

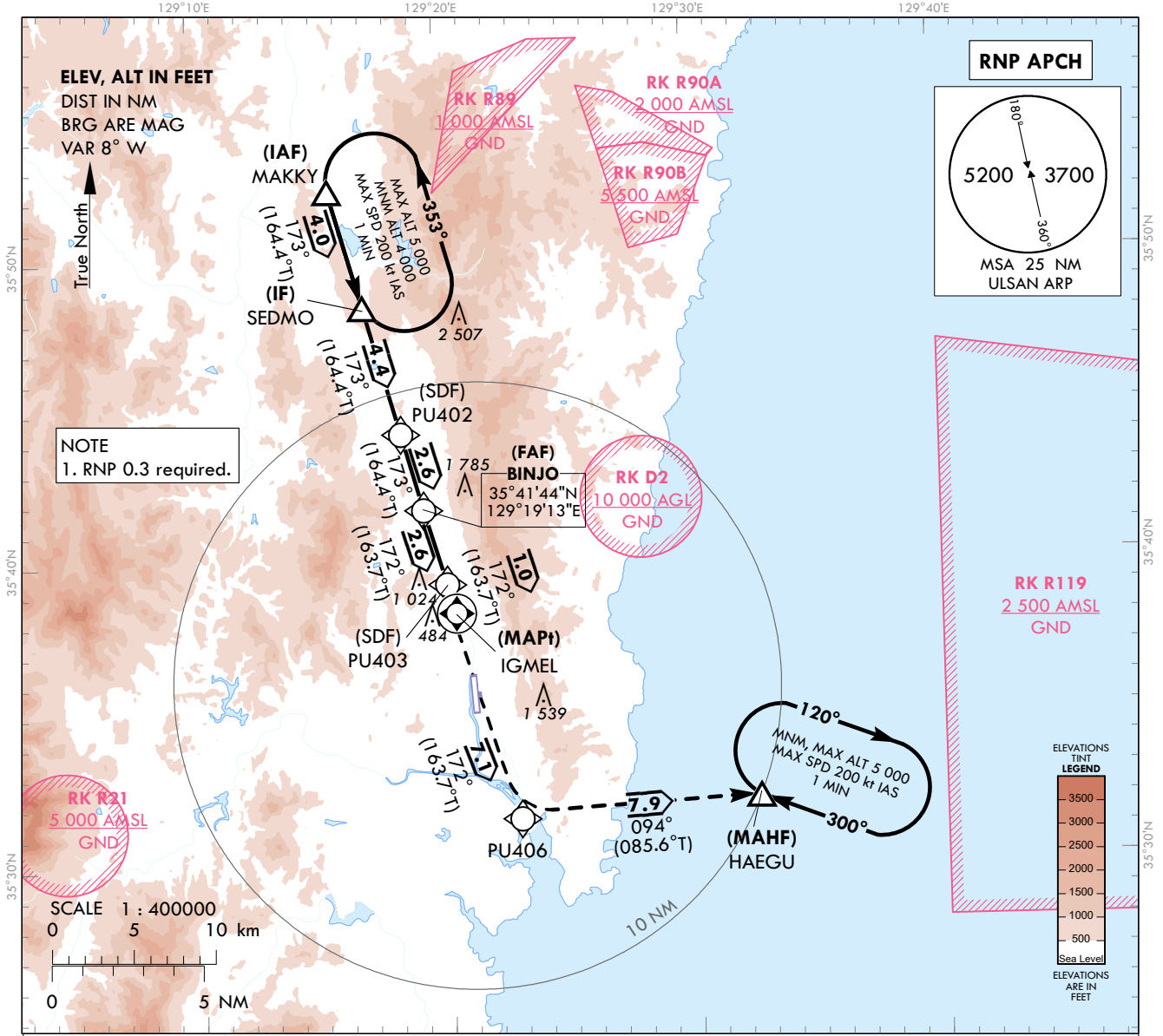
**INSTRUMENT  
APPROACH  
CHART**

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

POHANG APP	124.25
ULSAN TWR	118.75

**ULSAN/ULSAN(RKP)**  
**RNP Y RWY 18**

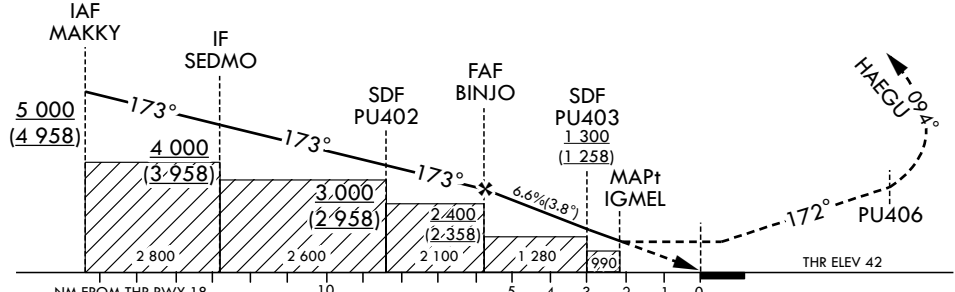
Note : Approach under U.S.TERPS.



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

**MISSED 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%)

CATEGORY		MDA(H)	A	B	C	D	Rate of descent	Knots	60	90	120	150	180
STA	LNAV	FULL	3 600 m	3 900 m	N/A		V/V fpm	400	600	800	1 000	1 200	
		ALS INOP	4 000 m	4 300 m	N/A								

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

Change : Amended phrase.

