

INSTRUMENT
APPROACH
CHART

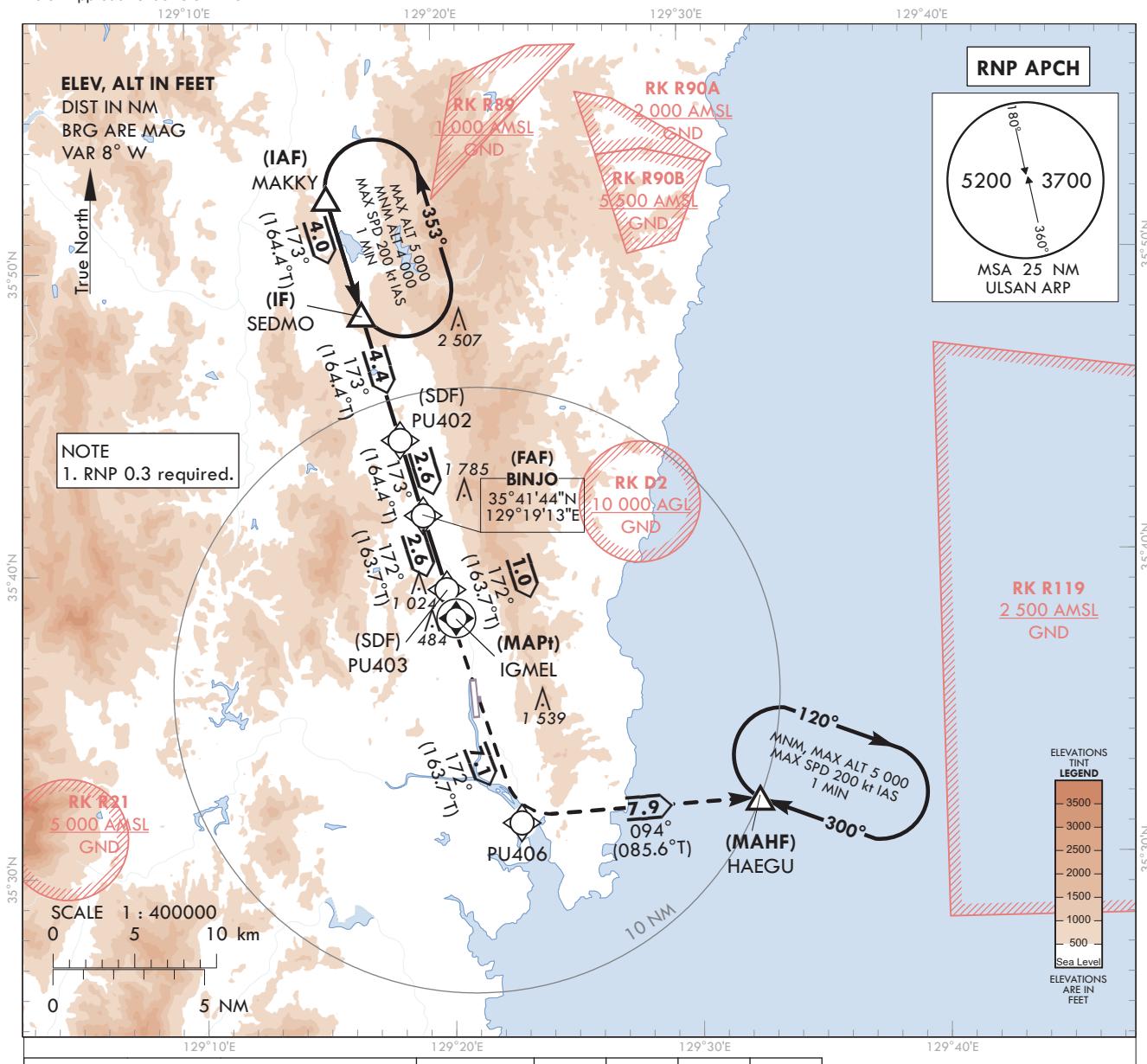
Note : Approach Under U.S.TERPS.

AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 18 - ELEV 42 ft

POHANG	APP	124.25
	TWR	120.2
ULSAN		118.75

ULSAN/Ulsan(RKPU)

RNP Y RWY 18

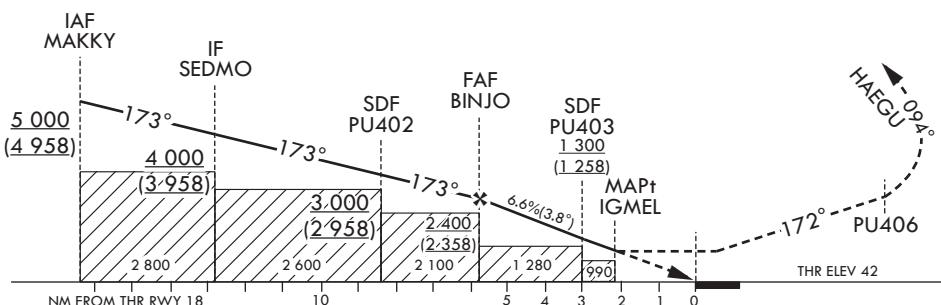


RECOMMENDED PROFILE(FAA)	THR RWY 18	5	4	3	2.2
Final Approach Gradient 6.58%, 400 ft/NM	ALT(HGT)	2 092 (2 050)	1 692 (1 650)	1 292 (1 250)	990 (948)

TRANSITION ALT 14 000
TRANSITION LVL FL 140

MISSSED APPROACH

Climb on track of 172° to PU406 then LEFT turn on track of 094° to HAEGU and HOLD at 5 000 ft.



* Missed APCH climb rate :
304 ft/NM(5.0%)

OCA (H)	A	B	C	D	Rate of descent	Knots	60	90	120	150	180
Straight-in Approach	LNAV	990 (948)		N/A	V/V fpm	400	600	800	1 000	1 200	

* Timing Not authorized for defining MAPt.
* Circling Not authorized.

