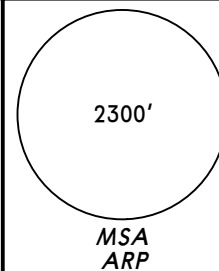
D-ATIS
135.07Apt Elev
179'

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

**LAKUT 3B [LAKU3B], MAROM 2B [MARO2B]
RWY 04L RNAV ARRIVAL**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



STAR	ROUTING
LAKUT 3B	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK802 (3000'+; K220-) - HK801 - PODOM (2300+).
MAROM 2B	LAKUT (FL70+) - MAROM (FL70+; K250-) - HK871 (3000'+) - HK849 - HK851 (2300'; K220-) - HK852 (2300') - PODOM (2300').

D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

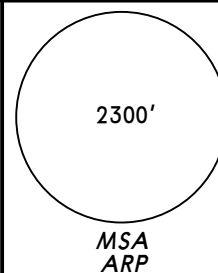
KUDOP 1G [KUDO1G], LAKUT 4G [LAKU4G]

PEXEN 2G [PEXE2G]

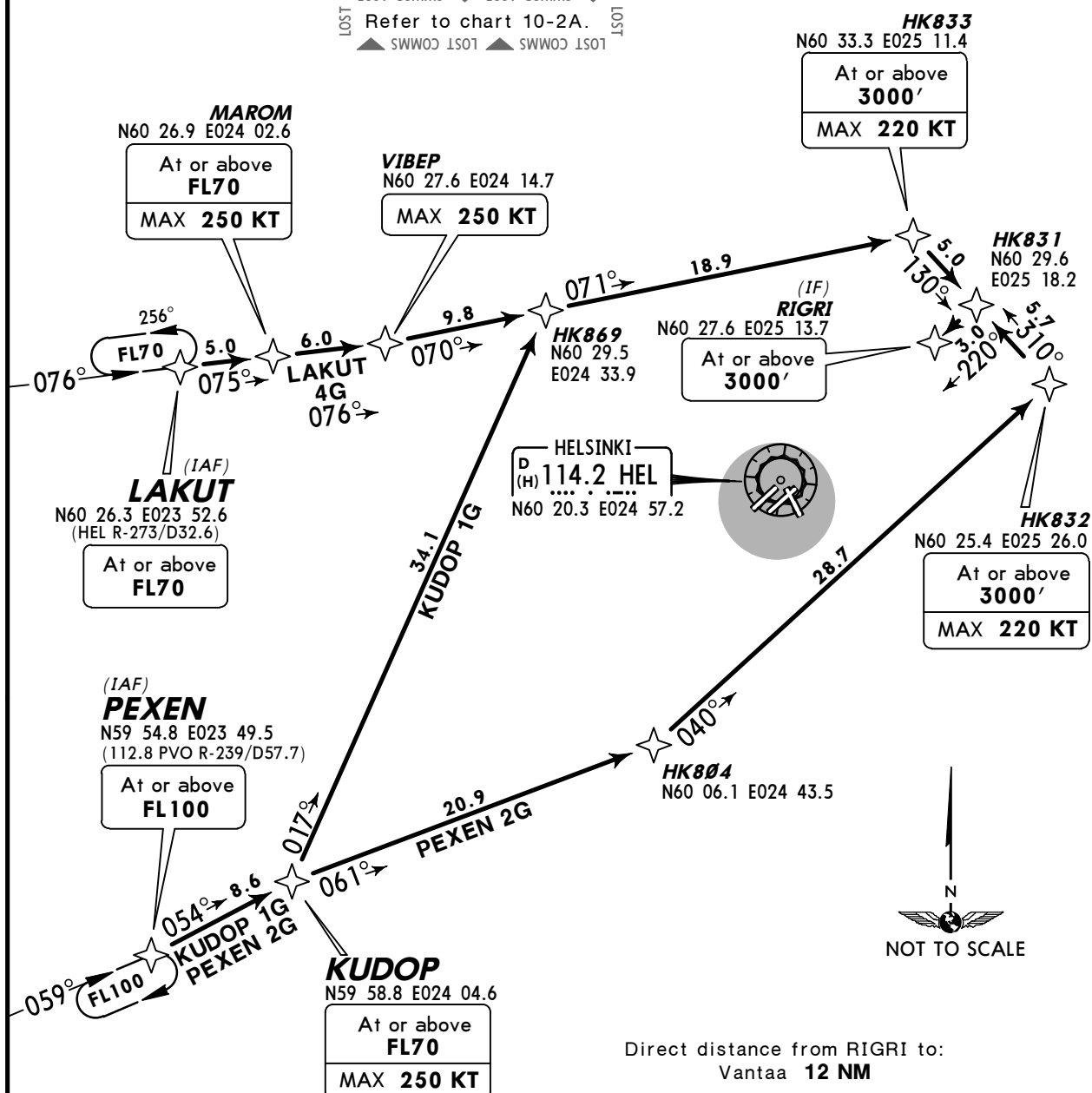
RWY 22R RNAV ARRIVALS

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ SWWOC 1SOT ▲ SWWOC 1SOT



STAR	ROUTING
KUDOP 1G	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK869 - HK833 (3000'+; K220-) - HK831 - RIGRI (3000'+).
LAKUT 4G	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK869 - HK833 (3000'+; K220-) - HK831 - RIGRI (3000'+).
PEXEN 2G	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK804 - HK832 (3000'+; K220-) - HK831 - RIGRI (3000'+).

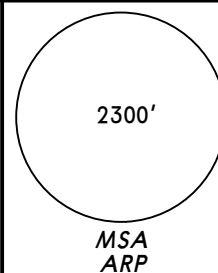
D-ATIS
135.07Apt Elev
179'

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

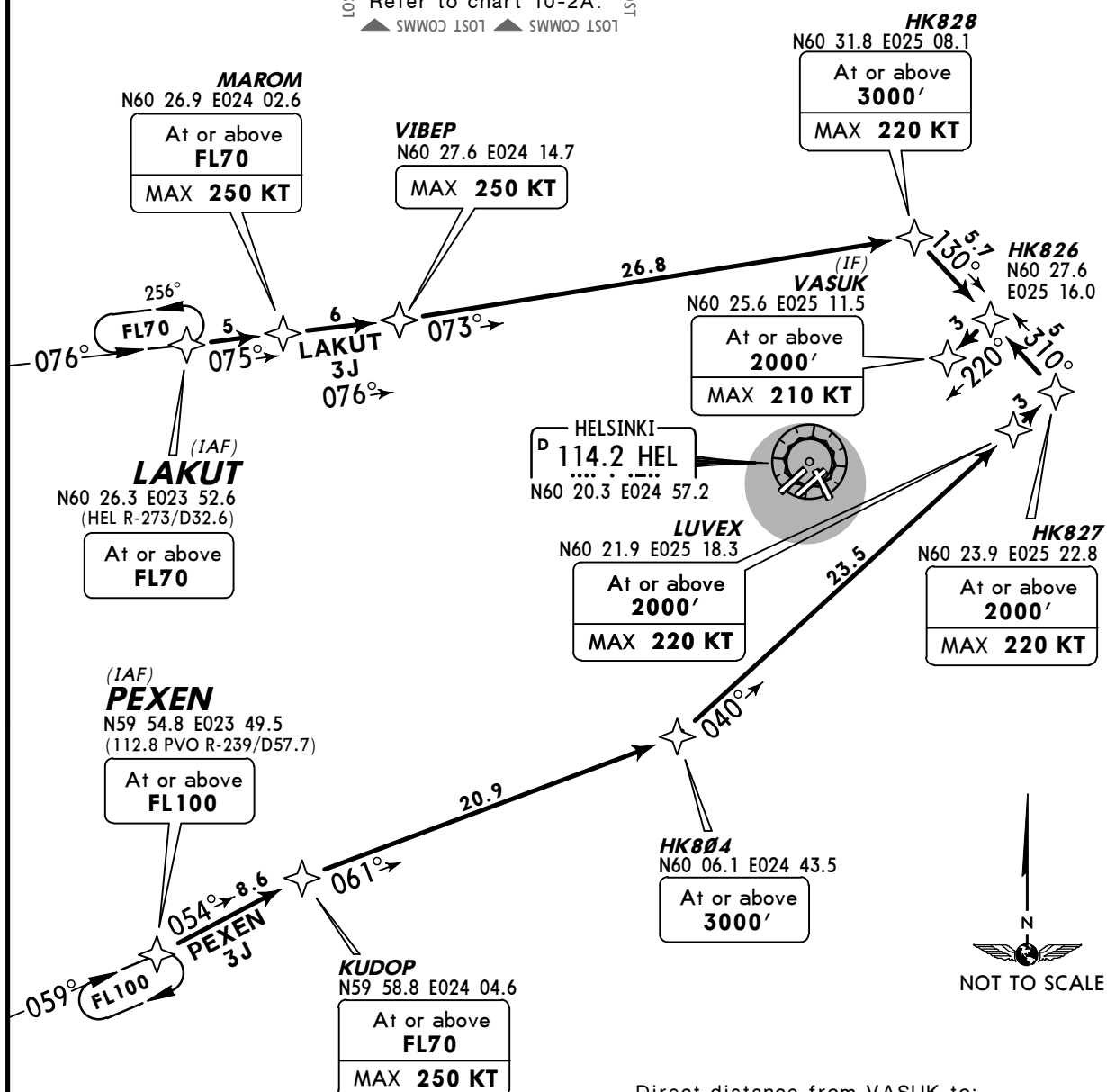
1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.
2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

**LAKUT 3J [LAKU3J], PEXEN 3J [PEXE3J]
RWY 22L RNAV ARRIVALS**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST

LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
▲ SWWOC 1501 ▲ SWWOC 1501

Direct distance from VASUK to:
Vantaa 9 NMMore than 2 DME inputs cannot
be guaranteed at all times.

STAR	ROUTING
LAKUT 3J	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK828 (3000'+; K220-) - HK826 - VASUK (2000'+; K210-).
PEXEN 3J	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK804 (3000'+) - LUVEX (2000'+; K220-) - HK827 (2000'+; K220-) - HK826 - VASUK (2000'+; K210-).

D-ATIS
135.07Apt Elev
179'

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

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

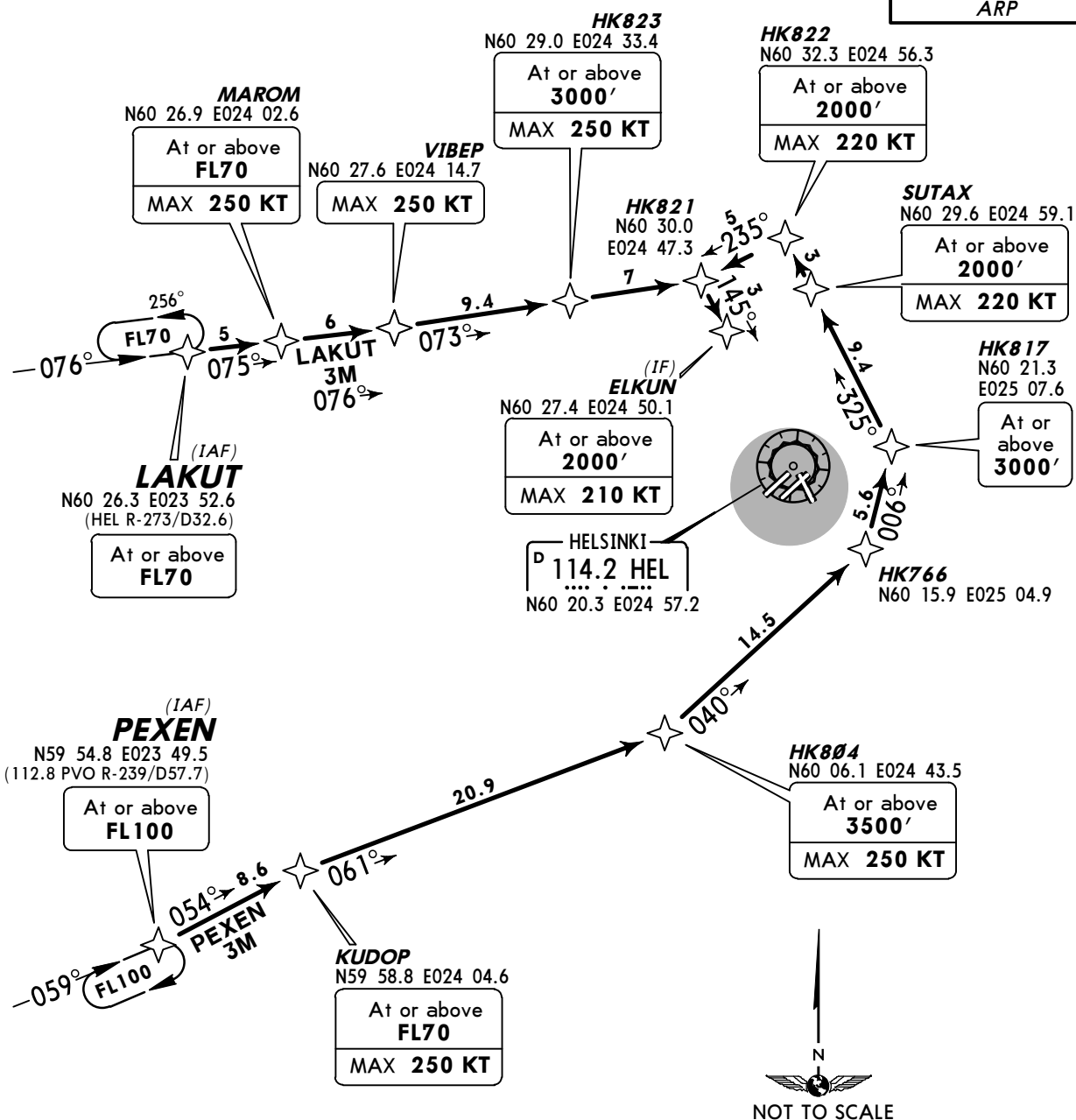
LAKUT 3M [LAKU3M], PEXEN 3M [PEXE3M]

RWY 15 RNAV ARRIVALS

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST

2300'

MSA
ARP

STAR	ROUTING
LAKUT 3M	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK823 (3000'+; K250-) - HK821 - ELKUN (2000'+; K210-).
PEXEN 3M	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK804 (3500'+; K250-) - HK766 - HK817 (3000'+) - SUTAX (2000'+; K220-) - HK822 (2000'+; K220-) - HK821 - ELKUN (2000'+; K210-).

D-ATIS
135.07Apt Elev
179'

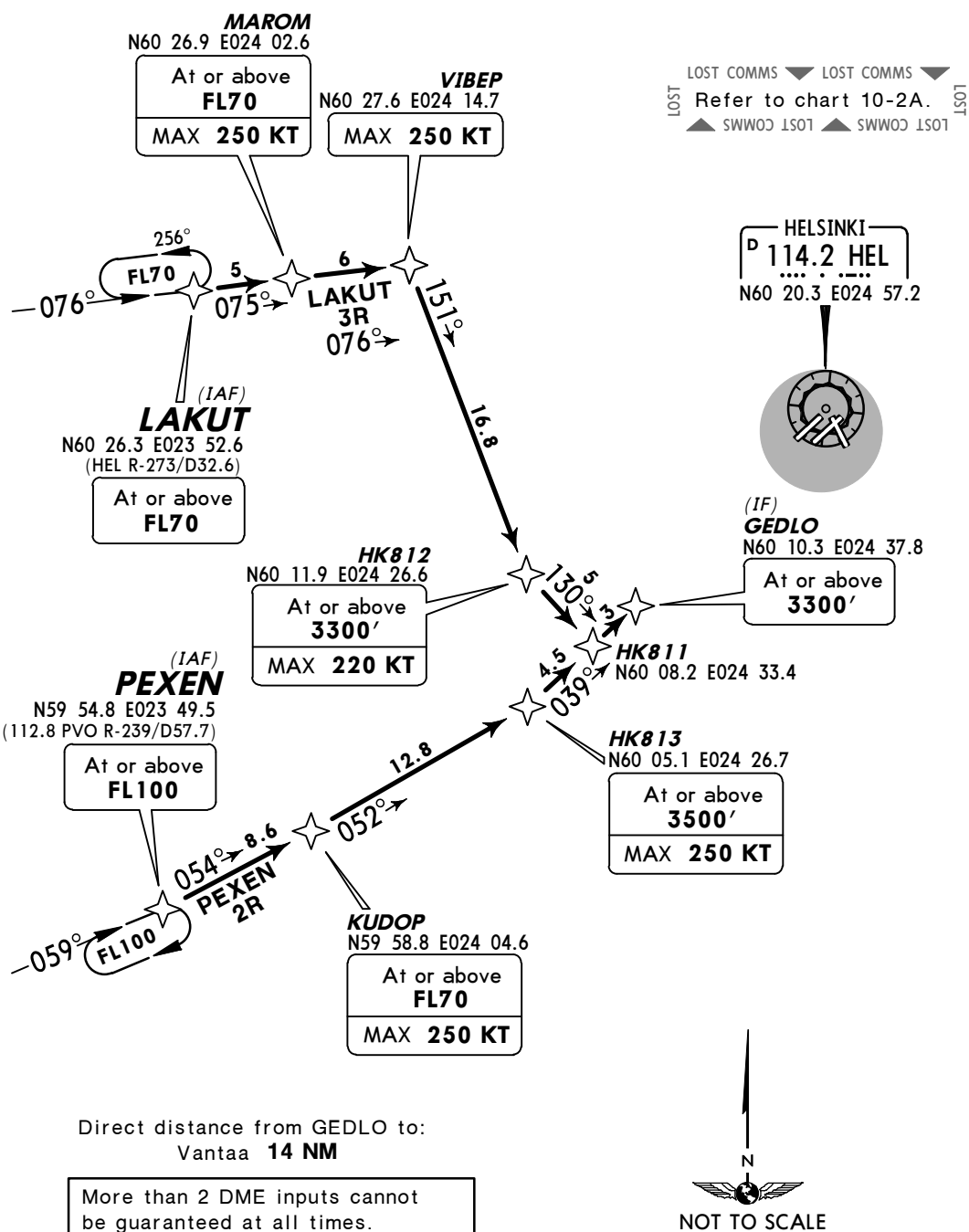
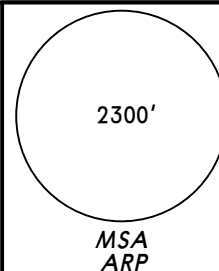
Alt Set: hPa Trans level: By ATC Trans alt: 5000'

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

**LAKUT 3R [LAKU3R], PEXEN 2R [PEXE2R]
RWY 04R RNAV ARRIVALS**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST

Direct distance from GEDLO to:
Vantaa 14 NM

More than 2 DME inputs cannot
be guaranteed at all times.

STAR	ROUTING
LAKUT 3R	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK812 (3300'+; K220-) - HK811 - GEDLO (3300'+).
PEXEN 2R	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK813 (3500'+; K250-) - HK811 - GEDLO (3300'+).

D-ATIS
135.07Apt Elev
179'

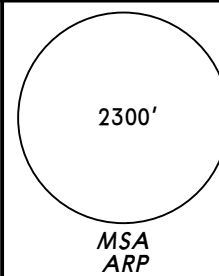
Alt Set: hPa Trans level: By ATC Trans alt: 5000'

1. ATC vectors the aircraft to final approach if traffic situation requires or the aircraft is unable to utilize given RNAV STAR.

