

# KneeBoard



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VER. 24.4.10

by Flyingdeuk

Domestic

Japan

China

S.E Asia(GUM)

Supplement

FUEL Consumption

NO Engine Bleed

GND Air / Cross Bleed

Cold Temp Correction

Cold Wx Operation

ENG ON Deicing

ENG OFFDeicing

# Domestic

**GMP**

**CJU**

**GMP**

**PUS**

**CJU**

**KWJ**

**CJU**

**CJJ**

**CJU**

**TAE**

**CJU**

**PUS**

**ICN**

**PUS**

**ICN**

**TAE**

Welcome PA

Next Page

**Home**

## WELCOME PA

손님 여러분, 안녕하세요?

저는 기장 \_\_\_\_입니다.

저희 대한항공을 이용해 주셔서 대단히 감사합니다  
\_\_\_\_(국제)공항까지 비행시간은 \_\_\_\_시간 \_\_\_\_분  
으로 예상됩니다.

비행 중에는 항공기가 갑자기 흔들릴 수도 있으니,  
자리에 앉아 계실 때에는 항상 좌석벨트를  
매주시기 바랍니다.

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다하겠습니다. 감사합니다.

Good morning (afternoon /evening), ladies and  
gentlemen.

This is captain last name speaking.

Welcome aboard Korean Air.

This flight is bound for \_\_\_\_ (international)  
airport and our flight time is \_\_\_\_ hours(s) and  
minutes.

For your safety, keep your seatbelts fastened  
while you are seated.

Thank you for choosing Koreanair.

Please enjoy the flight.

### Domestic

GMP	서울/김포국제
ICN	서울/인천국제
CJU	제주국제
PUS	부산/김해국제
CJJ	청주국제
KWJ	광주
TAE	대구국제

**도착 방송 (5시간이상, 40분전)**

**출발지 기준 2200-0800 Quiet Hour**

손님 여러분, 저는 기장입니다.

우리 비행기는 앞으로 약 (40)분 후에

\_\_국제공항에 착륙 예정입니다.

현재 공항의 날씨는 ① \_\_, 기온은 섭씨 \_\_도 입니다.

① 맑으며

① (다소)흐리며

① (이슬)비가 내리며/소나기가 내리며

① 바람이 불고 있으며

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① 안개가 끼어 있으며

① 황사가 있으며

지금 이곳의 시각은 \_\_월 \_\_일 \_\_요일, 오전(오후)

\_\_시 \_\_분 입니다.

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and it is ① \_\_.

① (mostly) clear

① (partly) cloudy

① drizzling / raining

① windy

① snowing

① foggy

① hazy or smoggy

The current time is \_\_ : \_\_ a.m(p.m), on (day-of-the-  
week), (month)(date).

Thank you for flying with us today.

**Domestic**

# Japan

[GMP](#)

[KIX](#)

[PUS](#)

[NRT](#)

[ICN](#)

[KIX](#)

[ICN](#)

[NRT](#)

[ICN](#)

[CTS](#)

[ICN](#)

[HND](#)

[ICN](#)

[NGO](#)

[ICN](#)

[FUK](#)

[ICN](#)

[AOJ](#)

Welcome PA

Next Page

[Home](#)

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Japan	
KIX	오사카/간사이
HND	도쿄/하네다
NRT	도쿄/나리타
CTS	삿포로/신(NEW) 치토세
NGO	나고야/주부(Centera)
FUK	후쿠오카
AOJ	아오모리

**Japan**

# China

GMP

SHA

GMP

PEK

CJU

PEK

PUS

PVG

ICN

NKG

ICN

TAO

ICN

PEK

ICN

SHE

ICN

PVG

ICN

YNJ

ICN

HGH

ICN

WHE

ICN

XIY

ICN

CSX

ICN

HKG

ICN

TSN

[Home](#)

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## China

SHA	상하이/홍차오
NKG	난징/루커우
TAO	칭다오/자오둥
PEK	베이징/소우뚜(캐피털)
SHE	선양/타오셴
PVG	상하이/푸둥
YNJ	옌지
HGH	황저우/샤오산
WHE	웨이하이/따췌이푸오
XIY	시안/시엔양
CSX	창사/후앙후아
HKG	홍콩
TSN	텐진/빈하이

# China



# S.E Asia

ICN

CXR

ICN

SGN

ICN

PNH

ICN

MNL

ICN

TPE

PUS

TPE

ICN

GUM

PUS

BKK

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Next Page

Home

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## S.E Asia

CXR	베트남 나짱/깜라인
SGN	베트남 호찌민/탄소넛
PNH	캄보디아 프놈펜
MNL	필리핀 마닐라/니노이 아키노
TPE	타이페이/타이완 타오유엔
PGUM	괌
BKK	방콕/수완나폼

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① 안개가 끼어 있으며

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① foggy

① hazy or smoggy

The current time is \_\_ : \_\_ a.m(p.m), on (day-of-the-  
week), (month)(date).

Thank you for flying with us today.

RKSS(GMP) 59ft

RKPC(CJU) 119ft

KE GMP 131.15	PA	KE CJU 129.4
DCL -15분 가능 TOBT 5분 차이		
시 CTC Comm		



Rwy 32R **Takeoff**

(06:00L~0900L / 12:00L~15:00L

/18:00L~21:00L)

GMP : SID (NADP 1)

32L/R	BULTI xT	324	324	5000	324
	(BULTI xQ)	324	324	5000	324
14L/R	BULTI xU	144	144	6000	144
	(BULTI xZ)	144	144	6000	144
KIP 113.6	32L 108.3	32R 110.7	14L 109.9	14R 108.7	

32L/R : KIP324/4, R225

YJU R271

14L/R : KIP144/4, R220

P73 /2

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)



Domestic

CJU : STAR

AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)

ILS Z 07	DOTOL xP	YUMIN	DOTOL 160
ILS Z 25	DOTOL xT	DUKAL	DOTOL/-10 160
HUD	07(87')	10433'	25(76')

07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)

25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675 (STOP x)

HST 40KTS

RKPC(CJU) 119ft

RKSS(GMP) 59ft

KE CJU 129.4 DCL -10분	PA	KE GMP 131.15
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Rwy 32L <b>Landing</b> (06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)	
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CJU : SID (NADP 1)

07	KAMIT xE	066	066	10000	066
25	KAMIT xW	246	246	10000	246

YDM 109.0	07 109.9	25 111.3
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07 : NONE	25 : YDM246/3, R290
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HUD	07(87')	10433'	25(76')
-----	---------	--------	---------

07 : Passing G4 CTC TWR
25 : 31 Holding PSN on P, E1,2,3 CTC TWR



Domestic

GMP : STAR

ILS 32L/R	OLMEN xT	BUMSI	OLMEN 160
ILS 14R	OLMEN xU	DOKDO	OLMEN 160

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

FIX	KIP /8(RWY 32), YJU R271, P73 /2
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32L : D3(6532'), E2(9117'), 32R : E1(6614')
14R : C1(6578')

32L/R : 8 KIP L/G, 14R : LOC CAPT L/G
FAF : Final Flap
TWR -> GND -> APRON (All by ATC)
Except RWY14R Landing (Until R)

# RKSS(GMP) 59ft RKPK(PUS) 13ft

KE GMP 131.15 **PA** KE Gimhae 129.2  
DCL -15분 가능 TOBT 5분 차이  
시 CTC Comm



Rwy 32R **Takeoff**

(06:00L~0900L / 12:00L~15:00L  
/18:00L~21:00L)

GMP : SID (NADP 1)

32L/R	OSPOT xT	324	324	5000	324
	(OSPOT xQ)	324	324	5000	324
14L/R	OSPOT xU	144	144	6000	144
	(OSPOT xZ)	144	144	6000	144
KIP 113.6	32L 108.3	32R 110.7	14L 109.9	14R 108.7	

32L/R : KIP324/4, R225  
YJU R271

14L/R : KIP144/4, R220  
P73 /2

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)



**Domestic**

PUS : STAR (Tail Wind 36R 136000lbs F40)

ILS 36	KEVOX x	MASTA	9DME LG, 8DME FLAP
VOR 18	GAYHA x	MASTA	<b>18 Circling Click!!</b>
HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'	
FIX	36 : IKMA/IKHE /9, /8	18 : KMH R284, R280	

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')  
18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')

Vacate C3,C4 by ATC only. Max Taxi SPD 20KTS  
C2 HOLD SHORT 가까움(Vacate TaxiSPD)

RKPK(PUS) 13ft

RKSS(GMP) 59ft

KE Gimhae 129.2

DCL -5분

PA

KE GMP 131.15

Rwy 32L **Landing**

(06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)

PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x KALOD tx	306	280	ATC	342
18	GIMHAE x	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5	36R 109.5	

36 : KMH R091, R271, R185

HUD	36L(13') 10499'	18R(13') 8530'
	36R(8') 8999'	18L(13') 8999'

RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS

**Domestic**

GMP : STAR

ILS 32L/R	GUKDO xT	BUMSI	GUKDO 160
ILS 14R	GUKDO xU	DOKDO	GUKDO 160
HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')
FIX	KIP /8(RWY 32), YJU R271, P73 /2		

32L : D3(6532'), E2(9117'), 32R : E1(6614')

14R : C1(6578')

32L/R : 8 KIP L/G, 14R : LOC CAPT L/G

FAF : Final Flap

TWR -> GND -> APRON (All by ATC)

Except RWY14R Landing (Until R)

<b>RKPC(CJU) 119ft</b>	<b>RKJJ(KWJ) 48ft</b>
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KE CJU 129.4

DCL -10분

**PA**

KE KWJ 129.4

**CJU : SID (NADP 1)**

07	KAMIT xE	066	066	10000	066
25	KAMIT xW	246	246	10000	246
YDM 109.0		07 109.9		25 111.3	
07 : NONE			25 : YDM246/3, R290		
HUD	07(87')	10433'		25(76')	

07 : Passing G4 CTC TWR

25 : 31 Holding PSN on P, E1,2,3 CTC TWR



**Domestic**

**KWJ : NO STAR (TL 140확인) – STAR RNP app Only!!**

ILS 04R	no KOTTY	SAMUL/-15	CI04R
RNP 22L	ORUSA x	ORUSA Tx	3.3도
LOC 22L	SAMUL	D058Q	No PAR 3.3도
VOR 22L/R	SAMUL	D058Q	Offset 3.29도
HUD	04R(46')	9301'	22L(48')
	04L(46')	9301'	22R(48')
FIX	04R : SAMUL(CLR Limit)		

**End of RWY Vacating 9301'**

**LOC 22L, VOR 22L/R -> LOC/VOR LNAV 지시고도 유지후**

**Final Establish 이후 강하 (TERR!!)**

**PAR 04L/R, 22R 가능 : 강하각 3도 (6NM, 3도)**

**TAXI MAX 15 kts (Max 30kts by ATC)**



**RKJJ(KWJ) 48ft****RKPC(CJU) 119ft**

KE KWJ 129.4

NO DCL

**PA**

KE CJU 129.4

KWJ : SID (NADP 1)

**DALSU – Y711 – DOTOL Comm RTE(ATC CLR) 확인!****(Join Air Way - DCT DOTOL CRS 192- LNAV)**

ALL	KWA 5			8000	
04L	(GWJ 3)	038	038	ATC	038
22R	(GWJ 4)	218	218	ATC	218
KWA 114.4		04R 111.1		22L 108.5	

04 : KWA /4.5, R225

22 : None

HUD	04L(46')	9301'	22R(48')
	04R(46')	9301'	22L(48')

Taxi SPD MAX 15kts

MAX 30kts by ATC

**Domestic**

CJU : STAR

**AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)**

ILS Z 07	DOTOL xP	YUMIN	DOTOL 160
ILS Z 25	DOTOL xT	DUKAL	DOTOL/-10 160
HUD	07(87')	10433'	25(76')

07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)

25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675 (STOP x)

HST 40KTS

RKPC(CJU) 119ft

RKTU(CJJ) 192ft

KE CJU 129.4 DCL -10분	<b>PA</b>	KE CJJ 129.05 NO DCL, ATIS
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CJU : SID (NADP 1)

07	KAMIT xE	066	066	10000	066
25	KAMIT xW	246	246	10000	246
YDM 109.0		07 109.9		25 111.3	
07 : NONE			25 : YDM246/3, R290		
HUD	07(87')	10433'		25(76')	

07 : Passing G4 CTC TWR
25 : 31 Holding PSN on P, E1,2,3 CTC TWR



Domestic

CJJ : NO STAR

After OSPOT H/D060 – RDR Vector

Req ILS Z 24R via HYEIN

ILS Z 06L	NO STAR (MATIZ x)	OSPOT (JIKJI tx)	TU761 / BAKJO (STAR 안춤)
ILS Z 24R	NO STAR (MATIZ x)	OSPOT (HYEIN tx)	HYEIN (STAR 안춤)
HUD	06L(166')	9003'	24R(182')
	06R(173')	9003'	24L(191')
FIX			

06L : B3 (6443'), A3 (8786')
24R : C3 (6230'), D3 (8825')

GS fluc' - A/P Dis' – Back to Normal – A/P Reengage
Req full length Landing (Vacate End of RWY)
180 BACK LINE 지나 Taxi Line 있음
Entering TWY A3, B3, B4, C3, D3 change GND freq

RKTU(CJJ) 192ft

RKPC(CJU) 119ft

KE CJJ 129.05 NO DCL, ATIS	<b>PA</b>	KE CJU 129.4
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CJJ : SID (NADP 1)

06L	CJJ xD	060	060	6000	060
24R	CJJ xD	240	240	6000	240

(06L : BUKIL 1, 2 RNAV)	(24R : OLREG 1, UPTIL 1)
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CHO 109.0	06L 110.3	24R 111.7
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06L/R : CHO /1.7, R235	24L/R : None
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HUD	06L(166')	9003'	24R(182')
	06R(173')	9003'	24L(191')

Upslope from Apron to RWY

Entering TWY A3, B3, B4, C3, D3 change TWR freq



Domestic

CJU : STAR

AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)

ILS Z 07	DOTOL xP	YUMIN	DOTOL 160
ILS Z 25	DOTOL xT	DUKAL	DOTOL/-10 160

HUD	07(87')	10433'	25(76')
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07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)

25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675 (STOP x)

HST 40KTS

# RKPC(CJU) 119ft | RKTN(TAE) 120ft

KE CJU 129.4

DCL -10분

**PA**

KE TAE 129.2

## CJU : SID (NADP 1)

07	AKPON xE	066	066	9000	066
25	AKPON xW	246	246	ATC	246
YDM 109.0		07 109.9		25 111.3	
07 : NONE			25 : YDM246/3, R290		
HUD	07(87')	10433'		25(77')	

07 : Passing G4 CTC TWR

25 : 31 Holding PSN on P, E1,2,3 CTC TWR



## Domestic

## TAE : NO STAR (TL 140 확인)

ILS 31L	TGU/-10	CF31L222/7	CF31L
ILS 13R	TGU/-10	YAWAN	
HUD	31L(118')	9039'	13R(111') 3.3
	31R(120')	8999'	13L(112')
FIX			

31L : D1(8848'), 13R : A1(8772')

13R ILS 3.3도 PAPI 3.3도 (산악지형 주의)

TAXI MAX 20kts (do not req) 최소 2000ft 간격

RKTN(TAE) 120ft

RKPC(CJU) 119ft

KE TAE 129.2  
NO DCL

PA

KE CJU 129.4

TAE : SID (NADP 1)

31L/R	DAEGU xD	312	312	8000	192
13L/R	DAEGU xD	132	132	8000	192
DOC 116.5		TGU 112.2	31L 108.7		13R 108.7
31 : DOC 245/11 DOC R245			13 : TGU076/17 TGU R076		
HUD	31L(118')		9039'	13R(112') 3.3	
	31R(120')		8999'	13L(112')	

TAXI MAX 20kts (do not req) 최소 2000ft 간격



Domestic

CJU : STAR

AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)

ILS Z 07	UPGOS xP	YUMIN	
ILS Z 25	UPGOS xT	DUKAL	
HUD	07(87')	10433'	25(76')

07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)

25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675, STOP X  
HST 40KTS

<b>RKPC(CJU) 119ft</b>	<b>RKPK(PUS) 13ft</b>
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KE CJU 129.4

DCL -10분

**PA**

KE Gimhae 129.2

CJU : SID (NADP 1)

07	AKPON xE	066	066	9000	066
25	AKPON xW	246	246	ATC	246
YDM 109.0		07 109.9		25 111.3	

07 : NONE

25 : YDM246/3, R290

HUD	07(87')	10433'	25(76')
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07 : Passing G4 CTC TWR

25 : 31 Holding PSN on P, E1,2,3 CTC TWR



**Domestic**

PUS : STAR (Tail Wind 36R 136000lbs F40)

ILS 36	KEVOX x	ANROD	9DME LG, 8DME FLAP
VOR 18	GAYHA x	ANROD	<u>18 Circling Click!!</u>
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'
FIX	36 : IKMA/IKHE /9, /8		18 : KMH R284, R280