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

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(T)	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	VPA/RDH	Navigation specification	Remarks
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	IGMEL	Y	172(163.7)	1.0	-	+990	-	35°38'17.7"N 129°20'26.4"E	-3.77/50	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	HIM	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	HIM	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	-

**INSTRUMENT  
APPROACH  
CHART - ICAO**

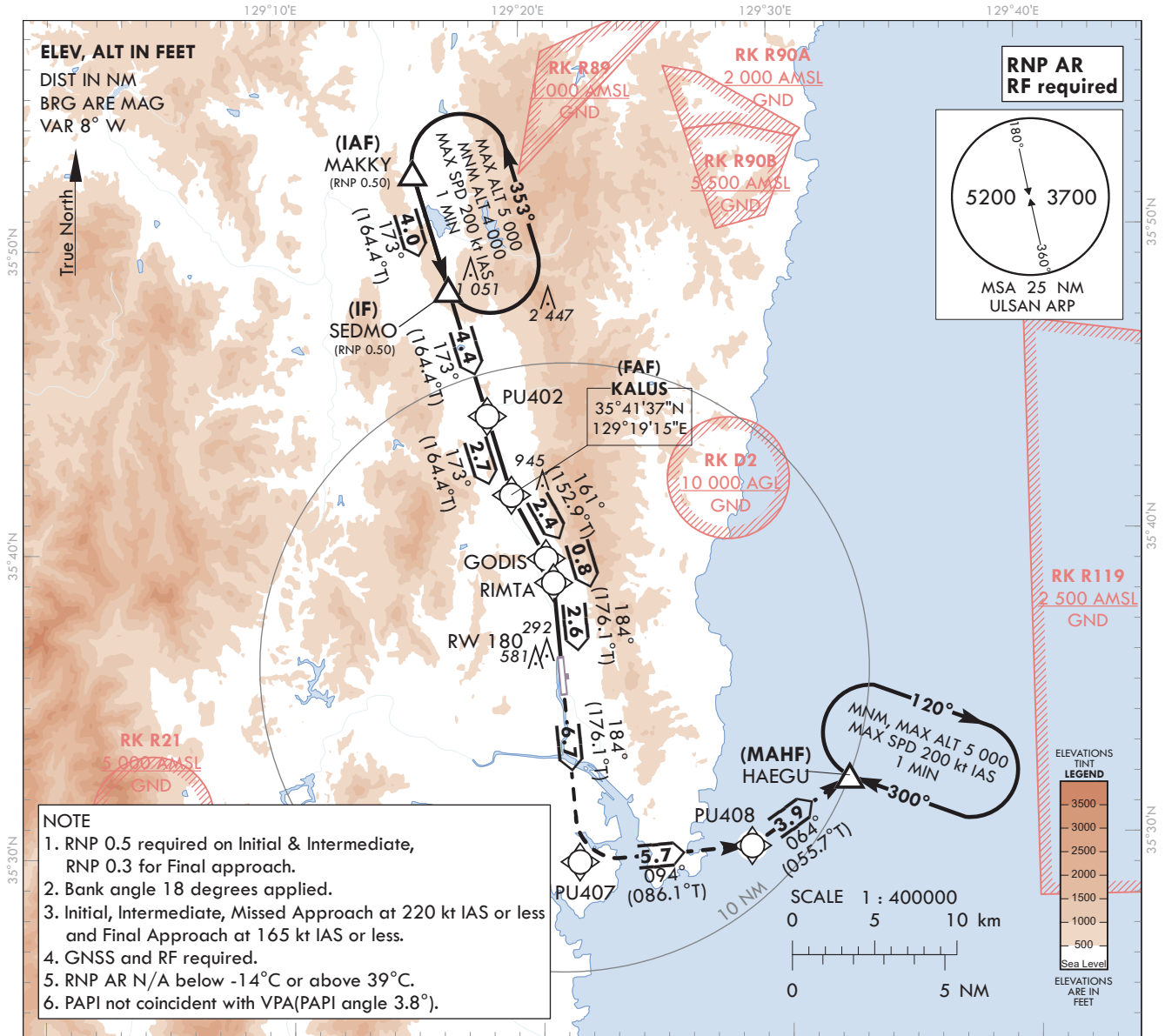
**AERODROME ELEV 42 ft**  
HEIGHTS RELATED TO  
THR RWY 18 - ELEV 42 ft

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

**ULSAN/Ulsan(RKPU)**

**RNP Z RWY 18(AR)**

Note : Approach Under ICAO Flight Procedures.

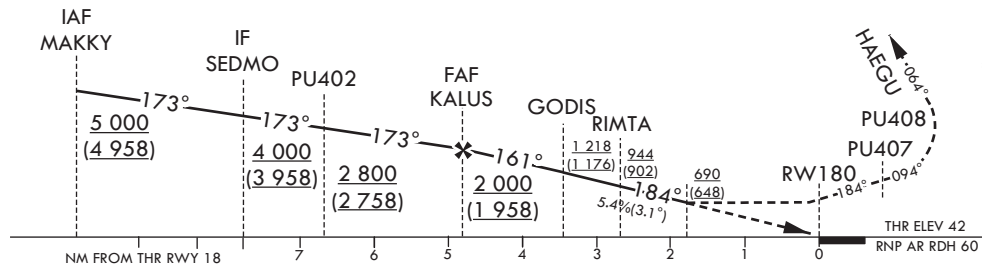


- NOTE**
1. RNP 0.5 required on Initial & Intermediate, RNP 0.3 for Final approach.
  2. Bank angle 18 degrees applied.
  3. Initial, Intermediate, Missed Approach at 220 kt IAS or less and Final Approach at 165 kt IAS or less.
  4. GNSS and RF required.
  5. RNP AR N/A below -14°C or above 39°C.
  6. PAPI not coincident with VPA(PAPI angle 3.8°).