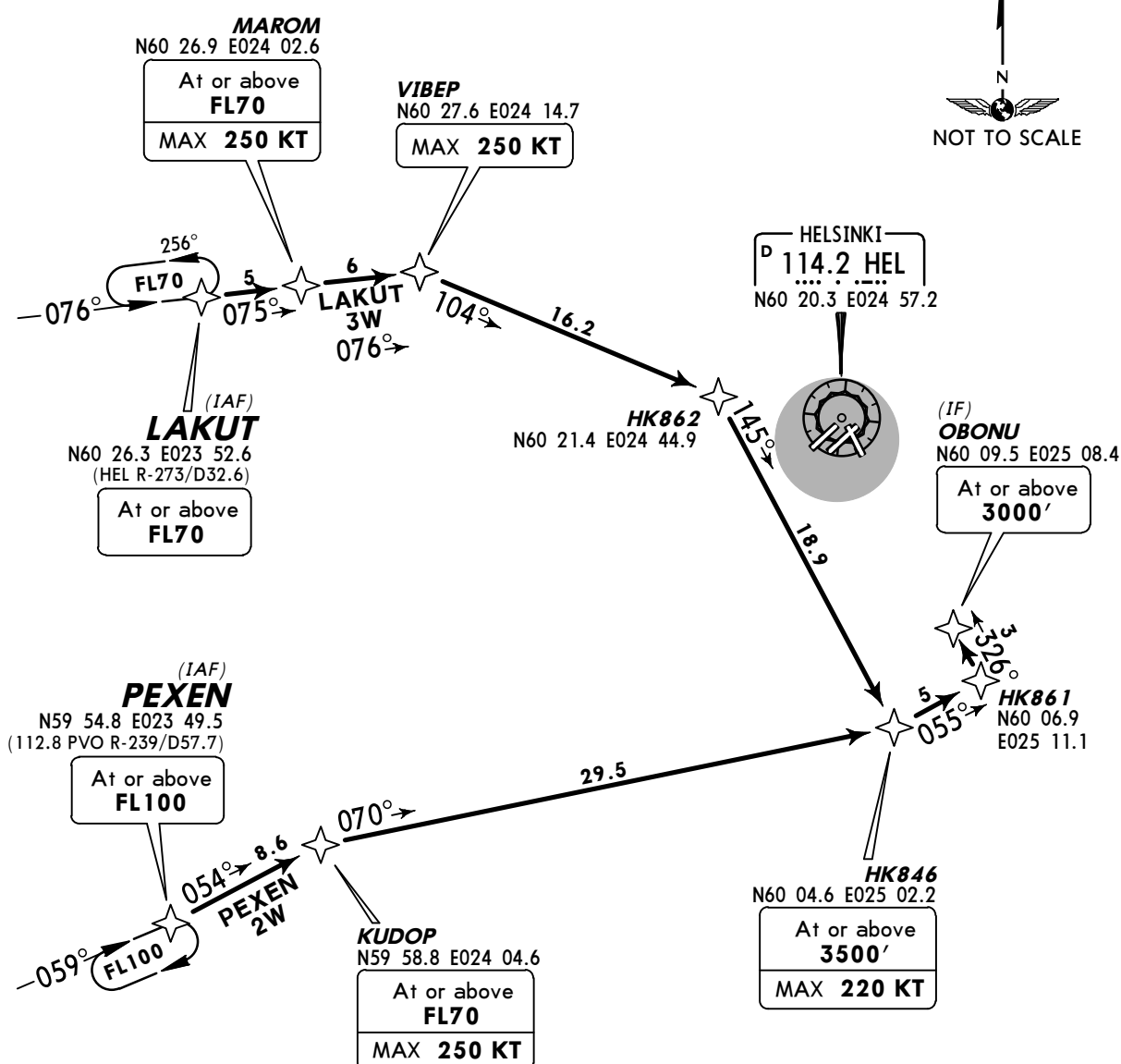
2. STARs must be flown according to the defined waypoint sequence until the last waypoint. Separate clearance to inbound is not required.

**LAKUT 3W [LAKU3W], PEXEN 2W [PEXE2W]
RWY 33 RNAV ARRIVALS**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC
FROM WEST

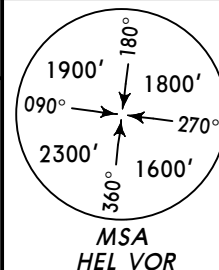
LOST COMMS ▼ LOST COMMS ▼
Refer to chart 10-2A.
LOST ▲ SWW03 1S01 ▲ SWW03 1S01



Direct distance from OBONU to:
Vantaa 12 NM

More than 2 DME inputs cannot
be guaranteed at all times.

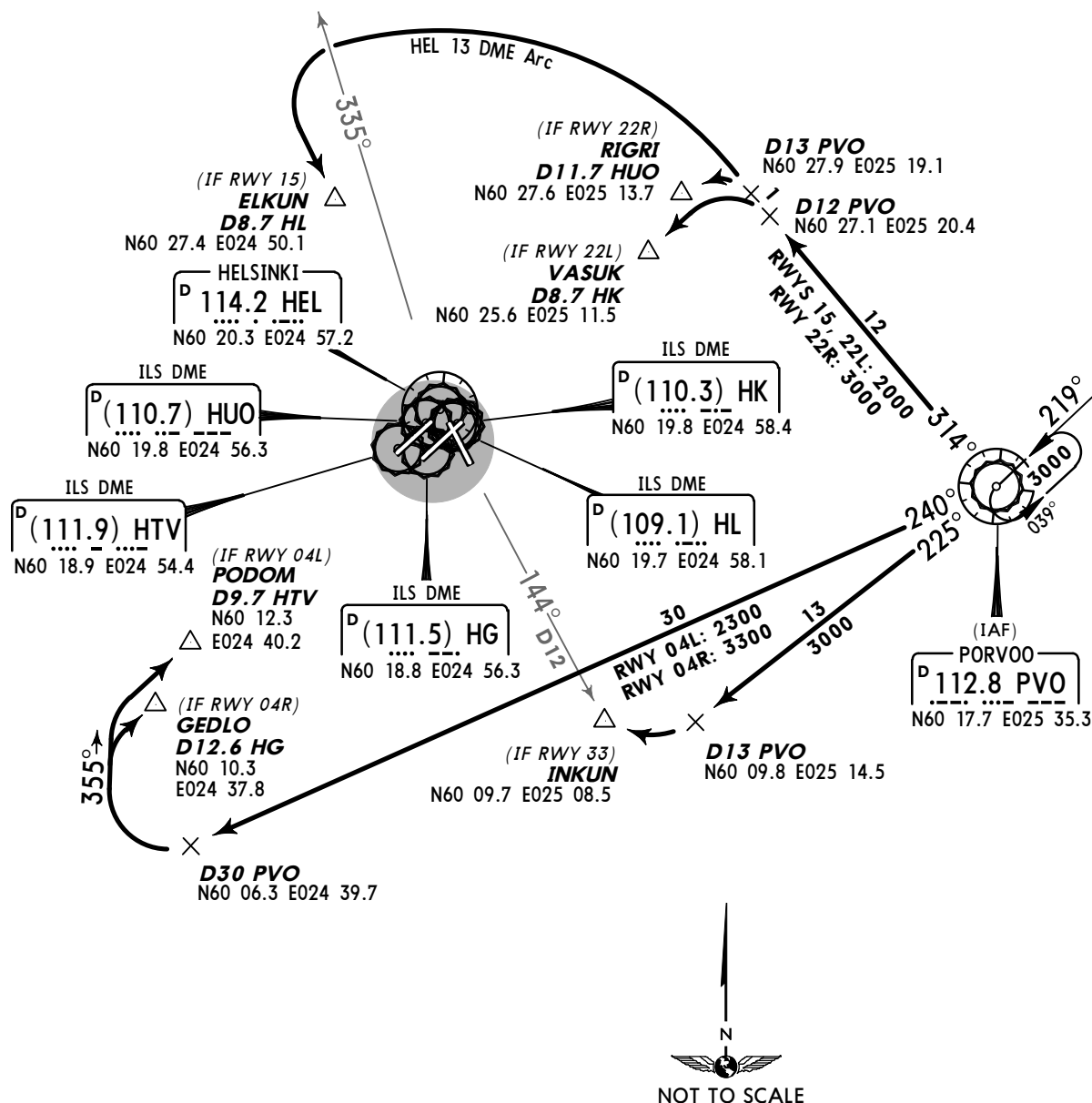
STAR	ROUTING
LAKUT 3W	LAKUT (FL70+) - MAROM (FL70+; K250-) - VIBEP (K250-) - HK862 - HK846 (3500'+; K220-) - HK861 - OBONU (3000'+).
PEXEN 2W	PEXEN (FL100+) - KUDOP (FL70+; K250-) - HK846 (3500'+; K220-) - HK861 - OBONU (3000'+).

D-ATIS
135.07Apt Elev
179'Alt Set: hPa
Trans level: By ATC Trans alt: 5000'

RWYS 04L/R, 15, 22L/R, 33 NON-RNAV LOST COMM PROCEDURES

DME AND VOR REQUIRED

CONVENTIONAL INITIAL APCH PROCEDURE FROM PVO FOR ALL RWYS



LOST COMM ROUTING

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

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

Aircraft equipped with onboard telephone dial +358 20 708 3324.

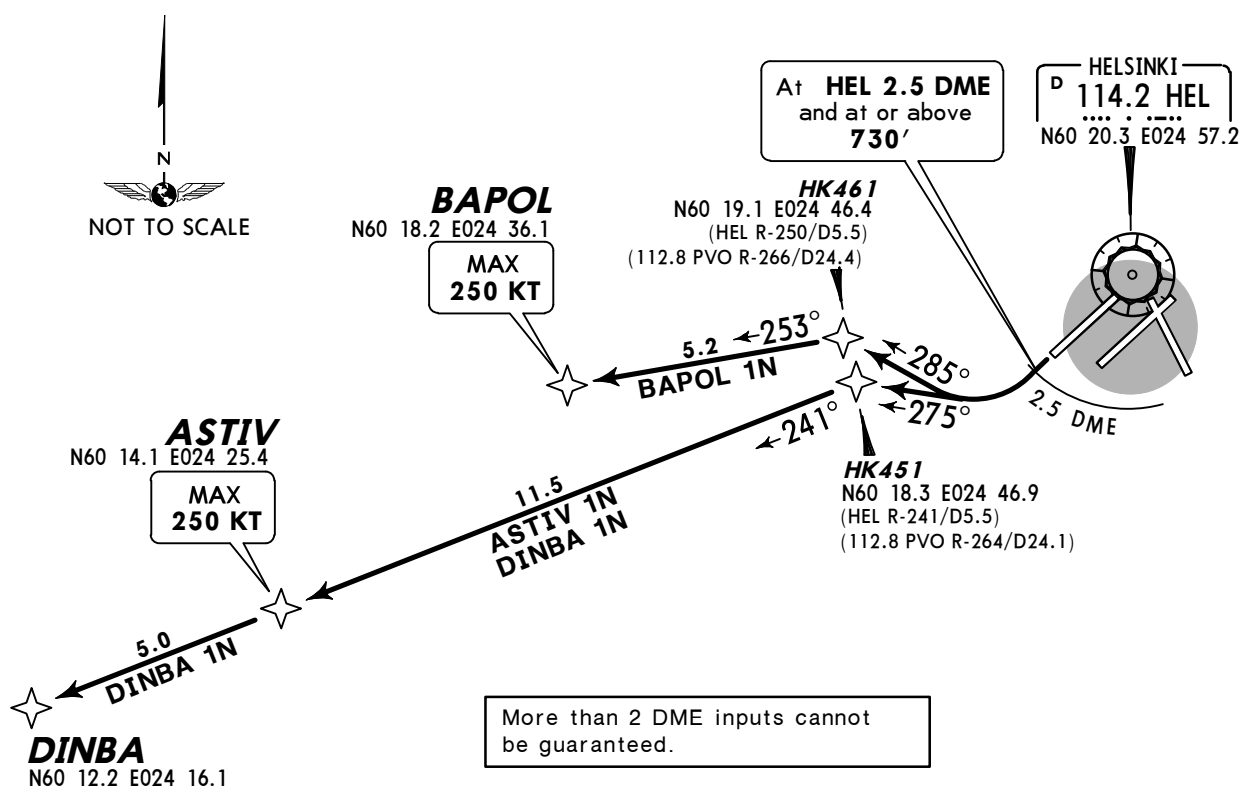
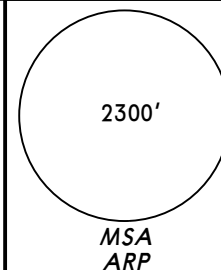
RNAV aircraft use RNAV STAR to join instrument approach.

HELSINKI Radar

(ASTIV 1N, BAPOL 1N,
DINBA 1N)
119.1 129.85Apt Elev
179'

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

**ASTIV 1N [ASTI1N]
BAPOL 1N [BAPO1N]
DINBA 1N [DINB1N]
RWY 22R RNAV DEPARTURES**
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



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

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

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

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

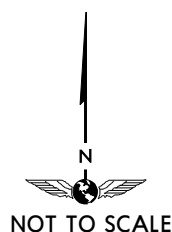
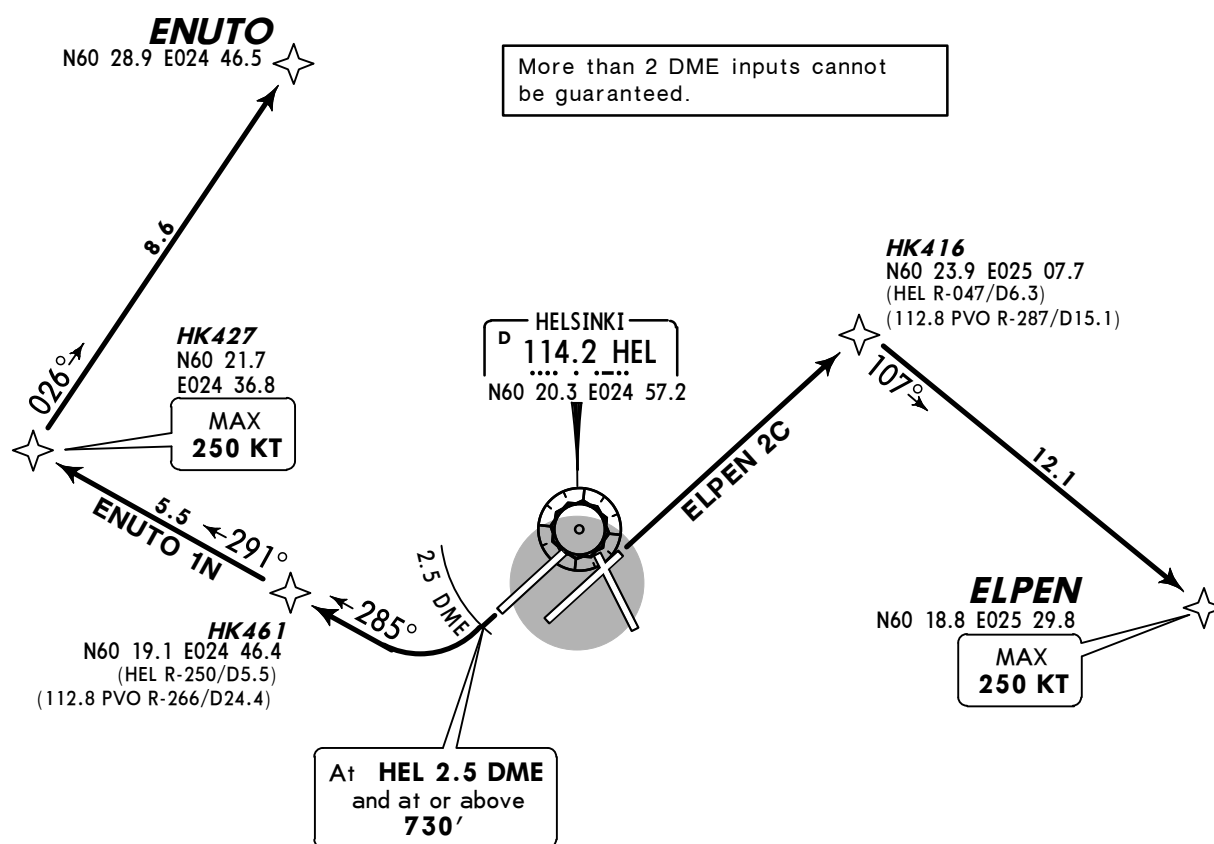
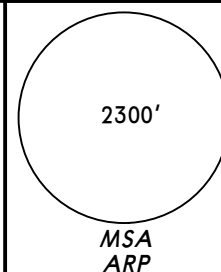
SID	ROUTING
ASTIV 1N	Climb on runway track to HEL 2.5 DME and at or above 730', turn RIGHT, 275° track to HK451 - ASTIV (K250-).
BAPOL 1N	Climb on runway track to HEL 2.5 DME and at or above 730', turn RIGHT, 285° track to HK461 - BAPOL (K250-).
DINBA 1N	Climb on runway track to HEL 2.5 DME and at or above 730', turn RIGHT, 275° track to HK451 - ASTIV (K250-) - DINBA.

HELSINKI Radar

(ELPEN 2C) (ENUTO 1N)
119.1 129.85Apt Elev
179'

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

**ELPEN 2C [ELPE2C]
ENUTO 1N [ENUT1N]
RWYS 04R, 22R RNAV DEPARTURES
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC**



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

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

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

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

SID	RWY	ROUTING
ELPEN 2C	04R	On runway track to HK416 - ELPEN (K250-).
ENUTO 1N	22R	Climb on runway track to HEL 2.5 DME and at or above 730', turn RIGHT, 285° track to HK461 - HK427 (K250-) - ENUTO.

HELSINKI Radar

(GIRLA 1D,
IDMOP 1P)
129.85 119.1Apt Elev
179'

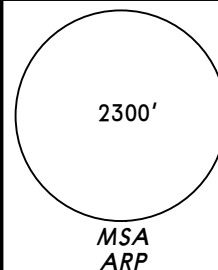
- Trans level: By ATC Trans alt: 5000'
1. Maintain Tower frequency until passing 1500', then contact HELSINKI Radar.
 2. At first contact with HELSINKI Radar report SID or RADAR heading given by ATC and level.
 3. SIDs are also minimum noise routings.
 4. Instructions containing deviations from SID (temporary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

ERSAV 1P [ERSA1P]
GIRLA 1D [GIRL1D]
IDMOP 1P [IDMO1P]

RWYS 33, 15 RNAV DEPARTURES

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



More than 2 DME inputs cannot
be guaranteed.

IDMOP

N60 24.1 E025 03.2
(HEL R-030/D4.8)
(112.8 PVO R-284/D17.2)

MAX
250 KT

After passing
HEL
and at or above
730'

If HEL u/s

At
KAD 12.1 DME
and at or above
730'

ERSAV
N60 18.5 E024 34.7

MAX
250 KT

HK481
N60 20.4 E024 47.2
(HEL R-264/D5.0)
(112.8 PVO R-269/D24.1)

6.5
ERSAV 1P

245°
KAD 12.1 DME
HEL 2.0 DME

HELSINKI
D (H) 114.2 HEL
N60 20.3 E024 57.2

At **HEL 2.0 DME**
and at or above
730'

8.0
GIRLA 1D

HK421
N60 16.8 E024 51.1
(HEL R-214/D4.6)
(112.8 PVO R-260/D22.0)

RIPVI
N60 16.4
E024 35.1

MAX
250 KT

5.0
180°

GIRLA
N60 11.5 E024 33.7

DME
KADIS
D (T) (117.5) KAD
N60 08.8 E025 04.9

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

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



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

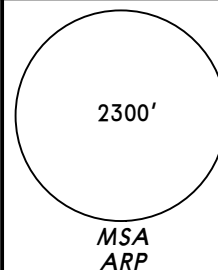
After take-off climb as rapidly as possible to at least 2000'.

SID	RWY	ROUTING
ERSAV 1P	33	On runway track, after passing HEL (if HEL u/s: KAD 12.1 DME) and at or above 730' turn LEFT, 245° track to HK481 - ERSAV (K250-).
GIRLA 1D	15	Climb on runway track to HEL 2.0 DME and at or above 730', turn RIGHT to HK421 - RIPVI (K250-) - GIRLA.
IDMOP 1P	33	On runway track, after passing HEL (if HEL u/s: KAD 12.1 DME) and at or above 730' turn RIGHT to IDMOP (K250-).

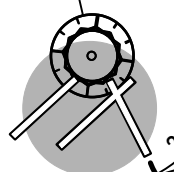
HELSINKI Radar
119.1Apt Elev
179'

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

**LAVTU 1D [LAVT1D]
NUTRU 1D [NUTR1D]
RWY 15 RNAV DEPARTURES**
RNAV (DME/DME OR GNSS)
P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC



HELSINKI
D (H) 114.2 HEL
.....
N60 20.3 E024 57.2



2.5 DME

At HEL 2.5 DME
and at or above
730'

HK431
N60 16.6 E025 05.3
(HEL R-125/D5.4)
(112.8 PVO R-258/D15.0)

078°

11.0
NUTRU 1D**NUTRU**

N60 17.4 E025 27.3

MAX
250 KT

127°

6.1
LAVTU 1D**LAVTU**

N60 12.3 E025 13.9

MAX
250 KT



More than 2 DME inputs cannot
be guaranteed.