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
RNP Y RWY 18
HOLDING PROCEDURE

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

RNP Y RWY 18										
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °N(°T)	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	
001	IF	MAKKY	-	-	-	+5 000	-	35°52'18.8"N 129°15'35.8"E	- RNP APCH IAF	
002	TF	SEDMO	-	173(164.4)	4.0	-	+4 000	-	35°48'27.1"N 129°16'55.0"E	- RNP APCH IF
003	TF	PU402	-	173(164.4)	4.4	-	+3 000	-	35°44'14.2"N 129°18'21.4"E	- RNP APCH SDF
004	TF	BINJO	-	173(164.4)	2.6	-	+2 400	-	35°41'43.5"N 129°19'12.8"E	- RNP APCH FAF
005	TF	PU403	-	172(163.7)	2.6	-	+1 300	-	35°39'15.5"N 129°20'05.6"E	- RNP APCH SDF
006	TF	IGWEL	Y	172(163.7)	1.0	-	+990	-	35°38'17.7"N 129°20'26.4"E	-3.77/30 RNP APCH MAPt
007	TF	PU406	-	172(163.7)	7.1	-	-	-	35°31'29.1"N 129°22'52.3"E	- RNP APCH -
008	TF	HAEGU	Y	094(085.6)	7.9	-	-	-	35°32'06.7"N 129°32'32.3"E	- RNP APCH -
009	HM	HAEGU	Y	300 (292.1)	-	R	@5 000	-200	35°32'06.7"N 129°32'32.3"E	- RNP APCH 1 min (Outbound timing)

HOLDING PROCEDURE

Holding Identification	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(T)	Time (min)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	VPA/RDH	Navigation specification	Remarks
RNP Y RWY 18	HM	SEDMO	Y	173(164.4)	1.0	L	-5 000	-200	35°48'27.1"N 129°16'55.0"E	- RNAV 1	-	

INSTRUMENT
APPROACH
CHART - ICAO

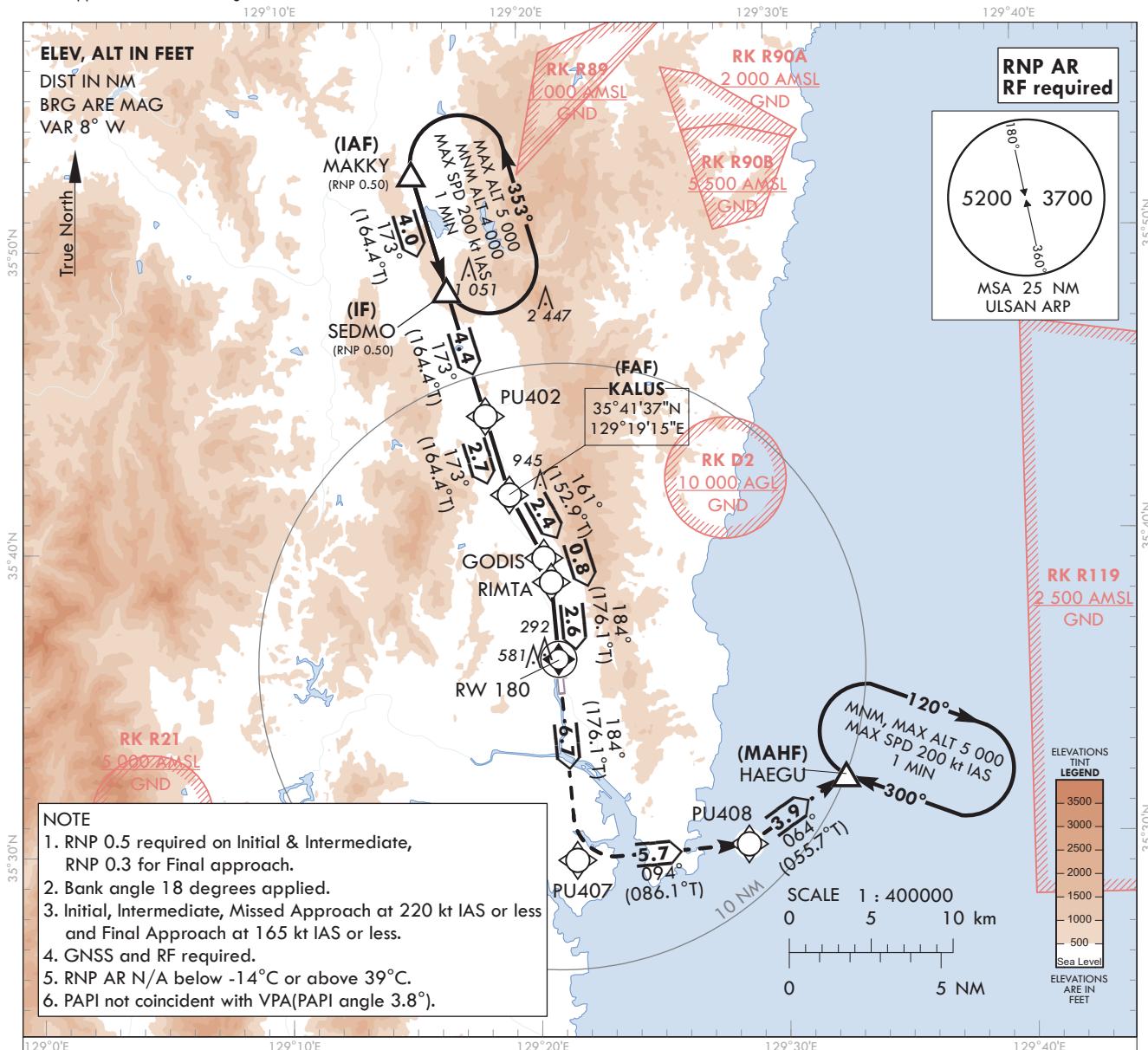
AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 18 - ELEV 42 ft

POHANG	APP	124.25
	TWR	120.2
ULSAN		118.75

ULSAN/Ulsan(RKPU)

RNP Z RWY 18(AR)

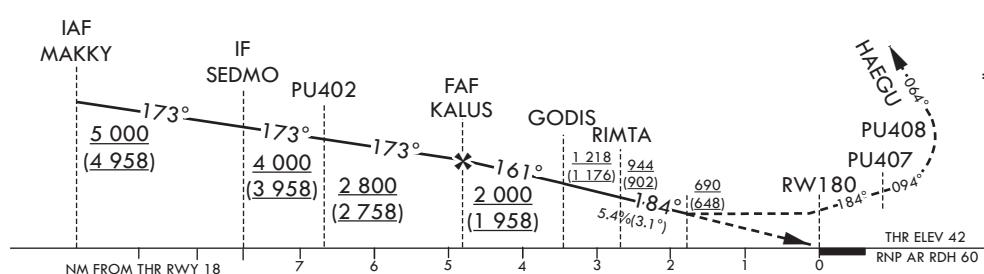
Note : Approach Under ICAO Flight Procedures.



MISSED APPROACH

Climb on track of 184° to PU407 then LEFT turn on track of 094° to PU408 then LEFT turn on track of 064° to HAEGU and Hold at 5 000 ft.
* DA to RW180 1.8 NM.

TRANSITION ALT 14 000
TRANSITION LVL FL 140



OCA (H)	A	B	C	D	Rate of descent	Knots	60	90	120	150	180
Straight-in Approach	RNP 0.3	690 (648)			V/V fpm	329	494	658	823	987	
			* Timing Not authorized for defining MAPt. * Circling Not authorized.								