**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



CATEGORY	DA(H)	A	B	C	D	Rate of descent	Knots				
							60	90	120	150	180
RNP 0.3	FULL	690				V/V fpm	329	494	658	823	987
	ALL INOP	(648)									

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

Change : Improved clarity such as terrain.

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

RNP Z RWY 18 (AR)

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(T)	Distance (NM)	Turn direction	Altitude (ft)	Speed (kt)	Coordinates	VPA/RDH	Navigation specification	Remarks
001	IF	MAKKY	-	-	-	-	+5 000	-220	35°52'18.8"N 129°15'35.8"E	-	-	IAF
002	TF	SEDWO	-	173(164.4)	4.0	-	+4 000	-220	35°48'27.1"N 129°16'55.0"E	-	0.5	IF
003	TF	PU402	-	173(164.4)	4.4	-	+2 800	-220	35°44'14.2"N 129°18'21.4"E	-	0.5	
004	TF	KALUS	-	173(164.4)	2.7	-	+2 000	-165	35°41'37.4"N 129°19'14.9"E	-	0.3	FAF Bank Angle 18°
005	TF	GODIS	-	161(152.9)	2.4	L	+1 218	-165	35°39'30.7"N 129°20'34.3"E	-3.10	0.3	Bank Angle 18°
006	RF	RIMTA	-	-	0.8	R	+944	-165	35°38'42.4"N 129°20'50.7"E	-3.10	0.3	Bank Angle 18°
007	TF	RW180	Y	184(176.1)	2.6	-	-	-165	35°36'08.9"N 129°21'03.5"E	-3.10/60	0.3	-
008	TF	PU407	-	184(176.1)	6.7	-	-	-220	35°29'30.2"N 129°21'36.8"E	-	1.0	
009	TF	PU408	-	094(086.1)	5.7	L	-	-220	35°29'53.2"N 129°28'33.2"E	-	1.0	Bank Angle 18°
010	TF	HAEGU	Y	064(055.7)	3.9	L	+5 000	-220	35°32'06.7"N 129°32'32.3"E	-	1.0	Bank Angle 18°
011	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)

RF arc center identifier	Coordinates
ARCO1	35°38'33.8"N 129°18'18.0"E

**INSTRUMENT  
APPROACH  
CHART**

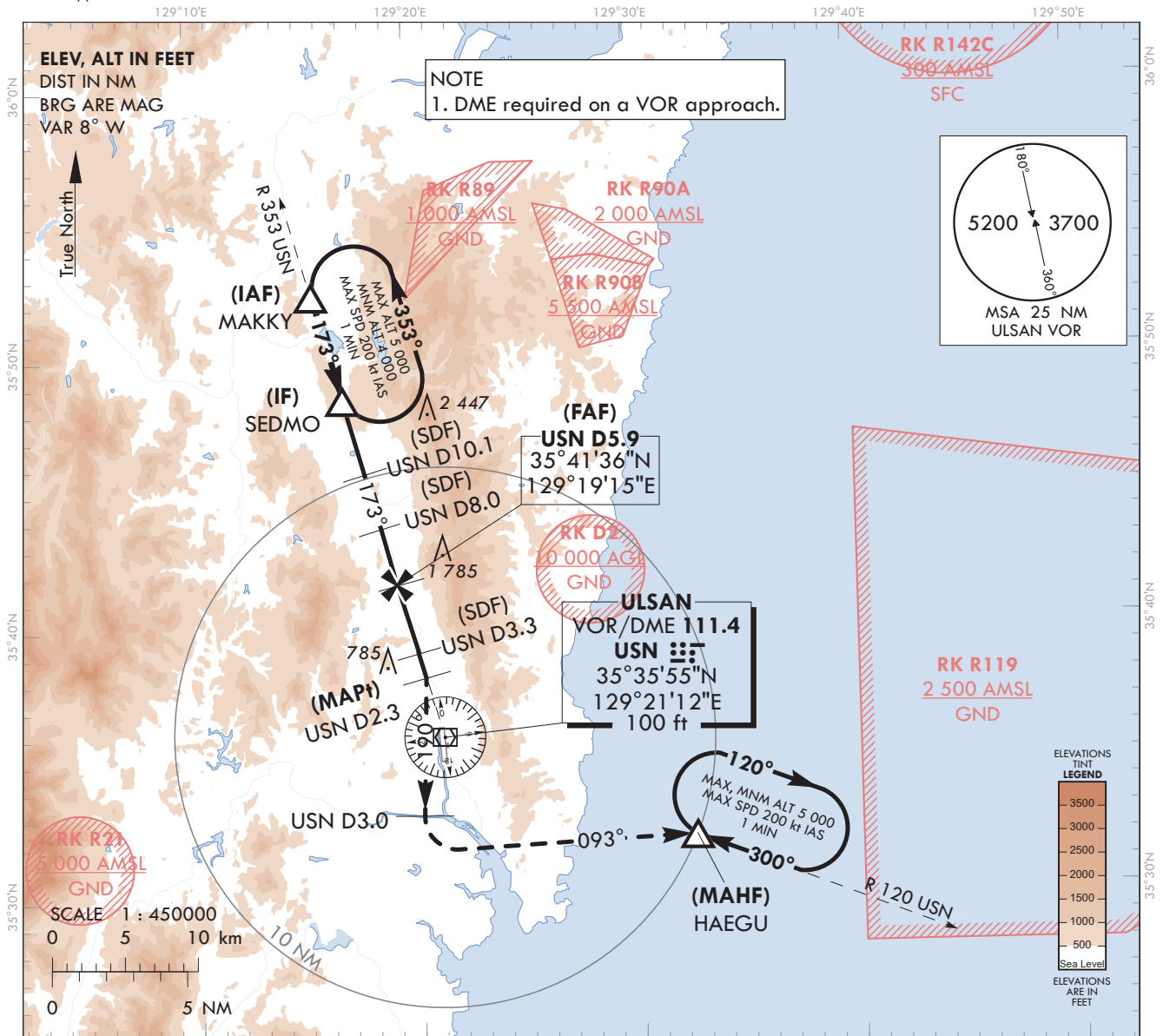
**AERODROME ELEV 42 ft**  
HEIGHTS RELATED TO AD ELEV