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

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

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

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

SID**ROUTING****LAVTU 1D**

Climb on runway track to HEL 2.5 DME and at or above 730', turn LEFT to HK431 - LAVTU (K250-).

NUTRU 1D

Climb on runway track to HEL 2.5 DME and at or above 730', turn LEFT to HK431 - NUTRU (K250-).

HELSINKI Radar

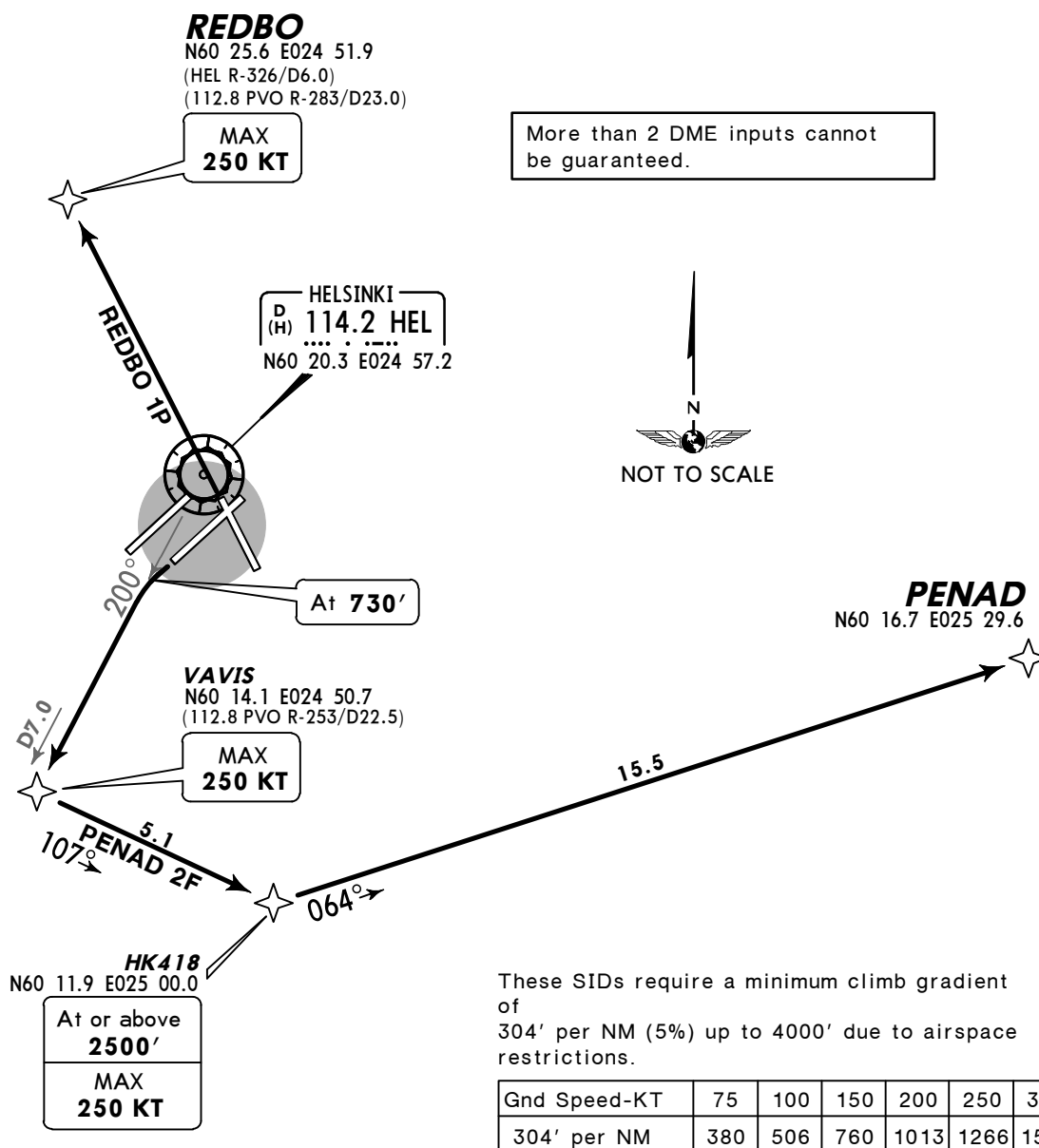
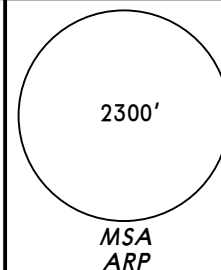
(PENAD 2F) (REDBO 1P)
119.1 129.85Apt Elev
179'

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

PENAD 2F [PENA2F]ONLY FOR AIRCRAFT NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB
ACCORDING TO ICAO ANNEX 16, CHAPTER 3**REDBO 1P [REDB1P]****RWYS 22L, 33 RNAV DEPARTURES**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC

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

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

SID	RWY	ROUTING
PENAD 2F	22L	Climb on runway track to 730', turn LEFT, intercept HEL R-200 (if HEL u/s: 200° track) to VAVIS (K250-) - HK418 (2500'+; K250-) - PENAD.
REDBO 1P	33	On runway track to REDBO (K250-).

HELSINKI Radar

(RIPVI 1D) (ROLAT 1S)
129.85 119.1Apt Elev
179'

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

RIPVI 1D [RIPVI1D]

ROLAT 1S [ROLA1S]

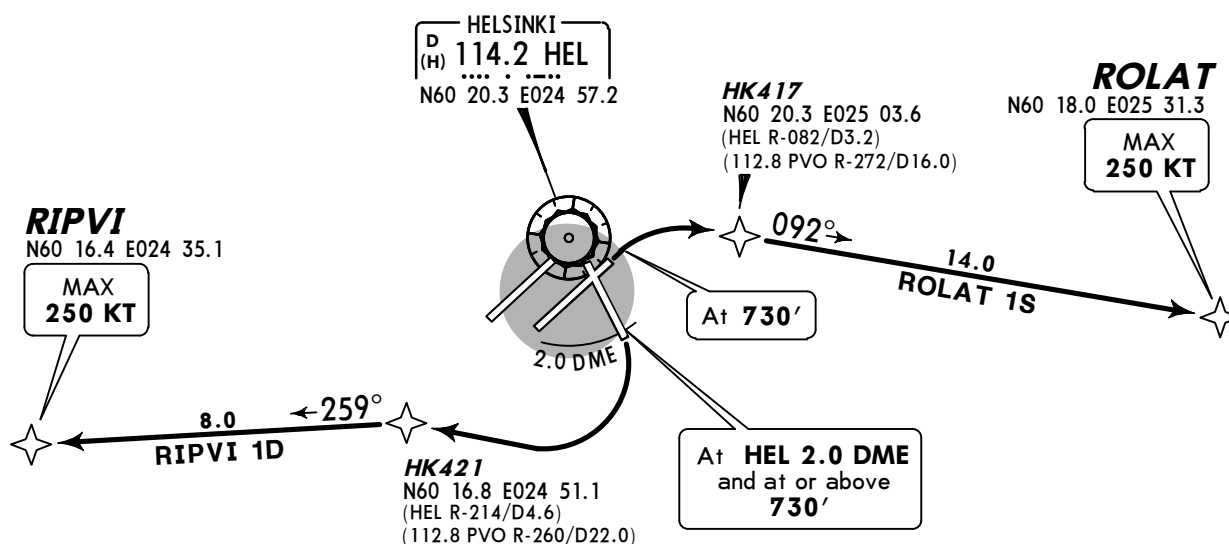
PROP/TURBOPROP ONLY

ONLY FOR AIRCRAFT NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPND
ACCORDING TO ICAO ANNEX 16, CHAPTER 3

RWYS 15, 04R RNAV DEPARTURES

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC

2300'

MSA
ARPMore than 2 DME inputs cannot
be guaranteed.

NOT TO SCALE

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

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

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

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

SID	RWY	ROUTING
RIPVI 1D	15	Climb on runway track to HEL 2.0 DME and at or above 730', turn RIGHT to HK421 - RIPVI (K250-).
ROLAT 1S	04R	Climb on runway track to 730', turn RIGHT to HK417 - ROLAT (K250-).

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HELSINKI Radar

(UREDA 1N,
VAVIS 2F) (VETUD 1C)
119.1 129.85Apt Elev
179'

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

UREDA 1N [URED1N]

VAVIS 2F [VAVI2F]

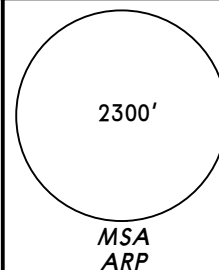
ONLY FOR AIRCRAFT NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB
ACCORDING TO ICAO ANNEX 16, CHAPTER 3

VETUD 1C [VETU1C]

RWYS 22R/L, 04R RNAV DEPARTURES

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC

More than 2 DME inputs cannot
be guaranteed.VETUD
N60 30.5 E024 48.7

9.5

←263°

XELAR
N60 30.4 E025 07.9MAX
250 KTHELSINKI
D (H) 114.2 HEL
N60 20.3 E024 57.2At HEL 2.5 DME
and at or above
730'HK416
N60 23.9 E025 07.7
(HEL R-047/D6.3)
(112.8 PVO R-287/D15.1)VETUD
1C

At 730'

HK428
N60 16.1 E024 46.4
(HEL R-225/D6.8)
(112.8 PVO R-259/D24.4)UREDA
N60 14.3
E024 37.4MAX
250 KT

UREDA 1N

VAVIS 2F

VAVIS

N60 14.1 E024 50.7
(112.8 PVO R-253/D22.5)MAX
250 KT

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

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

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

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

SID	RWY	ROUTING
UREDA 1N	22R	Climb on runway track to HEL 2.5 DME and at or above 730', turn RIGHT to HK428 - UREDA (K250-).
VAVIS 2F	22L	Climb on runway track to 730', turn LEFT, intercept HEL R-200 (if HEL u/s: 200° track) to VAVIS (K250-).
VETUD 1C	04R	Climb on runway track to HK416 - XELAR (K250-) - VETUD.

HELSINKI Radar

(XELAR 2C) (XUPAV 1U)
129.85 119.1Apt Elev
179'

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

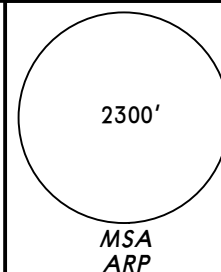
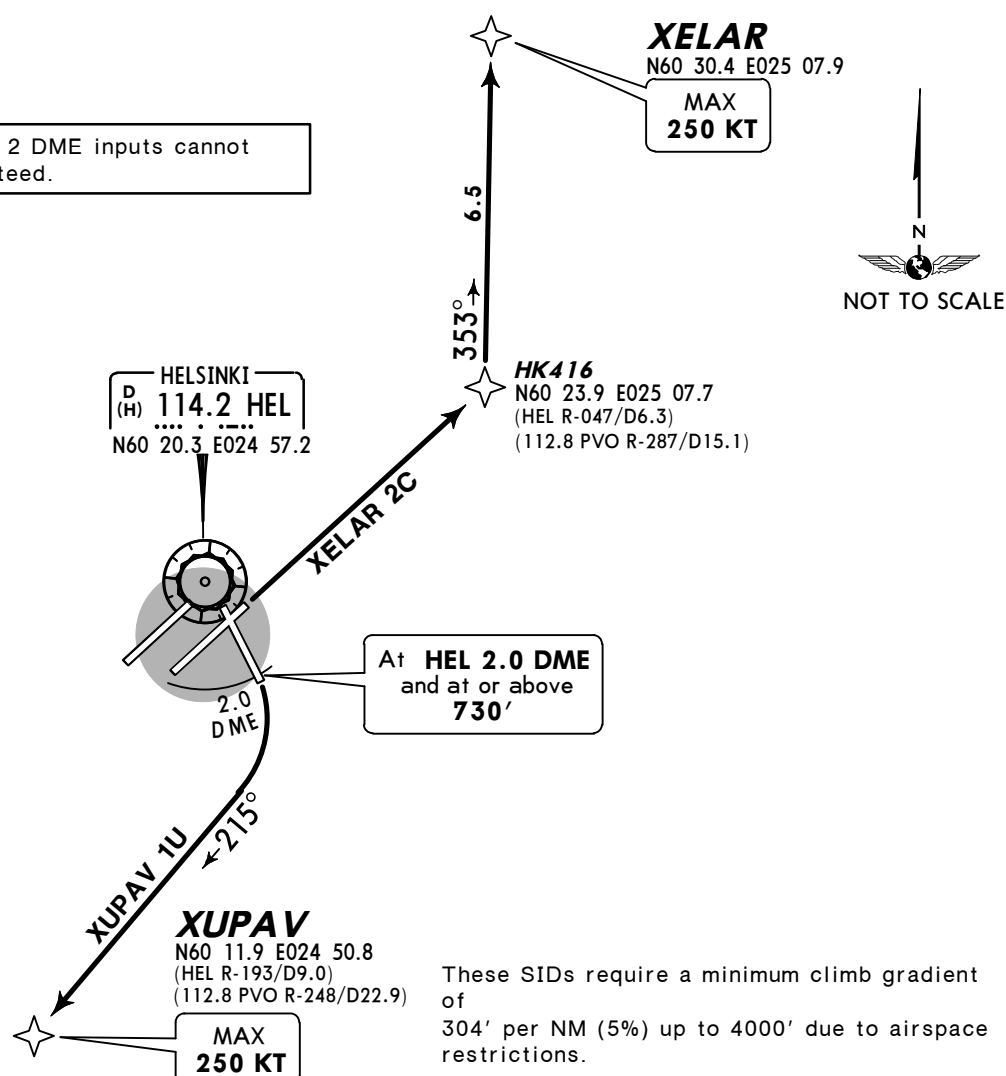
XELAR 2C [XELA2C]**XUPAV 1U [XUPA1U]**

PROP/TURBOPROP ONLY

ONLY FOR AIRCRAFT NOT EXCEEDING FLYOVER NOISE LEVEL 89 EPNDB
ACCORDING TO ICAO ANNEX 16, CHAPTER 3**RWYS 04R, 15 RNAV DEPARTURES**

RNAV (DME/DME OR GNSS)

P-RNAV APPROVAL REQUIRED OTHERWISE ADVISE ATC

More than 2 DME inputs cannot
be guaranteed.

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

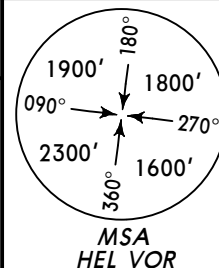
Initial climb clearance **4000'** or assigned altitude if lower,
climb to higher level only when cleared by ATC.

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

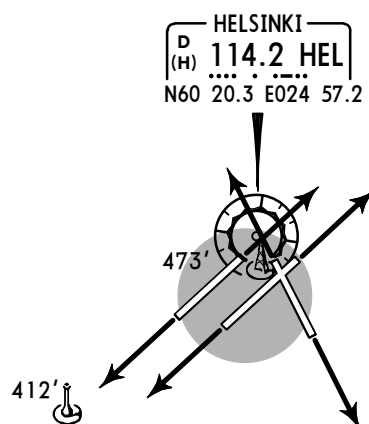
SID	RWY	ROUTING
XELAR 2C	04R	On runway track to HK416 - XELAR (K250-).
XUPAV 1U	15	Climb on runway track to HEL 2.0 DME and at or above 730', turn RIGHT to XUPAV (K250-).

Apt Elev
179'

Trans level: By ATC Trans alt: 5000'



RWYS 04L/R, 15, 22L/R, 33
OMNIDIRECTIONAL DEPARTURES
~~SPEED~~ MAX 250 KT UP TO 4000'
UNLESS OTHERWISE INSTRUCTED BY ATC



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

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

EXPECT close-in obstacles of

RWY 04L: 473', 061°/1.79NM from THR.

RWY 04R: 473', 031°/1.15NM from DISPL THR.

RWY 15: 473', 237°/0.29NM from THR.

RWY 22L: 473', 255°/0.71NM from THR.

RWY 22R: 412', 228°/4.33NM from DISPL THR.

RWY 33: 473', 332°/1.56NM from THR.

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

ROUTING

Climb straight ahead to at or above 730'.

HELSINKI, FINLAND
VANTAA

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ADDITIONAL RUNWAY INFORMATION

ADDITIONAL RUNWAY INFORMATION					USABLE LENGTHS		TAKE-OFF	WIDTH
RWY					Threshold	Glide Slope		
04L	HIRL (60m) CL (15m) HIALS-II TDZ PAPI-L(3.0°) RVR					9045' 2757m	①	197' 60m
22R					9843' 3000m	8806' 2684m		
ALS (red) also available								
① TAKE-OFF RUN AVAILABLE								
RWY 04L:								
From rwy head 10,039' (3060m)								
twy WY int 9682' (2951m)								
twy WS int 6371' (1942m)								
twy WP int 5689' (1734m)								
RWY 22R:								
From rwy head 10,039' (3060m)								
twy WH int 9662' (2945m)								
twy WK/WL int 6089' (1856m)								
twy WM int 5213' (1589m)								
04R	HIRL (60m) CL (15m) HIALS PAPI-L (3.0°) RVR				10,499' 3200m	9527' 2904m	②	197' 60m
22L	HIRL (60m) CL (15m) HIALS-II TDZ PAPI-L (3.0°) RVR					10,314' 3144m		
ALS (red) also available								
② TAKE-OFF RUN AVAILABLE								
RWY 04R:								
From rwy head 11,286' (3440m)								
twy ZS int 10,771' (3283m)								
twy ZR int 10,499' (3200m)								
twy ZL int 8432' (2570m)								
twy ZJ int 6591' (2009m)								
twy ZH int 5604' (1708m)								
twy ZG int 5374' (1638m)								
RWY 22L:								
From rwy head 11,286' (3440m)								
twy ZB int 10,994' (3351m)								
twy ZC int 9505' (2897m)								
DEP point T 9255' (2821m)								
twy Y int 8196' (2498m)								
twy ZD int 7808' (2380m)								
twy ZG int 5991' (1826m)								
15	HIRL (60m) CL (15m) HIALS TDZ PAPI-L (3.0°) RVR					8523' 2598m	③	197' 60m
33	HIRL (60m) CL (15m) HIALS PAPI-L (3.5°) RVR							
ALS (red) also available								
③ TAKE-OFF RUN AVAILABLE								
RWY 15:								
From rwy head 9518' (2901m)								
DEP point V 6398' (1950m)								
RWY 33:								
From rwy head 9518' (2901m)								
twy YL/CL int 8281' (2524m)								
twy YH int 6499' (1981m)								
twy YF int 5420' (1652m)								