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')  
18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')

Vacate C3,C4 by ATC only. Max Taxi SPD 20KTS  
C2 HOLD SHORT 가까움(Vacate TaxiSPD)

RKPK(PUS) 13ft

RKPC(CJU) 119ft

KE Gimhae 129.2 DCL -5분	PA	KE CJU 129.4
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x TOPAX tx	306	280	ATC	279
18	BULIM x ENGOT tx	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5	36R 109.5	

36 : KMH R091, R271, R185

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
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RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS



Domestic

CJU : STAR

AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)

ILS Z 07	UPGOS xP	YUMIN	
ILS Z 25	UPGOS xT	DUKAL	
HUD	07(87')	10433'	25(76')

07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)  
25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675, STOP X  
HST 40KTS

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RKPK(PUS) 13ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> KE Gimhae 129.2
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	OSPOT xE/A	333	333	5500/ ATC	333
34L/R	OSPOT xY	333	333	ATC	333
15L/R	OSPOT xC	153	153	5000	153
16L/R	OSPOT xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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ICN 국제선 이후 TRANSIT GD 필요(팀장님)
→ PUS PASSPORT Immigration 해야함.
<b><u>Domestic</u></b>

PUS : STAR (Tail Wind 36R 136000lbs F40)
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ILS 36	KEVOX x	MASTA	9DME LG, 8DME FLAP
VOR 18	GAYHA x	MASTA	<u>18 Circling Click!!</u>
HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'	
FIX	36 : IKMA/IKHE /9, /8	18 : KMH R284, R280	

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')
18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')

Vacate C3,C4 by ATC only, Max Taxi SPD 20KTS C2 HOLD SHORT 가까움(Vacate TaxiSPD)
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<u>RKPK(PUS) 13ft</u>			<u>RKSI(ICN) 23ft</u>		
KE Gimhae 129.2 DCL -5분		<b>PA</b>		KE ICN 131.5	
PUS : SID (Mod NADP CLB2 1000, 14000 MAX)					
36	SOORO x KALOD tx	306	280	ATC	342
18	GIMHAE x	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5		36R 109.5
36 : KMH R091, R271, R185					
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'		
RWY 36 400ft Man L/H turn, Max Taxi SPD 20KTS					

## Domestic

ICN : STAR			
ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		
33R : C4(7529'), C5(8513'), 33L : B4(7463'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')			
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')			
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO			

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RKTN(TAE)120ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	KE TAE 129.2
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	OSPOT xE/A	333	333	5500/ ATC	333
34L/R	OSPOT xY	333	333	ATC	333
15L/R	OSPOT xC	153	153	5000	153
16L/R	OSPOT xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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## Domestic

TAE : NO STAR (TL 140 확인)
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ILS 31L	TGU/-10	CF31L222/7	CF31L
ILS 13R	TGU	YAWAN	
HUD	31L(118')	9039'	13R(111') 3.3
	31R(120')	8999'	13L(112')
FIX			

31L : D1(8848'), 13R : A1(8772')
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13R ILS 3.3도 PAPI 3.3도 (산악지형 주의) TAXI MAX 20kts (do not req) 최소 2000ft 간격
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RKTN(TAE)120ft

RKSI(ICN) 23ft

KE TAE 129.2 NO DCL	<b>PA</b>	KE ICN 131.5
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TAE : SID (NADP 1)

31L/R	DAEGU xD	312	312	8000	192
13L/R	DAEGU xD	132	132	8000	192
DOC 116.5		TGU 112.2	31L 108.7	13R 108.7	

31 : DOC 245/11 DOC R245			13 : TGU076/17 TGU R076		
HUD	31L(118')	9039'	13R(112')	3.3	
	31R(120')	8999'	13L(112')		

TAXI MAX 20kts (do not req) 최소 2000ft 간격



Domestic

ICN : STAR

ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7463'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

RKPK(PUS) 13ft

RJAA(NRT) 135ft

KE Gimhae 129.2 DCL -5분	<div>PA</div> <div>KE Tokyo 131.7</div>
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x PSN tx	306	280	ATC	162
18	BULIM x PSN tx	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5	36R 109.5	

36 : KMH R091, R271, R185

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
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RWY 36 400ft Man L/H turn, Max Taxi SPD 20KTS



Japan

DEP 125.5 – TGU 125.37

FUK 133.15 – TKO 133.8 – 133.02 – 132.45 – 124.1

TKO 128.2 – TKO APP 124.4

NRT HAKKA 330,YAGAN 240,LIVET 210,SWAMP 150

Prepare Holding or RWY CHG

34L/R	SWAMP E (SWAMP T)	ELGAR (TYLER)	ILS 34L/R(Z)
16L/R	SWAMP G (SWAMP N)	GEMIN (NORMA)	ILS Z 16L/R
HUD	16L(135')	8202'	34R(141')
	16R(130')	13123'	34L(139')
FIX	16L : ITM 4 / 34R : ITJ 14, 4 (DME) 16R : IKF 4 / 34L : IYQ 12, 4 (DME)		

16L : B6(6433'), B7(7017'), 34R : B4(5849'), B2(6778')

16R : A6(6076'), A7(7624'), 34L : A5(6167'), A4(7641')

L/D DOWN before 14/12 DME, L/D FLAP 4 DME

Arrival Taxi RTE in Jeppesen (No Numbering)

**RJAA(NRT) 135ft** **RKPK(PUS) 13ft**

KE Tokyo 131.70

DCL -15분

**PA**

KE Gimhae 129.2

**NRT : SID – ENPAR tx (NADP 1)**

16L/R	TETRA x ENPAR tx	157	157	ATC	157
34L/R		337	337	7000/ATC	337
NRE 117.9		16L 110.7	16R 111.5	34L 111.9	34R 110.9
HUD	16L(135')		8202'	34R(141')	
	16R (130')		13123'	34L (139')	

**34R : CLB 220/10000, A4R21/22/23 220KTS 확인**

**Verity ENPAR tx TETRA 12000A**

APU Start, TAXI RTE 1, 2, 3, 4 RWY 별 DEP RTE

DEP 124.2

TKO 120.5 – 133.45 – 133.02 – 133.8

FUK 133.15

TGU 125.37

APP 125.5

**Japan**

**PUS : STAR (Tail Wind 36R 136000lbs F40)**

ILS 36	PEDLO x	KALEK	9DME LG, 8DME FLAP
VOR 18	GAYHA x	PSN	<b><u>18 Circling Click!!</u></b>
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'
FIX	36 : IKMA/IKHE /9, /8		18 : KMH R284, R280

**36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')**  
**18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')**

Vacate **C3,C4** by ATC only. Max Taxi SPD 20KTS  
C2 HOLD SHORT 가까움(Vacate TaxiSPD)

RKSI(ICN) 23ft			RKPK(PUS) 13ft		
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm			<div>PA</div> KE Gimhae 129.2		
ICN : SID (33/34 NADP 1, 15/16 NADP 2)					
33L/R	OSPOT xE/A	333	333	5500/ ATC	333
34L/R	OSPOT xY	333	333	ATC	333
15L/R	OSPOT xC	153	153	5000	153
16L/R	OSPOT xH	153	153	5000	153
NCN 113.8		33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9		34L 109.95	34R 108.1	16L 110.35	16R 108.55
33L/R : NC05L/R, R242 YJU R271			34L/R : WNG333/4.6, R242 YJU R271		
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R (23')		13123'	16L (23')	
Parallel TWY 10KTS 이상(R17 MAX 15kts)					
Domestic					
PUS : STAR (Tail Wind 36R 136000lbs F40)					
ILS 36	KEVOX x	MASTA	9DME LG, 8DME FLAP		
VOR 18	GAYHA x	MASTA	18 Circling Click!!		
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'		
FIX	36 : IKMA/IKHE /9, /8		18 : KMH R284, R280		
36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339') 18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')					
Vacate C3,C4 by ATC only, Max Taxi SPD 20KTS C2 HOLD SHORT 가까움(Vacate TaxiSPD)					

<u>RKPK(PUS) 13ft</u>			<u>RKSI(ICN) 23ft</u>		
KE Gimhae 129.2 DCL -5분		<b>PA</b>		KE ICN 131.5	
PUS : SID (Mod NADP CLB2 1000, 14000 MAX)					
36	SOORO x KALOD tx	306	280	ATC	342
18	GIMHAE x	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5		36R 109.5
36 : KMH R091, R271, R185					
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'		
RWY 36 400ft Man L/H turn, Max Taxi SPD 20KTS					

# Domestic

ICN : STAR			
ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		
33R : C4(7529'), C5(8513'), 33L : B4(7463'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')			
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')			
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO			

RKSI(ICN) 23ft			RJBB(KIX) 17ft		
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm			<div>PA</div> KE KIX 130.95		
ICN : SID (33/34 NADP 1, 15/16 NADP 2)					
33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153
NCN 113.8		33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9		34L 109.95	34R 108.1	16L 110.35	16R 108.55
33L/R : NC05L/R, R242 YJU R271			34L/R : WNG333/4.6, R242 YJU R271		
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R (23')		13123'	16L (23')	
Parallel TWY 10KTS 이상(R17 MAX 15kts)					
DEP 125.15 – TGU 134.17 – FUK 124.15 – TKO 133.8					
KIX RDR 120.85			<div>Japan</div>		
KIX APP 120.25					
KIX : STAR (SAEKI 170, RANDY 150)					
06L	ALISA B	BERRY		ILS Y 06L	
06R	ALISA A	ALLAN		ILS Y 06R	
24L/R	ALISA C	MAYAH		ILS Z 24L/R	
HUD	06L(15') 13123' 24R(23')				
	06R(5') 11483' 24L(12')				
06L : B8(5160'), B6(6751'), 24R : B7(5318'), B9(6751') 06R : A7(5137'), A6(6938'), 24L : A8(5269'), A9(6976')					
RWY06 : After 2500ft L/G DN, After 1500ft L/D FLAP TAXI RTE 1(via J4), 2(via J3)					



RJBB(KIX) 17ft			RKSI(ICN) 23ft		
KE KIX 130.95 DCL -15분		PA		KE ICN 131.5	
KIX : SID – SOUJA tx (NADP 1)					
06L/R	HELEN x - SOUJA tx	059	059	ATC (9000)	059
24L/R		239	239	ATC (9000)	239
KIE 111.6		06L 108.7	06R 108.1	24L 110.7	24R 108.5
HUD	06L(15')		13123'		24R(23')
	06R (5')		13123'		24L (12')
APU Start, TAXI RTE 1(via J4), 2(via J3)					

[DEP 119.2](#)

[TKO 132.7 – 133.8](#)

[FUK 124.15](#)

[TGU 120.57](#)

[APP 119.75](#)

Japan

ICN : STAR			
ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')  
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')  
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

<b>RKSI(ICN) 23ft</b>	<b>RJAA(NRT) 135ft</b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> KE Tokyo 131.70
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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DEP 125.15 – TGU 134.17 – TKO 124.15 – 132.02 TKO 124.1– 128.2 – TKO APP 124.4 – 120.2	<b>Japan</b>
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NRT : HAKKA 330,YAGAN 240,LIVET 210,SWAMP 150
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34L/R	SWAMP E (SWAMP T)	ELGAR (TYLER)	ILS 34L/R(Z)
16L/R	SWAMP G (SWAMP N)	GEMIN (NORMA)	ILS Z 16L/R
HUD	16L(135')	8202'	34R(141')
	16R(130')	13123'	34L(139')
FIX	16L : ITM 4 / 34R : ITJ 14, 4 (DME) 16R : IKF 4 / 34L : IYQ 12, 4 (DME)		

16L : B6(6433'), B7(7017'), 34R : B4(5849'), B2(6778') 16R : A6(6076'), A7(7624'), 34L : A5(6167'), A4(7641')
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L/D DOWN before 14/12 DME, L/D FLAP 4 DME Arrival Taxi RTE in Jeppesen (No Numbering)
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<b><u>RJAA(NRT) 135ft</u></b>	<b><u>RKSI(ICN) 23ft</u></b>
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KE Tokyo 131.70 DCL -15분	<b>PA</b>	KE ICN 131.5
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NRT : SID – ENPAR tx (NADP 1)
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16L/R	TETRA x ENPAR tx	157	157	ATC	157
34L/R		337	337	7000/ATC	337

NRE 117.9	16L 110.7	16R 111.5	34L 111.9	34R 110.9
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HUD	16L(135')	8202'	34R(141')
	16R (130')	13123'	34L (139')

34R : CLB 220/10000, A4R21/22/23 220KTS 확인 Verity ENPAR tx TETRA 12000A APU Start, TAXI RTE 1, 2, 3, 4 RWY 별 DEP RTE
--

DEP 124.2

TKO 120.5 – 133.45 – 133.02 – 133.8

TGU 120.57

APP 119.75

**Japan**

ICN : STAR
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ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180

HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')

FIX	RWY /8, /5 , YJU R271
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33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
--

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')
--

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RJCC(CTS) 70ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> Chitose Oper 132.05
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 134.17 – FUK 124.15 – 133.02</u>	<b>Japan</b>
<u>TKO 132.3 – SPR 133.3 –119.3</u>	
<u>CTS APP 120.1</u>	

CTS : STAR (01R : IDEMI FL150, 19L : NAVER FL170)
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01R	YOTEI SOUTH (YUKII WEST)	YOTEI not YOSEI	ILS Y/Z 01R 3000/2000
19L 19R CAT III	NAVER(170) YUNEY SOUTH (KAORY A)	KAORY YUNEY (KAORY)	ILS Z 19L
HUD	01R(57') 01L(62')	9843'	19L(77') 19R(82')

01R : B4(5278'), B3(7047'), 19L : B8(5177'), B9(7119')
01L : A5(5538'), A4(6961'), 19R : A7(5390'), A8(6873')

Do not Cross 01L/19R After L/D (No TWY) TAXI to Gate Via D(J) or G
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<u>RJCC(CTS) 70ft</u>	<u>RKSI(ICN) 23ft</u>
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Chitose Oper 132.05 NO DCL -5분	<b>PA</b>	KE ICN 131.5
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CTS : SID (NADP 1)
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ALL	DALBI x	002	002	ATC	002
	SUVIT x				
	SOSHU x	182	182	ATC	182
CHE	01R	19L	01L	19R	
116.9	110.75	109.35	110.9	111.5	
HUD	01R(57')	9843'	19L(77')		
	01L(62')		19R(82')		

APU, Deicing at the Gate
R/H turn DCT to HWE -> Confirm R/H Turn ND

<u>DEP 124.7</u>
<u>SPR 119.3 – TKO 124.5 – 132.3</u>
<u>FUK 133.02 – 124.15</u>
<u>TGU 120.57</u>
<u>APP 119.75</u>

Japan

ICN : STAR			
ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RJTT(HND) 21ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> Delta Oper 132.075
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153
NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1	
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55	

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
<u>DEP 125.15 – TGU 134.17 – FUK 133.02 – TKO 120.5</u>
<u>TKO 133.35</u>
<u>TKO APP 119.1 – 119.65</u>
<b><u>Japan</u></b>

HND : <b>STAR XAC Night– APP xxx Y 1400z~</b> SPENS 220
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34L/R	XAC xK/H	KAIHO/CACAO	ILS X / VIS
22	XAC xB	BACON	LDA W(RNVW 22)
16R/L	XAC R	NATTY/SANDY	RNP(R16RT/R16LT)
23	-	DANON	LDA W(RNVW 23)
HUD	34L(18') 9843'		16R(77') 8268' DIS
	34R(21') 9843' DIS TH		16L(19') 9744' DIS
	22(35') 8202'		23(55') 8202'

34L : L12(6515'), L13(7165'), 22 : B4(6207'), B3(6830')
16R : L5(5147'), L3(6361'), 23 : D5(5072'), D3(6391')

xxx Z : 180kts, 160kts limit APP Chart, xxx Y After 1400z
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## RJTT(HND) 21ft

## RKSI(ICN) 23ft

Delta Oper 132.075

DCL -15분

PA

KE ICN 131.5

**HND : SID (xx B/C 2200-0230z 0600-1000z) NADP 1**

ALL	BEKLA x OPPAR x		RWY H/D	RWY CRS	ATC	RWY H/D
HME 112.2	34L 111.7	16R 111.55	34R 108.9	16L 111.95	22 108.1	23 110.5
HUD		34L(18')		9843'	16R(77')	
		34R(21')		11024'	16L(19')	
		04(19')		8202'	05(46')	

34L : HME 351/1.1, R095, 34R : HME R080, R095, 22 :  
HME /2.2 R185

34R BEKLA : KAIJI 230kts, TORAM Flap5 SPD

16L : BEKLA : PLUTO 230kts

RWY05 RTE5 TAXI Chart

DEP ATIS

TKO 120.5 – FUK 133.02

TGU 120.57

APP 119.75



# Japan

## ICN : STAR

ILS 33/34	GUkDO xE	ENPIL	GUkDO 180
ILS 15/16	GUkDO xH	MUNAN	GUkDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

**33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')**

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

**34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')**

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts 이상, **HIRO**

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RJGG(NGO) 12ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> SWISSPORT OPERATION 132.05
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15</u>	<b><u>Japan</u></b>
<u>TGU 134.17 – TKO 133.8 – 133.02</u>	
<u>센트레아 APP – 121.05</u>	

NGO : STAR (SAMON 290, MARIA 130)
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36	CHESS(CARDS) SOUTH	PROBE	ILS Z 36
18	CHESS(CARDS) NORTH	QUEST	ILS Z 18

HUD	36(15')	11483'	18(15')
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36 : A6(5213'), A7(6525'), A8(7837')
18 : A5(5393'), A4(6528'), A3(7841')

RWY36 : After 1500ft L/D FLAP
RWY 18 : After 3000ft L/G DN & L/D FLAP
Caution Stop line, Yellow Ramp line, VDGS!!!