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

**ULSAN/Ulsan(RKPU)**

**VOR RWY 18**

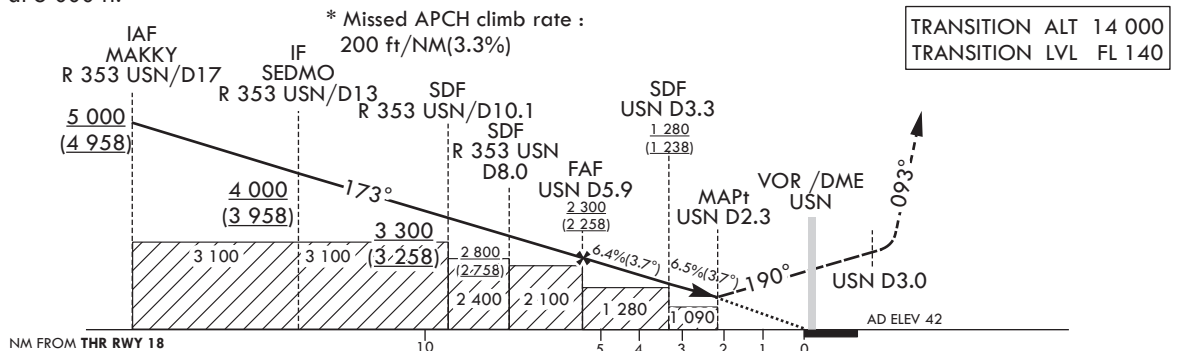
Note : Approach Under U.S.TERPS.



**MISSED 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)



CATEGORY	MDA(MDH)	A				B				Knots	60	90	120	150	180		
		1	2	3	4	1	2	3	4								
STA	FULL	1 090 (1 048)	3 600 m				4 600 m				Rate of descent	V/V fpm	392	588	784	980	1 175
	ALS INOP		4 000 m				4 900 m										

Change : Information of AD ELEV datum.

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**

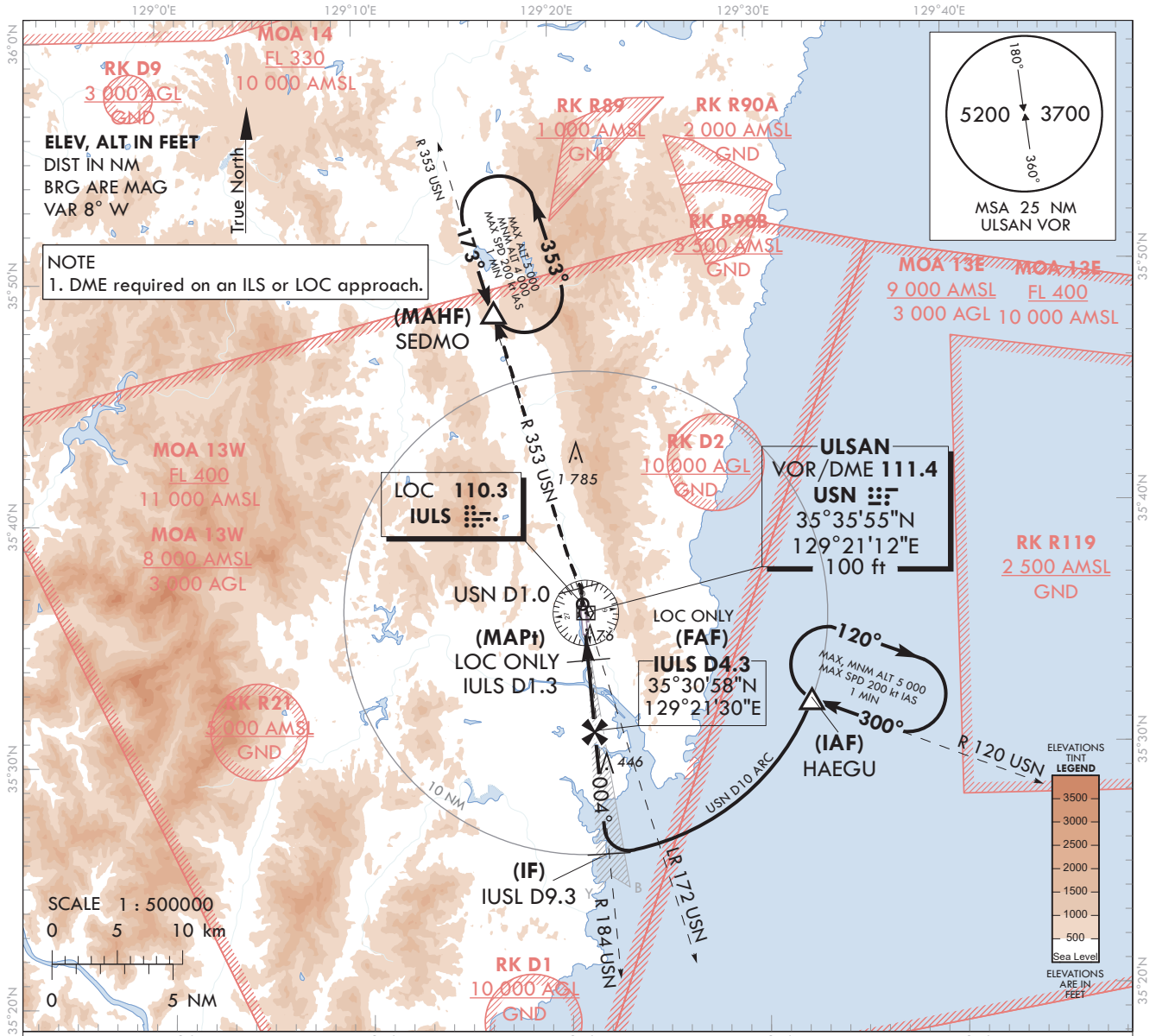
**AERODROME ELEV 42 ft**  
HEIGHTS RELATED TO  
THR RWY 36 - ELEV 28 ft