HOT SPOTS

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

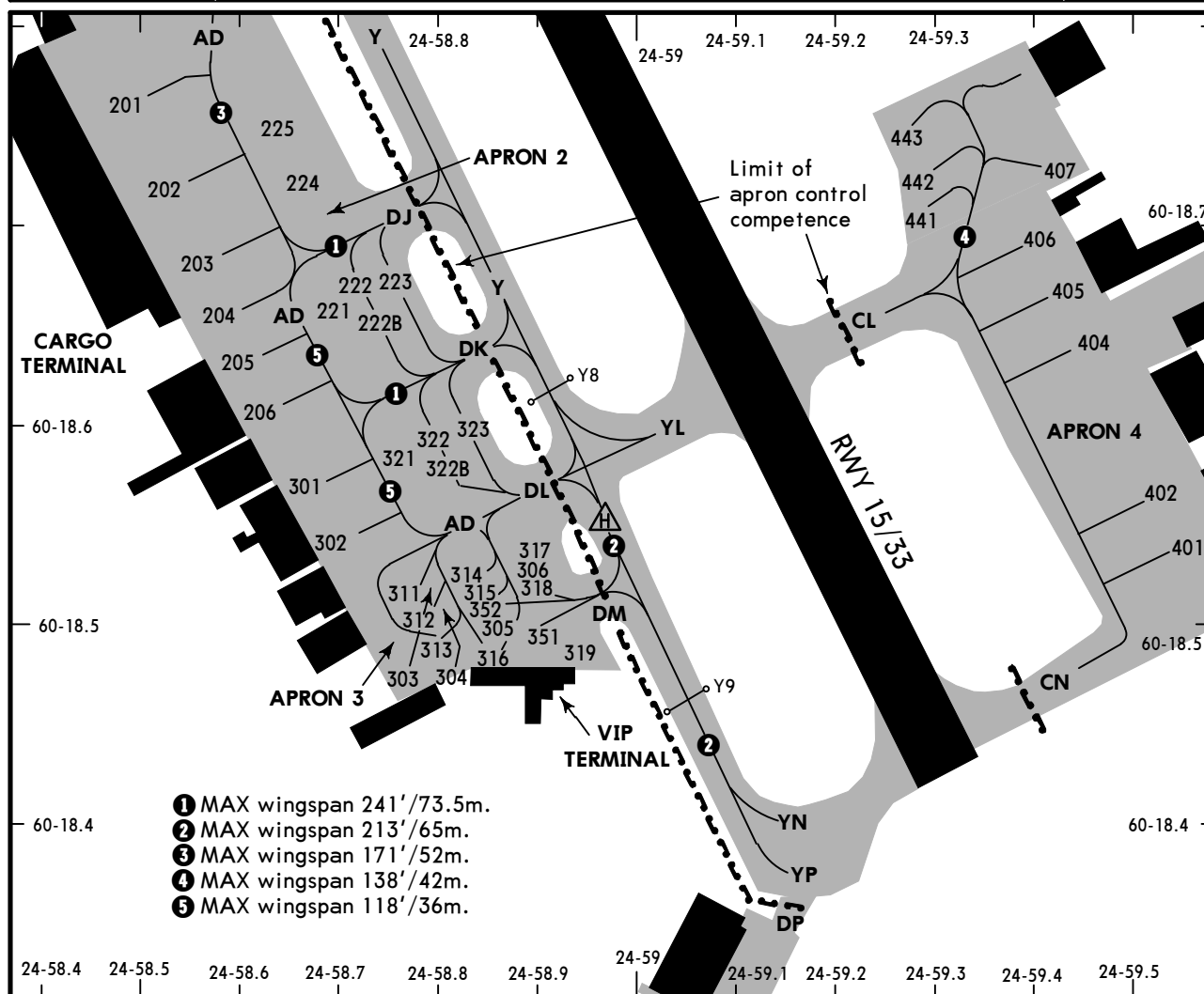
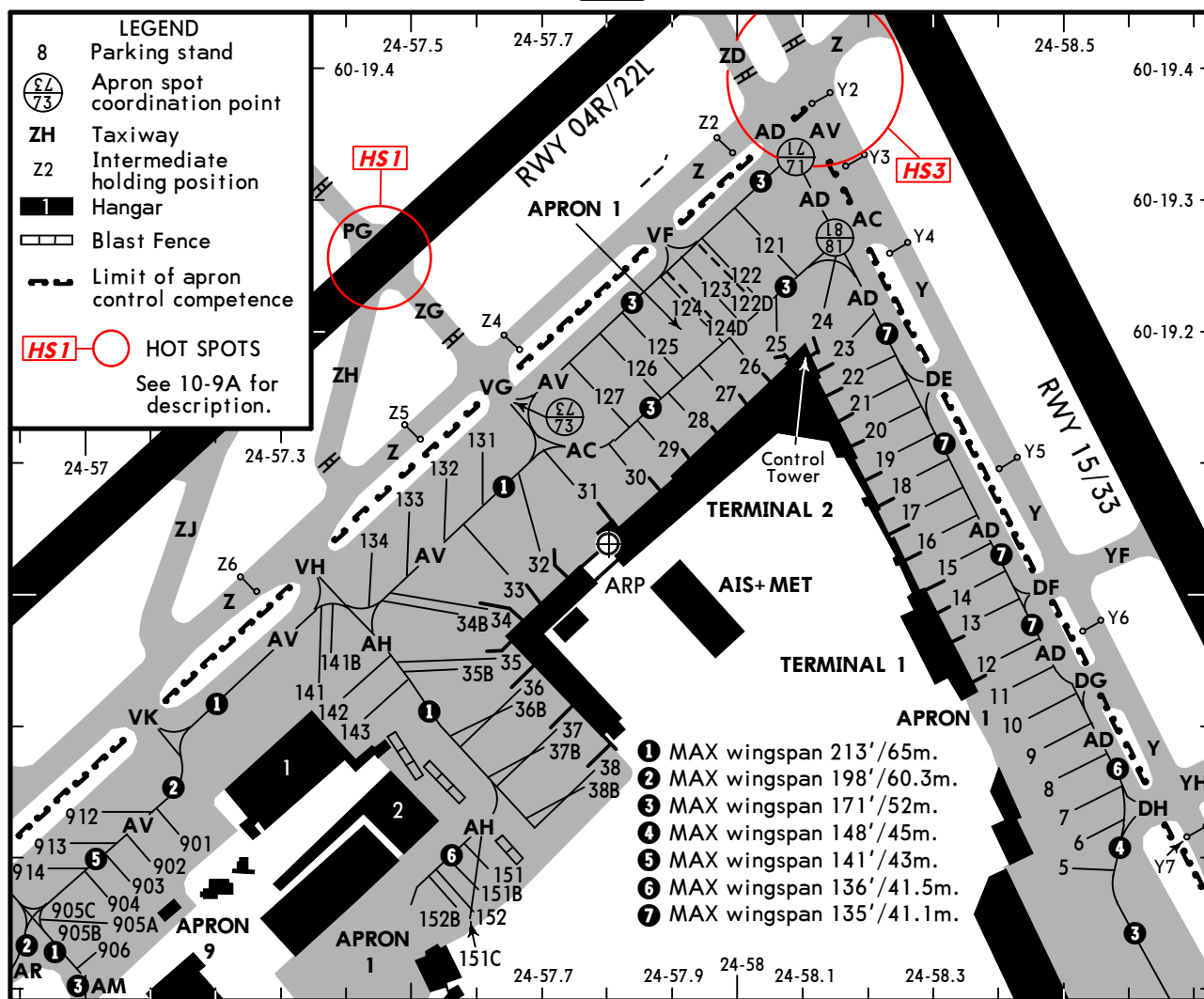
- HS1** Frequency change before crossing runway. An explicit crossing clearance shall be received before proceeding over the runway.
- HS2** be received before proceeding over the runway.
- HS3** Wide apron. Make sure of correct turn before runway when taxiing to Rwy 04R.

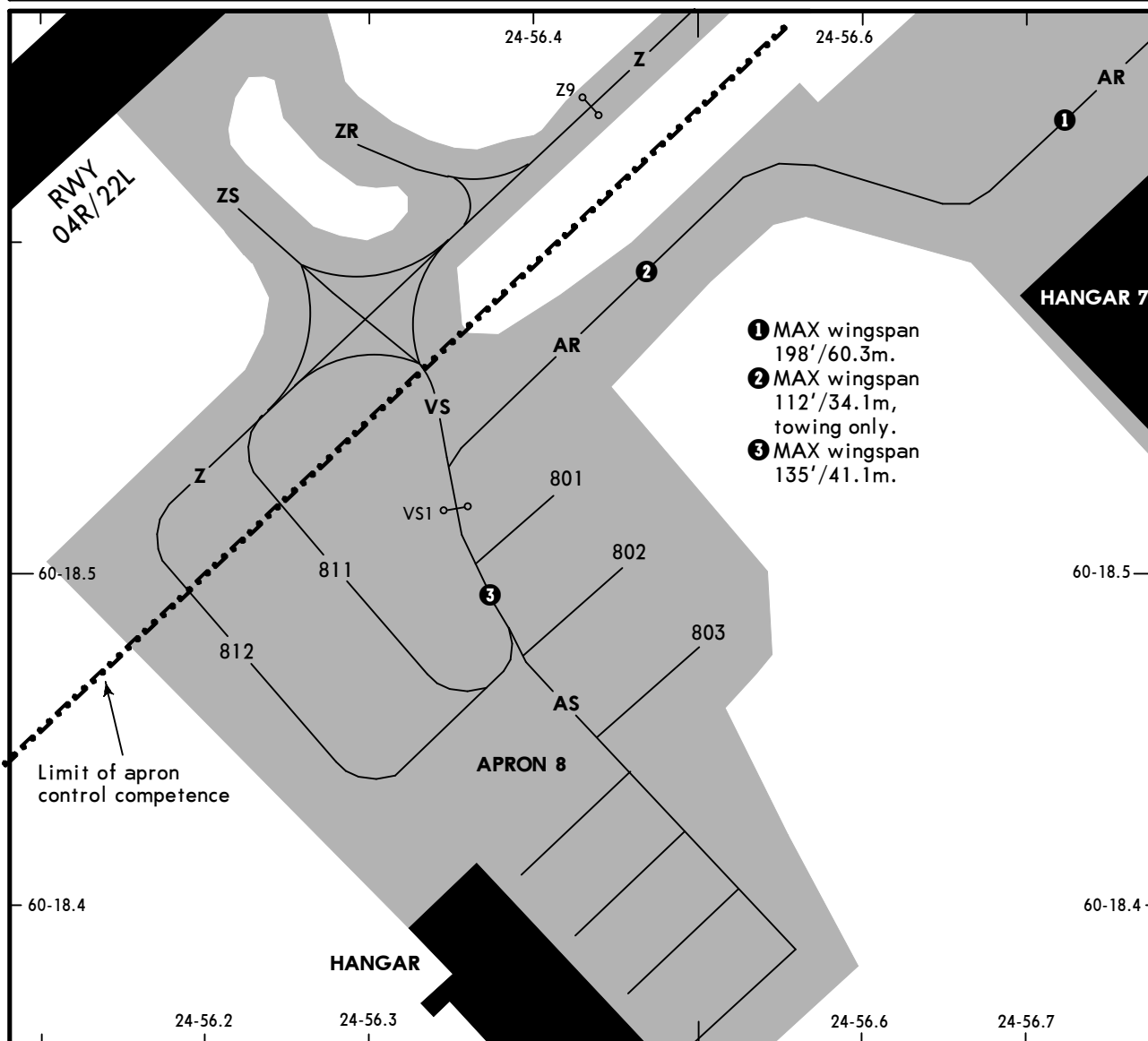
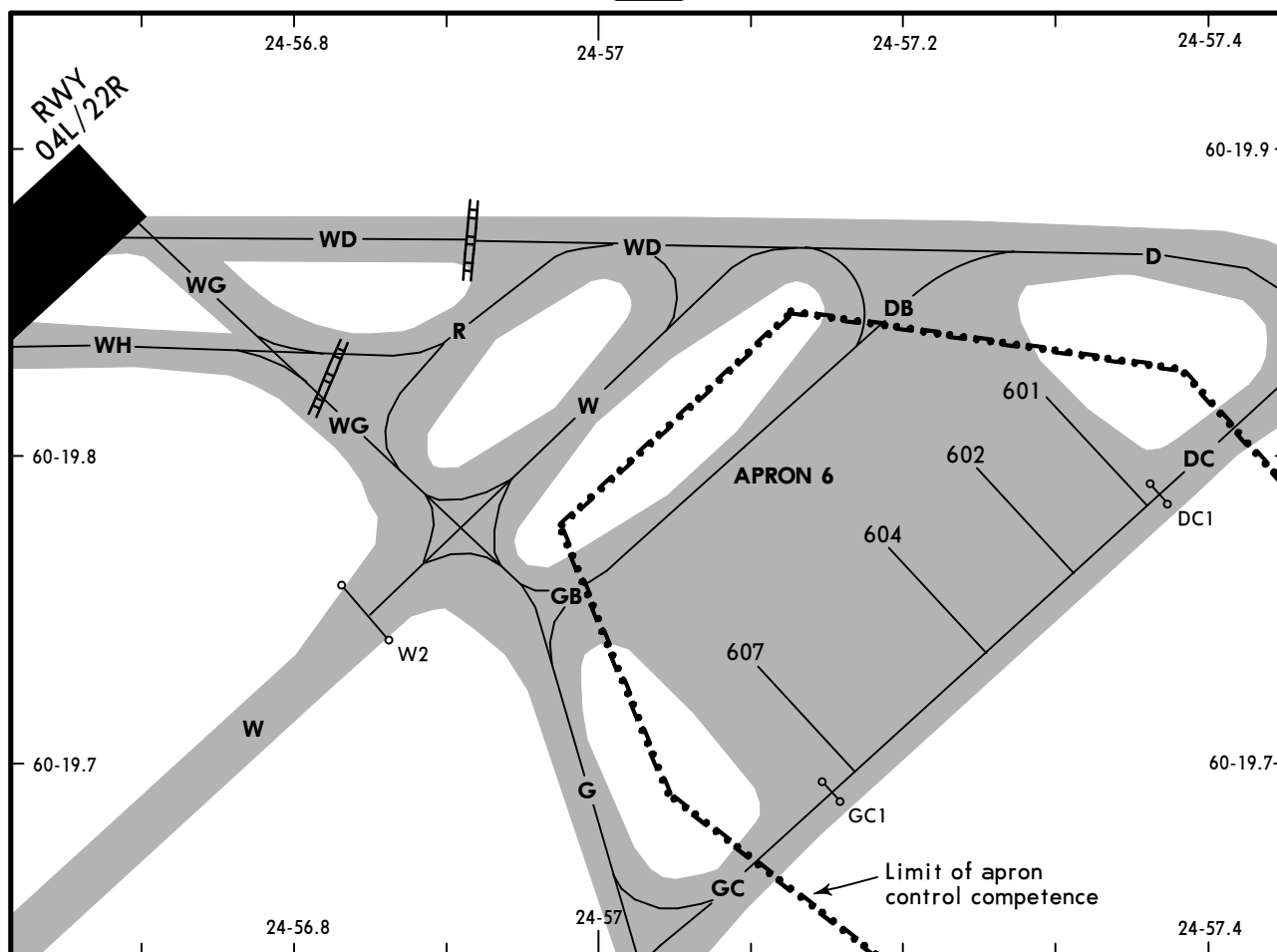
Standard

TAKE-OFF ①

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

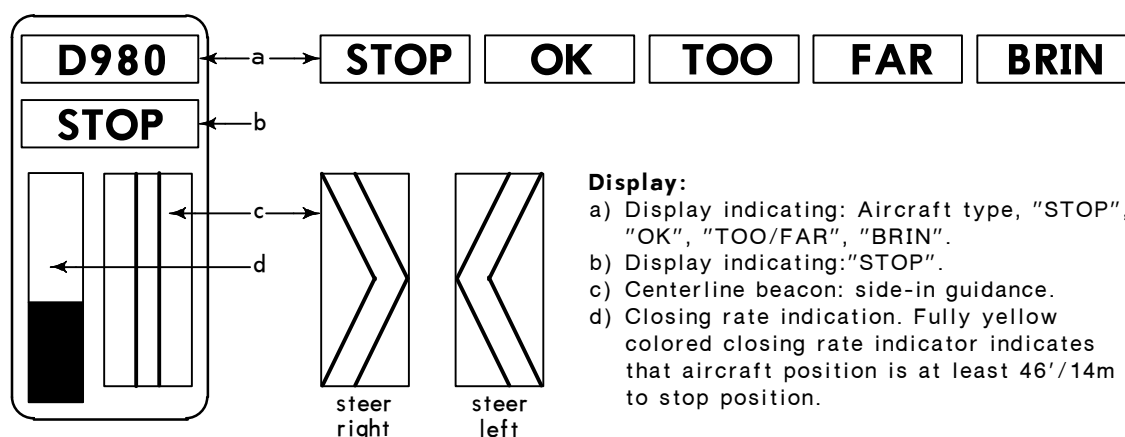
① Operators applying U.S. Ops Specs: CL required below 300m; approved HUD required below 150m.





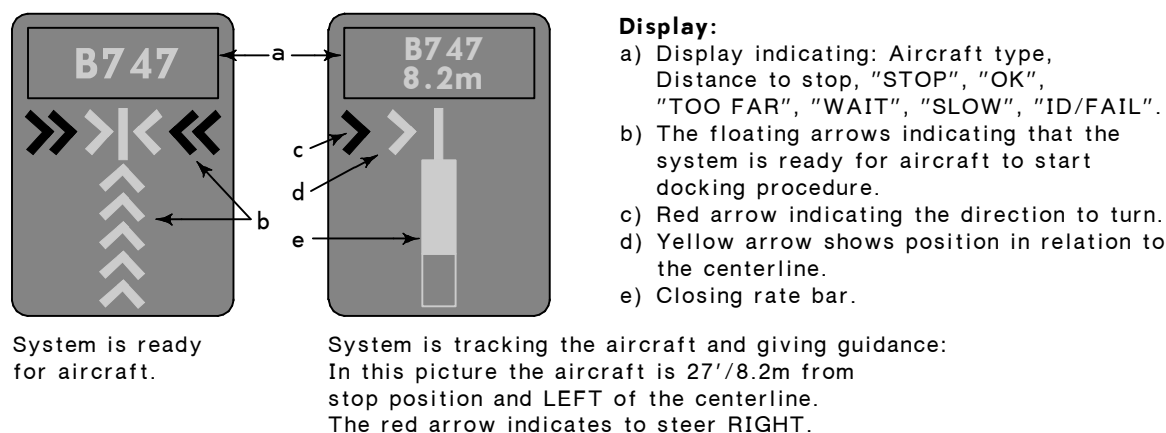
INS COORDINATES							
STAND No.	COORDINATES		ELEV	STAND No.	COORDINATES		ELEV
5 thru 8	N60 18.8	E024 58.5	148	224, 225	N60 18.7	E024 58.7	147
9	N60 18.9	E024 58.5	149	301	N60 18.6	E024 58.7	148
10	N60 18.9	E024 58.4	149	302	N60 18.5	E024 58.7	149
11, 12	N60 18.9	E024 58.4	150	303, 304	N60 18.5	E024 58.8	152
13	N60 19.0	E024 58.4	151	305	N60 18.5	E024 58.9	151
14	N60 19.0	E024 58.3	151	306	N60 18.5	E024 58.9	150
15	N60 19.0	E024 58.3	152	311 thru 313	N60 18.5	E024 58.8	152
16	N60 19.0	E024 58.3	154	314	N60 18.5	E024 58.8	151
17	N60 19.0	E024 58.3	155	315	N60 18.5	E024 58.8	151
18	N60 19.1	E024 58.2	156	316	N60 18.5	E024 58.9	151
19 thru 21	N60 19.1	E024 58.2	157	317	N60 18.5	E024 58.9	149
22 thru 24	N60 19.2	E024 58.1	158	318	N60 18.5	E024 58.9	150
25, 26	N60 19.2	E024 58.0	158	319	N60 18.5	E024 58.9	151
27	N60 19.1	E024 58.0	158	321	N60 18.6	E024 58.8	151
28, 29	N60 19.1	E024 57.9	158	322, 322B	N60 18.6	E024 58.8	150
30, 31	N60 19.1	E024 57.8	158	323	N60 18.6	E024 58.8	149
32, 33	N60 19.0	E024 57.7	159	351	N60 18.5	E024 58.9	151
34	N60 19.0	E024 57.6	159	352	N60 18.5	E024 58.8	151
34B	N60 19.0	E024 57.6	160	401	N60 18.5	E024 59.6	144
35, 35B	N60 18.9	E024 57.6	158	402	N60 18.6	E024 59.6	144
36 thru 37B	N60 18.9	E024 57.7	156	404	N60 18.6	E024 59.5	144
38, 38B	N60 18.9	E024 57.8	154	405	N60 18.7	E024 59.5	144
121	N60 19.3	E024 58.0	156	406, 407	N60 18.7	E024 59.4	144
122 thru 123	N60 19.2	E024 58.0	156	441	N60 18.7	E024 59.3	142
124, 124D	N60 19.2	E024 57.9	156	442, 443	N60 18.7	E024 59.3	142
125	N60 19.2	E024 57.9	155	601	N60 19.8	E024 57.3	166
126	N60 19.2	E024 57.8	155	602	N60 19.8	E024 57.2	165
127	N60 19.1	E024 57.8	156	604	N60 19.8	E024 57.1	165
131	N60 19.1	E024 57.6	161	607	N60 19.7	E024 57.1	165
132	N60 19.1	E024 57.5	160	801	N60 18.5	E024 56.4	150
133	N60 19.1	E024 57.5	159	802, 803	N60 18.5	E024 56.5	150
134	N60 19.0	E024 57.4	160	811	N60 18.5	E024 56.3	149
141	N60 18.9	E024 57.3	159	812	N60 18.5	E024 56.2	147
141B	N60 18.9	E024 57.4	159	901	N60 18.8	E024 57.2	158
142	N60 18.9	E024 57.4	159	902, 903	N60 18.8	E024 57.1	158
143	N60 18.9	E024 57.4	158	904, 905A	N60 18.7	E024 57.1	157
151, 151B	N60 18.8	E024 57.6	157	905B, 905C	N60 18.7	E024 57.0	156
151C, 152	N60 18.8	E024 57.6	156	906	N60 18.7	E024 57.1	157
152B	N60 18.7	E024 57.6	156	912	N60 18.8	E024 57.0	158
201 thru 203	N60 18.7	E024 58.5	149	913	N60 18.8	E024 56.9	156
204, 205	N60 18.6	E024 58.6	149	914	N60 18.8	E024 56.9	153
206	N60 18.6	E024 58.6	148				
221, 222	N60 18.7	E024 58.7	148				
222B	N60 18.6	E024 58.7	148				
223	N60 18.7	E024 58.7	148				

VISUAL NOSE-IN DOCKING GUIDANCE SYSTEM

**Instructions:**

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

VISUAL NOSE-IN DOCKING GUIDANCE SYSTEM (SAFEDOCK)



System is ready for aircraft.