<b><u>RJGG(NGO) 12ft</u></b>	<b><u>RKSI(ICN) 23ft</u></b>
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SWISSPORT OPERATION 132.05 <span style="color:red">DCL -15분</span>	<b><u>PA</u></b> KE ICN 131.5
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NGO : SID – TANGO tx (NADP 1)
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36	OUMI x - TANGO tx	356	356	ATC (7000)	356
18		176	176	ATC (7000)	176
CBE 117.8		18 109.7		36 111.9	
HUD	36(15')	11483'		18(15')	
APU Start 30min, Prepare Intersection T/O					

DEP 120.0

TKO 133.55 – 133.8 – TGU 120.52

APP – 119.75

**Japan**

ICN : STAR
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ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, <b>HIRO</b>

RKSI(ICN) 23ft			RJFF(FUK) 30ft		
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm			PA KE FUK 132.05		
ICN : SID (33/34 NADP 1, 15/16 NADP 2)					
33L/R	OSPOT xE/A	333	333	5500/ ATC	333
34L/R	OSPOT xY	333	333	ATC	333
15L/R	OSPOT xC	153	153	5000	153
16L/R	OSPOT xH	153	153	5000	153
NCN		33L	33R	15L	15R
113.8		109.3	108.9	111.9	109.1
WNG		34L	34R	16L	16R
112.9		109.95	108.1	110.35	108.55
33L/R : NC05L/R, R242 YJU R271			34L/R : WNG333/4.6, R242 YJU R271		
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R (23')		13123'	16L (23')	
Parallel TWY 10KTS 이상(R17 MAX 15kts)					
TGU 125.37					
Kobe 118.9 – FUK APP 119.65					
FUK RDR – 121.125					
Japan					
FUK : RNAV STAR, RDR Vectoring from IKE (PAVGA 13000ft) Hold W of IKE published					
16	SARUP	ENTIX	RNP, LOC 16		
34	V34 HAWKS WEST	RWY34 HAWKS	VIS 34 RNP, LOC 34		
HUD	16(15')		9186'	34(32')	
16 : C6(5505'), C7(6407'), 34 : C4(5193'), C3(6354')					
DGC VOR out of 6NM A/P					
VIS 34 : After IKE – RDR Vector Downwind – 1800ft – RWY Insight 1500ft – Before L/D CHK Complete before base (Do not Extend Downwind due Terrain)					

RJFF(FUK) 30ft

RKSI(ICN) 23ft

KE FUK 132.05 DCL -15min, Voice -5min	<b>PA</b>	KE ICN 131.5
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FUK : SID (Consider C2, C8 Intersection T/O)

16	HAKATA	158	158	ATC (10000)	158
34	XX	338	338	ATC (10000)	338
DGC 114.5			16 111.7	34 108.9	

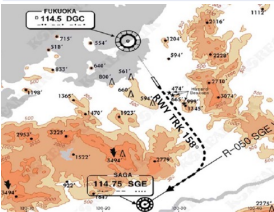
34 : SGE R050 (DGC VOR out of 6NM A/P)

HUD	16(15')	9186'	34(32')
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Caution GP HOLD LINE

Initial CTC TWR, “Ready for departure”

RWSL(Runway Status Lights) in operation



[DEP 127.9](#)  
[Kobe 118.9](#)  
[TGU 125.37](#)

Japan

ICN : STAR

ILS 33/34	GUkDO xE	ENPIL	GUkDO 180
ILS 15/16	GUkDO xH	MUNAN	GUkDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7463'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

<b>RKSI(ICN) 23ft</b>	<b>RJSA(AOJ) 650ft</b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	JPN AIR AOJ 130.17 NO ATIS
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	EGOBA xE/A	333	333	5500/ ATC	333
34L/R	EGOBA xY	333	333	ATC	333
15L/R	EGOBA xC	153	153	5000	153
16L/R	EGOBA xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 134.17 – FUK 124.15</u>	<b>Japan</b>
<u>FUK 125.15 – 133.02 – 132.3</u>	
<u>SPR 133.3 –127.57 – AOJ TWR 118.3</u>	

AOJ : <b>Obstacle Around Airport (High FE, Cold Temp)</b> <b>Hold over MRE, MELOS, YACHI Confirm CRS, EFC</b> CAT II,III Request Before 15min By Com
--

24	NONE	MRE YACHI	ILS Y/Z 24 RNP Z 24 (AR)
06	MELOS SOUTH	YACHI MELOS	RNP Z 06 (AR) VOR Z 06(5도)
HUD	24(664')	9843'	06(647')

24 : T2(5043'),T1(7043'),    06 : T3(5043'), T4(7043')
--

ILS Y 24 Turn SPD : Max 200kts, <b>CHK MRE D12 Turn 시작</b> <b>(선회 반경으로 선회 늦어짐 주의!, SPD Modify)</b> RWY, TWY color Yellow, GND by TWR
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RJSA(AOJ) 650ft

RKSI(ICN) 23ft

JPN AIR AOJ 130.17

**PA**

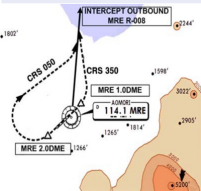
KE ICN 131.5

NO ATIS, TWR 118.3 Voice

AOJ : SID (NADP 1)

24	IWAKI xx	241	241	ATC	241
06		061	061	ATC	061
MRE 114.1			24 111.9		
HUD	24(664')	9843'		06(647')	
EO	24 : MRE 241/2, MRE R008 06 : MRE 061/1, R350, MRE R008				

ATC 순서 특이함. Deicing at the Gate



TWR 118.3

SPR 127.57 – 133.3

TKO 132.3 – 132.45 – 133.02

TKO 133.8

IGU 120.57

APP 119.75

**Japan**

ICN : STAR

ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, **HIRO**

# RKSS(GMP) 59ft | ZSSS(SHA) 10ft

KE GMP 131.15  
DCL -15분 가능 TOBT 5분 차이 시 CTC Comm

PA

China Eastern 131.5



Rwy 32R **Takeoff**

(06:00L~0900L / 12:00L~15:00L  
/18:00L~21:00L)

## GMP : SID (NADP 1)

32L/R	BULTI xT	324	324	5000	324
	(BULTI xQ)	324	324	5000	324
14L/R	BULTI xU	144	144	6000	144
	(BULTI xZ)	144	144	6000	144
KIP 113.6	32L 108.3	32R 110.7	14L 109.9	14R 108.7	

32L/R : KIP324/4, R225  
YJU R271

14L/R : KIP144/4, R220  
P73 /2

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)



CJU 124.52

SHA 120.95

SHA APP - 125.625 - 125.4 - 126.65

**China**

## SHA : STAR

SPD Rest From IAF(210kts), 180kts, 160kts

ILS Z 18L	PUD 61A	SS204	above 2960ft PUD QRH Below 2960ft SHA QRH
ILS Z 36R	PUD 71A	SS405	
HUD	18L(6')	10499'	36R(9')

18L: A3(6555'), A4(7578') 36R: A2(5738'), A1(7089')

Traffic PTN West of RWY, Landing East RWY Normally

Des 550m (1800ft) "five five zero meters"

L08, L09 not available B737

Shall CTC Apron Before Entering

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

**ZSSS(SHA) 10ft****RKSS(GMP) 59ft**

China Eastern 131.5

DCL -20분, No READBACK

**PA**

KE GMP 131.15

Rwy 32L **Landing**

(06:00L~0900L / 12:00L~15:00L

/18:00L~21:00L)

**SHA : SID (NADP 1)**

N DEP Freq : 126.65 South DEP : 121.10 (넘겨줌)

18R	LAMEN 61D	183	183	3000 (900m)	183
36L	LAMEN 73D	003	003	3000 (900m)	003
	LAMEN 71D	003	003	3000 or 4900	003
SHA 117.2		18L 111.3		36R 110.3	
HUD	18R (9')		10827'		36L (76')

RWY 36L LAMEN 71D : L/H Turn Below 200m(660ft) in DCL

[DEP 126.65\(121.1\)](#)[SHA APP 125.4 – 125.625 – SHA 120.95](#)[ICN 125.725 – 124.52](#)[APP – 119.75](#)**China****GMP : STAR**

ILS 32L/R	OLMEN xT	BUMSI	OLMEN 160
ILS 14R	OLMEN xU	DOKDO	OLMEN 160
HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')
FIX	KIP /8(RWY 32), YJU R271, P73 /2		

**32L : D3(6532'), E2(9117'), 32R : E1(6614')****14R : C1(6578')**

32L/R : 8 KIP L/G, 14R : LOC CAPT L/G

FAF : Final Flap

TWR -&gt; GND -&gt; APRON (All by ATC)

Except RWY14R Landing (Until R)



# RKSS(GMP) 59ft | ZBAA(PEK) 116ft

KE GMP 131.15  
DCL -15분 가능 TOBT 5분 차이  
시 CTC Comm

**PA**

Air China Beijing  
131.5



Rwy 32R **Takeoff**

(06:00L~0900L / 12:00L~15:00L  
/18:00L~21:00L)

**GMP : SID (NADP 1)**

32L/R	NOPIK xT	324	324	5000	324
	(NOPIK xQ)	324	324	5000	324
14L/R	NOPIK xU	144	144	6000	144
KIP 113.6	32L 108.3	32R 110.7	14L 109.9	14R 108.7	

32L/R : KIP324/4, R225  
YJU R271

14L/R : KIP144/4, R220  
P73 /2

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)



DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.72 – 128.15 – PEK 125.6

PEK APP 120.6 – Final 119.0

**China**

**PEK : STAR (RW01/19 main (RW36L/18R))**

01(36L)	DUMAP xZA	AA421	ILS Z 01(Y 36L)
19(18R))	DUMAP xZA	AA521	ILS Z 19(Y 18R)
HUD	01(84')	12467'	19(94') 3.2도
	36L(107')	10499'	18R(115')

FIX : RWxx /8(180kts), /6(160kts) TMA Max 280kts

01 : Q5(5223'), Q6(7024'), 19 :Q4(5298'), Q3(7103')

36L : P6(6276'), P7(7719'), 18R : P3(6223'), P2(7552')

APU off Procedure (GND Air Cond' & GPU)

Standard TAXI RTE in Jeppesen Chart

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

**ZBAA(PEK) 116ft** **RKSS(GMP) 59ft**

Air China Beijing 131.5

DCL -30분, Voice -10분  
(COBT/STD 15분 차이 CTC  
Comm)

**PA**

KE GMP 131.15

## Rwy 32L Landing

(06:00L~0900L / 12:00L~15:00L)

/18:00L~21:00L)



PEK : SID (NADP 1) RW36R/18L Intersec T/O W2, W7

36R (01)	MUGLO xWD(xYD)	359	359	ATIS/DCL	359
18L (19)	MUGLO xZD(xYD)	179	179	ATIS/DCL	179
PEK 114.7	36R 111.55	18L 109.3	01 108.5	19 108.9	

36R : PEK 325/11, 36L : PEK 326/13, 01 : PEK 323/9 R124

HUD	36R(98') 01(84')	12467'	18L(110') 19(94')
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## COBT from ATIS "Enroute", Bad Wx DOTRA SID



## DEP 124.4

PEK APP 120.6 – PEK 125.6

DLC 123.2 – 132.95

ICN 132.8 – APP 119.75

## China

**GMP : STAR**

ILS 32L/R	REBIT xT(xQ)	BUMSI	REBIT 170
ILS 14R	REBIT xU	DOKDO	
HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')
FIX	KIP /8(RWY 32), YJU R271, P73 /2		

**32L : D3(6532'), E2(9117'), 32R : E1(6614')**

**14R : C1(6578')**

32L/R : 8 KIP L/G, 14R : LOC CAPT L/G

FAF : Final Flap

TWR -> GND -> APRON (All by ATC)

Except RWY14R Landing (Until R)

RKSS(GMP) 59ft

RJBB(KIX) 17ft

KE GMP 131.15 DCL -15분 가능 TOBT 5분 차이 시 CTC Comm	PA	KE KIX 130.95
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Rwy 32R **Takeoff**

(06:00L~0900L / 12:00L~15:00L  
/18:00L~21:00L)

GMP : SID (NADP 1)

32L/R	EGOBA xT	324	324	5000	324
	(EGOBA xQ)	324	324	5000	324
14L/R	EGOBA xU	144	144	6000	144

KIP 113.6	32L 108.3	32R 110.7	14L 109.9	14R 108.7
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32L/R : KIP324/4, R225 YJU R271	14L/R : KIP144/4, R220 P73 /2
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HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)


[DEP 125.15 – TGU 134.17 – TKO 133.8](#)
[KIX RDR 120.85](#)
[KIX APP 120.25](#)

# Japan

KIX : STAR (SAEKI 170, RANDY 150)

06L	ALISA B	BERRY	ILS Y 06L
06R	ALISA A	ALLAN	ILS Y 06R
24L/R	ALISA C	MAYAH	ILS Z 24L/R

HUD	06L(15')	13123'	24R(23')
	06R(5')	11483'	24L(12')

06L : B8(5160'), B6(6751'), 24R : B7(5318'), B9(6751')

06R : A7(5137'), A6(6938'), 24L : A8(5269'), A9(6976')

RWY06 : After 2500ft L/G DN, After 1500ft L/D FLAP

TAXI RTE 1, 2

<b><u>RJBB(KIX) 17ft</u></b>	<b><u>RKSS(GMP) 59ft</u></b>
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KE KIX 130.95 DCL -15분	<b>PA</b>	KE GMP 131.15
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Rwy 32L <b>Landing</b> (06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)	
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<b>KIX : SID – SOUJA tx (NADP 1)</b>
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06L/R	HELEN x - SOUJA tx	059	059	ATC (9000)	059
24L/R		239	239	ATC (9000)	239

KIE 111.6	06L 108.7	06R 108.1	24L 110.7	24R 108.5
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HUD	06L(15')	13123'	24R(23')
	06R (5')	13123'	24L (12')

APU Start, TAXI RTE 1, 2
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<a href="#">DEP 119.2</a>	<b><u>Japan</u></b>
<a href="#">TKO 132.7 – 133.8</a>	
<a href="#">IGU 120.57</a>	
<a href="#">APP 119.75</a>	

<b>GMP : STAR</b>
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ILS 32L/R	GUKDO xT	BUMSI	OLMEN 160
ILS 14R	GUKDO xU	DOKDO	OLMEN 160

HUD	32L(41')	10499'	14R(34')
	32R(42')	11811'	14L(38')

FIX	KIP /8(RWY 32), YJU R271, P73 /2
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32L : D3(6532'), E2(9117'), 32R : E1(6614')
14R : C1(6578')

32L/R : 8 KIP L/G, 14R : LOC CAPT L/G
FAF : Final Flap
TWR -> GND -> APRON (All by ATC)
Except RWY14R Landing (Until R)

# RKPC(CJU) 119ft ZBAA(PEK) 116ft

KE CJU 129.4

DCL -10분

**PA**

Air China Beijing

132.0

CJU : SID (NADP 1)

07	LIMDI xE	066	066	9000	066
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25	KAMIT xW	246	246	ATC	246
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YDM 109.0	07 109.9	25 111.3
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07 : NONE

25 : YDM246/3, R290

HUD	07(87')	10433'	25(76')
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07 : Passing G4 CTC TWR

25 : 31 Holding PSN on P, E1,2,3 CTC TWR



**China**

DEP 121.2 – TGU 124.52 – 120.72 – 126.17 – 132.8

DLC 132.95 – TAO 133.72 – 128.15 – PEK 125.6

PEK APP 120.6 – Final 119.0

PEK : STAR (RW01/19 main (RW36L/18R))

01(36L)	DUMAP xZA	AA421	ILS Z 01(Y 36L)
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19(18R))	DUMAP xZA	AA521	ILS Z 19(Y 18R)
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HUD	01(84')	12467'	19(94')	3.2도
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36L(107')	10499'	18R(115')
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FIX : RWxx /8(180kts), /6(160kts) TMA Max 280kts

01 : Q5(5223'), Q6(7024'), 19 :Q4(5298'), Q3(7103')

36L : P6(6276'), P7(7719'), 18R : P3(6223'), P2(7552')

APU off Procedure (GND Air Cond' & GPU)