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
RNP Z RWY 18 (AR)

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

RNP Z RWY 18 (AR)									
Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °N(°T)	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates
001	IF	MAKKY	-	-	-	+5 000	-220	35°52'18.8"N 129°15'35.8"E	-
002	TF	SEDMO	-	173(164.4)	4.0	-	+4 000	-220	35°48'27.1"N 129°16'55.0"E
003	TF	PU402	-	173(164.4)	4.4	-	+2 800	-220	35°44'14.2"N 129°18'21.4"E
004	TF	KALUS	-	173(164.4)	2.7	-	+2 000	-165	35°41'37.4"N 129°19'14.9"E
005	TF	GODIS	-	161(152.9)	2.4	L	+1 218	-165	35°39'30.7"N 129°20'34.3"E
006	RF Center : ARCO1 r=2.08 NM	RIMTA	-	0.8	R	+944	-165	35°38'42.4"N 129°20'50.7"E	-3.10
007	TF	RW180	Y	184(176.1)	2.6	-	-165	35°36'08.9"N 129°21'03.5"E	-3.10/60
008	TF	PU407	-	184(176.1)	6.7	-	-220	35°29'30.2"N 129°21'36.8"E	-
009	TF	PU408	-	094(086.1)	5.7	L	-220	35°29'53.2"N 129°28'33.2"E	-
010	TF	HAEGU	Y	064(055.7)	3.9	L	+5 000	-220	35°32'06.7"N 129°32'33.3"E
011	HM	HAEGU	Y	300 (292.1)	-	R	@5 000	-200	35°32'06.7"N 129°32'33.3"E

RF arc center Identifier	Coordinates
ARCO1	35°38'33.8"N 129°18.0"E

INSTRUMENT
APPROACH
CHART

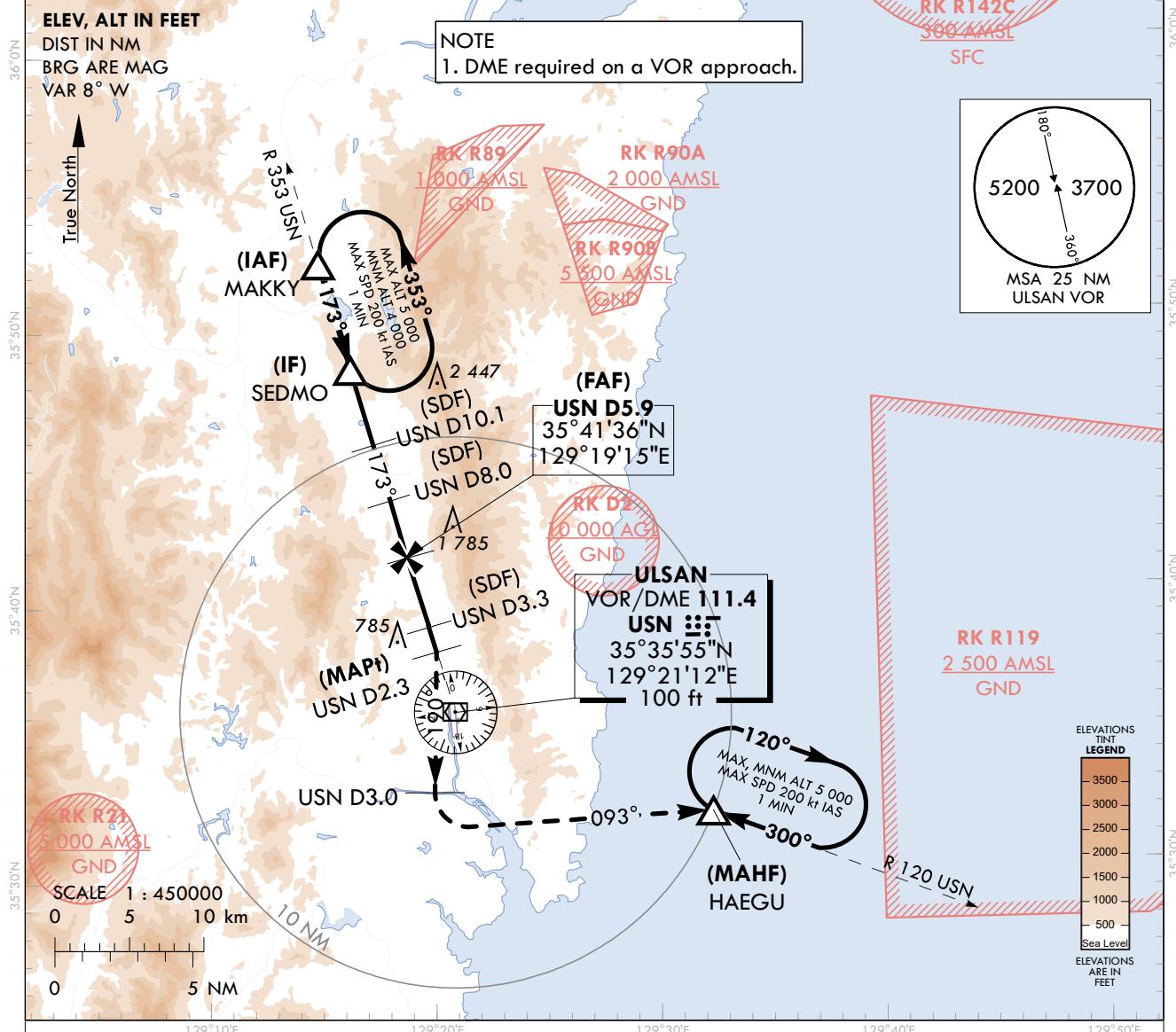
Note : Approach Under U.S.TERPS.

AERODROME ELEV 42 ft
HEIGHTS RELATED TO AD ELEV

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

ULSAN/Ulsan(RKPU)

VOR RWY 18



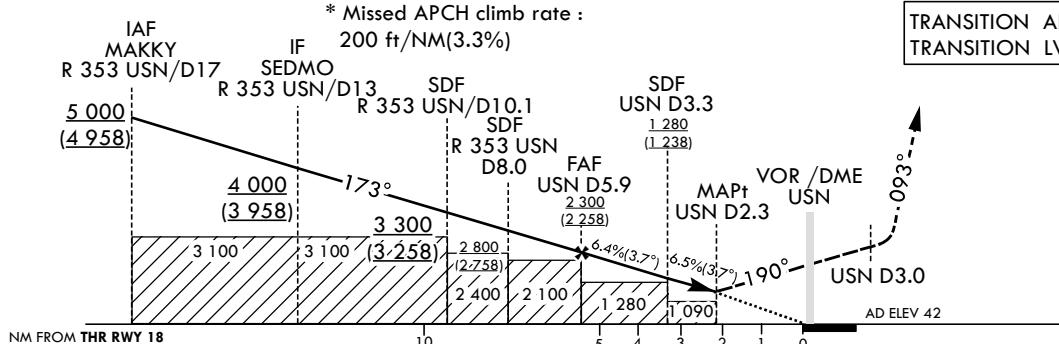
MISSSED APPROACH

Climb on HDG 190° to USN 3 DME, then LEFT turn direct to HAEGU and Hold at 5 000 ft.