System is tracking the aircraft and giving guidance: In this picture the aircraft is 27'/8.2m 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. MAX approach speed is 11km/h (3m/sec). If exceeded, display indicates "SLOW".
6. 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.
7. "STOP/ID FAIL": Aircraft type verification is failed. Interrupt taxiing and contact HELSINKI Apron.
8. Fully yellow colored closing rate bar indicates that aircraft position is at least 39'/12m to stop position. When distance is 38'/11.5m to stop position the yellow colored closing rate indication starts to shorten from the bottom, one row indicates 1.6'/0.5m.
9. When stop position is reached, display indicates "STOP". Correct parking is indicated as "OK".
10. If aircraft overshoots the limit for correct parking, display indicates "TOO FAR".
11. "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.
12. Display automatically shuts down after parking.
13. In case of malfunction in the docking guidance system interrupt taxiing and contact HELSINKI Apron.

STRAIGHT-IN RWY		DA(H) / MDA(H)	RVR (ALS/ALS out)
04L	CAT 2 ILS	233' (100')	RA 105' - 300m
	ILS	333' (200')	500m / 1000m
	LOC	510' (377')	800m / 1000m
	LOC ❶	780' (647')	1000m / 1000m
	RNAV	560' (427')	800m / 1000m
	VOR	660' (527')	1000m / 1000m
04R	ILS	350' (200')	500m / 1000m
	LOC	610' (460')	1000m / 1000m
	RNAV	580' (430')	800m / 1000m
15	ILS	362' (200')	500m / 1000m
	LOC	620' (458')	1000m / 1000m
	LOC ❷	810' (648')	1000m / 1000m
	RNAV	620' (458')	1000m / 1000m
	VOR	620' (458')	1000m / 1000m
	VOR ❸	870' (708')	1000m / 1000m
22L	CAT 2 ILS	247' (100')	RA 113' - 300m
	ILS	347' (200')	500m / 1000m
	LOC	600' (453')	1000m / 1000m
	RNAV	620' (473')	1000m / 1000m
	NDB	620' (473')	1000m / 1000m
22R	ILS	378' (200')	500m / 1000m
	LOC	620' (442')	800m / 1000m
	RNAV	620' (441')	800m / 1000m
33	RNAV	580' (434')	1000m / 1000m
	VOR	580' (434')	1000m / 1000m
	VOR ❹	1270' (1124')	1000m / 1000m

❶ W/o D2.0 HTV.

❷ W/o D2.0 HL.

❸ W/o D1.5 HEL.

❹ W/o D5.0 HEL.

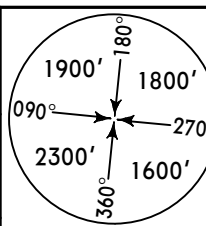
TAKE-OFF RWY 04L/R, 15, 22L/R, 33

LVP must be in Force ❶				
RL, FATO LTS, CL & RVR info	RL, FATO LTS & RCLM	Unlit/unmarked defined RWY/FATO	Nil Facilities DAY	Nil Facilities NIGHT
150m	200m	200m	250m ❷	800m

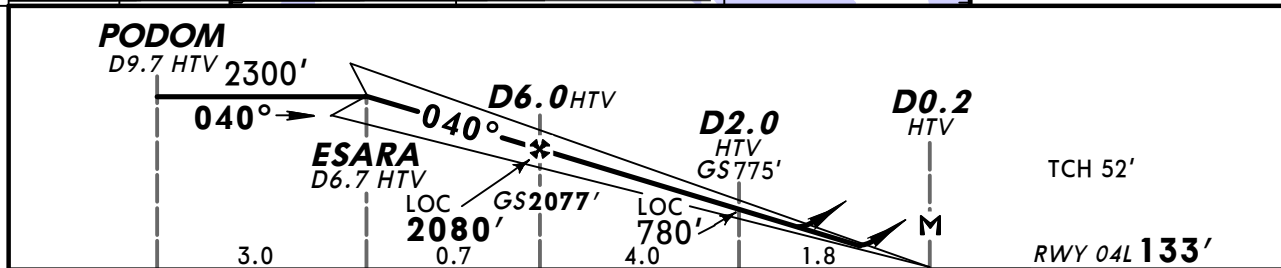
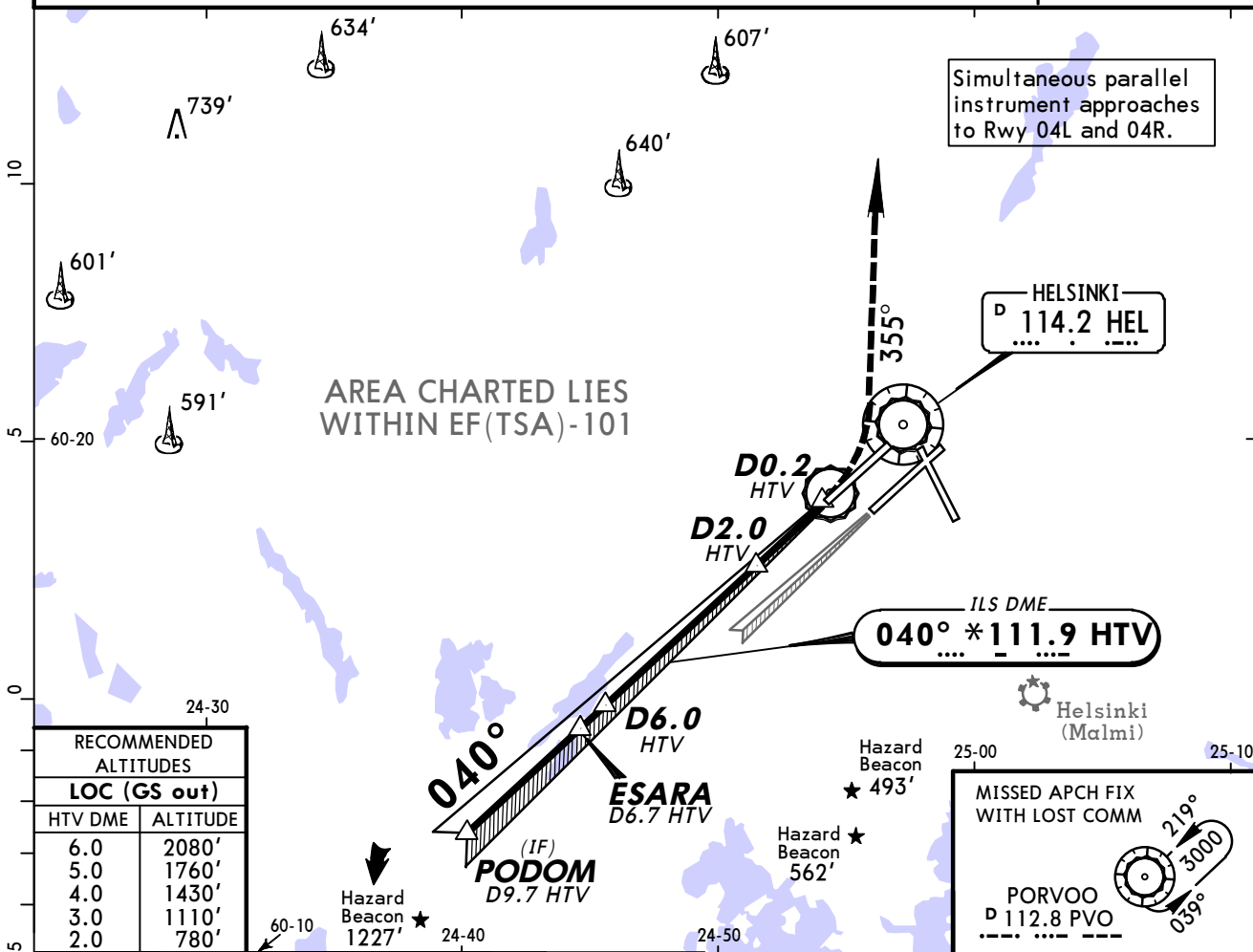
❶ Without LVP 400m are stipulated.

❷ Or rejected take-off distance whichever is the greater.

BRIEFING STRIP™

D-ATIS Arrival		HELSINKI Approach (R)		HELSINKI Tower		Ground	
135.07		119.1		118.6 118.85		121.8	
LOC HTV *111.9	Final Apch Crs 040°	GS D6.0 HTV 2077' (1944')	ILS DA(H) Refer to Minimums	Apt Elev 179' RWY 133'			
MISSED APCH: Climb on 040° to D0.2 HTV or 580', whichever is later. Turn LEFT onto 355° climbing to 3000'. Expect radar vectoring.							
MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.							
Alt Set: hPa		Rwy Elev: 5 hPa		Trans level: By ATC			
1. DME required.		2. MIM 150 KT until 4 NM from TDZ. Otherwise advise ATC.					
3. LACFT: See ATC State pages.							

MSA
HEL VOR



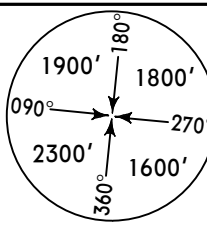
Gnd speed-Kts	70	90	100	120	140	160	HIALS-II	
ILS GS or	377	485	539	647	755	862	PAPI	040°
LOC Descent Angle	3.00°							D0.2 HTV
MAP at D0.2 HTV								whichever later 580'

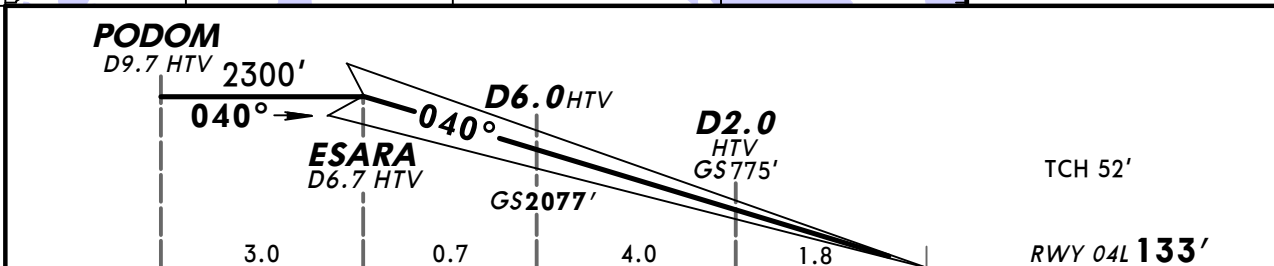
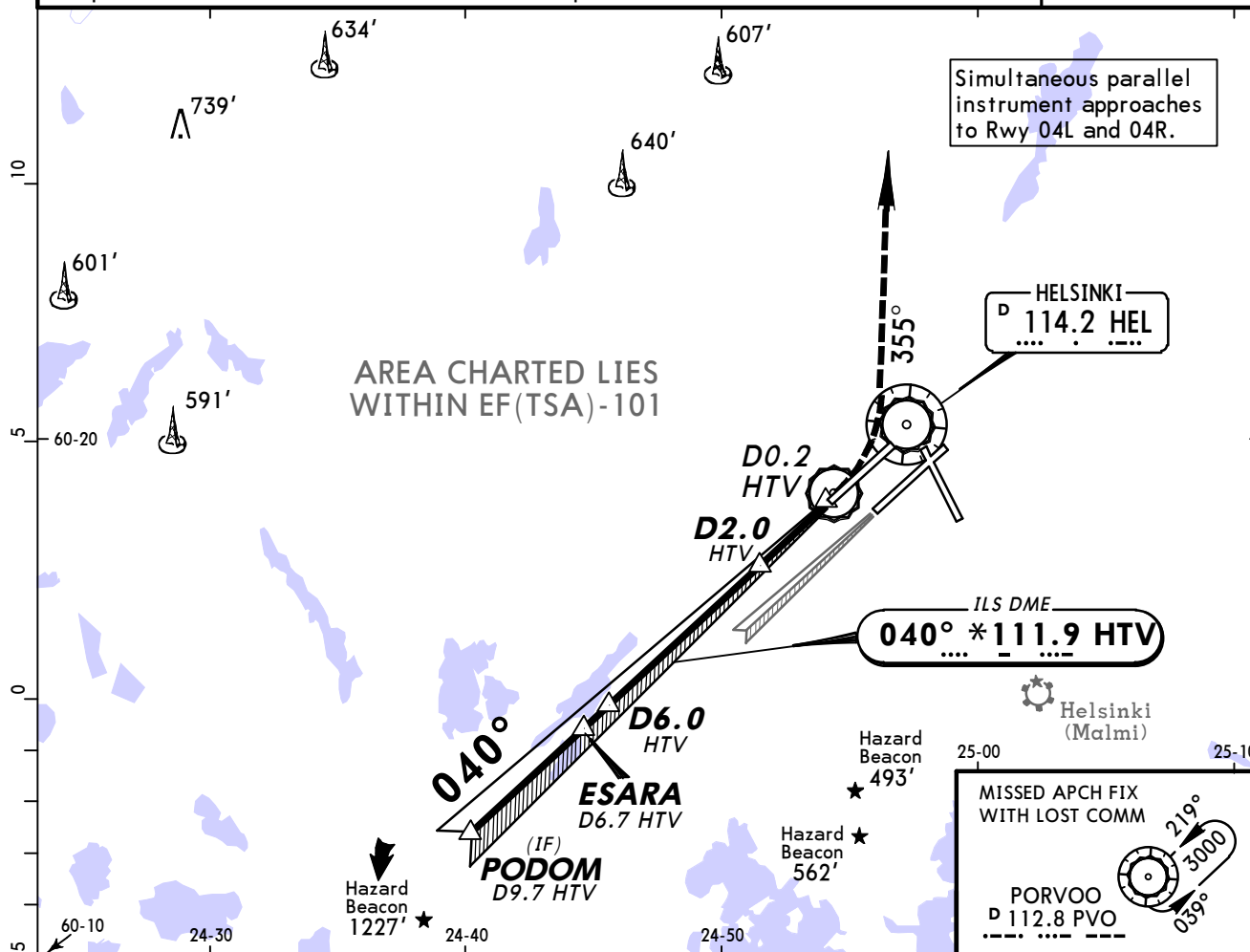
Standard				STRAIGHT-IN LANDING RWY 04L			
ILS				LOC (GS out)			
DA(H) ABCD: 333' (200') LACFT: 336' (203')				DA(H) 510' (377')			
FULL				ALS out			
Limited				ALS out			
ALS out				ALS out			
A					RVR 1500m	RVR 1500m	
B					RVR 1500m	RVR 1500m	
C	RVR 550m	RVR 750m	RVR 1200m	RVR 1000m	RVR 1700m	CMV 2300m	CMV 2400m
D							

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VANTAA

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11 NOV 11 11-1A Eff 17 Nov

HELSINKI, FINLAND
CAT II ILS Rwy 04L

D-ATIS Arrival		HELSINKI Approach (R)		HELSINKI Tower		Ground
135.07		119.1		118.6	118.85	121.8
LOC HTV *111.9	Final Apch Crs 040°	GS D6.0 HTV 2077' (1944')	CAT II ILS RA/DA(H) Refer to Minimums	Apt Elev 179'	RWY 133'	
MISSED APCH: Climb on 040° to D0.2 HTV or 580', whichever is later. Turn LEFT onto 355° climbing to 3000'. Expect radar vectoring. MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.						
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. 3. Special Aircrew & Aircraft Certification Required.						MSA HEL VOR



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

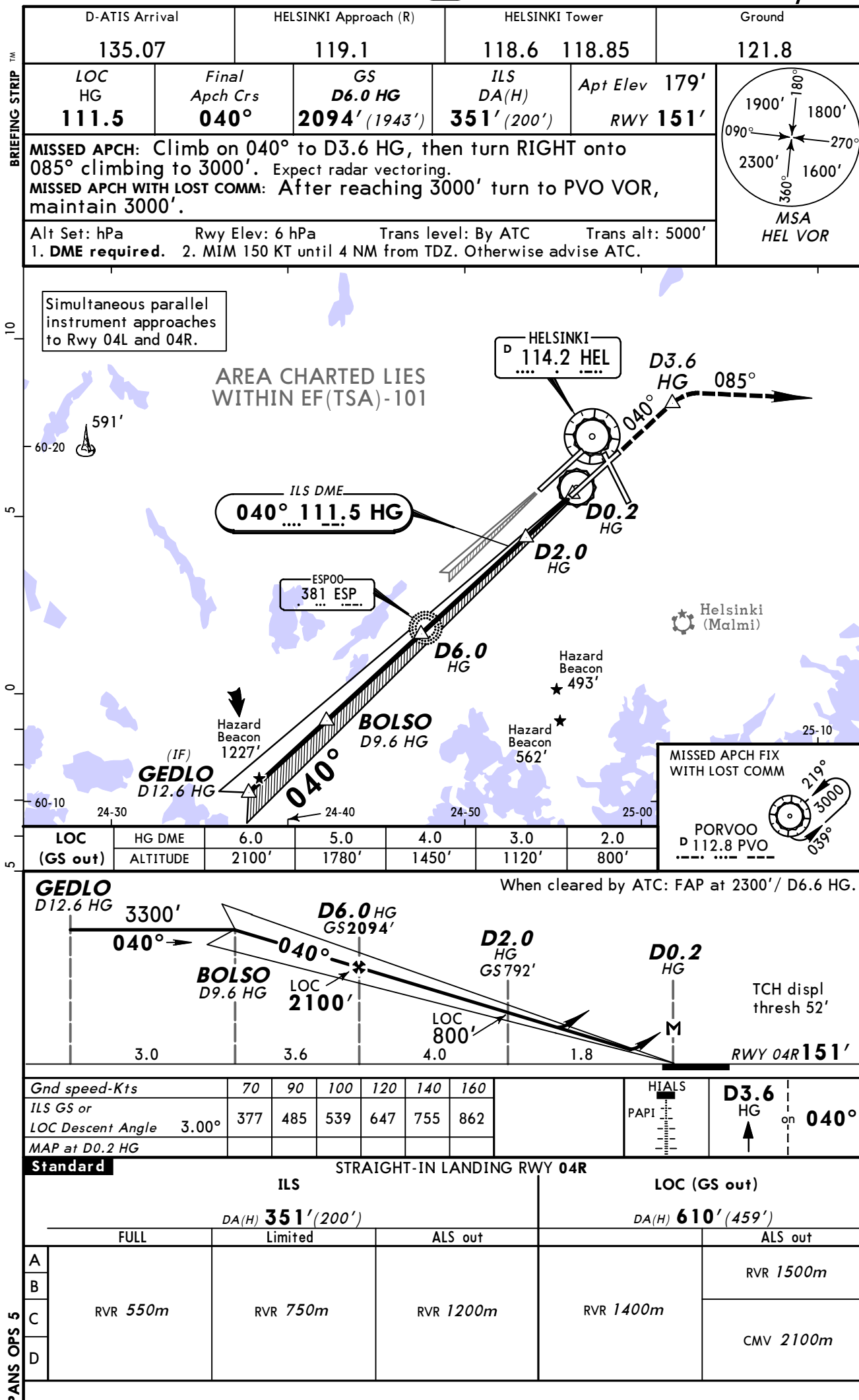
Standard			STRAIGHT-IN LANDING RWY 04L CAT II ILS		
ABC RA 105'			D RA 113'		LACFT RA 114'
DA(H) 233' (100')			DA(H) 241' (108')		DA(H) 242' (109')