Standard TAXI RTE in Jeppesen Chart

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

# ZBAA(PEK) 116ft | RKPC(CJU) 119ft

Air China Beijing 132.0

DCL 30분전, Voice 10분전  
(COBT/STD 15분 차이 CTC  
Comm)

## PA

KE CJU 129.4

PEK : SID (NADP 1) **RW36R/18L Intersec T/O W2, W7**

36R (01)	MUGLO xWD(xYD)	359	359	ATIS/DCL	359
18L (19)	MUGLO xZD(xYD)	179	179	ATIS/DCL	179
PEK 114.7	36R 111.55	18L 109.3	01 108.5	19 108.9	

36R : PEK 325/11, 36L : PEK 326/13, 01 : PEK 323/9 R124

HUD	36R(98') 01(84')	12467'	18L(110') 19(94')
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**COBT from ATIS "Enroute", Bad Wx DOTRA SID**



DEP 124.4

PEK APP 120.6 – PEK 125.6

DLC 123.2 – 132.95

ICN 132.8 – 126.17 – 120.72

124.52 – APP 119.75

## China

**CJU : STAR**

**AFT Merge PT(220kts) DCT IAF(210kts), FAF (160kts)**

ILS Z 07	LIMDI xP	YUMIN	
ILS Z 25	LIMDI xT	DUKAL	
HUD	07(87')	10433'	25(76')

07 : P6(5176'), P5(5882'), P4(6840'-ATC HIRO)

25 : P7(5219'), P8(5882'), P10(7524'-ATC HIRO)

Entering Rapid TWY CTC GND 121.675 (STOP x)  
HST 40KTS



<b>RKPK(PUS) 13ft</b>	<b>ZSPD(PVG) 13ft</b>
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KE Gimhae 129.2 DCL -5분	<b>PA</b>	China Eastern 130.5
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x TOPAX tx	306	280	ATC	279
18	BULIM x ENGOT tx	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5	36R 109.5	

36 : KMH R091, R271, R185

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
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RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS



DEP 125.5 – TGU 128.17 – 124.52(125.72)  
SHA 120.95  
SHA APP 125.62(119.975) – 125.4

China

PVG : STAR (North of 'PVGNB', R-276 Prohibited)

34R(L)/35L(R)	DUM 91A/92A	MP2	ILS Z xx
16L(R)/17R(L)	DUM 81A/82A	MP1	ILS Z xx
HUD	34R/L(11'/12') 12467' 16L/R(12'/11')		
	35R(10') 13123' 17L10')		
	35L(12') 11155' 17R(12')		

34R : G4(5603'), G5(6896'), 16L : G3(5577'), G2(6909')  
35L : D4(5636'), D5(6932'), 17R : D3(5626'), D2(6942')

Normally DUMET 6000m  
Follow Me Car Insight – TAXI L/T off,APU off Procedure

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

ZSPD(PVG) 13ft

RKPK(PUS) 13ft

China Eastern 130.5

PA

KE Gimhae 129.2

DCL 20분전, No READ BACK!

PVG : SID (NADP 1)

(ATC Hold Expected Fuel Add!!)

34L/R 35R/L	LAM 92D (LAM 91D)	348	348	ATC (900m)	348
16R/L 17L/R	LAM 82D (LAM 81D)	168	168	ATC (900m)	168
PUD 116.9	34R 108.9	35L 108.1		34L 108.3	35R 111.9
	16L 111.5	17R 111.1		16R 108.7	17L 110.7
HUD	34R/L(11'/12') 35R(10') 35L(12')	12467' 13123' 11155'		16L/R(12'/11') 17L(10') 17R(12')	

APU Start, TUG Connect After Beacon L/T ON

Ready for Intersection T/O

SHA APP 125.4 (Without Instruction)

SHA APP 125.62(119.975)

SHA 120.95

ICN 125.725(124.52) – 128.17

APP – 125.5

China

PUS : STAR (Tail Wind 36R 136000lbs F40)

ILS 36	KEVOX x	ANROD	9DME LG, 8DME FLAP
VOR 18	GAYHA x	ANROD	18 Circling Click!!
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'
FIX	36 : IKMA/IKHE /9, /8		18 : KMH R284, R280

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')

18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')

Vacate C3,C4 by ATC only. Max Taxi SPD 20KTS

C2 HOLD SHORT 가까움(Vacate TaxiSPD)

RKSI(ICN) 23ft			ZSNJ(NKG) 49ft		
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm			PA None		
ICN : SID (33/34 NADP 1, 15/16 NADP 2)					
33L/R	BOPTA xA	333	333	ATC	333
34L/R	BOPTA xY	333	333	ATC	333
15L/R	BOPTA xC	153	153	5000	153
16L/R	BOPTA xH	153	153	5000	153
NCN 113.8		33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9		34L 109.95	34R 108.1	16L 110.35	16R 108.55
33L/R : NC05L/R, R242 YJU R271			34L/R : WNG333/4.6, R242 YJU R271		
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R (23')		13123'	16L (23')	
Parallel TWY 10KTS 이상(R17 MAX 15kts)					
DEP 125.15 – TGU 126.17 – 120.72 – 124.52(125.72)					
SHA 120.95 – 120.55 – 125.95 – 119.075					
NKG APP 126.55 – 119.25					
China					
NKG : STAR ('D' N31 34.0 E118 42.1 – R101, R289)					
07 (06)	ESB 71F/21A (ESB 61F/11A)		SNQ		ILS Z 07 (ILS Z 06)
25 (24)	ESB 52F/22A (ESB 42F/12A)		NJ210		ILS Z 25 (ILS Z 24)
HUD	07(41')		11811'	25(39')	
	06(43')		11811'	24(38')	
07 : D5(6499'), D6(7582'), 25 : D2(6505'), D1(7582') 06 : A5(6614'), A6(7860'), 24 : A3(6637'), A9(7864')					
IAF, Missed App SPD APP : 210kts or 205kts Follow Me Car on C 13, APU off Procedure					

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

ZSNJ(NKG) 49ft			RKSI(ICN) 23ft		
None DCL 가능, READ BACK!		<div>PA</div>		KE ICN 131.5	
NKG : SID (NADP 1) (ATC Hold Expected Fuel Add!!)					
06 (07)	ESB 61X/11D (ESB 71X/21D)	064	064	3000 (900m)	064
24 (25)	ESB 42X/12D (ESB 52X/22D)	244	244	3000 (900m)	244
NJL 113.6		07 108.7	25 111.3	06 110.3	24 110.9
HUD	06(43') 07(41')		11811'		24(38') 25(39')
APU Start, TUG Connect After Beacon L/T ON					
<div>DEP 119.25</div> <div>NKG APP 126.55</div> <div>SHA 119.075 – 125.95 – 120.55 – 120.95</div> <div>ICN 125.725(124.52) – 120.72 – 126.17</div> <div>APP – 119.75</div> <div>China</div>					
ICN : STAR					
ILS 33/34	OLMEN xE	ENPIL	OLMEN 180		
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180		
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')		
	34R(23')	13123'	16L(23')		
FIX	RWY /8, /5 , YJU R271				
33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')					
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')					
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO					

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>ZSQD(TAO) 30ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	None
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	NOPIK xA	333	333	ATC	333
34L/R	NOPIK xY	333	333	ATC	333
15L/R	BINIL xC	153	153	5000	153
16L/R	BINIL xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 132.8 – DLC 132.95</u>	<b>China</b>
<u>TAO 134.85 – 133.72 – 134.85</u>	
<u>TAO APP 124.6 – 119.4</u>	

TAO : STAR (AVBIK R014 - LAROP R159 동쪽 금지)
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35(34)	LAT 91A/01A	JD405	ILS Z 35(34)
17(16)	LAT 81A/11A	JD305	ILS Z 17(16)
HUD	35(27')	11811'	17(29')
	34(27')	11811'	16(27')

FIX : AVBIK R014, LAROP R159 (두점 연결)
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35 : S2(5255'), S4(6624'), 17 : S1(5282'), S3(6604')
34 : R2(5278'), R4(6650'), 16 : R1(5318'), R3(6706')

위 Vacate Point 불가시 TWR 보고 Follow Me Car on Lxx, APU off Procedure
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# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**



ZSQD(TAO) 30ft			RKSI(ICN) 23ft		
None DCL 가능, READ BACK! (Voice 10분전 부터)		<div>PA</div> <div>KE ICN 131.5</div>			
TAO : SID (NADP 1)					
34 (35)	LAT 91D/01D	350	350	ATC 3000 (900m)	350
16 (17)	LAT 81D/11D	170	170	ATC 3000 (900m)	170
JDG 114.45	17 110.15	35 109.75	16 111.9	34 108.55	
HUD	34(27') 35(27')		11811'		16(27') 17(29')
Heading 190, Join W209 -> DCT LATUX CRS 147					

[APP 119.4](#)

[TAO APP 124.6](#)

[TAO 134.85 – 133.72 – DLC 132.95](#)

[ICN 132.8 – APP 119.75](#)

China

ICN : STAR			
ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		
33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')			
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')			
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO			

RKSI(ICN) 23ft

ZBAA(PEK) 116ft

KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	PA Air China Beijing 132.0
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)

33L/R	NOPIK xA	333	333	ATC	333
34L/R	NOPIK xY	333	333	ATC	333
15L/R	BINIL xC	153	153	5000	153
16L/R	BINIL xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.72 – 128.15 – PEK 125.6

PEK APP 120.6 – Final 119.0

China

PEK : STAR (RW01/19 main (RW36L/18R))

01(36L)	DUMAP xZA	AA421	ILS Z 01(Y 36L)
19(18R))	DUMAP xZA	AA521	ILS Z 19(Y 18R)
HUD	01(84')	12467'	19(94') 3.2도
	36L(107')	10499'	18R(115')

FIX : RWxx /8(180kts), /6(160kts) TMA Max 280kts

01 : Q5(5223'), Q6(7024'), 19 :Q4(5298'), Q3(7103')  
36L : P6(6276'), P7(7719'), 18R : P3(6223'), P2(7552')

APU off Procedure (GND Air Cond' & GPU)  
Standard TAXI RTE in Jeppesen Chart

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

TL  
TA

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

ZBAA(PEK) 116ft

RKSI(ICN) 23ft

Air China Beijing 132.0 DCL 30분전, Voice 10분전 (COBT/STD 15분 차이 CTC Comm)	<div>PA</div> <div>KE ICN 131.5</div>
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PEK : SID (NADP 1) RW36R/18L Intersec T/O W2, W7

36R (01)	MUGLO xWD(xYD)	359	359	ATIS/DCL	359
18L (19)	MUGLO xZD(xYD)	179	179	ATIS/DCL	179
PEK 114.7	36R 111.55	18L 109.3	01 108.5	19 108.9	

36R : PEK 325/11, 36L : PEK 326/13, 01 : PEK 323/9 R124

HUD	36R(98') 01(84')	12467'	18L(110') 19(94')
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COBT from ATIS “Enroute”, Bad Wx DOTRA SID



DEP 124.4

PEK APP 120.6 – PEK 125.6

DLC 123.2 – 132.95

ICN 132.8 – APP 119.75

China

ICN : STAR

ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>ZYTX(SHE) 198ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> China Southern Dispatch 131.5
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<b>ICN : SID (33/34 NADP 1, 15/16 NADP 2)</b>
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<b>33L/R</b>	<b>NOPIK xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	NOPIK xY	333	333	ATC	333
<b>15L/R</b>	<b>BINIL xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BINIL xH	153	153	5000	153

<b>NCN</b> 113.8	<b>33L</b> 109.3	<b>33R</b> 108.9	<b>15L</b> 111.9	<b>15R</b> 109.1
<b>WNG</b> 112.9	<b>34L</b> 109.95	<b>34R</b> 108.1	<b>16L</b> 110.35	<b>16R</b> 108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 132.8 – DLC 132.95 – 135.65</u>
<u>DLC 134.325(128.775)</u>
<u>SHE APP 125.55 – 119.825</u>
<u>TWR 118.1</u>

**China**

<b>SHE : STAR (CLR Limit TOSID Late Handoff to SHE)</b>
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<b>06</b>	<b>TOSID 62A, 61A</b>	<b>TX504</b>	<b>ILS Z 06</b>
<b>24</b>	<b>TOSID 72A, 11A</b>	<b>TX662</b>	<b>ILS Z 24</b>
<b>HUD</b>	<b>06(170')</b>	<b>10499'</b>	<b>24(198')</b>

<b>Around TOSID – Present TRK or HDG – CTC SHE CTL</b>
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<b>06 : D(6210'), C(7854'), 24 : J(6227'), K(7864') - ATC</b>
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06 : HP06(03), 24 : HP06(03) Follow Me Car <b>Normally Remain Parking Brake SET!!</b> APU off Procedure (GND Air Cond' & GPU)
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# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

<b><u>ZYTX(SHE) 198ft</u></b>	<b><u>RKSI(ICN) 23ft</u></b>
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China Southern Dispatch	<b>PA</b>
131.5	KE ICN 131.5
DCL 가능, 5분전 READ BACK! (Voice 10분전)	

**SHE : SID (NADP 1) A2, A8 Intersec T/O by ATC**

06	TOSID 61,62D	056	056	ATC/DCL	056
24	TOSID 71,72D	236	236	ATIS/DCL	236
SEY 114.1	06 110.5			24 110.3	
HUD	06(170')		10499'		24(198')

**Follow FollowMe Car Until HPxx**  
**Be Careful “Hold short CAT I Hold line”**  
**Maintain Present TRK/HDG Join A588(CRS 217)**  
**Offset R3 → Active Fix DCT and EXE again!!**

**CTC APP without TWR Instruction**

APP 119.825 – 125.55

DLC 134.325 – 135.65

DLC 132.95

ICN 132.8 – APP 119.75

**China**

**ICN : STAR**

ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

**33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')**  
**15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')**  
**34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')**  
**16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')**

**8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO**

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>ZSPD(PVG) 13ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	China Eastern 130.5
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<b>ICN : SID (33/34 NADP 1, 15/16 NADP 2)</b>
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<b>33L/R</b>	<b>BOPTA xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	BOPTA xY	333	333	ATC	333
<b>15L/R</b>	<b>BOPTA xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BOPTA xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 126.17 – 120.72 – 124.52(125.72)</u>	<b>China</b>
<u>SHA 120.95</u>	
<u>SHA APP 125.62(119.975) – 125.4</u>	

<b>PVG : STAR (North of 'PVGNB', R-276 Prohibited)</b>
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<b>34R(L)/35L(R)</b>	<b>DUM 91A/92A</b>	<b>MP2</b>	<b>ILS Z xx</b>
<b>16L(R)/17R(L)</b>	<b>DUM 81A/82A</b>	<b>MP1</b>	<b>ILS Z xx</b>
<b>HUD</b>	<b>34R/L(11'/12')</b>	<b>12467'</b>	<b>16L/R(12'/11')</b>
	<b>35R(10')</b>	<b>13123'</b>	<b>17L(10')</b>
	<b>35L(12')</b>	<b>11155'</b>	<b>17R(12')</b>

<b>34R : G4(5603'), G5(6896'), 16L : G3(5577'), G2(6909')</b>
<b>35L : D4(5636'), D5(6932'), 17R : D3(5626'), D2(6942')</b>

Normally DUMET 6000m
Follow Me Car Insight – TAXI L/T off,APU off Procedure



# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

ZSPD(PVG) 13ft

RKSI(ICN) 23ft

China Eastern 130.5

PA

KE ICN 131.5

DCL 20분전, No READ BACK!

PVG : SID (NADP 1)

(ATC Hold Expected Fuel Add!!)

34L/R 35R/L	LAM 92D (LAM 91D)	348	348	ATC (900m)	348
16R/L 17L/R	LAM 82D (LAM 81D)	168	168	ATC (900m)	168
PUD 116.9	34R 108.9	35L 108.1		34L 108.3	35R 111.9
	16L 111.5	17R 111.1		16R 108.7	17L 110.7
HUD	34R/L(11'/12') 35R(10') 35L(12')	12467' 13123' 11155'		16L/R(12'/11') 17L(10') 17R(12')	

APU Start, TUG Connect After Beacon L/T ON

Ready for Intersection T/O

SHA APP 125.4 (Without Instruction)

SHA APP 125.62(119.975)

SHA 120.95

ICN 125.725(124.52) – 120.72 – 126.17

APP – 119.75

China

ICN : STAR

ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

<b>RKSI(ICN) 23ft</b>	<b>ZYYJ(YNJ) 624ft</b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	None No D-ATIS
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	NOPIK xA	333	333	ATC	333
34L/R	NOPIK xY	333	333	ATC	333
15L/R	BINIL xC	153	153	5000	153
16L/R	BINIL xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
--	---

HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 132.8 – DLC 132.95 – 135.65</u>	<b>China</b>
<u>128.77 – SHE 119.3 – 118.9</u>	
<u>YNJ TWR 118.75</u>	

YNJ : RNP STAR (RW09 main for L/D)
CHK NAV DATA for Holding Area(Expect Hold Mil Train)

09	KAN/OMB 09A (KAN/OMB 04(02)A)	YJ504 (D267T)	ILS Z 09 (VOR 4도 off)
27	KAN/OMB 19(18)A (KAN/OMB 11(12)A)	YJ604 (D341N)	ILS Z 27 (VOR 4도 off)

HUD	09(621') 8530' 27(597') 3.3도
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FIX	DPRKK(N43 01.6/E129 52.0) R100, R200 RWY27 /12 (Do not overshoot 12DME ARC)
-----	--

09 : C(5330'),180 BACK(8530'), 27 : B(7400'),A (8350')
--

Expect Hold Due to MIL Train(ADD FUEL 30min)
PAX Window must closed Between APP and DEP.