POHANG APP	124.25
ULSAN TWR	118.75

**ULSAN/Ulsan(RKPU)**

**ILS Y or LOC Y RWY 36**

Note : Approach under ICAO Flight Procedures.



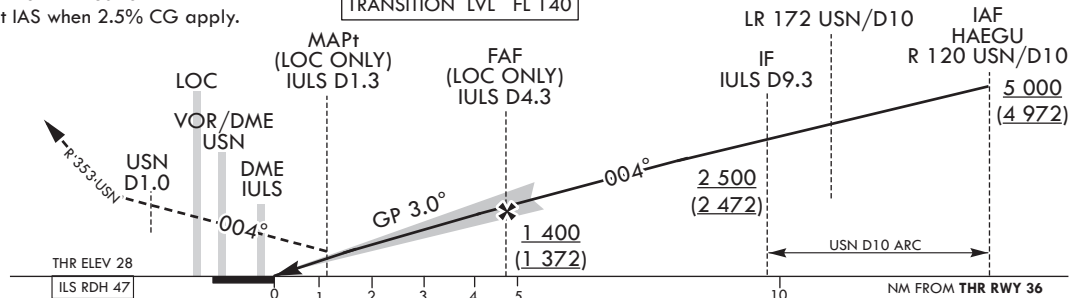
**MISSED APPROACH**

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



CATEGORY	DA(DH)/MDA(MDH)	A				Rate of descent
		B	C	D		
STA	CAT-I (CG 2.5%)	FULL	710	3 000m		V/V fpm
		ALS INOP	(682)	3 700m		
	CAT-I (CG 5.0%)	FULL	246	800m		
		ALS INOP	(218)	1 200m		
LOC	FULL	750	2 700m		*Timing Not authorized for defining MAPt. *Circling Not authorized.	
	ALS INOP	(722)	3 400m			

Change : Improved clarity such as terrain.

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**

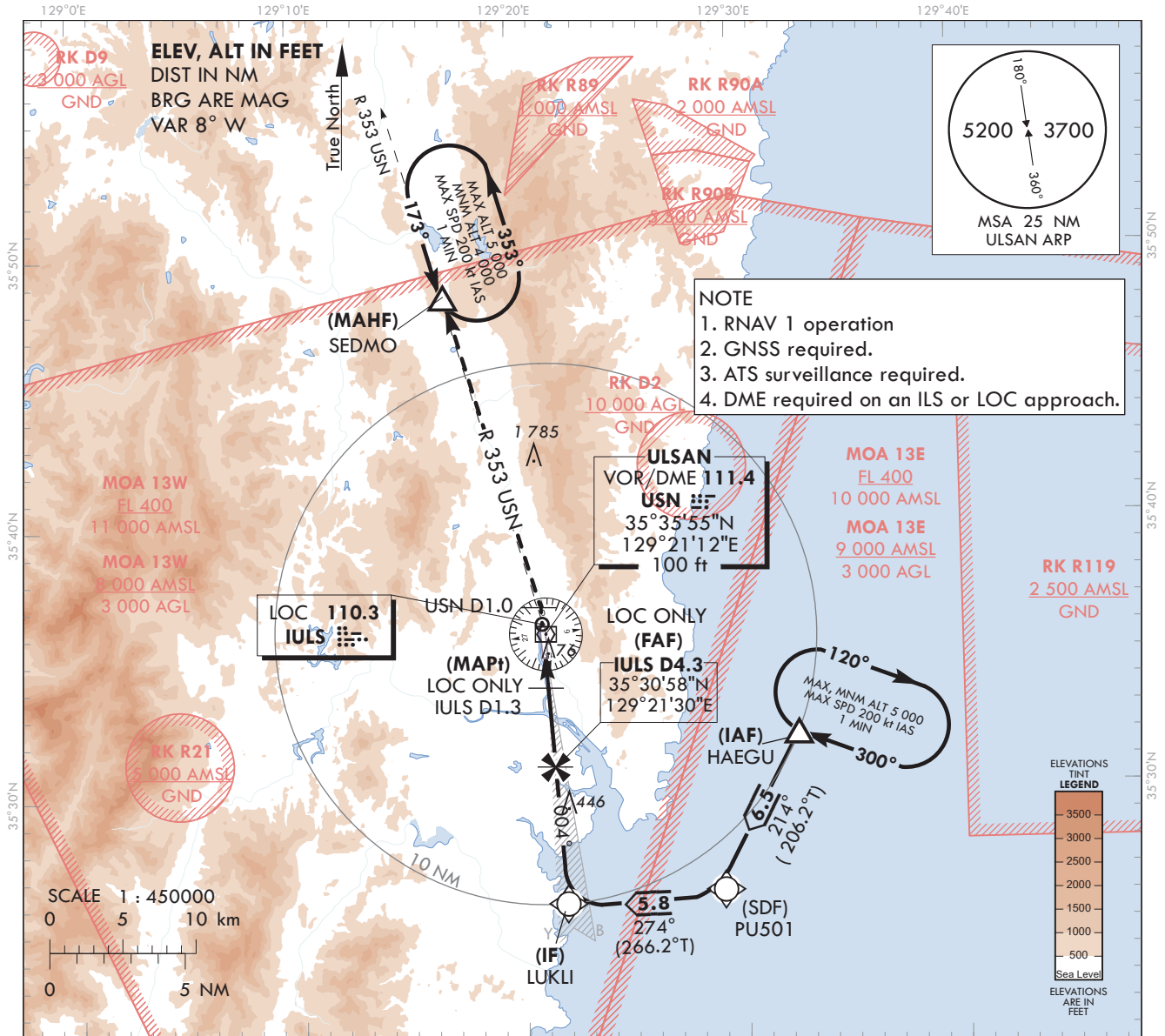
**AERODROME ELEV 42 ft**  
HEIGHTS RELATED TO  
THR RWY 36 - ELEV 28 ft