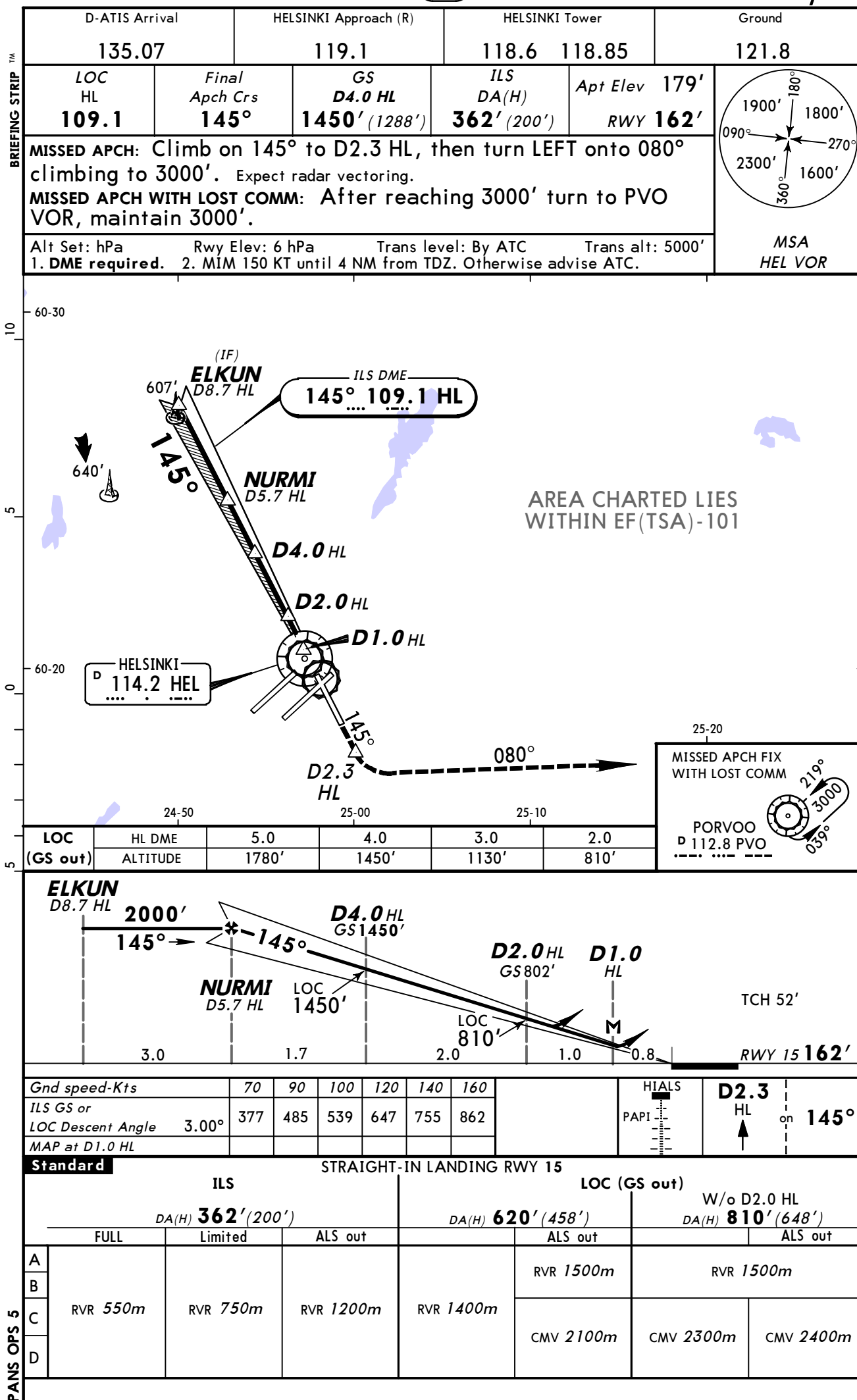
RVR 300m 1	
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1 Operators applying U.S. Ops Specs: Autoland or HUD required below RVR 350m.

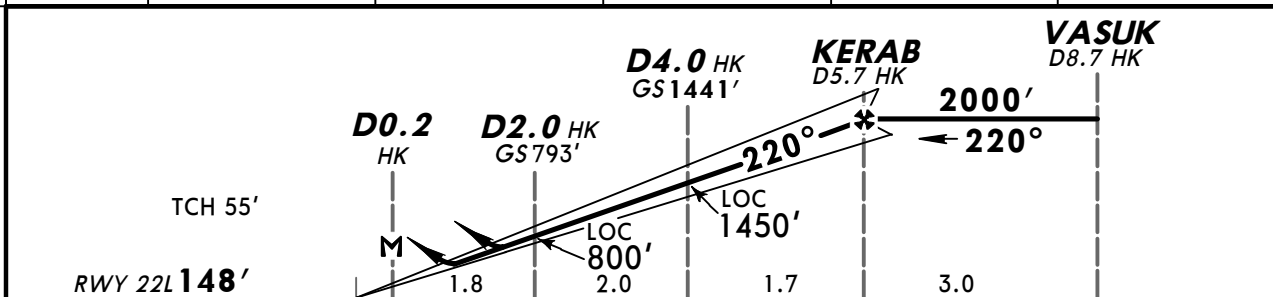
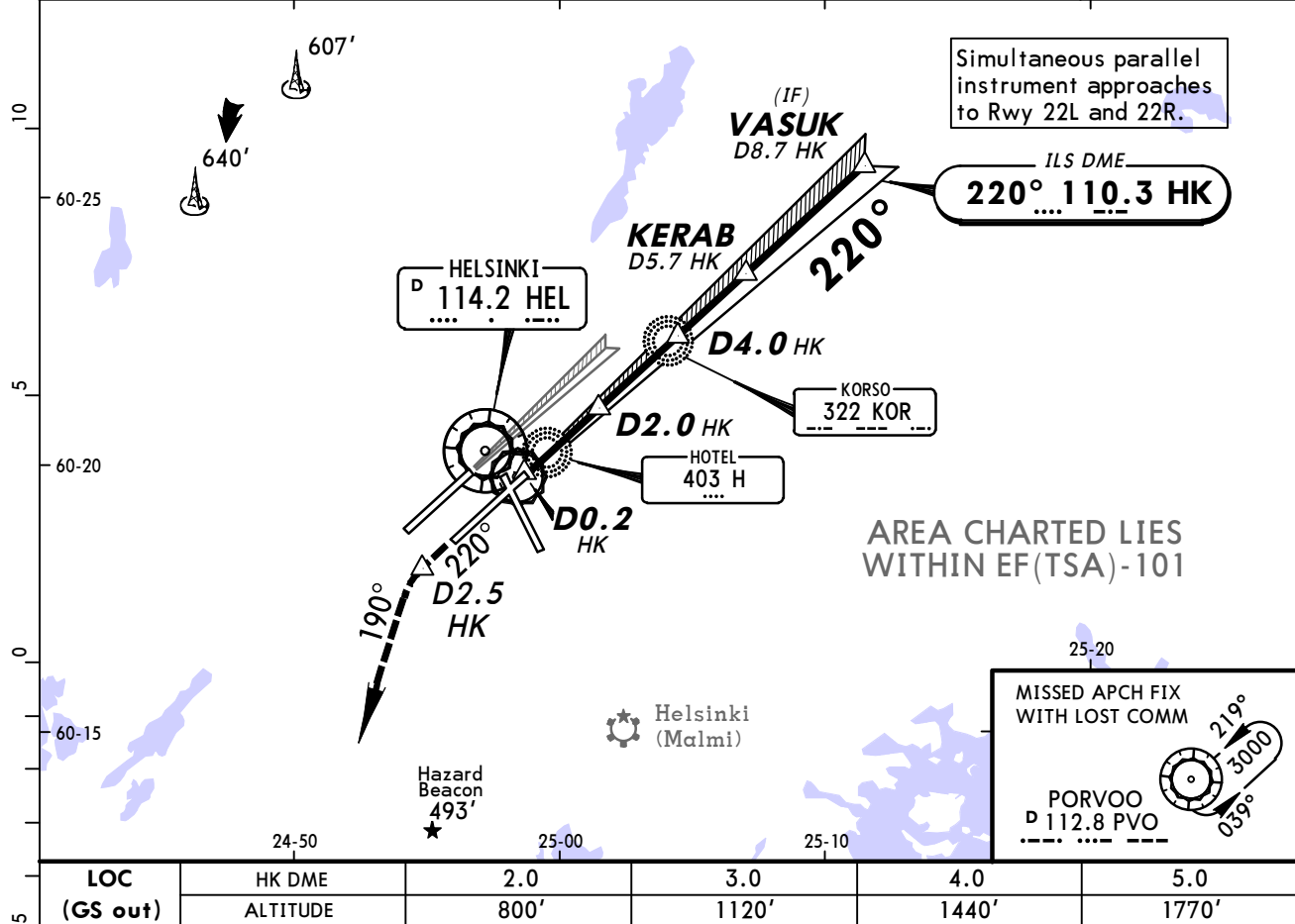
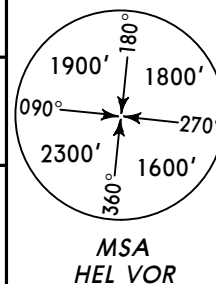
CHANGES: Speed restriction. Minimums.

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D-ATIS Arrival 135.07	HELSINKI Approach (R) 119.1	HELSINKI Tower 118.6 118.85	Ground 121.8
LOC HK 110.3	Final Apch Crs 220°	GS D4.0 HK 1441' (1293')	ILS DA(H) 348' (200')
Apt Elev 179' RWY 148'			
MISSED APCH: Climb on 220° to D2.5 HK or 600', whichever is later, then turn LEFT onto 190° climbing to 3000'. Expect radar vectoring. MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.			
Alt Set: hPa 1. DME required.	Rwy Elev: 5 hPa 2. MIM 150 KT until 4 NM from TDZ. Otherwise advise ATC.	Trans level: By ATC	Trans alt: 5000'



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II	220°	D2.5 HK	whichever later	600'
ILS GS or LOC Descent Angle 3.00°	377	485	539	647	755	862	PAPI	↑			
MAP at D0.2 HK											

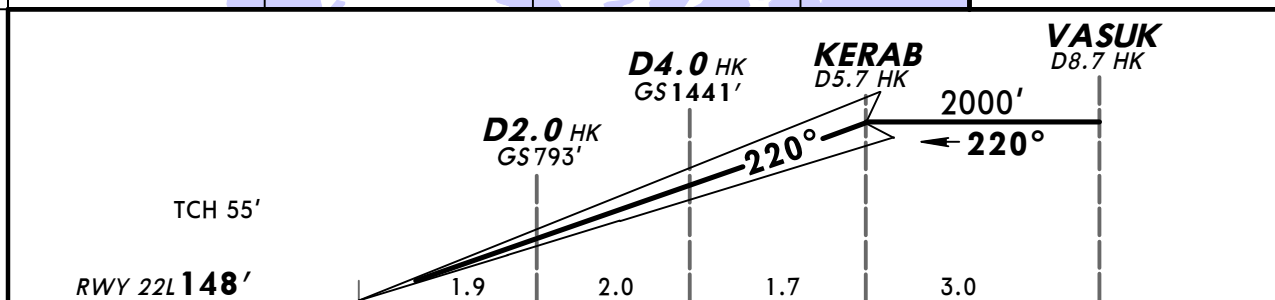
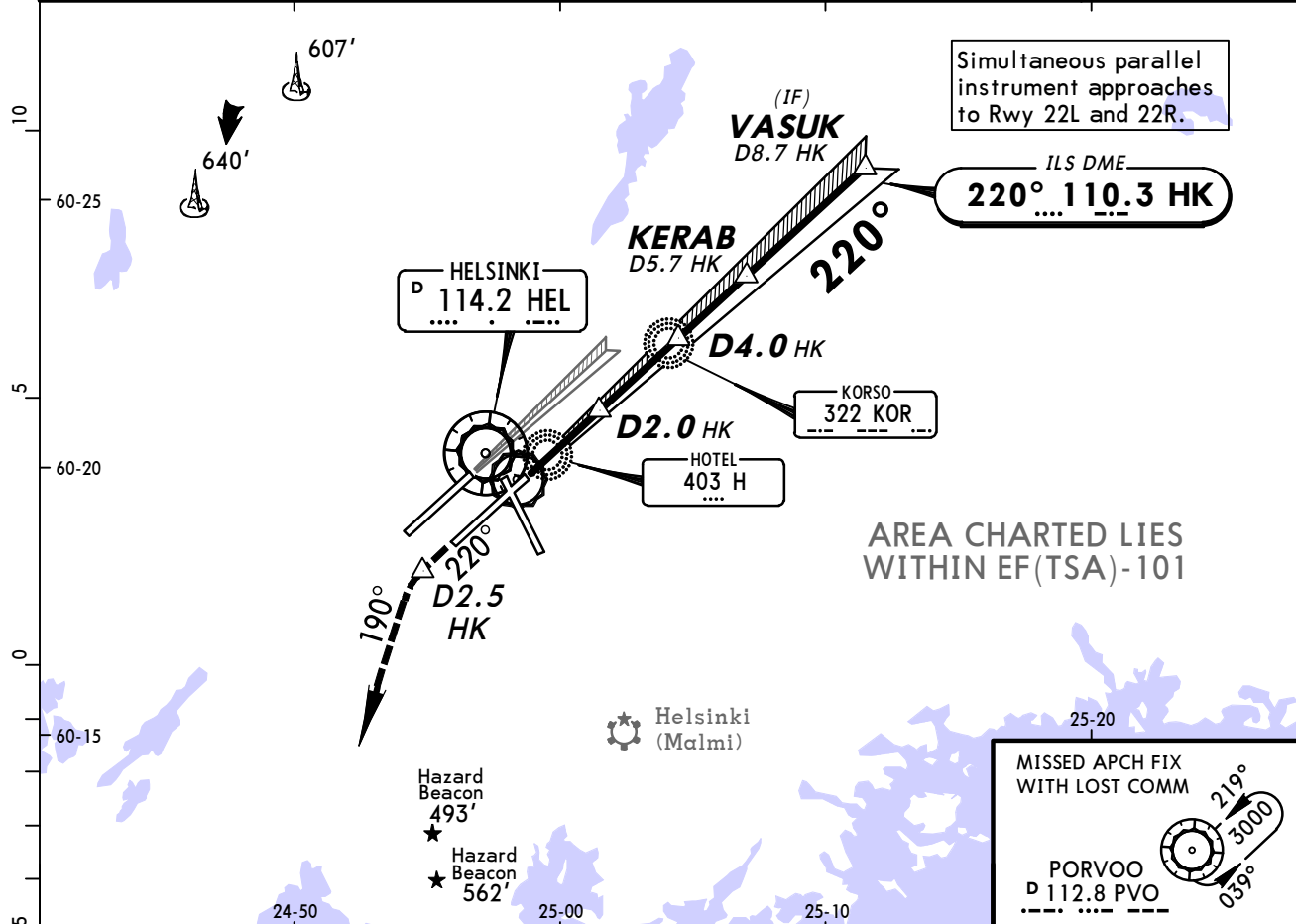
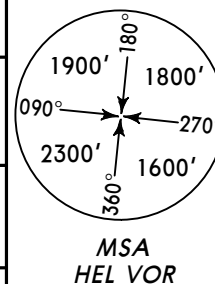
STRAIGHT-IN LANDING RWY 22L					LOC (GS out)	
ILS			LOC (GS out)			
DA(H) 348' (200')			DA(H) 600' (452')			
FULL	Limited	ALS out	FULL	Limited	ALS out	
A						RVR 1500m
B						
C	RVR 550m	RVR 750m	RVR 1200m	RVR 1400m		CMV 2100m
D						

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11 NOV 11 11-4A Eff 17 Nov

HELSINKI, FINLAND
CAT II ILS Rwy 22L

D-ATIS Arrival 135.07	HELSINKI Approach (R) 119.1	HELSINKI Tower 118.6 118.85	Ground 121.8
LOC HK 110.3	Final Apch Crs 220°	GS D4.0 HK 1441' (1293')	CAT II ILS RA/DA(H) Refer to Minimums
Apt Elev 179' RWY 148'			
MISSED APCH: Climb on 220° to D2.5 HK or 600', whichever is later, then turn LEFT onto 190° climbing to 3000'. Expect radar vectoring. MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.			
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. 3. Special Aircrew & Aircraft Certification Required.			



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II	220°	D2.5 HK whichever later 600'
GS	3.00°	377	485	539	647	755	862		

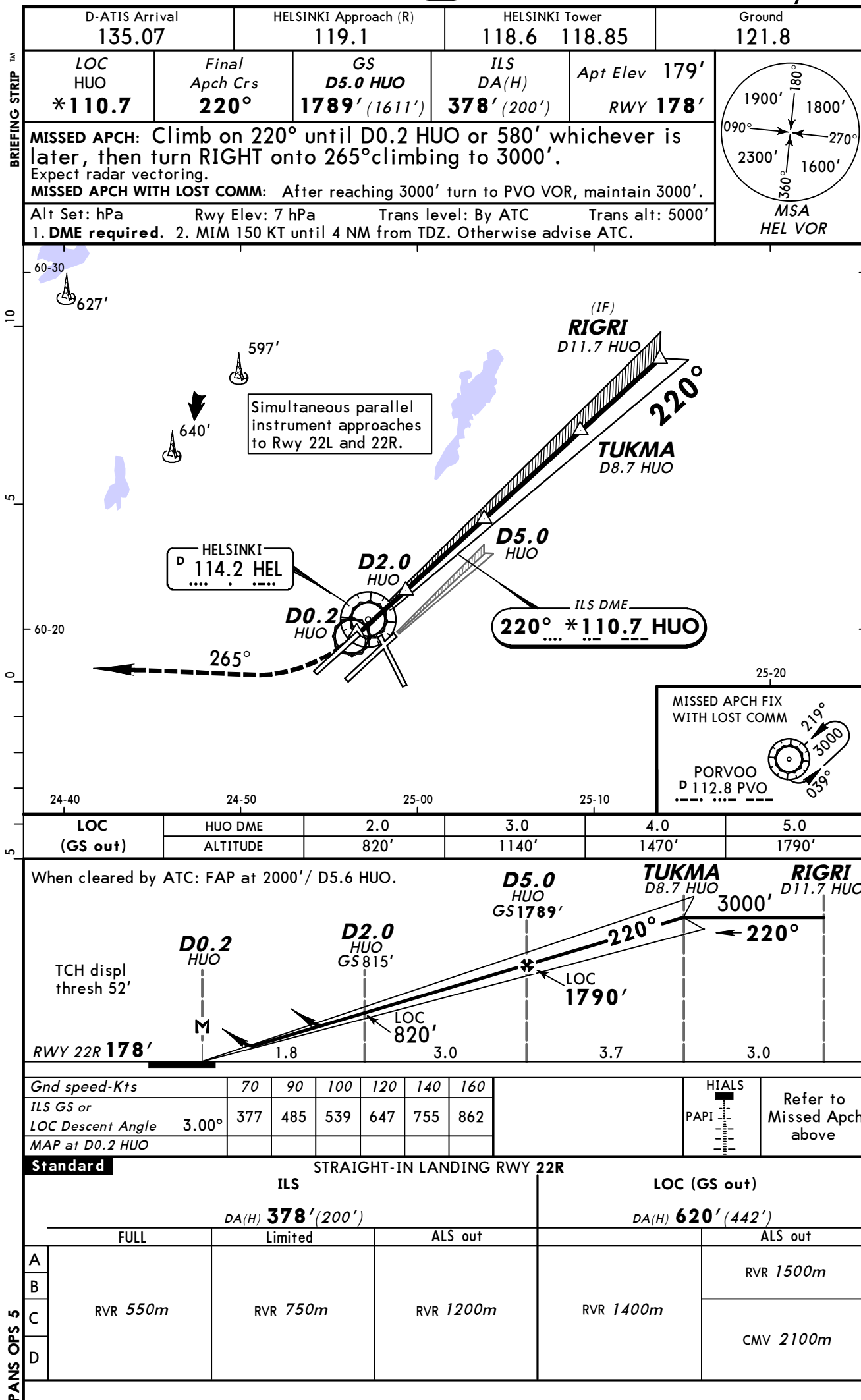
Standard			STRAIGHT-IN LANDING RWY 22L			CAT II ILS		
ABC RA 113' DA(H) 248' (100')		D RA 124' DA(H) 258' (110')		LACFT RA 126' DA(H) 259' (111')				