Parking Brake Remain SET (Winter)
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# Meter/Feet Conversion Table

☐ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

TL  
TA

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

QFE Next Page

**China**

YNJ Altitude / Height Conversion Table	
<div>xxxx meters on STD 이후 적용</div> <div>xxxx meters on QFE xxxx -&gt; REQ QNH</div> <div>-&gt; QNH xxx SET후 Conversion Table 사용</div> <div>YNJ A/P Elevation : 623ft = 22.5hPa</div>	
Height based on QFE (instructed by ATC)	Altitude base on QNH (Set Altitude : QFE + Elev SET)
xxx m on QFE	xxx m plus Elevation Set
3000 m	10500 ft
2700 m	9500 ft
2400 m	8500 ft
2100 m	7500 ft
1800 m	6500 ft
1500 m	5600 ft
1200 m	4600 ft
1100 m	4200 ft
1000 m	3900 ft
850 m	3400 ft
800 m	3200 ft
750 m	3100 ft
550 m	2400 ft
515 m	2300 ft
500 m	2300 ft
425 m	2000 ft
355 m	1800 ft
200 m	1300 ft
100 m	1000 ft
0 m	623 ft

<b>ZYYJ(YNJ) <u>624ft</u></b>	<b>RKSI(ICN) 23ft</b>
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None TWR 118.75 By Voice	<b>PA</b>	KE ICN 131.5
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<b>YNJ : RNP SID (NADP 1) RW27 Main</b> <b>CTOT from GND Staff due to Mil Train (ADD Fuel)</b> <b>Consider Improve C/B &amp; NO Bleed T/O (in Summer)</b>
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27	KANVU 19D (11D)	271	271	ATC/6500ft (1800mQFE)	271
09	KANVU 09D (01D)	091	091	ATC/6500ft SPD 200kts	091
YNJ 113.1		09 108.7		27 109.3	

FIX	27 : YNJ 271/3.6, YNJ 073/10 (MAX 162kts) 09 : YNJ 091/4.5, YNJ 287/11 (MAX 162kts)				
HUD	27(597') 3.3도		8530'		09(621')

<b>Must Check MTOW</b> <b>RWY 27 180 Back(Clockwise)</b>
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	YNJ 118.75
	SHE 132.35 – 119.3
	DLC 128.77 – 135.65
	132.95 – ICN 132.8
	<b>China</b>

ICN : STAR
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ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, <b>HIRO</b>
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RKSI(ICN) 23ft			ZSHC(HGH) 22ft		
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm			PA	Hangzhou Reporting Office 130.65	
ICN : SID (33/34 NADP 1, 15/16 NADP 2)					
33L/R	BOPTA xA	333	333	ATC	333
34L/R	BOPTA xY	333	333	ATC	333
15L/R	BOPTA xC	153	153	5000	153
16L/R	BOPTA xH	153	153	5000	153
NCN 113.8		33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9		34L 109.95	34R 108.1	16L 110.35	16R 108.55
33L/R : NC05L/R, R242 YJU R271			34L/R : WNG333/4.6, R242 YJU R271		
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R (23')		13123'	16L (23')	
Parallel TWY 10KTS 이상(R17 MAX 15kts)					
DEP 125.15 – TGU 126.17 – 120.72 – 124.52(125.72)					
SHA 120.95 – 120.55 – SHA APP 125.62 – 119.7					
HGH APP 119.82 – 120.4 – 125.55				China	
HGH : STAR - STAR, APP, Missed APP Keep Track Caution Military Traffic (Missed APP ALT In ATIS)					
06/07	OKT, SUP 91A		HC410	ILS Z xx	
24/25	OKT, SUP 81A		HC305	ILS Z xx	
HUD	06(22')		11155'	24(22')	
	07(22')		11811'	25(22')	
FIX	APP SPD REST in APP Chart				
06 : C5(5613'), C6(6899'), 24 : C4(5613'), C3(6981') 07 : A5(6266'), A6(7565'), 25 : A4(6250'), A3(7555') TWR Permisson Report RWY Vacated					
TAXI RTE In Jeppesen Chart, Follow Me Car, APU off					

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**



ZSHC(HGH) 22ft

RKSI(ICN) 23ft

<div>Hangzhou Reporting Office</div> <div>130.65</div> <div>DCL(NO Readback)</div> <div>Voice 10min전</div>	<div>PA</div> <div>KE ICN 131.5</div>
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HGH: SID (NADP 1)

06/07	OKT, SUP 91D	069	069	3000 (900m)	069
24/25	SUP 81D	249	249	3000 (900m)	249
HGH 113.0	06 110.5	07 110.35	24 111.5	25 108.5	
FIX	24/25 : HGH 249/5.5, R020				
HUD	06(22')	11155'	24(22')		
	07(22')	11811'	25(22')		

APU Start, TUG Connect After Beacon L/T ON

Red/Blue PushBack, Verify RWY & Direction

After T/O, Report T/O RWY

HANGZHOU

113.0 HGH

HGH APP 120.4 – 119.82

SHA APP 119.975

SHA 120.55 – 120.95

ICN 125.725(124.52) – 120.72 – 126.17

China

ICN : STAR

ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

RKSI(ICN) 23ft

ZSWH(WEH)146ft

KE ICN 131.5  
DCL -10분 TOBT 5분 차이시  
CTC Comm

PA

None  
No D-ATIS

ICN : SID (33/34 NADP 1, 15/16 NADP 2)

33L/R	NOPIK xA	333	333	ATC	333
34L/R	NOPIK xY	333	333	ATC	333
15L/R	BINIL xC	153	153	5000	153
16L/R	BINIL xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242  
P518 R068, R278

34L/R : WNG333/4.6, R242  
P518 R068, R278

HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.725

WHE TWR 118.65 (130.0)

China

WEH (TL 69) : RNAV STAR (QFE but QNH Operation)  
Around AGAVO ATIS 126.25 get RWY, APP info

03	IKE xx F	WH106	RNP ILS Z 03
21	IKE xx F	WH206	RNP ILS Z 21
HUD	03(113')	8530'	21(146')

03 : B(6500'), C(5300'), 21 : D(7300') 90 Turn Vacate  
180 Back No Terminal Side Turn

RWY 21 Short Track Miles -> Req one Orbit WH113  
Watch MLDW Due to RWY 21 ShortCut  
Descend Published Report Published = CLR APP  
PAX Window must closed Between APP and DEP

# Meter/Feet Conversion Table

☐ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
3600 M	11800 FT
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
<b>2100 M</b>	<b>6900 FT</b>
<b>1500 M</b>	<b>4900 FT</b>

TL  
TA

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

QFE Next Page

**China**

WEH Altitude / Height Conversion Table		
<div>xxxx meters on STD 이후 적용</div> <div>xxxx meters on QFE xxxx -&gt; REQ QNH</div> <div>-&gt; QNH xxx SET후 Conversion Table 사용</div> <div>03 Elev : 113ft = 4.0hPa, 21 Elev : 146ft = 5.2hPa</div>		
Height based on QFE (instructed by ATC)	Altitude base on QNH (Set Altitude : QFE + Elev SET)	
xxx m on QFE	xxx m plus Elevation Set	
2400 m	8000 ft	
2100 m	7000 ft	
1800 m	6000 ft	
1500 m	5100 ft	
1200 m	4100 ft	
1100 m	3700 ft	
1000 m	3400 ft	
900 m	3100 ft	
800 m	2700 ft	
700 m	2400 ft	
600 m	2100 ft	
550 m	1900 ft	
500 m	1800 ft	
400 m	1400 ft	
350 m	1300 ft	
300 m	1100 ft	
280 m	1000 ft	
200 m	800 ft	
100 m	400 ft	
0 m	03 : 113 ft	21 : 146 ft

ZSWH(WEH)146ft	RKSI(ICN) 23ft
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None -5 Min, TWR 118.65 By Voice	<b>PA</b>	KE ICN 131.5
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WEH (TA 4930') : RNP SID (NADP 1)
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03	IKE xx X	026	026	ATC 4500m(14800')	026
21	IKE xx X	206	206	ATC 4500m(14800')	206
WHE 115.8	03 110.1		21 110.7		
HUD	03(113')	8530'		21(146')	

RWY03/21 Expect C – Taxi down on RWY – 180 Back Taxi to RWY21 via B -> Confirm 180 Back!!! 180 Back No Terminal Side Turn PAX Window must closed Between APP and DEP
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TWR 118.65

TAO 133.725

DLC 132.95

TGU 132.8

China

ICN : STAR
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ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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<b><u>RKSI(ICN) 23ft</u></b>	<b><u>ZLXY(XIY)1572ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> Airport Operation Center 132.0
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<b>ICN : SID (33/34 NADP 1, 15/16 NADP 2)</b>
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<b>33L/R</b>	<b>NOPIK xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	NOPIK xY	333	333	ATC	333
<b>15L/R</b>	<b>BINIL xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BINIL xH	153	153	5000	153

<b>NCN</b> 113.8	<b>33L</b> 109.3	<b>33R</b> 108.9	<b>15L</b> 111.9	<b>15R</b> 109.1
<b>WNG</b> 112.9	<b>34L</b> 109.95	<b>34R</b> 108.1	<b>16L</b> 110.35	<b>16R</b> 108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>DEP 125.15 – TGU 132.8 – DLC 132.95</u>
<u>TAO 133.725 – 128.15</u>
<u>PEK 125.6 – 120.35 – 133.65 – 134.15 – 126.7</u>
<u>XIY 125.3 – 120.95</u>
<u>XIY APP 119.05 – 120.2 – 125.1</u>

**China**

<b>XIY (TL 118) : RNAV STAR (Spd Restriction at REF Page)</b>
<b>Req ILS APP instead of Visual APP</b>

<b>05L/R</b>	<b>LOVRA xx W</b>	<b>XY906</b>	<b>RNAV ILS Z 05L/R</b>
<b>23R/L</b>	<b>LOVRA xx Y</b>	<b>XY801</b>	<b>RNAV ILS Z 23R/L</b>
<b>HUD</b>	<b>05L(1562')</b>	<b>9843'</b>	<b>23R(1569')</b>
	<b>05R(1556')</b>	<b>12467'</b>	<b>23L(1538')</b>

<b>05L : A3(6778'), A2(9032'), 23R : A6(5544'), A7(6512')</b>
<b>05R : D4(5613'), D3(7322'), 23L : D5(5646'), D6(7408')</b>

Follow Me Car, CTC Apron before Gate in “Closing to xx TWY, apply to change to xx Freq” Taxi RTE in Jeppesen Chart.
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# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

<u>ZLXY(XIY)</u> <u>1572ft</u>	<u>RKSI(ICN)</u> 23ft
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Airport Operation Center 132.0 DCL -20 Min, Read Back	<b>PA</b> KE ICN 131.5
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XIY (TA 9850') : RNAV SID (NADP 1)
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05L /R	WJC xx W/Z	052	052	ATC 1500m(4900')	052
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23R /L	WJC xx X/Y	232	232	ATC 1500m(4900')	232
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LCZ 109.0	05L 109.9	23R 110.3	05R 109.3	23L 111.1
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FIX	23R/L : LCZ /18
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HUD	05L(1562')	9843'	23R(1569')
	05R(1556')	12467'	23L(1538')

NOTAM TO Perf, Req Full length to Delivery
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	<u>DEP 119.9- XIY 120.95 - 124.1</u> <u>PEK 126.7 - 134.15 - 128.3 - 120.35</u> <u>DLC 123.2 - 132.95</u> <u>TAE 132.8</u>	<b>China</b>
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ICN : STAR
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ILS 33/34	REBIT xA	PAMBI	REBIT 170
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ILS 15/16	REBIT xH	MUNAN	REBIT 170
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')

FIX	RWY /8, /5 , P518 R068, R278
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33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
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34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')
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8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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RKSI(ICN) 23ft

ZGHA(CSX)220ft

KE ICN 131.5

DCL -10분 TOBT 5분 차이시

CTC Comm

PA

Changsha Reporting

Office 131.15

ICN : SID (33/34 NADP 1, 15/16 NADP 2)

33L/R	NOPIK xA	333	333	ATC	333
34L/R	NOPIK xY	333	333	ATC	333
15L/R	BINIL xC	153	153	5000	153
16L/R	BINIL xH	153	153	5000	153

NCN	33L	33R	15L	15R
113.8	109.3	108.9	111.9	109.1
WNG	34L	34R	16L	16R
112.9	109.95	108.1	110.35	108.55

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.725 – 128.15 – PEK 127.35 – 127.5

PEK 132.2 – SHA 118.9 – WUH 119.7 – 134.35

CSX 132.55 – 125.6 – 119.65

HUH TWR 118.55(118.175)

China

CSX (TL 118) : RNAV STAR

After OLMIB 6600M, STAR or RDR Vec before GUSIV

18L/R	PEX xx W	HA366	RNAV ILS Z 18L/R
36R/L	PEX xx X	HA383	RNAV ILS Z 36R/L
HUD	18L(212')	12467'	36R(188')
	18R(219')	10499'	36L(198')

18L : C9(5629'),C7(6948'),36R : C11(5675'),C13(6961')

18R : B4(5167'), B3(6427'), 36L : B5(5206'), B6(6443')

Position Report to GND first CTC

TWY T9 less 29.2m , Follow Me Car

APU Procedure but APU available cabin 26도 이하시

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

<b>ZGHA(CSX)220ft</b>	<b>RKSI(ICN) 23ft</b>
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Changsha Reporting Office 132.0 DCL -20m, Read Back	<div>PA</div> KE ICN 131.15
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XIY (TA 9850') : RNAV SID (NADP 1)
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18R/L	OPO xx W	181	181	ATC(900m)	181
36L/R	OPO xx X	001	001	ATC(900m)	001
18R 110.3	36L 109.9	18L 109.3	36R 111.1		

FIX	36L/R : LYH217/8.5, R190 (LYH 113.55 for EO)				
HUD	18R(219')	10499'	36L(198')		
	18L(212')	12467'	36R(188')		

CTC DEP 119.65 without TWR Instruction
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DEP 119.65– CSX 132.55

WUH 134.35 – 120.975 – 135.65

125.775

SHA 132.4 – 125.325 – 120.55

120.95

**China**

ICN : STAR
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ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641') 34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')
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8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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<b>RKSI(ICN) 23ft</b>	<b>VHHH(HKG) 28ft</b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<div>PA</div> HAS FLT Dispatch 131.6
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ICN : SID (33/34 NADP 1, 15/16 NADP 2)
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33L/R	BOPTA xA	333	333	ATC	333
34L/R	BOPTA xY	333	333	ATC	333
15L/R	BOPTA xC	153	153	5000	153
16L/R	BOPTA xH	153	153	5000	153

NCN 113.8	33L 109.3	33R 108.9	15L 111.9	15R 109.1
WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R (23')	13123'	16L (23')

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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ICN 124.52(125.72) – FUK 127.5 – TPE 125.5 – 126.7 129.1 – HKG RDR 121.3 – 126.5 DEP 122.0 – Final 119.1 – 119.35	China
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HKG : Terminal Tx RTE + STAR Chart (TL110) ENPET FL260, RWY25R After TOPUN - APP Mode
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07L(R)	ABBEY xxA SIERA xxA/C	LIMES	ILS 07L(R)
25R(L)	ABBEY xxB SIERA xxB/D	TD	RNAV tx ILS 25R ILS 25L

HUD	07L(23')	11896' DIS TH	25R (23')
	07R(27')	11942' DIS TH	12467' 25L(27')

07L : C7(5882'), C8(7194'), 25R : C6(5882'), C5(7211')
07R : J7(6916'), J8(7998'), 25L : J5(6916'), J4(8192')

Tx RTE - STAR - APP Chart Many SPD Restrictions xxR Dash Line for B737, APU BAN off Procedure
--

# VHHH(HKG) 28ft | RKSI(ICN) 23ft

HAS FLT Disp 131.6

DCL 20분전

5분 차이시 CTC Comm

## PA

KE ICN 131.5

HKG : SID + Terminal Tx RTE Chart TA 9000

NADP2 : 1000 SPD INTV (Vzf+10~20kts), 1500 CLB TH  
(NADP 1/2 for 07L/R)

07L(R)	OCEAN xxE(A) (RASSE xxZ/X)	074	074	5000	074
25R(L)	OCEAN xxB/F	254	254	5000	254
SMT 114.8	07L 111.5	25R 108.75	07R 110.9	25L 110.9	
HUD	07R/L(27'/23')		12467'	25L/R(27'/23')	
E. O	07L(R) : LKC R105(SMT /3), LKC105/9.5 R185 25R(L) : ITFR(ITFL)254/10, R156				