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

**ULSAN/Ulsan(RKPU)**

**ILS Z or LOC Z RWY 36**

Note : Approach under ICAO Flight Procedures.



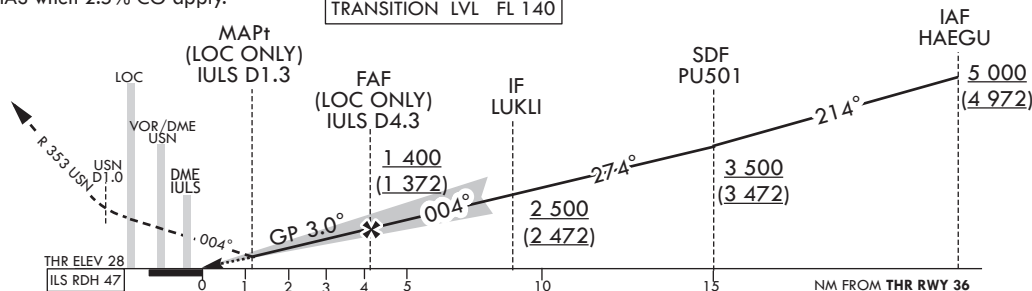
**MISSED APPROACH**

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



CATEGORY	DA(DH)/MDA(MDH)	A	B	C	D	Rate of descent						
						Knots	60	90	120	150	180	
STA	CAT-I (CG 2.5%)	FULL	710 (682)	3 000 m			V/V fpm	318	478	637	796	955
		ALS INOP	3 700 m									
	CAT-I (CG 5.0%)	FULL	246 (218)	800 m								
		ALS INOP	1 200 m									
LOC	FULL	750 (722)	2 700 m			*Timing Not authorized for defining MAPt. *Circling Not authorized.						
	ALS INOP	3 400 m										

Change : Improved clarity such as terrain.