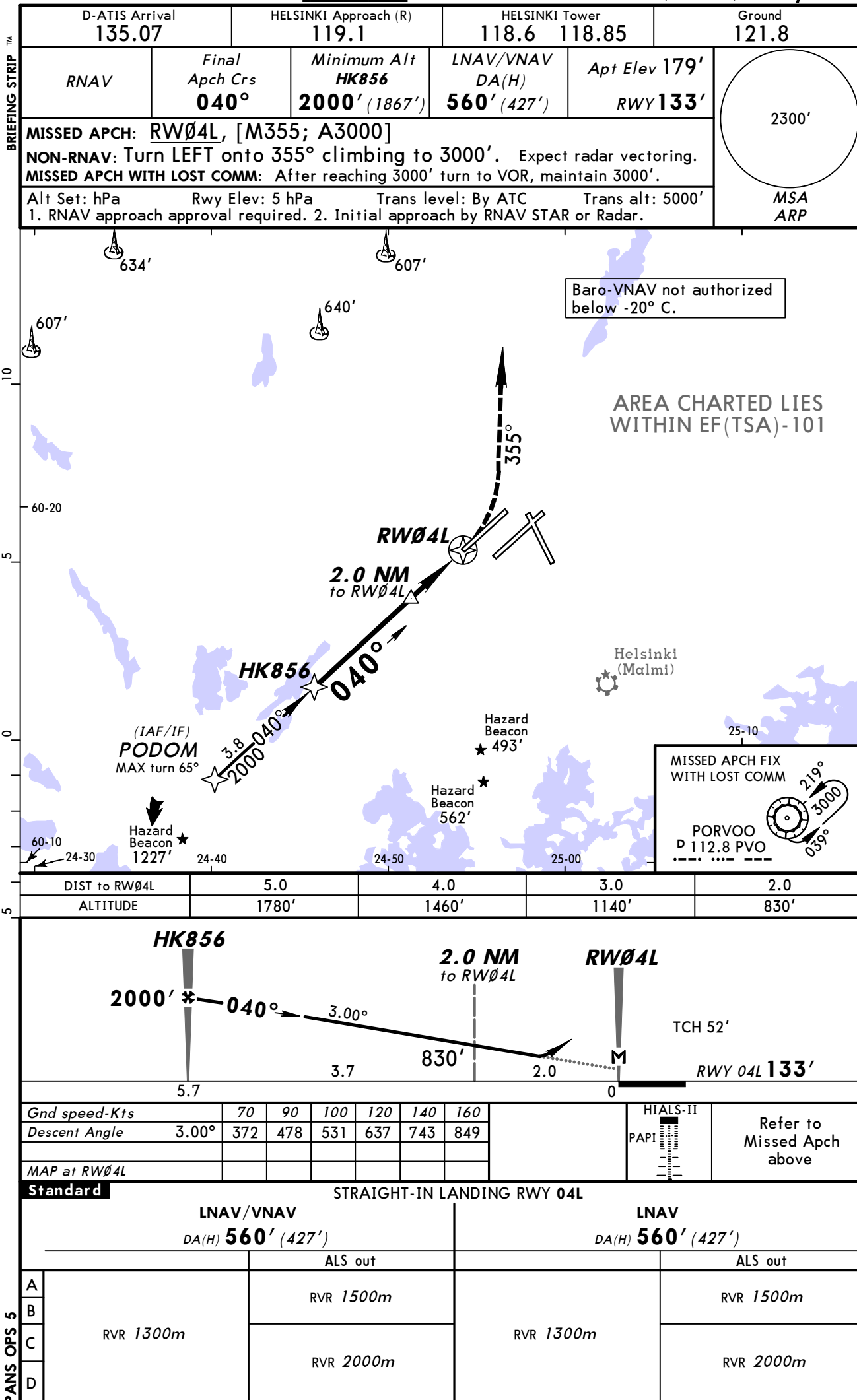
RVR 300m 1								
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1 Operators applying U.S. Ops Specs: Autoland or HUD required below RVR 350m.

CHANGES: Speed restriction. Rwy elev. Minimums.

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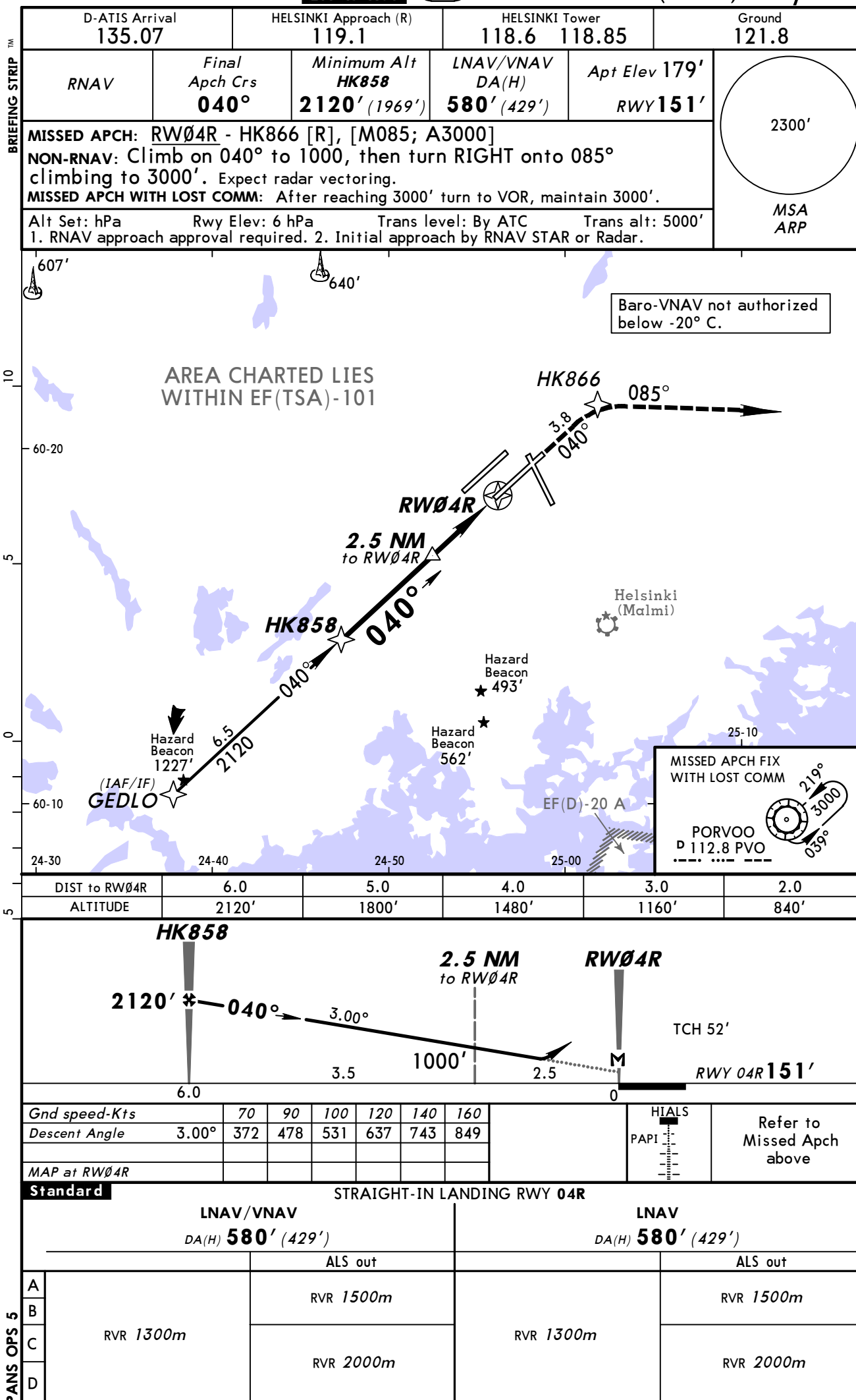


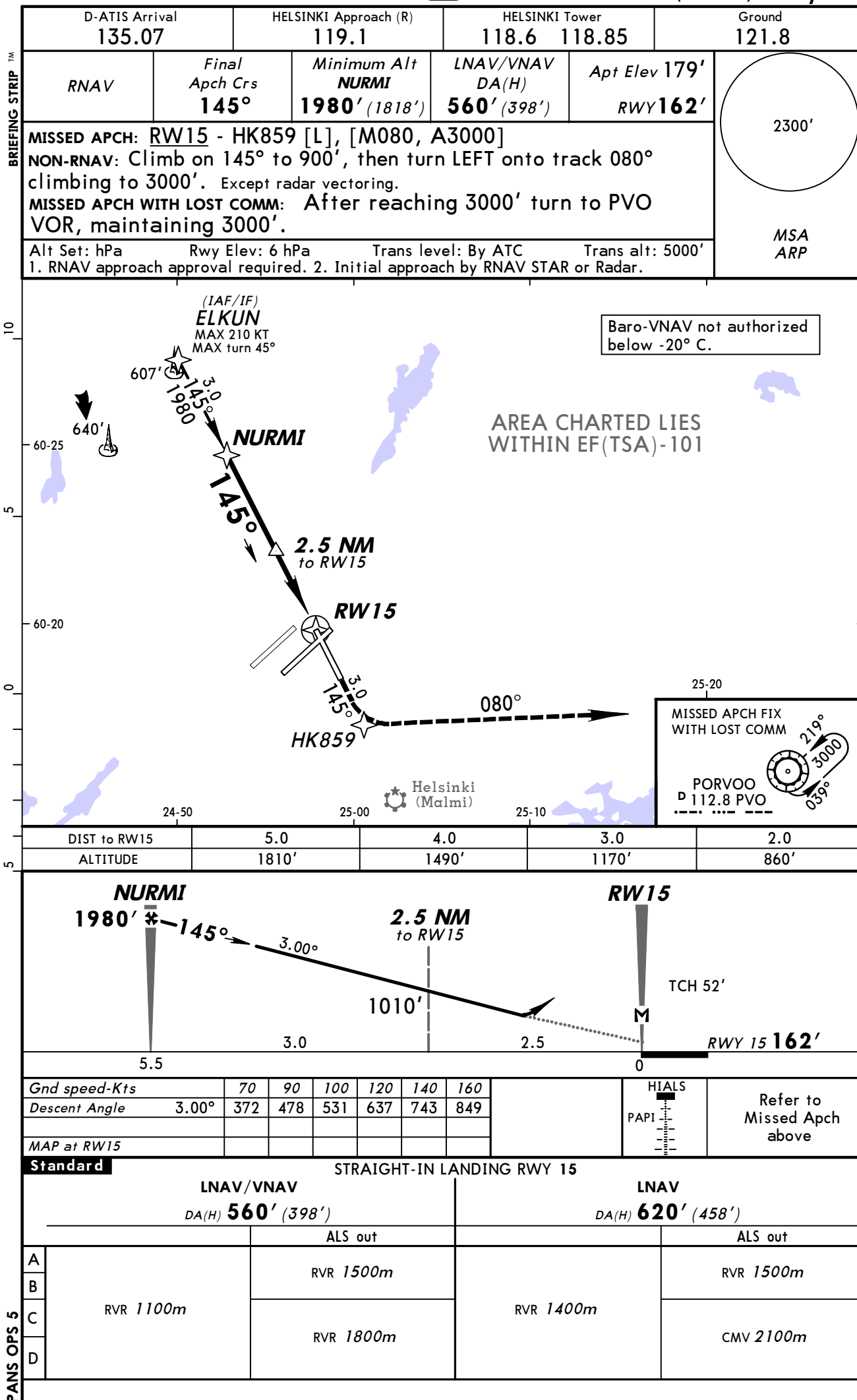


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11 NOV 11
Eff 17 Nov 12-2

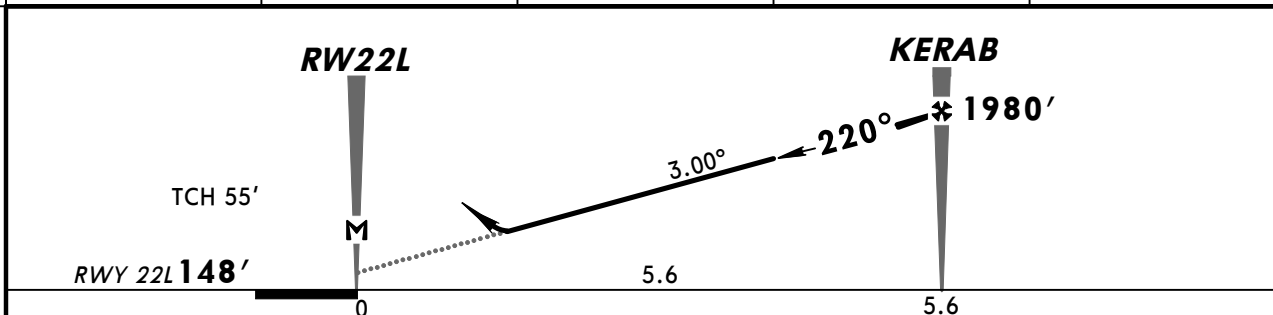
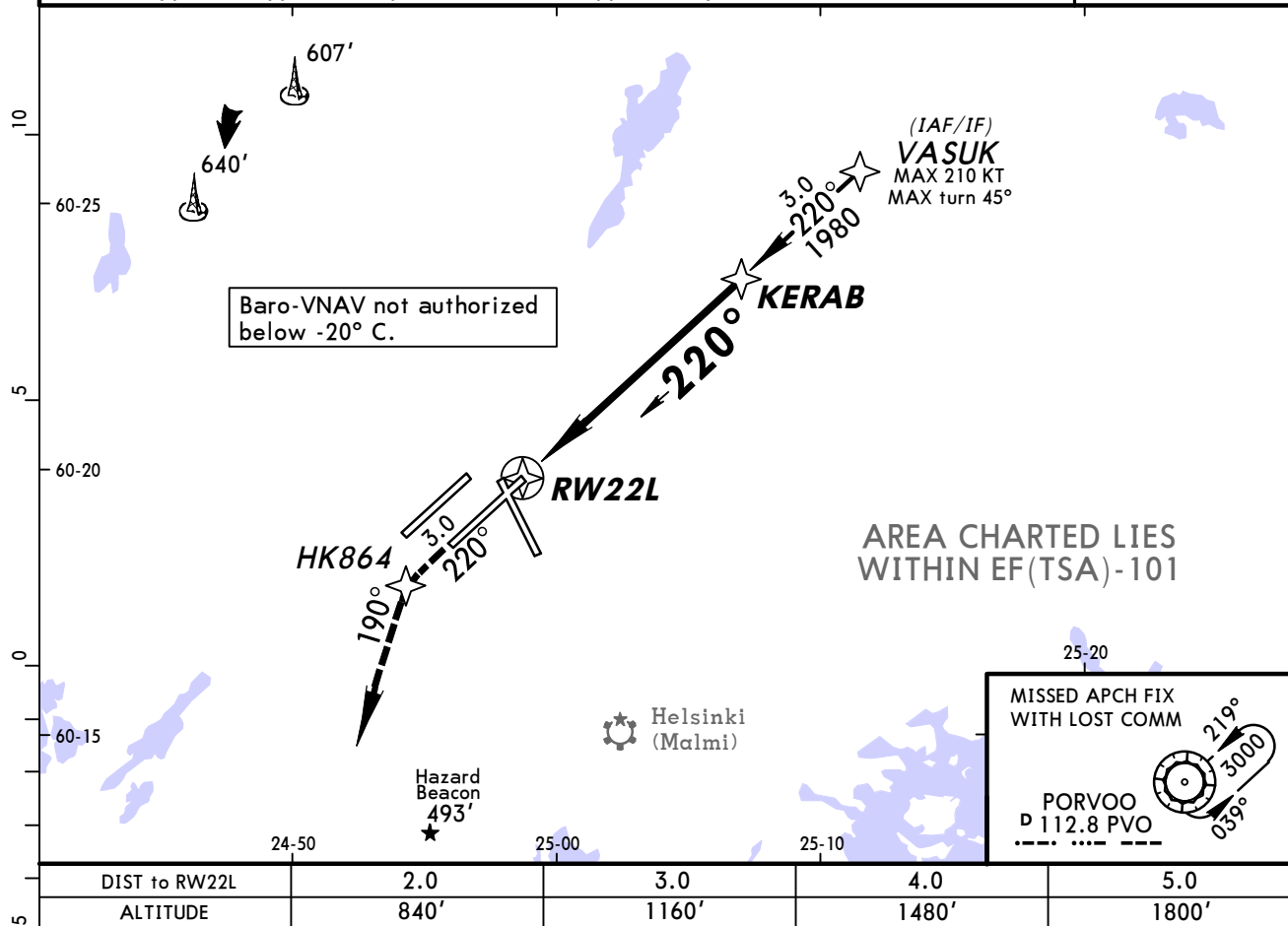
HELSINKI, FINLAND
RNAV (GNSS) Rwy 04R





BRIEFING STRIP™

D-ATIS Arrival 135.07		HELSINKI Approach (R) 119.1		HELSINKI Tower 118.6 118.85		Ground 121.8	
RNAV	Final Apch Crs 220°	Minimum Alt KERAB 1980' (1832')	LNAV/VNAV DA(H) 580' (432')	Apt Elev 179' RWY 148'	2300' MSA ARP		
MISSED APCH: RW22L - HK864 [L], [M190; A3000]							
NON-RNAV: Climb on 220° to 900', then turn LEFT onto 190° climbing to 3000'. Expect radar vectoring.							
MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.							
Alt Set: hPa Rwy Elev: 5 hPa Trans level: By ATC Trans alt: 5000'							
1. RNAV approach approval required. 2. Initial approach by RNAV STAR or Radar.							