SID – Tx RTE Chart Many SPD Restriction



HKG DEP 123.8 – RDR 118.925

TPE 129.1 – 126.7 – 123.6 – 125.5

FUK 127.5 – ICN 125.725(124.52)

ICN – 120.72 – 126.17

APP – 119.75

## China

ICN : STAR

ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')  
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')  
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, **HIRO**

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>ZBTJ(TSN) 6ft</u></b>
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> Air China Tianjin 132.0

**ICN : SID (33/34 NADP 1, 15/16 NADP 2)**

<b>33L/R</b>	<b>NOPIK xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	NOPIK xY	333	333	ATC	333
<b>15L/R</b>	<b>BINIL xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BINIL xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 P518 R068, R278	34L/R : WNG333/4.6, R242 P518 R068, R278
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)

<u>DEP 125.15 – TGU 132.8 – DLC 132.95</u>	<b><u>China</u></b>
<u>TAO 133.72 – 128.15 – PEK 125.6</u>	
<u>TSN APP 119.27 – <del>TWR 118.425(130.0)</del></u>	

**TSN : STAR (Missed App 1970' Initially)**

<b>16L/16R</b>	<b>DUMAP xYA/ZA</b>	<b>TJ960</b> <b>TJ919</b>	<b>ILS 16L/16R</b>
<b>34R/34L</b>	<b>DUMAP xZA</b>	<b>TJ840</b> <b>TJ820</b>	<b>ILS 34R/34L</b>
<b>HUD</b>	<b>16L(4')</b>	<b>10499'</b>	<b>34R(5')</b>
	<b>DIS TH 16R(5')</b>	<b>10499'/11811'</b>	<b>34L(6')</b>

FIX : RWxx /8

**16L :W3(6269'),W2(9809'), 34R :W7(6443'),W8(7591')**  
**16R :B4(5177'),B3(7191'), 34L :B5(5183'),B6(7201')**

Follow me car on D, TAXI SPD Max 27kts

# Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

Westbound (180° ~ 359° )	
<b>13100 M</b>	<b>43000 FT</b>
12200 M	40100 FT
<b>11600 M</b>	<b>38100 FT</b>
11000 M	36100 FT
<b>10400 M</b>	<b>34100 FT</b>
9800 M	32100 FT
<b>9200 M</b>	<b>30100 FT</b>
8400 M	27600 FT
<b>7800 M</b>	<b>25600 FT</b>
7200 M	23600 FT
<b>6600 M</b>	<b>21700 FT</b>
6000 M	19700 FT
<b>5400 M</b>	<b>17700 FT</b>
4800 M	15700 FT
<b>4200 M</b>	<b>13800 FT</b>
<b>3600 M</b>	<b>11800 FT</b>
<b>3000 M</b>	<b>9800 FT</b>
2400 M	7900 FT
<b>1800 M</b>	<b>5900 FT</b>
1200 M	3900 FT

TL  
TA

Eastbound (360° ~ 179° )	
13700 M	44900 FT
<b>12500 M</b>	<b>41100 FT</b>
11900 M	39100 FT
<b>11300 M</b>	<b>37100 FT</b>
10700 M	35100 FT
<b>10100 M</b>	<b>33100 FT</b>
9500 M	31100 FT
<b>8900 M</b>	<b>29100 FT</b>
8100 M	26600 FT
<b>7500 M</b>	<b>24600 FT</b>
6900 M	22600 FT
<b>6300 M</b>	<b>20700 FT</b>
5700 M	18700 FT
<b>5100 M</b>	<b>16700 FT</b>
4500 M	14800 FT
<b>3900 M</b>	<b>12800 FT</b>
3300 M	10800 FT
<b>2700 M</b>	<b>8900 FT</b>
2100 M	6900 FT
<b>1500 M</b>	<b>4900 FT</b>

■ ALT / HEIGHT Conversion

**550M**

**1800ft**

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
<b>900 M</b>	<b>3000 FT</b>	<b>450M</b>	<b>1500FT</b>
800 M	2600 FT	400 M	1300 FT
<b>700 M</b>	<b>2300 FT</b>	<b>350 M</b>	<b>1100 FT</b>
600 M	2000 FT	300 M	1000 FT

**China**

<b>ZBTJ(TSN) 6ft</b>	<b>RKSI(ICN) 23ft</b>
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Air China Tianjin 132.0 DCL 30분전, Voice 10분전 (Read Back!)	<div>PA</div> KE ICN 131.5
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<b>TSN : SID (NADP 1) Caution 600m Level Off – SPD Inc</b>
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16R /16L	MUGLO xZD	161	161	600m ATC	161
34L /34R	MUGLO xZD xYD	341	341	600m ATC	341
TAJ 112.1	16L 109.7	34R 111.5		16R 110.9	34L 110.5
HUD	16R(5') 16L(4')		11811' 10499		34L(6') 34R(5')

16R : Do not pass A11 Confirm Parking Brake Release before Push back
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[DEP 119.27](#)

[PEK 125.6](#)

[DLC 123.2 – 132.95](#)

[ICN 132.8 – APP 119.75](#)

China

<b>ICN : STAR</b>
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ILS 33/34	REBIT xA	PAMBI	REBIT 170
ILS 15/16	REBIT xH	MUNAN	REBIT 170
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , P518 R068, R278		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO
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<b><u>RKSI(ICN) 23ft</u></b>	<b><u>VVCR(CXR) 46ft</u></b>
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> None No D-ATIS

**ICN : SID (33/34 NADP 1, 15/16 NADP 2)**

<b>33L/R</b>	<b>BOPTA xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	BOPTA xY	333	333	ATC	333
<b>15L/R</b>	<b>BOPTA xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BOPTA xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5 – TPE 125.5 – 127.9 – 129.1 – MNL 119.3  
MNL RDO 8942(5655) – HCM 120.7  
132.35 – 134.05 – CXR APP 127.9

**SE Asia**

**CXR : STAR (Wx, Using RWY from HoChiMinh CTL)**  
**RWY20 Max Tail Wind 15kts, chk condition**  
**CAAV STAR, APP not Authorized**

<b>20L/R</b>	<b>COTUN, BANKE, HUNTA, NHATA xx</b>	<b>CR xxx</b>	<b>ILS Y 20L RNP 20R</b>
<b>02R/L</b>			<b>ILS X/Z 02L/R</b>
<b>HUD</b>	<b>02R(15') 3.5도</b>	<b>10000'</b>	<b>20L(34')</b>
	<b>02L(20') 3.5도</b>	<b>10010'</b>	<b>20R(46')</b>

**20L : G3(6735'), G1(9603'), 02R : G5(6528'), G7(9662')**  
**20R : W4(5971'), W3(7680'),02L : W5(5606'), W6(7345')**

FollowMe Car Service, **Sensitie VDGS Caution!!**

## RKSI(ICN) 23ft

None

## TWR 118.2 By Voice

**PA**

KE ICN 131.5

**CNX : RNP SID (NADP 1)**

## Follow Restrictions due to Military Traffic

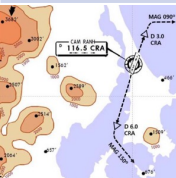
02L/R	NIHOA xxA	020	020	ATC/FL100	020
20R/L	NIHOA xxB	200	200	ATC/FL100	200
CRA 116.5	02R 111.9	02L 110.7	20L 110.3		

02 : CRA 020/2, R090

20 : CRA 200/6, R150

HUD	02L(20') 3.5도	10010'	20R(46')
	02R(15') 3.5도	10000'	20L(34')

**TWY Y5 only below wingspan 36m/118ft**



DEP 127.9 – HCM 134.05

DAD 123.3 – SNY 122.6(-5min)

HKG 132.15 – 127.1 – TPE 129.1

125.5 – FUK 127.5 (SENKA /20)

## SE Asia

## ICN : STAR

ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')  
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')  
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts 이상, **HIRO**

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>VVTS(SGN) 33ft</u></b>
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> None No D-ATIS

**ICN : SID (33/34 NADP 1, 15/16 NADP 2)**

<b>33L/R</b>	<b>BOPTA xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	BOPTA xY	333	333	ATC	333
<b>15L/R</b>	<b>BOPTA xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BOPTA xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5(SENKA /20) – TPE 125.5 – 127.9 – 129.1  
MNL 119.3 – MNL RDO 8942(5655) – HCM 120.7  
132.35 – SGN APP 125.5

**SE Asia**

**SGN : STAR (CPDLC : VVHM) TL 190**

<b>25R(L)</b>	<b>DALAP xxH</b>	<b>SOKAN</b>	<b>ILS W 25R/L</b>
<b>07R(L)</b>	<b>DALAP xxG</b>	<b>SAMDU</b>	<b>ILS W 07R, VOR 07L</b>
<b>HUD</b>	<b>25R(33')</b>	<b>10007'</b>	<b>07L(20')</b>
	<b>25L(32')</b>	<b>12559'</b>	<b>10036' (DISP TH) 07R(24')</b>

**25R:P4(6158'), P5(6991'),07R:S6(4412'),S5(6574',110도)**  
 B737 P4, P5, S6, S5 Unable Tell ATC  
**25L : S7(6824'), S8(9671'), 07L : P3(6266'), P2(8907')**

FollowMe Car Service in Ramp (Caution STOPBAR L/T)  
**Sensitie VDGS!!! (0.5m이내, 2m STOP시 바로 정지)**

VVTS(SGN) 33ft		RKSI(ICN) 23ft			
None -15min, DEL 121.8 By Voice		<div>PA</div>		KE ICN 131.5	
SGN : RNP SID (NADP 1) TA 18000' Request RWY due to Performance					
25L(R)	KADUM xxD	250	250	11000	250
07L(R)	KADUM xxE/A	070	070	ATC	070
TSH 116.8	25R 110.5	07R 111.7		25L 108.3	
HUD	25R(33')		10007'	07L(20')	
	25L(32')		12559'	07R(24')	
Caution TSAT +/- 5min ATC CLR, RWY CHG After TAXI Caution STOPBAR L/T, Follow Car Service					
APP 125.5 – HCM 120.1 – 134.05 HNI 123.3 – SNY 122.6(-5min) HKG 132.15 – 127.1 – TPE 129.1 – 127.9 126.7 – 123.6 – FUK 127.5(SENKA /20)					
SE Asia					
ICN : STAR					
ILS 33/34	OLMEN xE	ENPIL		OLMEN 180	
ILS 15/16	OLMEN xH	MUNAN		OLMEN 180	
HUD	33L/R 34L(23')		12303'	15L/R 16R(23')	
	34R(23')		13123'	16L(23')	
FIX	RWY /8, /5 , YJU R271				
33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')					
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')					
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO					

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>VDPP(PNH) 40ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	PNH DIS 129.0
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<b>ICN : SID (33/34 NADP 1, 15/16 NADP 2)</b>
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<b>33L/R</b>	<b>BOPTA xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	BOPTA xY	333	333	ATC	333
<b>15L/R</b>	<b>BOPTA xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BOPTA xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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<u>FUK 127.5(SENKA /20) – TPE 125.5 – 127.9 – 129.1</u>	<b>SE Asia</b>
<u>MNL 119.3 – MNL RDO 8942(5655)</u>	
<u>HCM 120.7(MIGUG) – PNH 127.5</u>	
<u>APP 123.8</u>	

<b>PNH : RNAV STAR (TL ATC, ATIS)</b>
<b>Caution CLR Limit GONLY, Do not Confuse ANAT, ANAB</b>

<b>05</b>	<b>NANXY xxB</b>	<b>BOSET</b>	<b>RNP 05</b>
<b>23</b>	<b>DETMA xxA</b>	<b>KOSDA Del Holding Data</b>	<b>ILS 23</b>
<b>HUD</b>	<b>05(40')</b>	<b>9843'</b>	<b>9350' (DISP TH) 23(37')</b>

<b>05 : E(6240'), H(7148'), 23 : C(7004'), 180 Back</b>
<b>No Centerline L/T, No Vacate Lead L/T(Only Edge L/T)</b>

<b>APU Off after 5min after parking</b>
<b>Stand xx Yellow Lead-in Marking(xx A,B Blue Line!!)</b>

VDPP(PNH) 40ft

RKSI(ICN) 23ft

PNH DIS 129.0

PA

KE ICN 131.5

READY! TWR 118.0 By Voice

PNH : RNAV SID (NADP 1) TA 10000'

RWY 23 SEYHA Watch Over Bank

05	NANXY xx (SEYHA xx)	046	046	ATC (5000)	046
23		226	226	ATC	226
PNH 114.3		23 109.7			
HUD	05(40') 9843' 23(37')				
E.O	PNH 226/2.5, R160				

APU Start 10min Before DEP

Line up 180 Back follow Yellow Guide Line

PHNOM PENH  
D 114.3 PNH

APP 123.8 – PNH 127.5

HCM 134.05 – 120.7

MNL RDO 8942/5655(ARESI)

MNL 119.3(AKOTA)

TPE 127.9 – 125.5

FUK 127.5(SENKA /20)

SE Asia

ICN : STAR

ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>RPLL(MNL) 75ft</u></b>
KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b> PAGSS Oper 131.0 No D-ATIS

**ICN : SID (33/34 NADP 1, 15/16 NADP 2)**

<b>33L/R</b>	<b>BOPTA xA</b>	<b>333</b>	<b>333</b>	<b>ATC</b>	<b>333</b>
<b>34L/R</b>	BOPTA xY	333	333	ATC	333
<b>15L/R</b>	<b>BOPTA xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	BOPTA xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 133.6 – 127.5 – 132.3 – 123.9(BISIG ETA)  
MNL RDO 8903(13300)  
MNL 128.7(BEDIP) – APP 121.1

**SE Asia**

**MNL : RNP STAR with RNP APP (CPDLC : RPHI) TL 130**  
**3 STAR Difference Track Mile & IAF**

<b>06</b>	<b>POLIO, NABAL</b> <b>xxR/P</b>	<b>DAGAT</b> <b>(GONDO)</b>	<b>RNP 06</b> <b>ILS 06</b>
<b>24</b>	<b>DCT MIA RDR Vec</b> <b>(TMA 250, 20NM 210)</b>	<b>MEDAM</b> <b>(MUTAN)</b>	<b>RNP 24</b> <b>ILS 24</b>
<b>HUD</b>	<b>06 (16')</b>	<b>11188'</b>	<b>24 (75')</b>

**06 : R2(6223'), R1(8221'), 24 : R4(6095'), R5(7746')**  
**Unable advise ATC, Do not confuse R2, E2, RWY31**

**CTC Ramp before Entering apron, Report Chockin Time**  
**Caution HotSpot RWY31**

RPLL(MNL) 75ft

RKSI(ICN) 23ft

PAGSS Oper 131.0 -5min, CLR 125.1 By Voice Aircraft Type, Proposing ALT	<b>PA</b>	KE ICN 131.5
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MNL : RDR Vector to CAB (NADP 1) TA 11000'

Main RWY H/D Climb 7000ft, CLR for T/O

06	CAB xx R/A (Cabanatuan)	061	061	12000 ATC	061
24	CAB xx P/B (Cabanatuan)	241	241	9000 ATC	241
MIA 114.4		06 109.1		24 109.9	
E.O	06 : MIA /2, R250				
HUD	06(16')	11188'	24(75')		

Req ENG Startup to GND -> Req Pushback to Ramp



DEP 121.1(124.4)

MNL 120.5 – 119.3(LEBIX ETA)

FUK 123.9 – 127.5 – 133.6

ICN 124.52

SE Asia

ICN : STAR			
ILS 33/34	OLMEN xE	ENPIL	OLMEN 180
ILS 15/16	OLMEN xH	MUNAN	OLMEN 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513')

15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')

16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO





RCTP(TPE)108ft		RKSI(ICN) 23ft			
Dynasty Operation 131.3 DCL, Voice -5min		<div>PA</div> KE ICN 131.5			
TPE : RNAV SID (NADP 1) TA 11000 Be Ready Intersection T/O, A030 -> 3000ft					
05R/L	PIANO xxA/C	054	054	ATC	054
23L/R	PIANO xxD/B	234	234	ATC	234
05L 111.1	23R 109.3	05R 110.7		23L 111.9	
HUD	05L(74')	12008'		23R(63')	
	05R(107')	12467'		23L(96')	
“DCT PIANO then L3 RNAV Transition”					
<div>DEP 128.5</div> <div>TPE 125.5</div> <div>FUK 127.5 (SENKA /20)</div>					
SE Asia					
ICN : STAR					
ILS 33/34	OLMEN xE	ENPIL		OLMEN 180	
ILS 15/16	OLMEN xH	MUNAN		OLMEN 180	
HUD	33L/R 34L(23')	12303'		15L/R 16R(23')	
	34R(23')	13123'		16L(23')	
FIX	RWY /8, /5 , YJU R271				
33R : C4(7529'), C5(8513'), 33L : B4(7563'), B5(8513') 15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')					
34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507') 16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')					
8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO					