RECOMMENDED PROFILE(FAA)	DME USN	5	4	3	2.8
Final Approach Gradient 6.45%, 392 ft/NM	ALT(HGT)	1 947 (1 906)	1 556 (1 514)	1 164 (1 122)	1 080 (1 038)

* Missed APCH climb rate :
200 ft/NM(3.3%)

TRANSITION ALT 14 000
TRANSITION LVL FL 140



OCA (H)	A	B	C	D	Knots	60	90	120	150	180	
Straight-in Approach	1 090 (1 048)			N/A	Rate of descent	V/V fpm	392	588	784	980	1 175
* Timing Not authorized for defining MAPt.											
* Circling Not authorized.											

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
VOR RWY 18

AERONAUTICAL DATA TABULATION

VOR Approach to RWY 18 from MAKKY			
Fix/point	Coordinates		
MAKKY(IAF)	R 353 USN / 17.00 NM USN	35°52'18.8"N	129°15'35.8"E
SEDMO(IF)	BRG 172.64° / 13.00 NM USN	35°48'27.1"N	129°16'55.0"E
D10.1 USN(SDF)	BRG 172.64° / 10.10 NM USN	35°45'39.1"N	129°17'51.8"E
D8.0 USN(SDF)	BRG 172.64° / 8.00 NM USN	35°43'37.6"N	129°18'33.5"E
D5.9 USN(FAF)	BRG 172.64° / 5.90 NM USN	35°41'36.0"N	129°19'15.1"E
D3.3 USN(SDF)	BRG 172.64° / 3.28 NM USN	35°39'04.4"N	129°20'07.0"E
D2.3 USN(MAPt)	BRG 172.64° / 2.26 NM USN	35°38'05.4"N	129°20'27.1"E
THR RWY 18	Final approach descent angle 3.67°(FAF-SDF) / 3.71°(SDF-THR)	35°36'08.89"N	129°21'03.54"E
USN VOR/DME		35°35'54.6"N	129°21'11.8"E
D3.0 USN	BRG 190.62° / 3.00 NM USN	35°33'01.3"N	129°20'11.6"E
HAEGU	BRG 93.43° / 10.00 NM USN	35°32'06.7"N	129°32'32.3"E

INSTRUMENT APPROACH CHART - ICAO

Note : Approach under ICAO Flight Procedures.

AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 36 - ELEV 28 ft

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

ULSAN/Ulsan(RKPU)