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**

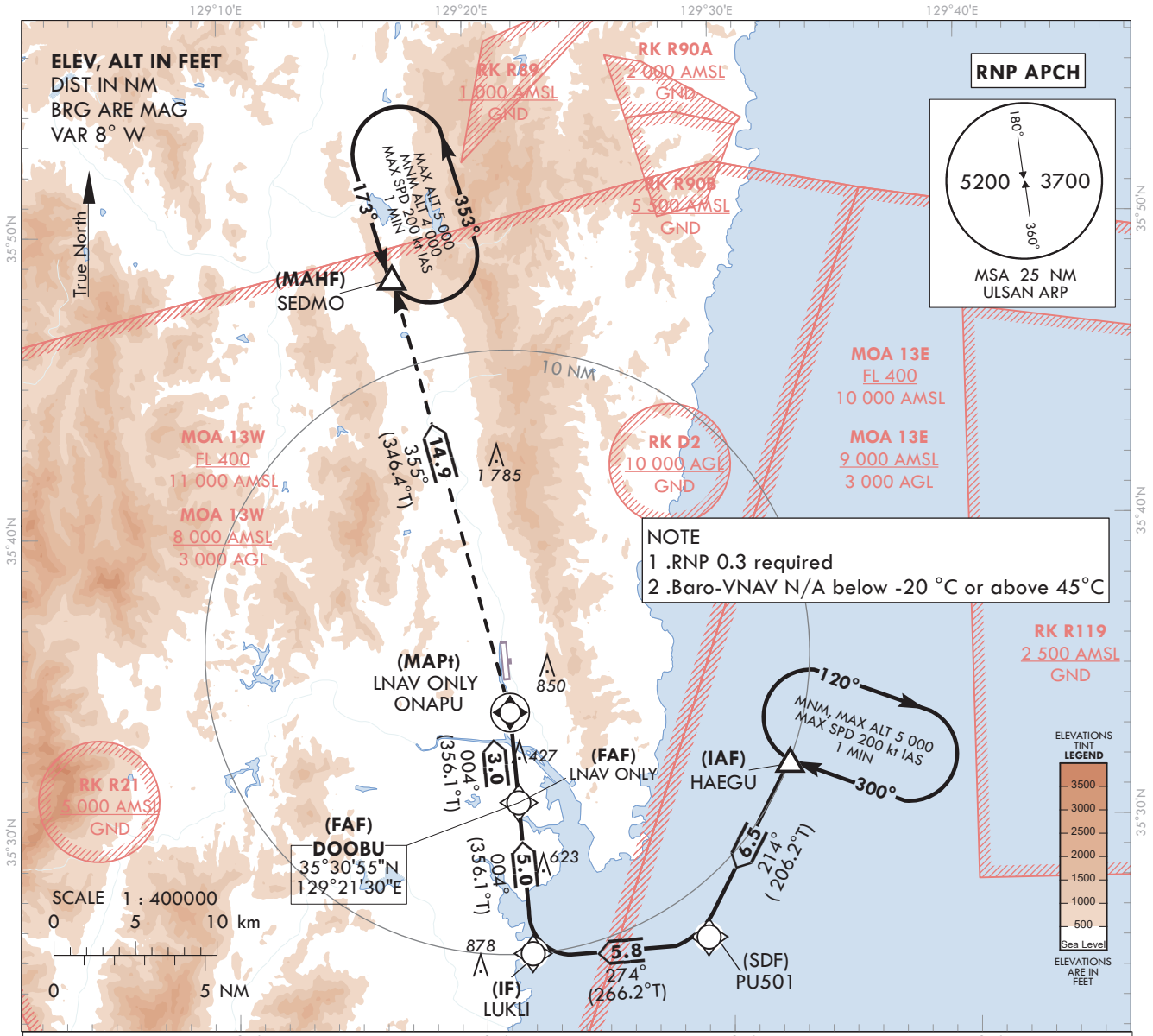
**AERODROME ELEV 42 ft**  
HEIGHTS RELATED TO  
THR RWY 36 - ELEV 28 ft

POHANG APP	124.25
ULSAN TWR	118.75

**ULSAN/Ulsan(RKPU)**

**RNP RWY 36**

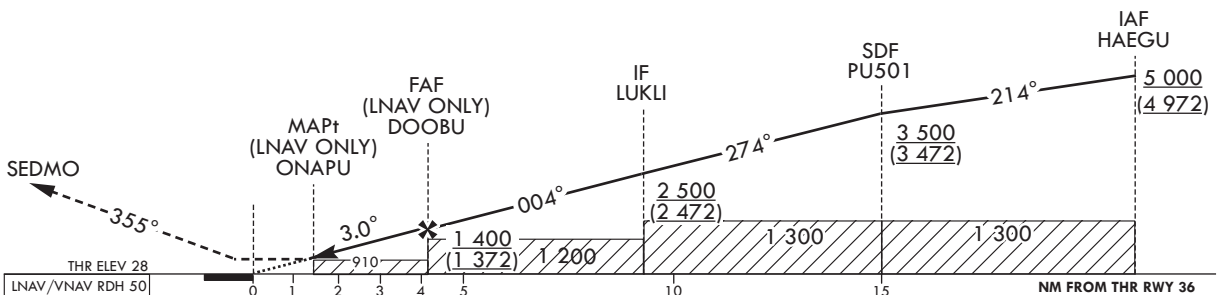
Note : Approach under ICAO Flight Procedures.



TRANSITION ALT 14 000  
TRANSITION LVL FL 140

**MISSED APPROACH**

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



CATEGORY		DA(H)/MDA(H)	A	B	C	D	Rate of descent	Knots	60	90	120	150	180	
STA	LNAV/VNAV	FULL	760	2 700 m				* Timing Not authorized for defining MAPt. * Circling Not authorized.	V/V fpm	319	478	637	796	956
		ALS INOP	(732)	3 400 m										
	LNAV	FULL	910	3 300 m										
		ALS INOP	(882)	4 000 m										

Change : Improved clarity such as terrain.

AERONAUTICAL DATA TABULATION

Instrument Approach Procedure Coding Tables

RNP RWY 36

Serial Number	Path Descriptor	Waypoint Identifier	Fly-over	Course/Track °M(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	PU501	-	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	DO8BU	-	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	MAPt
006	TF	SEDMO	Y	355(346.4)	14.9	-	-	-	35°48'27.1"N 129°16'55.0"E	-	RNP APCH	-
007	HM	SEDMO	Y	173 (164.4)	-	-	-5 000 +4 000	-	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	-