<b><u>RKSI(ICN) 23ft</u></b>	<b><u>PGUM(GUM) 305ft</u></b>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	<b>PA</b>	Menzies Operations 129.4 No DATIS
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<b>ICN : SID (33/34 NADP 1, 15/16 NADP 2)</b>
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<b>33L/R</b>	<b>OSPOT xE/A</b>	<b>333</b>	<b>333</b>	<b>5500/ ATC</b>	<b>333</b>
<b>34L/R</b>	OSPOT xY	333	333	ATC	333
<b>15L/R</b>	<b>OSPOT xC</b>	<b>153</b>	<b>153</b>	<b>5000</b>	<b>153</b>
<b>16L/R</b>	OSPOT xH	153	153	5000	153

<b>NCN</b> <b>113.8</b>	<b>33L</b> <b>109.3</b>	<b>33R</b> <b>108.9</b>	<b>15L</b> <b>111.9</b>	<b>15R</b> <b>109.1</b>
<b>WNG</b> <b>112.9</b>	<b>34L</b> <b>109.95</b>	<b>34R</b> <b>108.1</b>	<b>16L</b> <b>110.35</b>	<b>16R</b> <b>108.55</b>

33L/R : NC05L/R, R242 YJU R271	34L/R : WNG333/4.6, R242 YJU R271
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<b>HUD</b>	<b>33L/R 34L(23')</b>	<b>12303'</b>	<b>15L/R 16R(23')</b>
	<b>34R (23')</b>	<b>13123'</b>	<b>16L (23')</b>

Parallel TWY 10KTS 이상(R17 MAX 15kts)
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FUK 133.15 – 135.3 – 132.3

TKO RDO (BIXAK) 17904/8870

SFO RDO (PAKDO) 4666/8903

GUM (NATSS) 118.7

**SE Asia**

<b>GUM : no STAR (UTC + 10, TL 180)</b>
<b>CPDLC BIXAK to NATSS : RJJJ to KZAK</b>
<b>CTC GUM CERAP 118.7 (SQ2100) Before 250NM</b>

<b>06L/R</b>	<b>UNZ/-15,OBALE(MEMKE)</b>	<b>ILS 6L/R (Upslope)</b>
<b>24L/R</b>	<b>UNZ/-15,CIBOL(WABOX)</b>	<b>RNAV Y 24L/R (Downslope)</b>

<b>HUD</b>	<b>6L(256') 11014' DIS TH</b> <b>6R(258') 10014'</b>	<b>24R(305') 12014'</b> <b>24L(293') 8710' DIS TH</b>
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<b>FIX</b>	<b>UNZ /250 (UNZ VOR out of 3.3NM A/P)</b>
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<b>06L : E(6473'), F(6975'), 24R : D(6282'), C(8264')</b>
<b>06R : E(6502'), G(7808') , 24L : B(8254')</b>

<b>Prepare GS OUT, Vacate RWY CTC Ramp CTL</b>
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# EDTO Procedure **APU Remain ON**

## PREFLIGHT

Apply Alternate Airport IFR Wx Minima for Planning  
(Ops Pecs C055)

RVSM CHK : **CAPT/FO 50ft, PILOT/FE 75ft**  
FUEL CROSS FEED V/V CHK : **On -> Off, V/V**

**L/T CHK**

NAV DATA Input : **EEP, ETP1, ETP2, EXP**

HF SELCAL CHK : Jeppesen - ENT DATA Pacific

**SEOUL RADIO : 8903(3004,6532,13300,13303,17904)**

## AFTER START

APU Remain **ON** Until Passing EXP

## AFTER LEVEL OFF (CRZ CHK)

RVSM CHK : **CAPT/FO 200ft**

## BEFORE EEP (Entry Point)

60min 기준 : B737-900 398NM, Others 408NM

**APU Fail Before EEP : Reroute, Turnback, Divert**

FIX 1 : **EEP**, FIX 2 : **ETP1**

FMS ALT A/P SET : **ALTN Page**

EDTO C/L : **Fuel, A/C, MSA, ALT Wx & NOTAM**

**Review Contingency Procedure**

## EDTO Segment

**APU Fail After EEP : Continue**

**Apply Actual Wx for Actual Divert**

## ETP (Equal Time Point)

FIX, ALTN Page SET

EDTO C/L : **Fuel, A/C, MSA, ALT Wx & NOTAM**

## EXP (Exit Point)

APU - **OFF**

## 1 HR Before TOD

FUEL CROSS FEED V/V CHK : **On -> Off, V/V**

**L/T CHK**

<u>PGUM(GUM) 305ft</u>	<u>RKSI(ICN) 23ft</u>
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Menzies Operations 129.4 By Voice, No DATIS	<b>PA</b>	KE ICN 131.5
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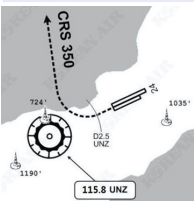
PUS : no SID (RWY 06 LNAV not Arming on GND)

06L/R	RWY H/D	063	063	ATC (9000)	063
24L/R	RWY H/D	243	243	ATC (9000)	243
UNZ 115.8			06L 110.3	06R 110.9	

24 : UNZ /2.5 (UNZ VOR out of 3.3NM A/P)

HUD	06L(256')	12014'	24R(305')
	06R(258')	10014'	24L(293')

RWY, Ramp Area have lots of Slope, Be Caution  
06 Upslope, 24 Downslope



DEP 118.7

SFO RDO (NATSS) 8870/6532

TKO RDO (PAKDO) 3455/8903

FUK 132.3 (HIDEK)

KOB 133.85 – 118.9

TAE 125.37

SE Asia

ICN : STAR

ILS 33/34	GUKDO xE	ENPIL	GUKDO 180
ILS 15/16	GUKDO xH	MUNAN	GUKDO 180
HUD	33L/R 34L(23')	12303'	15L/R 16R(23')
	34R(23')	13123'	16L(23')
FIX	RWY /8, /5 , YJU R271		

33R : C4(7529'), C5(8513'), 33L : B4(7463'), B5(8513')  
15L : C2(7522'), C1(8536'), 15R : B3(7454'), B2(8641')

34L : P7(5600'), P8(6578'), 34R : N4(6876'), N5(8507')  
16R : P6(5597'), P5(6574'), 16L : N3(7043'), N2(8444')

8NM 180kts, 5NM 160kts, Parr TAXI 10kts이상, HIRO

RKPK(PUS) 13ft

RCTP(TPE)108ft

KE Gimhae 129.2 DCL -5분	PA	Dynasty Operation 131.3
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x TOPAX tx	306	280	ATC	279
18	BULIM x ENGOT tx	182	182	5000	182
KMH 113.8		PSN 114.0	36L 108.5	36R 109.5	

36 : KMH R091, R271, R185

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
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RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS



DEP 125.5 – TGU 128.17 – 124.52(125.72)

FUK 127.5 (SENKA /20)



SE Asia

TPE : STAR TL130 COPRA FL200 (FL250-130 : 280kts, FL130-10000ft : Max 280kts, APP Chart Text)

05L/R	BAKER xx A	JAMMY	ILS 05L/R
23R/L	BAKER xx B	AUGUR	ILS 23R/L
HUD	05L(74')	12008'	23R(63')
	05R(107') DIS 12139'	23L(96') DIS 11319'	

05L : N7(5787'), N6(6738'), 23R : N6(4468'), N4(6656')  
05R : S6(5419'), S7(7244'), 23L : S5(5442'), S4(7470')

No VOR at TPE, A-VDGS see above

RCTP(TPE)108ft

RKPK(PUS) 13ft

Dynasty Operation 131.3 DCL, Voice -5min	<b>PA</b>	KE Gimhae 129.2
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TPE : RNAV SID (NADP 1) TA 11000

Be Ready Intersection T/O, A030 -> 3000ft

05R/L	PIANO xxA/C	054	054	ATC	054
23L/R	PIANO xxD/B	234	234	ATC	234
05L 111.1	23R 109.3	05R 110.7	23L 111.9		
HUD	05L(74')	12008'	23R(63')		
	05R(107')	12467'	23L(96')		

"DCT PIANO then L3 RNAV Transition"

DEP 128.5

TPE 125.5

FUK 127.5 (SENKA /20)

ICN 125.725(124.52) – 128.17

APP – 125.5

SE Asia

PUS : STAR (Tail Wind 36R 136000lbs F40)

ILS 36	KEVOX x	ANROD	9DME LG, 8DME FLAP
VOR 18	GAYHA x	ANROD	<u>18 Circling Click!!</u>
HUD	36L(13') 10499'	36R(8') 8999'	18R(13') 8530'
			18L(13') 8999'
FIX	36 : IKMA/IKHE /9, /8	18 : KMH R283, R280	

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')  
18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')

Vacate C3,C4 by ATC only. Max Taxi SPD 20KTS

C2 HOLD SHORT 가까움(Vacate TaxiSPD)

<u>RKPK(PUS) 13ft</u>	<u>VTBS(BKK) 4ft</u>
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KE Gimhae 129.2 DCL -5분	<b>PA</b>	KE Bangkok 131.25
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)

36	SOORO x TOPAX tx	306	280	ATC	279
18	BULIM x ENGOT tx	182	182	5000	182

KMH 113.8	PSN 114.0	36L 108.5	36R 109.5
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36 : KMH R091, R271, R185

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
-----	----------------------------------	----------------------------------

RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS



DEP 125.5 – TGU 128.17 – 124.52(125.72)

FUK 127.5 (SENKA /20)

TPE 125.5 – 129.1 – HKG 132.15 – 127.1

SNY 122.6 – HNI 123.3 – VTN 128.3

BKK 132.1 – APP 119.1

**SE Asia**

BKK : STAR TL130 UTC+7

19L/R	EASTE xxC RUKSA tx	No tx Vector	ILS Z 19L/R
01L/R	EASTE xxD RUKSA tx	No tx Vector	ILS Z 01L/R
HUD	19L(4')	13123' No Groov	01R(4')
	19R(4')	12139'	01L(4')

19L : B8(5567'), B10(6965'), 01R : B7(5964'), B5(7962')  
19R : E9(5052'), E13(7139'), 01L : E12(4872'), E7(6958')

HIRO, Standard Taxi Route, APU Off



VTBS(BKK) 4ft		RKPK(PUS) 13ft			
KE Bangkok 131.25 DCL -20min, Voice 133.8		PA KE Gimhae 129.2			
BKK : RNAV SID (NADP 1) TA 11000 A-CDM REQ Pushback +-5min of TSAT					
19R/L	UPKUP xxG/J	195	195	6000	195
01R/L	UPKUP xxK/H	015	015	6000	015
SVB 111.4	19L 110.5	01L 109.1		19R 109.5	01R 110.1
HUD	19R(4')		12139'		01L(4')
	19L (4')	13123' No Groov			01R(4')
APU Start within 10min, Standard TAXI Route 19R Do not Pass E1, D2					

DEP 119.25 (AUTO)

HNI 123.3 – SNY 122.6 – HKG 127.1 – 132.15

TPE 129.1 – 126.7 – 127.9 – 125.5

FUK 127.5 (SENKA /20)

ICN 125.725(124.52) – 128.17

APP – 125.5

SE Asia

PUS : STAR (Tail Wind 36R 136000lbs F40)			
ILS 36	KEVOX x	ANROD	9DME LG, 8DME FLAP
VOR 18	GAYHA x	ANROD	<u>18 Circling Click!!</u>
HUD	36L(13') 10499' 36R(8') 8999'		18R(13') 8530' 18L(13') 8999'
FIX	36 : IKMA/IKHE /9, /8		18 : KMH R283, R280
36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339') 18R : C6(5770'), C7 (6824') / 18L : E4(5882'), E5(8792')			

Vacate C3,C4 by ATC only. Max Taxi SPD 20KTS  
C2 HOLD SHORT 가까움(Vacate TaxiSPD)

## **CRZ FUEL Penalty (Approximation)**

**ISA+10°C : 1% increase trip fuel**

**2000ft above/below OPT ALT : 1~2% increase trip fuel**

### **NG**

**4000ft below OPT ALT : 3~5% increase trip fuel**

**8000ft below OPT ALT : 8~14% increase trip fuel**

### **-8**

**4000ft below OPT ALT : 2% increase in trip fuel**

**8000ft below OPT ALT : 7% increase in trip fuel**

**0.01M above LRC : 1~2% increase in trip fuel**

## **FUEL Consumption**

### **APU**

**GND : 270LBS/hr**

**IN FLT : 180LBS/hr**

### **TAXI**

**2 ENG, no APU : 1500LBS/hr (400LBS 16분 연료)**

### **CRZ**

**1시간당 750ft 상승가능**

### **Holding**

**분당 100LBS (4000LBS는 40분 Holding가능)**

### **Missed App & Landing**

**1200LBS (과거 EDTO자료) 1500LBS이상 적용**

## **FUEL Loading**

**Center Tank 1000LBS 이상시 Main Tank FULL**

**FUEL Overfill : 1000LBS 기준**

**- 8 : CTR fuel 1000~2000LBS T/O시 Low Press L/T**

**ON -> CTR Fuel 필요시 2000LBS이상으로**

**Dispatch**

**Home**

# NO ENGINE BLEED TAKEOFF AFTER START (APU ON)

## Consideration

- Max Taxi Weight Check (MTOW+500lbs)
- Improved T/O < No Bleed T/O < Improved T/O + No Bleed T/O
- OPT TOW Blank -> MTOW Check
- ELEC : ENG GEN, BLEED : APU BLEED (Max 17000ft)

Anti-ice 필요시 이륙전 수행, 불필요시 시동후 수행

**BLUE(S/W CHG), BLACK(S/W NO CHG)**

## Stabilized - AFTER START Flow

**GENs on BUS, Prob Heats ON 이후 수행**

**Right PACK switch . . . . . AUTO**

**ISOLATION VALVE switch . . . . .**

**CLOSE**

**Left PACK switch . . . . . AUTO**

**Engine No. 1 BLEED air switch . . . . . OFF**

**APU BLEED air switch . . . . . ON**

**Engine No. 2 BLEED air switch . . . . . OFF**

**Trim Air Switch . . . . . ON**

**WING ANTI-ICE switch . . . . . OFF**

(ENG BLEED ON & ISOL V/V AUTO까지 OFF)

**Bleed Air DUCT PRESS indicator . Check**

**Ensure that eng bleed air supplies the packs.**

**APU Remain – ON (OFF 주의)**

**RECALL CHK**

**AFTER START CHECK LIST**

## NO ENGINE BLEED **AFTERTAKEOFF**

ENG Fail시 FE+1500ft or Obstacle CLR후 수행하라.

**N1, Climb Thrust (APU Bleed MAX 17000ft)**

Engine No. 2 BLEED air switch . . . . . ON

APU BLEED air switch. . . . . OFF

CABIN rate of CLIMB indicator 안정되면

Engine No. 1 BLEED air switch . . . . . ON

ISOLATION VALVE switch . . . . . AUTO

APU switch . . . . . OFF (or ON for EDTO)

For EDTO flights, APU EXP까지 ON 유지하라

**Bleed Air DUCT PRESS indicator . .Check**

**Ensure that eng bleed air supplies the packs.**

## NO ENGINE BLEED **LANDING**

GA Thrust 추가 필요시 **10000ft** 이하에서 수행

**FL200** or TOD 이하 **APU switch . . . . START**

**When below 10,000 ft:**

WING ANTI-ICE switch . . . . . OFF

Right PACK switch . . . . . AUTO

ISOLATION VALVE switch . . . . . CLOSE

Left PACK switch . . . . . AUTO

Engine No. 1 BLEED air switch . . . . . OFF

APU BLEED air switch . . . . . ON

Engine No. 2 BLEED air switch . . . . . OFF

**Bleed Air DUCT PRESS indicator . .Check**

**Ensure that APU bleed air supplies the packs.**

**Home**

## GND CONDITIONED AIR USE

공항 요구로 APU OFF후 기내 온도 조절을 위한 방법  
Air Cart와는 다르며 단순 에어컨 기능만 함.

**GPU Connect – GPU ONBUS – APU OFF**

**Ground conditioned air 연결 전**

**PACK switches . . . . . OFF**

Packs의 damage를 방지하기 위함.

**APU Start – APU ONBUS – GPU, GND Air 제거**

**PACK switches . . . . . As needed**

## GND AIR CART USE

APU 부작동시 AIR CART로 PACK과 시동을 위해 사용  
AIR CART는 외부 BLEED AIR의 역할을 함.

**APU BLEED air switch . . . . . OFF**

**ISOLATION VALVE switch . . . . . OPEN**

**RECIRC FAN switches . . . . . AUTO**

**Trim Air Switch . . . . . ON**

**PACK switches . . . . . AUTO or HIGH**

**Cabin temperature selectors . . . . . AUTO**

Set for desired temperature.