U.S. Y or LOC Y RWY 36

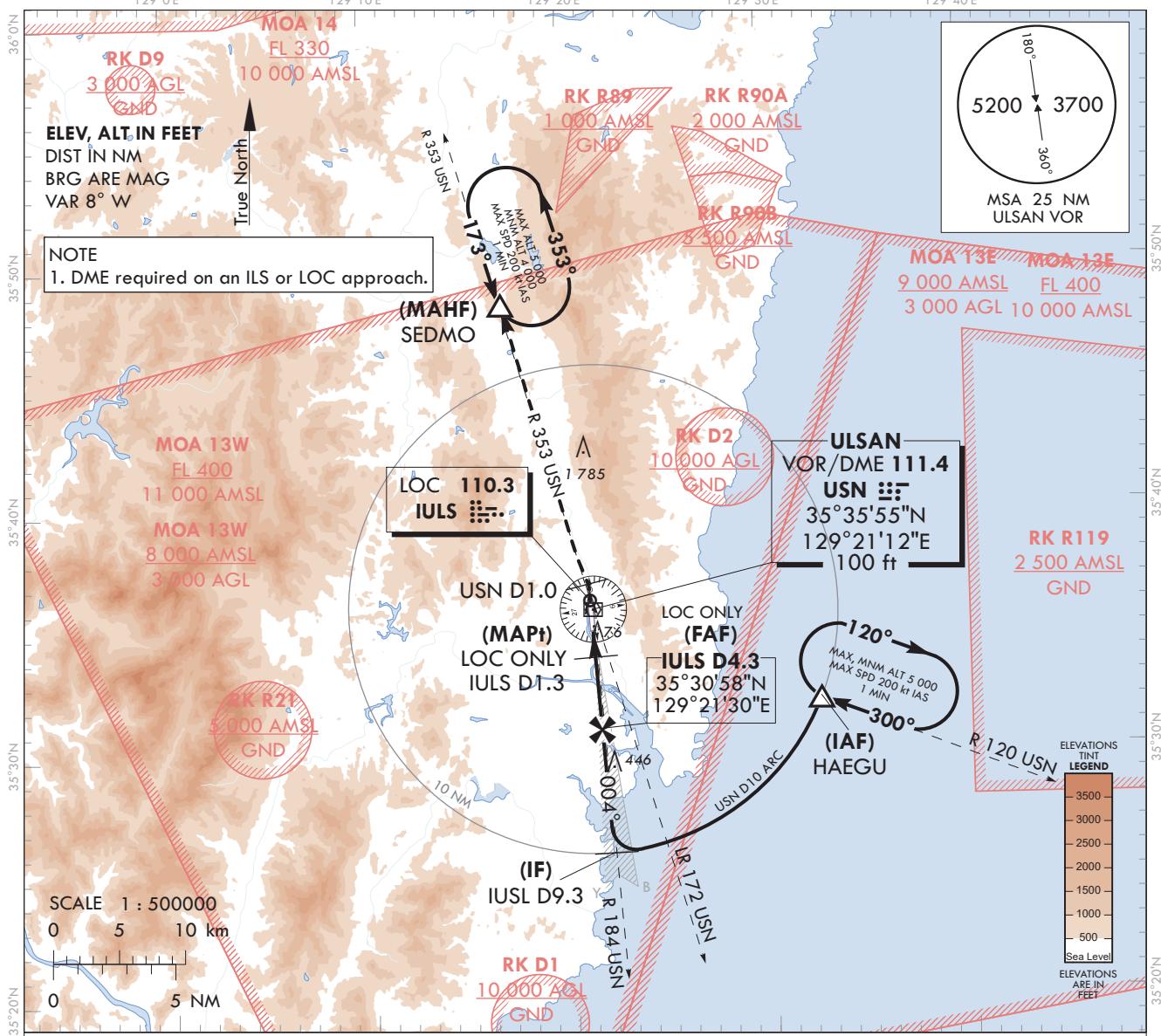
ILS Y or LOC Y RWY 36

129°0'E

RK D9
3 000 AGL
ELEV, ALT. IN FEET
DIST IN NM
BRG ARE MAG
VAR 8° W

NOTE

1. DME required on an ILS or LOC approach.



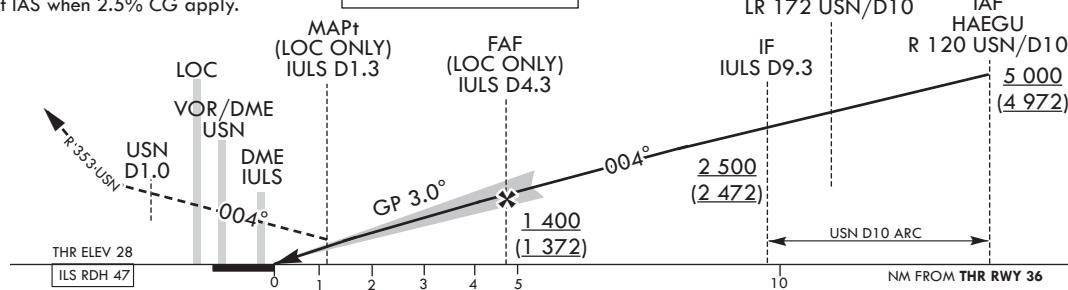
129

MISSSED APPROACH
Climb on HDG 004° to USN 1 DME,
then LEFT turn to intercept R 353 USN to SEDMO.
Hold at SEDMO at 4,000 ft.

* Missed APCH turn limited to MAX 200 kt IAS when 2.5% CG apply.

RECOMMENDED PROFILE(LOC ONLY)	DME	IULS	6	5	4	3	2.3
Final Approach Gradient 5.28%, 321 ft/NM	ALT(HGT)		1 950 (1 922)	1 620 (1 592)	1 300 (1 272)	980 (952)	750 (722)

TRANSITION ALT 14 000
TRANSITION LVL FL 140



OCA (H)		A	B	C	D		Knots	60	90	120	150	180
Straight-in Approach	CAT-I (CG 2.5%)	710 (682)				Rate of descent	V/V fpm	318	478	637	796	955
	CAT-I (CG 5.0%)	246 (218)					*Timing Not authorized for defining MAPt.					
	LOC	750 (722)				*Circling Not authorized.						

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
ILS Y or LOC Y RWY 36

AERONAUTICAL DATA TABULATION

ILS Y / LOC Y Approach to RWY 36 from HAEGU			
Fix/point		Coordinates	
HAEGU(IAF)	R 120 USN / 10.00 NM USN	35°32'06.7"N	129°32'32.3"E
D9.3 IULS(IF)	BRG 4.31° / 9.30 NM IULS	35°25'54.7"N	129°21'54.8"E
D4.3 IULS(FAF LOC ONLY)	BRG 4.31° / 4.30 NM IULS	35°30'57.6"N	129°21'29.5"E
D1.3 IULS(MAPt LOC ONLY)	BRG 4.31° / 1.30 NM IULS	35°33'55.7"N	129°21'14.7"E
THR RWY 36	Final approach descent angle 2.90° (LOC ONLY)	35°35'04.15"N	129°21'08.95"E
IULS DME		35°35'13.8"N	129°21'12.2"E
USN VOR/DME		35°35'54.6"N	129°21'11.8"E
IULS LOC		35°36'16.3"N	129°21'02.9"E
D1.0 USN	BRG 4.31° / 1.00 NM USN	35°36'53.8"N	129°20'59.8"E
SEDMO	BRG 352.68° / 13.00 NM USN	35°48'27.1"N	129°16'55.0"E

INSTRUMENT
APPROACH
CHART - ICAO

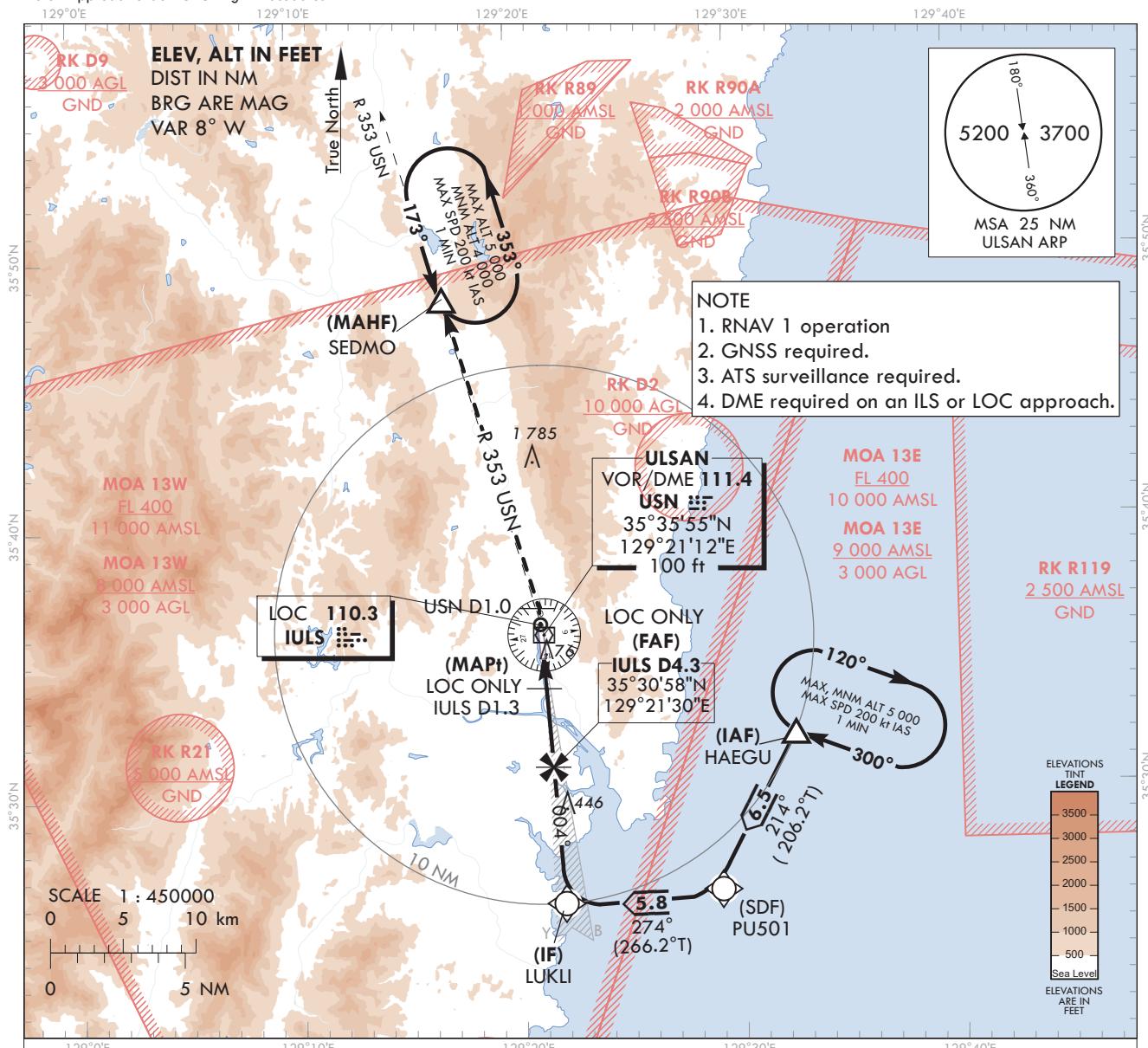
Note : Approach under ICAO Flight Procedures.

AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 36 - ELEV 28 ft

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

ULSAN/Ulsan(RKPU)

ILS Z or LOC Z RWY 36



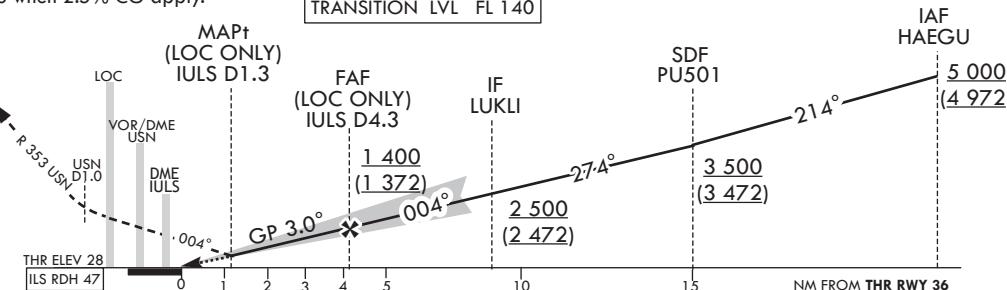
MISSSED APPROACH

Climb on HDG 004° to USN 1 DME, then LEFT turn to intercept R 353 USN to SEDMO.
Hold at SEDMO at 4 000 ft.

* Missed APCH turn limited to MAX 200 kt IAS when 2.5% CG apply.

RECOMMENDED PROFILE(LOC ONLY)	DME IULS	6	5	4	3	2.3
Final Approach Gradient 5.28%, 321 ft/NM	ALT(HGT)	1 950 (1 922)	1 620 (1 592)	1 300 (1 272)	980 (952)	750 (722)

TRANSITION ALT 14 000
TRANSITION LVL FL 140



OCA (H)		A	B	C	D	Knots	60	90	120	150	180	
Straight-in Approach	CAT-I (CG 2.5%)		710 (682)			Rate of descent	V/V fpm	318	478	637	796	955
	CAT-I (CG 5.0%)		246 (218)									
	LOC		750 (722)									

*Timing Not authorized for defining MAPt.

*Circling Not authorized.

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
ILS Z or LOC Z RWY 36

AERONAUTICAL DATA TABULATION

ILS Z / LOC Z Approach to RWY 36 from HAEGU			
Fix/point		Coordinates	
HAEGU(IAF)			35°32'06.7"N 129°32'32.3"E
PU501(SDF)			35°26'18.1"N 129°29'02.9"E
LUKLI(IF)	BRG 4.31° / 9.30 NM IULS	35°25'54.4"N	129°21'54.8"E
D4.3 IULS(FAF LOC ONLY)	BRG 4.31° / 4.30 NM IULS	35°30'57.6"N	129°21'29.5"E
D1.3 IULS(MAPt LOC ONLY)	BRG 4.31° / 1.30 NM IULS	35°33'55.7"N	129°21'14.7"E
THR RWY 36	Final approach descent angle 2.90° (LOC ONLY)	35°35'04.15"N	129°21'08.95"E
IULS DME		35°35'13.8"N	129°21'12.2"E
USN VOR/DME		35°35'54.6"N	129°21'11.8"E
IULS LOC		35°36'16.3"N	129°21'02.9"E
D1.0 USN	BRG 4.31° / 1.00 NM USN	35°36'53.8"N	129°20'59.8"E
SEDMO	BRG 352.68° / 13.00 NM USN	35°48'27.1"N	129°16'55.0"E

INSTRUMENT
APPROACH
CHART - ICAO

Note : Approach under ICAO Flight Procedures.

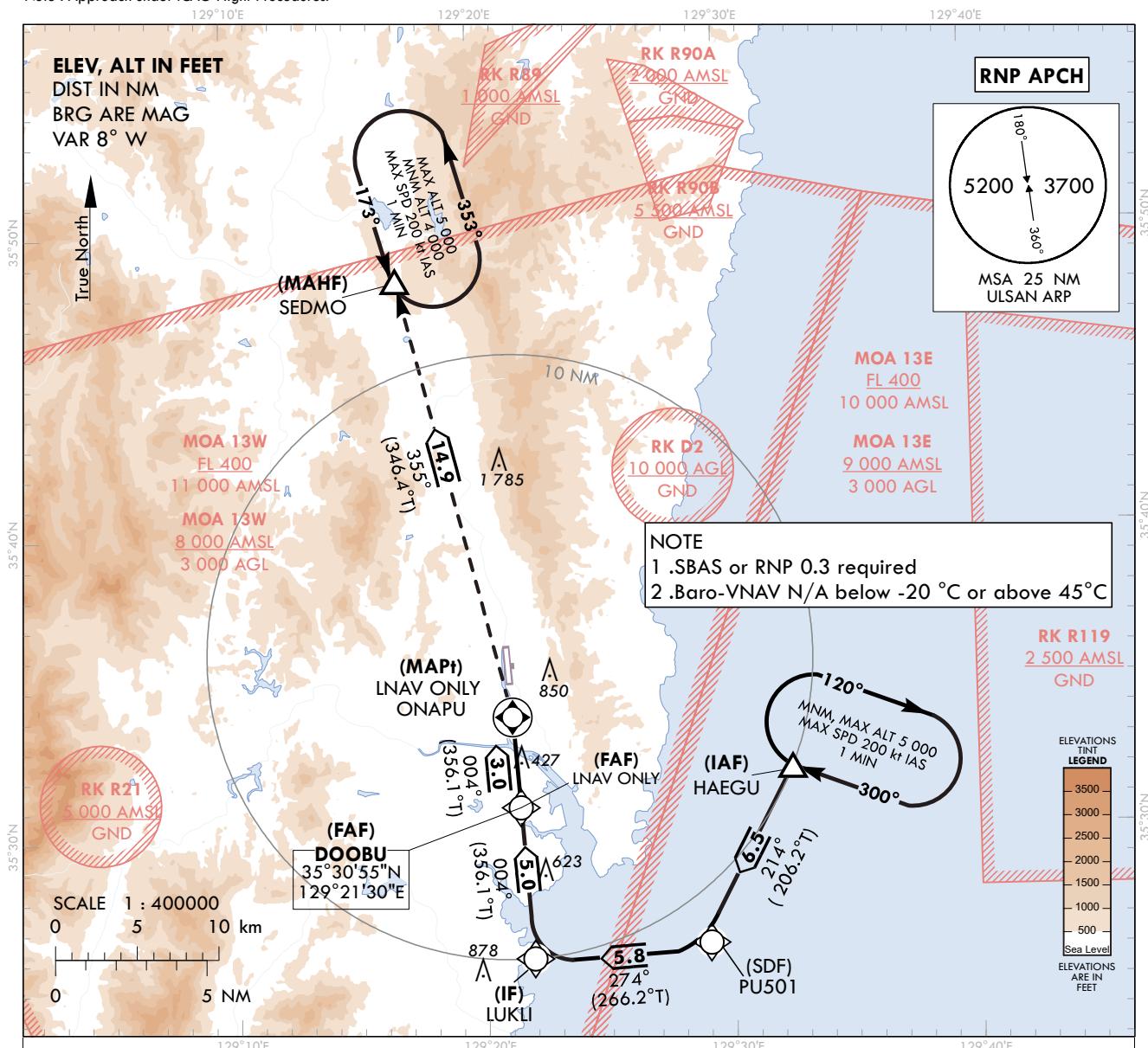
AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 36 - ELEV 28 ft