Gnd speed-Kts	70	90	100	120	140	160	HIALS-II PAPI Refer to Missed Apch above
Descent Angle	3.00°	372	478	531	637	743	
MAP at RW22L							

Standard		STRAIGHT-IN LANDING RWY 22L			
		LNAV/VNAV		LNAV	
		DA(H) 580' (432')		DA(H) 620' (472')	
		ALS out		ALS out	
A	RVR 1300m	RVR 1500m		RVR 1500m	
B					
C					
D		RVR 2000m		RVR 1500m CMV 2200m	

HELSINKI, FINLAND
RNAV (GNSS) Rwy 22R

BRIEFING STRIP TM

MAP at RW22R

STRAIGHT-IN LANDING RWY 22R

		LNAV/VNAV DA(H) 590' (<i>411'</i>)		LNAV DA(H) 620' (<i>441'</i>)
		ALS out		ALS out
A	RVR 1200m	RVR 1500m	RVR 1400m	RVR 1500m
B				
C				
D		RVR 1900m		CMV 2100m

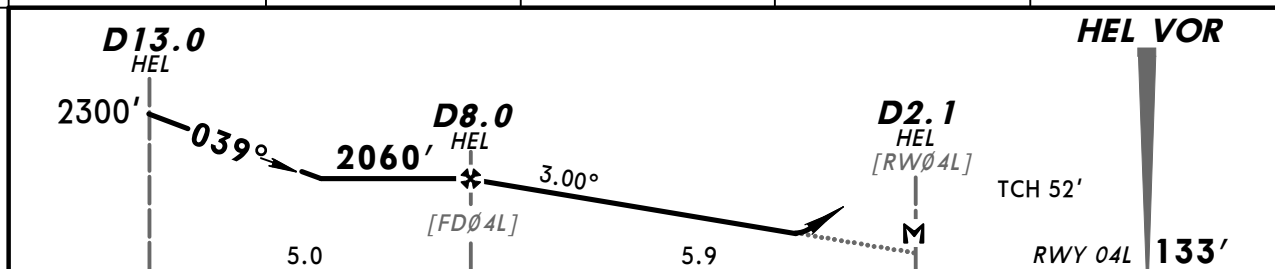
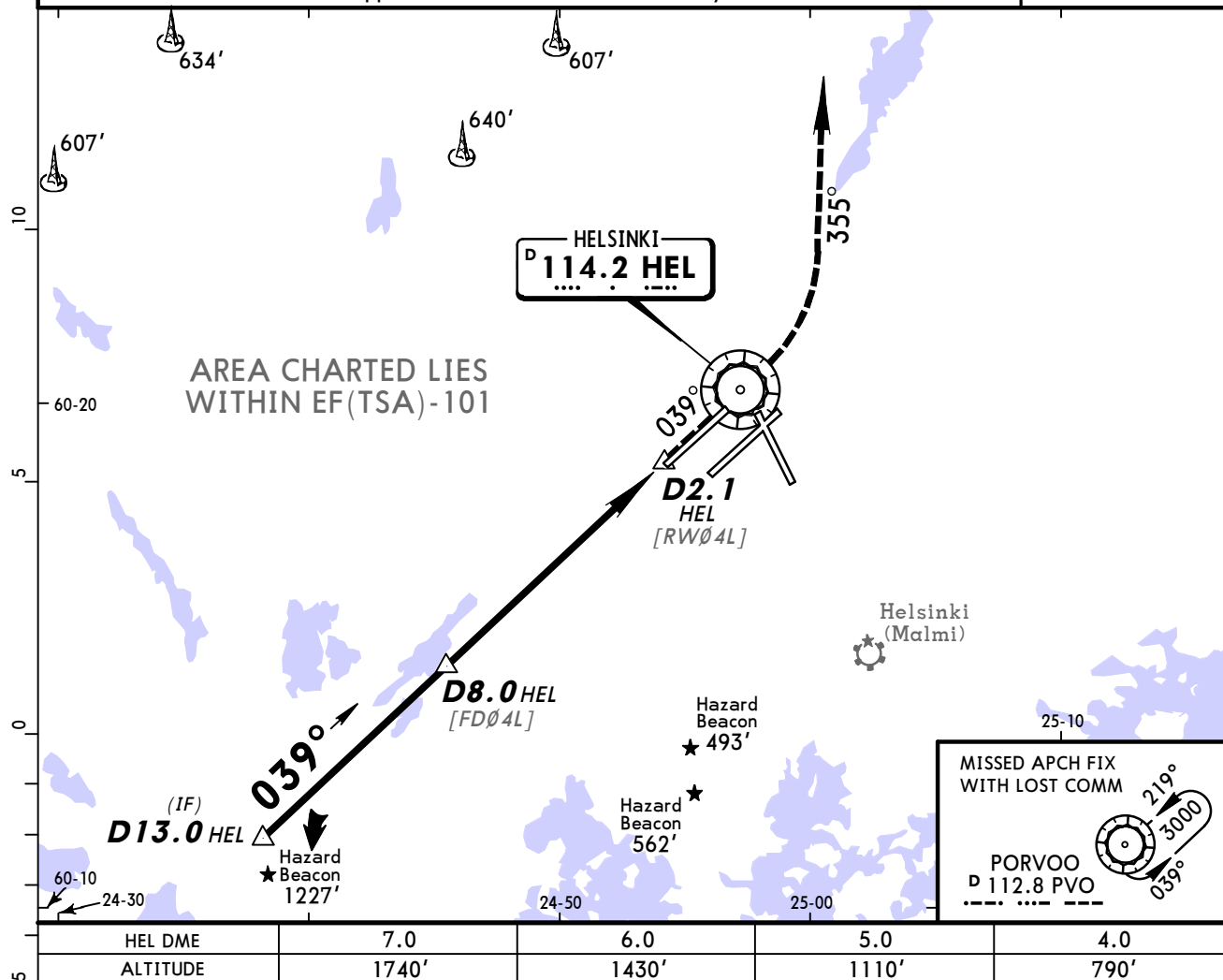
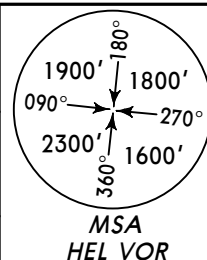
BRIEFING STRIP TM



A	RVR 1500m		RVR 1500m	
B				
C	RVR 1600m	RVR 2000m	RVR 1600m	RVR 2000m
D				

HELSINKI, FINLAND
VOR Rwy 04L

BRIEFING STRIP TM



<i>Gnd speed-Kts</i>	70	90	100	120	140	160	
<i>Descent Angle</i> 3.00°	372	478	531	637	743	849	
<i>MAP at D2.1 HEL</i>							

Standard	STRAIGHT-IN LANDING RWY 04L
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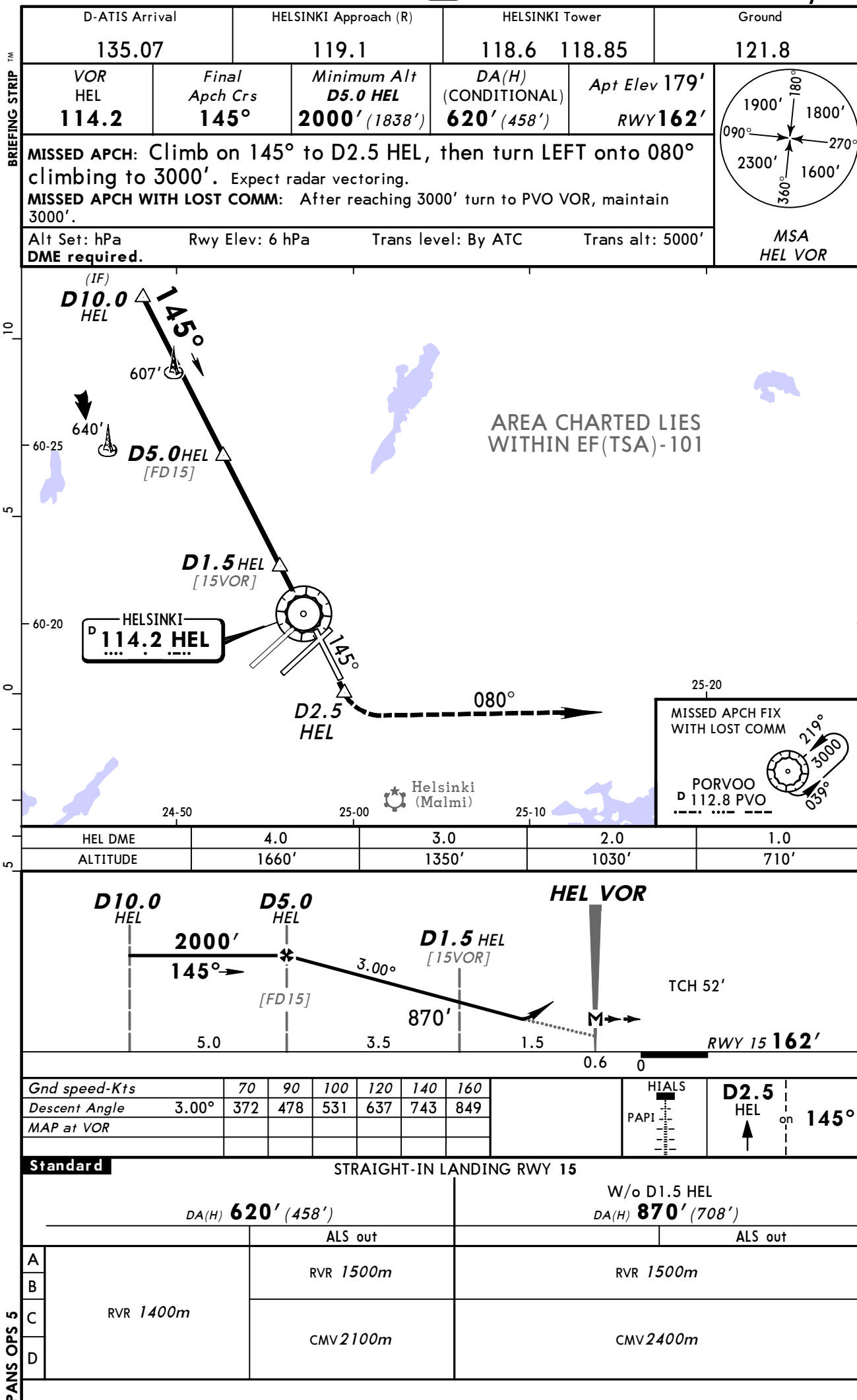
 $DA_{(H)} \mathbf{660'} (527')$

ALS out

ANS OPS 5	A	RVR 1500m	
	B		
	C	RVR 1700m	CMV 2400m
	D		

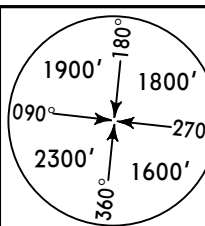
CHANGES: None.

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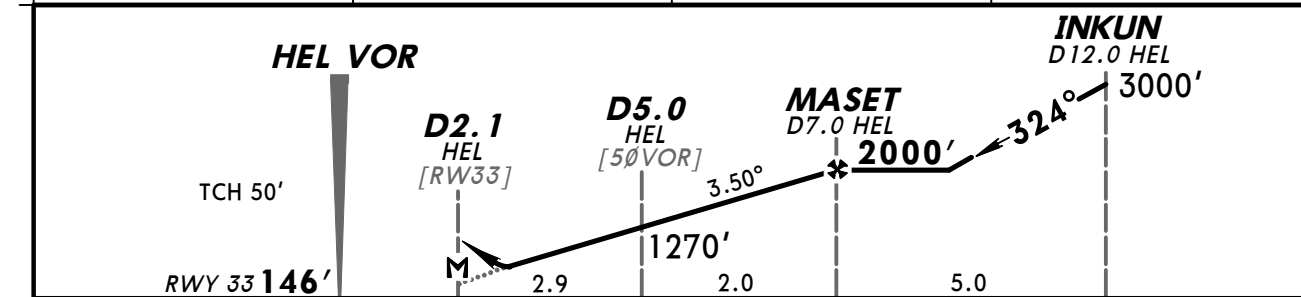
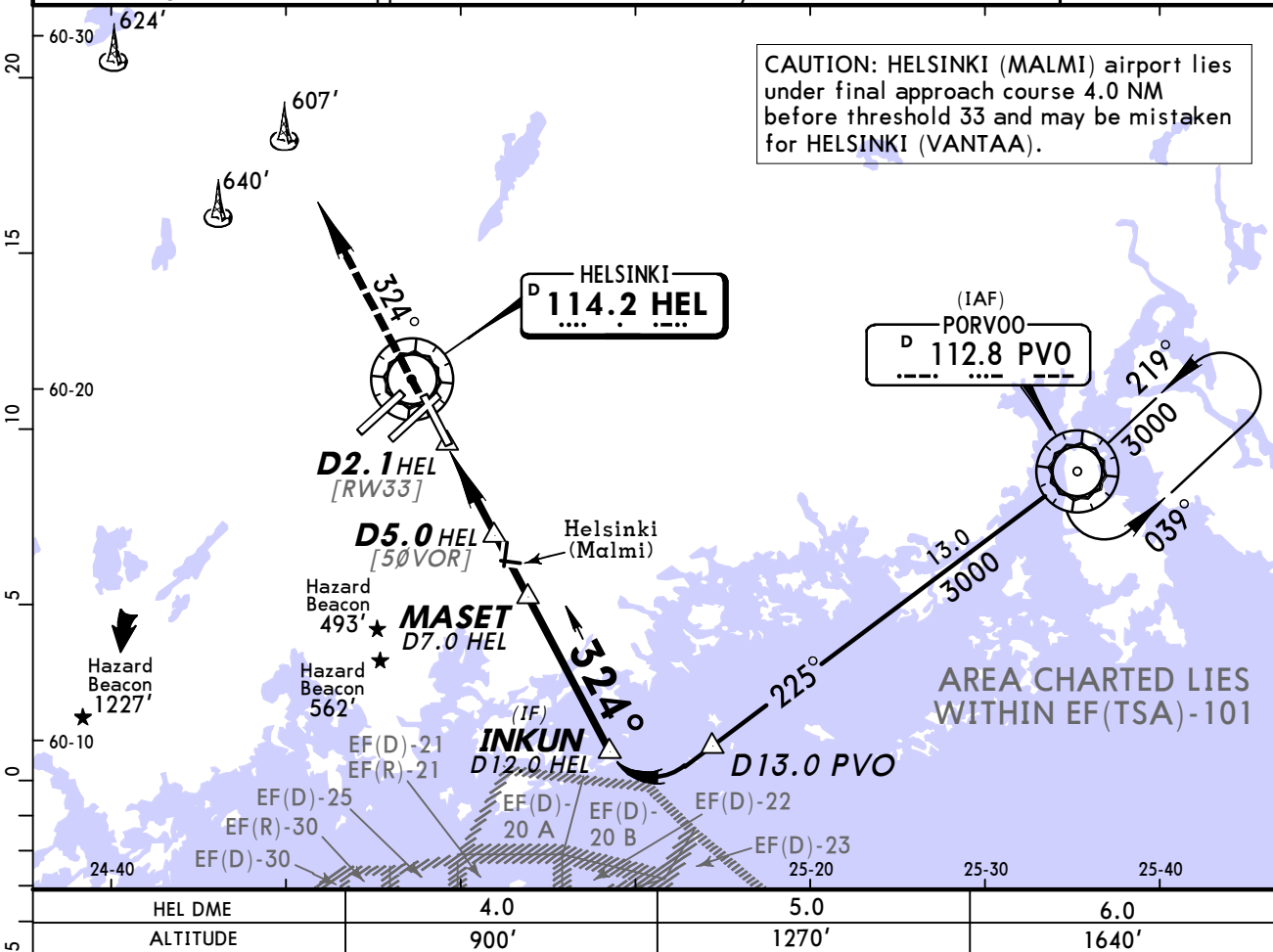


BRIEFING STRIP

TM

D-ATIS Arrival		HELSINKI Approach (R)		HELSINKI Tower		Ground
135.07		119.1		118.6 118.85		121.8
VOR HEL 114.2	Final Aptch Crs 324°	Minimum Alt MASET 2000' (1854')	DA(H) (CONDITIONAL) 580' (434')	Apt Elev 179' RWY 146'		
MISSED APCH: Climb on 324° to 3000'. Expect radar vectoring.						
MISSED APCH WITH LOST COMM: After reaching 3000' turn to PVO VOR, maintain 3000'.						
Alt Set: hPa		Rwy Elev: 5 hPa	Trans level: By ATC		Trans alt: 5000'	
1. DME REQUIRED.		2. Final approach track offset 1° from rwy centerline.				

MSA HEL VOR



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 3000' on 324°
Descent Angle	3.50°	434	557	619	743	867	
MAP at D2.1 HEL							

Standard		STRAIGHT-IN LANDING RWY 33			
		DA(H) 580' (434')		W/o D5.0 HEL DA(H) 1270' (1124')	
		ALS out		ALS out	
TRANS OPS 5	A	RVR 1500m		RVR 1500m	
	B				
	C	RVR 2000m		CMV 2400m	
	D				

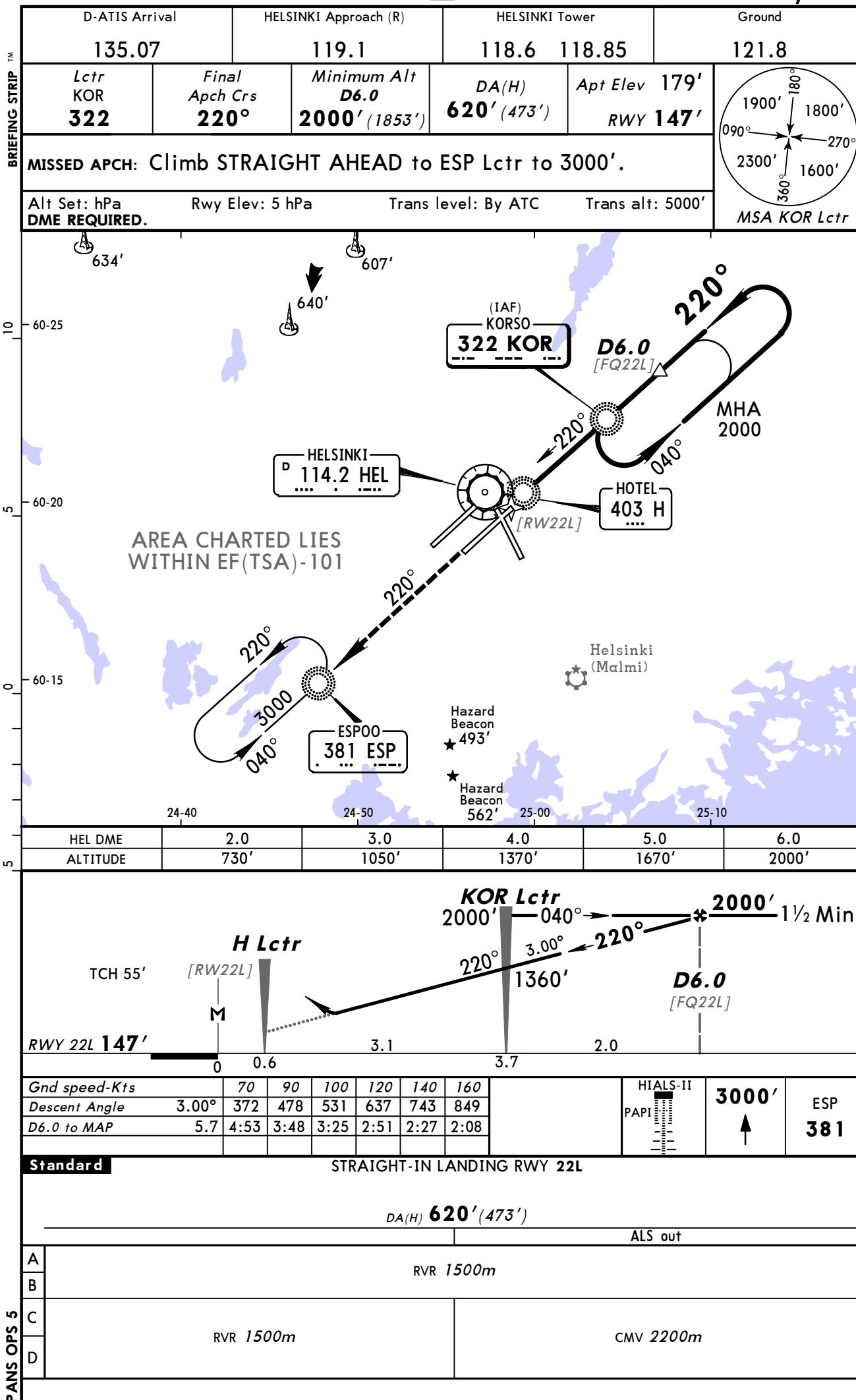


Chart changes since cycle 14-2013

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

ACT	PROCEDURE IDENT	INDEX	REV DATE	EFF DATE
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HELSINKI, (VANTAA - EFHK)

TERMINAL CHART CHANGE NOTICES

Chart Change Notices for Airport EFHK

Type: Terminal

Effectivity: Temporary

Begin Date: 20130506

End Date: 20130701

(10-9/10-9C) Construction work in progress: Twy VS u/s, twy AR btn Hangar 7 and twy VS u/s. Stands 801 thr 803 and 811 u/s. Temporary twy AB established on Apron 8 btn stand 811 and hangar, to be used under tow by acft with max wingspan of 118ft (36m) only.

Type: Terminal

Effectivity: Permanent

Begin Date: Immediately

End Date: No end date

EFF 15 SEP 12 two new de-icing stands avbl: 122D at N06 19.2 E024 58.0 and 124D at N06 19.2 E024 57.9.

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.