**Duct pressure . . . . . 20 psi minimum**

20 psi이하고 APU 사용가능시

**ISOLATION VALVE switch . . . . . AUTO**

**APU BLEED air switch. . . . . ON**

**APU - left pack, external air - right pack.**

## STARTING with GND AIR SOURCE

#1 ENG 먼저 (우측에 AIR CART, GPU 연결됨)  
“Req Engine Start up Present Positon~~~”

**Engine No. 1 must be started first.**

When cleared to start: -> **Before Start CHKLIST**

**APU BLEED air switch . . . . . OFF**

**Engine No. 1 start . . . . . Accomplish**

Use normal start procedures. -> **PACKS – OFF...**

**Generator No. 1 switch . . . . . ON**

**Disconnect Air Cart & GPU**

“Request Pushback” (if needed)

**#2 시동전 Air Cart 제거 반드시 확인!!**

## ENG CROSSBLEED START

#1 ENGBLEED 로 #2 ENG START

**PushBack 완료, #2 ENG Area CLR**

**Parking brake . . . . . SET**

**Engine BLEED air switches . . . . . ON**

**APU BLEED air switch . . . . . OFF**

**PACK switches . . . . . OFF**

**ISOLATION VALVE switch . . . . . AUTO**

ENG Bleed air 들어오는지 확인하라.

**#1 thrust lever . . . Advance thrust lever**

**Duct Press 30PSI까지 TH 증가(-8 : IDLE)**

**Starting ENG #2**

**Stabilized - #1 ENG IDLE – After START Flow**

**AFTER START CHKLIST**

## COLD TEMP CORRECTION General

5도 간격은 보수적으로 보간법 적용됨

Min 은 반드시 수정 (중간 고도 CORRECTION은 PIC 결정)  
Missed App 고도는 ATC 협조 필요

반드시 고도 - FE 후의 고도를 보정해야함.

Ex) FE 200ft 공항 : 5000ft는 4800ft만 보정해야함.

### Height Above FE (Feet) 200-800ft

TEMP	200	300	400	500	600	700	800
0	20	20	30	30	40	40	50
-5	20	30	40	40	50	60	70
-10	20	30	40	50	60	70	80
-15	30	40	50	60	80	90	100
-20	30	50	60	70	90	100	120

### Height Above FE (Feet) 900-5000ft

TEMP	900	1000	1500	2000	3000	4000	5000
0	50	60	90	120	170	230	280
-5	70	80	120	160	230	310	390
-10	90	100	150	200	290	390	490
-15	110	120	180	240	360	480	600
-20	130	140	210	280	420	570	710

**Domestic**

**Japan**

**China**

## COLD TEMP CORRECTION 1/2

Min 은 반드시 수정 (중간 고도 CORRECTION은 PIC 결정)  
Missed App 고도는 ATC 협조 필요

### GMP 32L (261') / 32R (262') / 14R (254')

32L/R	8000	5500	5300	4000	2800	2300	2000
0	8450	5810	5600	4230	2970	2440	2120
-5	8620	5930	5710	4310	3030	2490	2160
-10	8780	6040	5820	4390	3080	2530	2200
R14	4000	2800	1400		4000		
0	4230	2970	1490		4230		
-5	4310	3030	1520		4310		
-10	4390	3080	1540		4390		

### CJU 07 (307') / 25 (296')

	4000	2900	1800	07	8000	25	6000
0	4220	3070	1900		8450		6340
-5	4300	3130	1940		8620		6460
-10	4380	3180	1970		8780		6590

### CJJ 06L (387') / 24R (296')

06L	4400	3900	3000	2100		7000	
0	4650	4110	3170	2210		7390	
-5	4740	4200	3230	2270		7540	
-10	4810	4260	3280	2290		7670	
24R	6000	3700	2500	2100		6000	
0	6330	3900	2640	2210		6330	
-5	6460	3980	2700	2270		6460	
-10	6570	4040	2730	2290		6570	



COLD TEMP CORRECTION 2/2							
ICN ALL RWY (243')							
33/34	7000	6000	5000	3600	2600	1600	
0	7400	6340	5290	3810	2760	1700	
-5	7520	6460	5390	3880	2810	1730	
-10	7680	6580	5490	3950	2860	1760	
15/16	3000	2600	1600		4000		3000
0	3170	2760	1700		4230		3170
-5	3230	2810	1730		4310		3230
-10	3290	2860	1760		4390		3290
KWJ 04R(266'),04L(610') / 22L(610')							
04L/R	4000	3000	2000				7000
0	4230	3170	2120				7500
-5	4310	3230	2160	<div>Home</div>			7590
-10	4390	3290	2200				7680
22L	5000	4100	3500	2900	2200		4000
0	4230	3170	2120	3070	2340		4230
-5	4310	3230	2160	3130	2430		4310
-10	4390	3290	2200	3190	2420		4390
PUS 36L(233'),36R(228') / 18L/R (see below)							
36L/R	6000	5000	3300	2100		6000	
0	6340	5290	3490	2210		6340	
-5	6460	5390	3560	2250		6460	
-10	6580	5490	3620	2290		6580	
18L/R	6000	5000	4000	2600	1700		6000
0	6340	5290	4230	2760	1800		6340
-5	6460	5390	4310	2810	1830		6460
-10	6580	5490	4390	2860	1870		6580

## COLD Wx Operation 1/2

OAT (GND) / TAT (TAT) is 10°C (50°F) or below :

- visible moisture (clouds, fog with VIS 1SM (1600 m) or rain, snow, sleet, ice crystals...)
- ice, snow, slush and standing water is present on the ramps, taxiways, or runways.

### PREFLIGHT

**PROBE HEAT switches** ----- **ON**

### ENGINE START

NG : OAT -35°C TH변경전 2분간 IDLE, Min Oil Press 까지 IDLE 수분간 유지, Oil Temp Nor 후 Oil Press High시 ShutDown

### ENGINE ANTI-ICE

**ENGINE START switches** ----- **CONT**

**ENGINE ANTI-ICE switches** ----- **ON**

COWL V/V OPEN 지속 Bright : APU Bleed OFF - ISO V/V AUTO - TH 서서히 증가 (Max 30%)

### WING ANTI-ICE

**WING ANTI-ICE switch** ----- **ON**

Type II or IV로 Deicing 안할 거면 사용하라

### AFTER START

**GENERATOR 1 and 2 switches** ----- **ON**

IDG 1분 이내 안정, 늦어도 5분 이내 안정된다.

**FLIGHT controls** ----- **Check**

Deicing 할거면 Deicing 하고 한다.

**FLAPS** ----- **Check**

Full Travel UP – 40 – UP (Deicing시 하고 실시)

**FLAP UP Taxi 고려**

### TAXI OUT

OAT 3°C 이하 RUN UP, Ice Shedding

- RUNUP : Behind CLR, Min 70% 30초, 30분간격  
(-8 : 50%-IDLE, 60분 간격)

- Ice Shedding (FZRA, FZDZ, FZFG, +SN) :  
Min 70%, 1초, 10분간격 (-8 : 없음)

TWY 상태 고려 허용되는 만큼 N1 사용

## COLD Wx Operation 2/2

**BEFORE T/O (Takeoff Signal - FLAPS 5)**  
**FLAPS ----- SET**  
**-8 : Oil Temp 31°C 이상 확인**

### Standing TAKEOFF

**THRUST with EAI ----- 70%, -8 : 50%5초**  
**RUNUP(OAT 3°C이하) NG 70%30초, -8 : 50% 5초**

### ENGINE ANTI-ICE

**ENGINE START switches ----- CONT**  
**ENGINE ANTI-ICE switches ----- ON**  
**SAT -41°C 부터 OFF 가능**  
**COWL V/V OPEN 지속 Bright : APU Bleed OFF,**  
**ISO V/V AUTO, TH 서서히 증가 (Max 30%)**

### FAN ICE REMOVAL one ENG at a time

Moderate Severe Icing 가능하면 회피하라. FAN  
ICE로 Vibration 발생 또는 예방을 위한 절차  
**ENGINE START switches (both) ----- FLT**  
**Autothrottle (if engaged) ----- Disengage**  
**THRUST ----- Increase(min 80%, 1초) & Adjust**  
**15초이내 Vib 4.0이하 안정화(15분 간격 반복가능)**  
**Autothrottle (if needed) ----- Engage**  
**4.0보다 크면 Engine High Vibration Check List**

### WING ANTI-ICE

Icing 보이면 Deicer로 사용(Anti-icer도 사용가능)  
**FL350이상 사용금지 -> Emer Descend**  
**Icing 지역 Holding – Flap 사용금지**  
**WING ANTI-ICE switch ----- ON**

### APPROACH L/D

**FLAP 15 사용 조건일 경우만 VREF ICE 사용**

### AFTER L/D, SHUTDOWN

**TAXI RUNUP, ICE SHEDDING 절차적용**  
**FLAPS ----- 15 까지만**  
**ENG ANTI-ICE ----- ENG ShutDown전 OFF**  
**Stabilizer trim ----- Set 5 units**  
**ENGINE ----- ShutDown**

# ENG ON Deicing in ICN

TOBT- 40min CTC KE ICN (사전신청, 결과확인)

ICN Deicing "Deicing Required ENG On Deicing"  
ICN Apron "Req Pushback Deicing Zone xxx" **SQ2000**  
Pad Control Arrange Deicing Pad No.  
Ice Man Manage Deicing Process

**PARKING BRAKE ----- SET**

Report Parking Brake SET - > Ice Man

**B737-8 BROADBAND s/w ----- OFF**

**FLAPS ----- UP**

**THRUST LEVERS ----- IDLE**

**STABILIZER TRIM ----- CHECK**

**ENGINE BLEED AIR SWITCHES ----- OFF**

**APU BLEED air switch ----- OFF**

Report Ready for Deicing - > Ice Man

**START DE/ANTI-ICING REQ DCL(CTC DEL)**

항공기이동 및 Configuration 변경 금지

**AFTER DE/ANTI-ICING IS COMPLETED**

**(TIME CHECK 1분)**

용액과 마지막 용액 뿌린 시간 받고 적는다.

Holdover Time 결정!!!

**B737-8 BROADBAND s/w ----- ON**

**TIME CHECK 1분후**

**APU BLEED air switch ----- As needed**

**Engine BLEED air switches ----- ON**

**FLAP LEVER ----- Set for takeoff or UP**

ice, snow, slush or standing water, 강수 지속시 –  
FLAP UP고려 (FLAP full travel check 고려)

**Flight controls ----- Check, as needed**

**After Start Cheklist**

**TAXI, BEFORE T/O, T/O Procedure**

**Cold Wx**

**DECISION TREE next page**

**Home**

# TAKEOFF DECISION TREE

## DE/ANTI-ICE AIRCRAFT

Holdover Time Begins

NOT  
CLEAN

COCKPIT  
CHECK  
①

CLEAN

TAKEOFF

NOT SURE

NOT  
CLEAN

CABIN  
CHECK  
②

CLEAN

TAKEOFF  
within  
5 mins.

If unable,  
repeat Cabin  
Check or  
External  
Check.

NOT SURE

NOT  
CLEAN

EXTERNAL  
CHECK  
③

CLEAN

Holdover Time Ends

- Frost  
- Freezing Fog  
- Snow

- Freezing Drizzle  
- Light Freezing Rain  
- Rain on Cold  
Socked Wings

NOT  
CLEAN

CABIN  
CHECK  
②

CLEAN

NOT SURE

NOT  
CLEAN

EXTERNAL  
CHECK  
③

CLEAN

TAKEOFF  
within  
5 mins.  
If unable,  
repeat  
Cabin  
Check.

Fluid  
Type

TYPE I

Type II & IV

EXTERNAL  
CHECK  
③

NOT  
CLEAN

CLEAN

TAKEOFF within 5 mins.  
If unable, repeat De/Anti-icing

# ENG OFF Deicing in GMP...

TOBT- 20min CTC KE GMP (PAD, New TOBT)

## REQ DCL

Deicing "Deicing Required PADxxx"  $\pm 5\text{min}$  TOBT  
Apron "Req Pushback Deicing PADxxx"

**PARKING BRAKE ----- SET**

Establish communications with GND personnel.

**B737-8 BROADBAND s/w ----- OFF**

**FLAPS ----- UP**

**THRUST LEVERS ----- IDLE**

**STABILIZER TRIM ----- CHECK**

**ENGINE BLEED AIR SWITCHES ----- OFF**

**APU BLEED air switch ----- OFF**

**APU ----- START (시동후 ON 유지)**

**APU GENERATOR bus switches ----- ON**

**ENGINE ANTI-ICE switches ----- OFF**

**Engine Start levers ----- CUTOFF**

## SHUTDOWN CHECKLIST

**Home**

## START DE/ANTI-ICING

항공기이동 및 Configuration 변경 금지

## AFTER DE/ANTI-ICING IS COMPLETED

(TIME CHECK 1분)

용액과 마지막 용액 뿌린 시간 받고 적는다.

Holdover Time 결정!!!

**B737-8 BROADBAND s/w ----- ON**

TIME CHECK 1분후

**APU BLEED air switch ----- ON**

**Engine BLEED air switches ----- ON**

**PREFLT CHKlist -> Req STARTUP -> CHKlist**

## AFTER BOTH ENGINES ARE STARTED

**ENGINE ANTI-ICE switches----As needed**

**APU----- As needed**

**FLAP LEVER ----- Set for takeoff or UP**

ice, snow, slush or standing water, 강수 지속시 –  
FLAP UP고려 (FLAP Full travel check고려)

**Flight controls ----- Check, as needed**

**AFTER START CHKlist (ATC CLR Confirm)**

**TAXI, BEFORE T/O, T/O Procedure**

**Cold Wx**

**DECISION TREE next page**

# TAKEOFF DECISION TREE

## DE/ANTI-ICE AIRCRAFT

Holdover Time Begins

NOT  
CLEAN

COCKPIT  
CHECK  
①

CLEAN

TAKEOFF

NOT SURE

NOT  
CLEAN

CABIN  
CHECK  
②

CLEAN

TAKEOFF  
within  
5 mins.

If unable,  
repeat Cabin  
Check or  
External  
Check.

NOT SURE

NOT  
CLEAN

EXTERNAL  
CHECK  
③

CLEAN

Holdover Time Ends

- Frost  
- Freezing Fog  
- Snow

- Freezing Drizzle  
- Light Freezing Rain  
- Rain on Cold  
Socked Wings

NOT  
CLEAN

CABIN  
CHECK  
②

CLEAN

NOT SURE

NOT  
CLEAN

EXTERNAL  
CHECK  
③

CLEAN

TAKEOFF  
within  
5 mins.  
If unable,  
repeat  
Cabin  
Check.

Fluid  
Type

TYPE I

Type II & IV

EXTERNAL  
CHECK  
③

NOT  
CLEAN

CLEAN

TAKEOFF within 5 mins.  
If unable, repeat De/Anti-icing

# PUS VOR 18L/R

RKPK ARRIVALS 1/1  
 STARS RTE 2 RUNWAYS  
 VOR18R<SEL> <SEL>18R  
 TRANS  
 GAYHA<SEL>  
 RHY EXT  
 -- . -NM  
 FPA  
 - . -

STARS RUNWAYS  
 VOR18L/R 18L/R  
 TRANS. **KMH22** Vref+wind  
 GAYHA (Modify Required)

**FIX : KMH 280(Base Turn), 284(Missed App)**



## Missed App

Base Turn 이전 : L/H Turn **KMH 284** OUTBD  
 (SEL HDG SEL – INT H/D - VOR/LOC Engage)

Base Turn 이후 : Continue R/H Turn **KMH 284**  
 OUTBD  
 (SEL HDG SEL – INT H/D - VOR/LOC Engage)

**Domestic** LOC 36 Circling  
 Next Page



# PUS LOC 36L/R Circling 18L/R

RKPK ARRIVALS 1/1  
STARS RTE 2 RUNWAYS  
36L18R<SEL> <SEL>18R  
TRANS  
GEOJE<SEL>

RWY EXT  
-- -NM  
FPA  
-.-

STARS

36L18L/R

TRANS. **KMH22** Vref+wind

**GEOJE** (Modify Required)

RUNWAYS

18L/R

**CI36L(CF36R) 3500 FI36L(FF36R) 2100**

**FIX : KMH 280(Base Turn), 310(Missed App)**



## Missed App

Base Turn 이전 : L/H Turn **KMH 310** OUTBD  
(SEL HDG SEL – INT H/D - VOR/LOC Engage)

Base Turn 이후 : Continue R/H Turn **KMH 310**  
OUTBD  
(SEL HDG SEL – INT H/D - VOR/LOC Engage)

**Domestic**

GS KTS	KM	MILES
300	560	350
310	570	360
320	590	370
330	610	380
340	630	390
350	650	400
360	670	410
370	690	430
380	710	440
390	720	450
400	740	460
410	760	470
420	780	480
430	800	500
440	820	510
450	830	520
460	850	530
470	870	540
480	890	550
490	910	560
500	930	580
510	950	590
520	960	600
530	980	610
540	1000	620
550	1020	630
560	1040	650
570	1060	660
580	1070	670
590	1090	680
600	1110	690
610	1130	700
620	1150	710
630	1170	730
640	1190	740
650	1200	750
660	1220	760
670	1240	770
680	1260	780
690	1280	800
700	1300	810