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

KASS	CH1318
	K36A
	RDH: 50

ULSAN/Ulsan(RKPU)

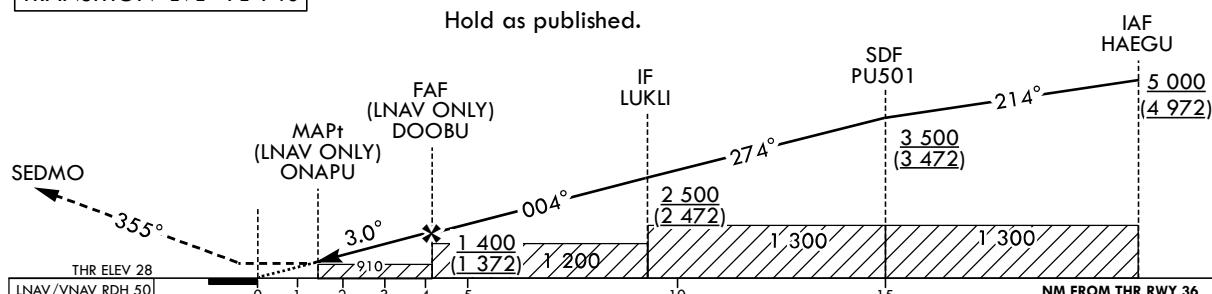
RNP RWY 36



TRANSITION ALT 14 000
TRANSITION LVL FL 140

MISSED APPROACH

Climb to 4 000 ft on track of 355° to SEDMO.
Hold as published.



	OCA (H)	A	B	C	D				
Straight-in Approach	LPV (CG 2.5%)	740 (712)				Knots	60	90	120
	LPV (CG 5.0%)	340 (312)				V/V fpm	319	478	637
	LNAV/VNAV	810 (782)					796	956	
	LNAV	910 (882)							

* Timing Not authorized for defining MAPt.
* Circling Not authorized.

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
RNP RWY 36
HOLDING PROCEDURE

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

RNP RWY 36

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °N(°T)	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	VPA/RDH	Navigation specification	Remarks
001	IF	HAEGU	-	-	-	+5 000	-	35°32'06.7"N 129°32'32.3"E	-	RNP APCH	IAF	
002	TF	PUS01	-	214(206.2)	6.5	-	+3 500	-	35°26'18.1"N 129°29'02.9"E	-	RNP APCH	SDF
003	TF	LUKLI	-	274(266.2)	5.8	-	+2 500	-	35°25'54.4"N 129°21'54.8"E	-	RNP APCH	IF
004	TF	DOOBU	-	004(356.1)	5.0	-	+1 400	-	35°30'55.3"N 129°21'29.7"E	-	RNP APCH	FAF
005	TF	ONAPU	Y	004(356.1)	3.0	-	+910	-	35°33'54.4"N 129°21'14.8"E	-3.00/50	RNP APCH	MAP†
006	HM	SEDMO	Y	355(346.4)	14.9	-	-	-	35°48'27.1"N 129°16'55.0"E	-	RNP APCH	1 min (Outbound timing)

HOLDING PROCEDURE

Holding Identification	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(°T)	Time (min)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	VPA/RDH	Navigation specification	Remarks
RNP RWY 36	HM	HAEGU	Y	300 (292.1)	1.0	R	@5 000	-200	35°32'06.7"N 129°32'32.3"E	-	RNAV 1	-
	HM	SEDMO	Y	173 (164.4)	1.0	L	-5 000 +4 000	-200	35°48'27.1"N 129°16'55.0"E	-	RNAV 1	-

ULSAN/Ulsan(RKPU)
RNP RWY 36

FAS DATA BLOCK INFORMATION

INPUT DATA

Parameters	Values
Operation Type	0
SBAS Provider	6 (KASS)
Airport Identifier	RKPU
Runway	36
Runway Letter	0 (None)
Approach Performance Designator	0
Route Indicator	
Reference Path Data Selector	0
Reference Path Identifier	K36A
LTP/FTP Latitude	35°35'04.1470"N
LTP/FTP Longitude	129°21'08.9500"E
LTP/FTP Ellipsoidal Height (meters)	38.3
FPAP Latitude	35°36'08.8905"N
Delta FPAP Latitude (seconds)	64.7435
FPAP Longitude	129°21'03.5405"E
Delta FPAP Longitude (seconds)	-5.4095
Threshold Crossing Height (TCH)	50.0
TCH Units Selector	0 (Feet)
Glidepath Angle (GPA, degrees)	3.00
Course Width (metres)	105.00
Length Offset (metres)	0
Horizontal Alert Limit (HAL, meters)	40.0
Vertical Alert Limit (VAL, meters)	50.0

OUTPUT DATA

Data Block	60 15 10 0B 12 24 00 00 01 36 33 0B A6 6D 45 0F AC 16 83 37 7F 15 CF F9 01 BD D5 FF F4 01 2C 01 64 00 C8 FA 10 38 07 E6
Calculated CRC Value	103807E6

INTENTIONALLY

LEFT

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INSTRUMENT
APPROACH
CHART - ICAO