**INSTRUMENT  
APPROACH  
CHART - ICAO**

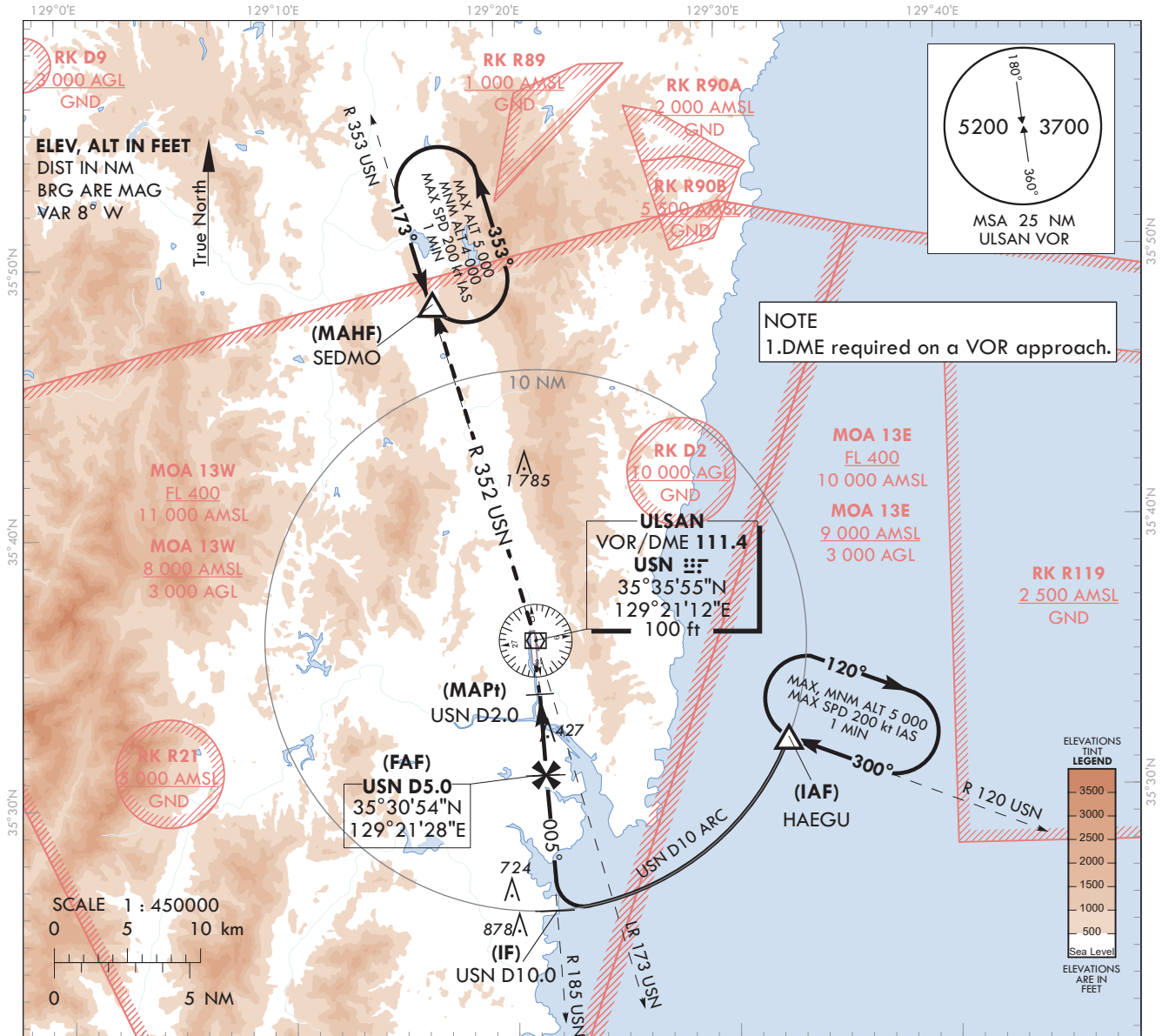
**AERODROME ELEV 42 ft**  
**HEIGHTS RELATED TO**  
**THR RWY 36 - ELEV 28 ft**

POHANG	APP	124.25
		120.2
ULSAN	TWR	118.75

**ULSAN/Ulsan(RKPU)**

**VOR RWY 36**

Note : Approach under ICAO Flight Procedures.

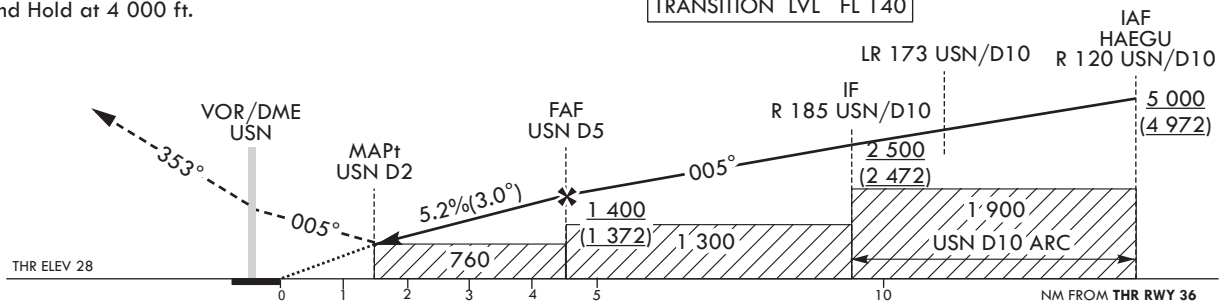


RECOMMENDED PROFILE	DME USN	5	4	3
Final Approach Gradient 5.24%, 318 ft/NM	ALT(HGT)	1 400 (1 372)	1 080 (1 052)	760 (732)

**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



CATEGORY	MDA(MDH)	A	B	C	D	Knots	60	90	120	150	180
							Rate of descent	V/V fpm	318	477	636
STA	FULL	760 (732)	2 700 m				* Timing Not authorized for defining MAPt. * Circling Not authorized.				
	ALS INOP		3 400 m								

Change : Improved clarity such as terrain.

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