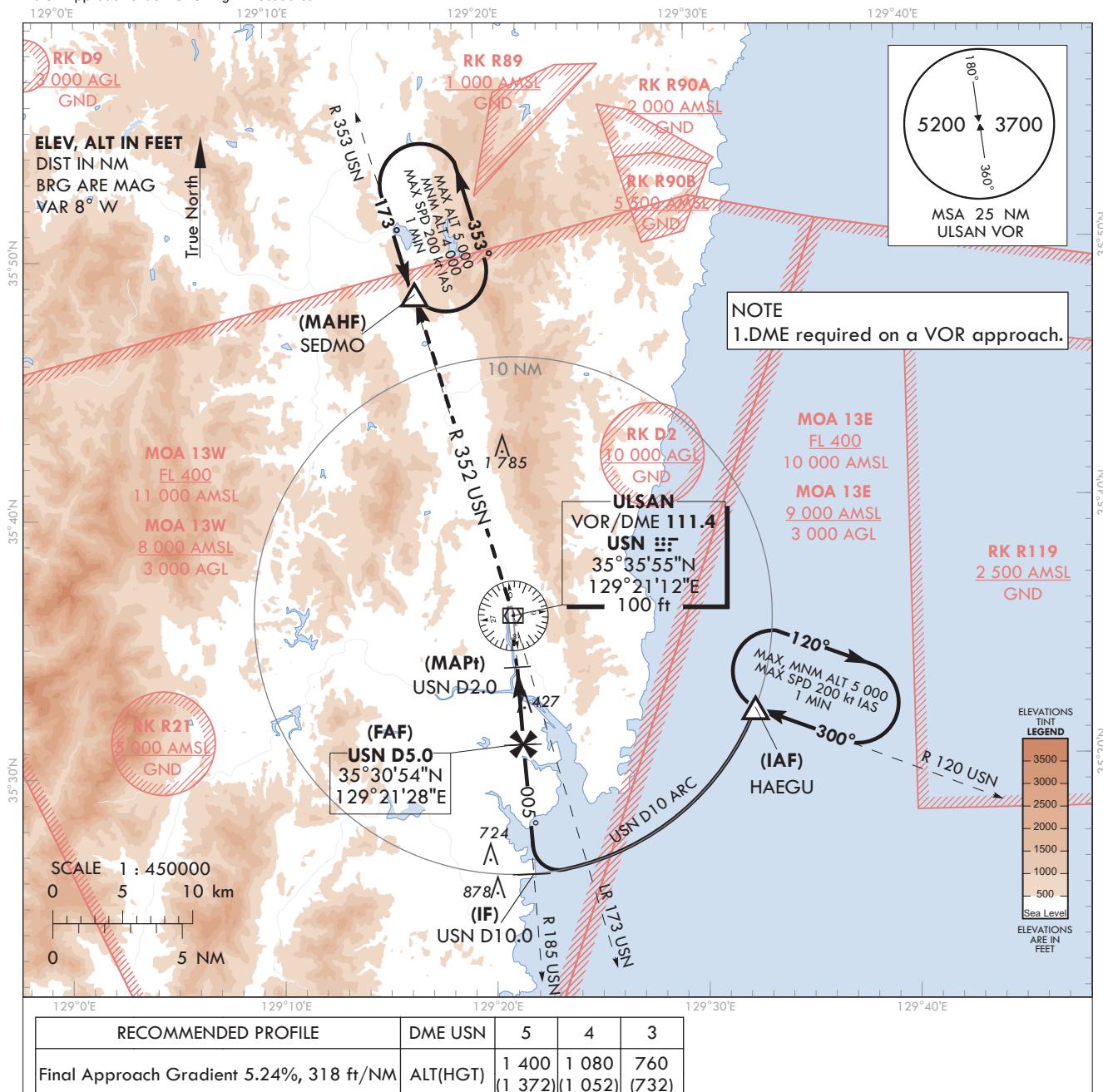
Note : Approach under ICAO Flight Procedures.

AERODROME ELEV 42 ft
HEIGHTS RELATED TO
THR RWY 36 - ELEV 28 ft

POHANG	APP	124.25
	120.2	
ULSAN	TWR	118.75

ULSAN/Ulsan(RKPU)

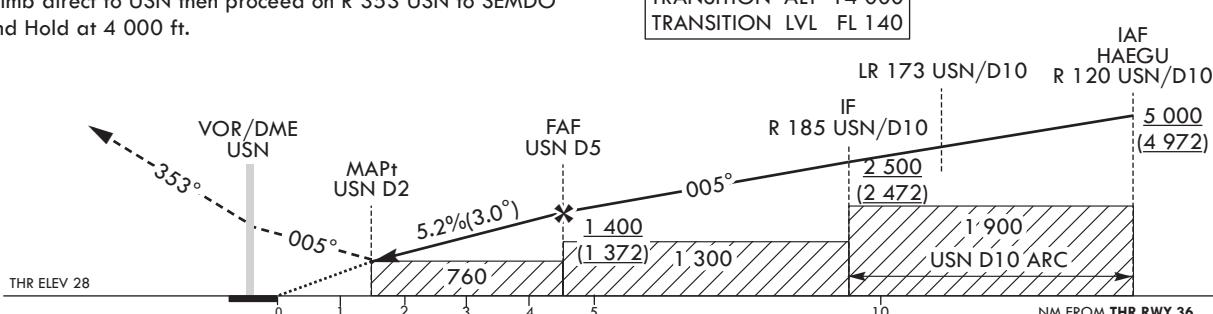
VOR RWY 36



MISSED APPROACH

Climb direct to USN then proceed on R 353 USN to SEMDO and Hold at 4 000 ft.

TRANSITION ALT 14 000
TRANSITION LVL FL 140



OCA (H)	A	B	C	D	Knots	60	90	120	150	180	
Straight-in Approach		760 (732)			Rate of descent	V/V fpm	318	477	636	795	954

* Timing Not authorized for defining MAPt.
* Circling Not authorized.

Change : Information of landing minima(OCA(H)).

ULSAN/Ulsan(RKPU)
VOR RWY 36

AERONAUTICAL DATA TABULATION

VOR Approach to RWY 36 from HAEGU		
Fix/point	Coordinates	
HAEGU(IAF)	R 120 USN / 10.00 NM USN	35°32'06.7"N 129°32'32.3"E
D10.0 USN(IF)	BRG 5.63° / 10.00 NM USN	35°25'54.3"N 129°21'44.9"E
D5.0 USN(FAF)	BRG 5.63° / 5.00 NM USN	35°30'54.4"N 129°21'28.4"E
D2.0 USN(MAPt)	BRG 5.63° / 2.00 NM USN	35°33'54.5"N 129°21'18.5"E
THR RWY 36	Final approach descent angle 2.99°	35°35'04.15"N 129°21'08.95"E
USN VOR/DME		35°35'54.6"N 129°21'11.8"E
SEDMO	BRG 352.68° / 13.00 NM USN	35°48'27.1"N 129°16'55.0"E