

KneeBoard



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VER. 24.8.9

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 OFF Deicing

Domestic

GMP

CJU

GMP

PUS

CJU

KWJ

CJU

CJJ

CJU

TAE

CJU

PUS

ICN

PUS

ICN

TAE

Welcome PA

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WELCOME PA

손님 여러분, 안녕하세요?

저는 여러분을 모시고 가는 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.

저는 여러분을 안전하게 모시기 위해 최선을
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 your flight.

Domestic

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

도착 방송 (5시간 이상, 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

① 눈이 오고 있으며

① 안개가 끼어 있으며

① 황사가 있으며

지금 이곳의 시각은 __월 __일 __요일, 오전(오후)

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We expect to land at __ international airport in about (40) minutes.

The current temperature at __ is __ degrees Celsius, or __ degrees Fahrenheit (OPT 참고)

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](#)

[PUS](#)

[NGO](#)

[PUS](#)

[FUK](#)

[ICN](#)

[KIX](#)

[ICN](#)

[NRT](#)

[ICN](#)

[CTS](#)

[ICN](#)

[HND](#)

[ICN](#)

[NGO](#)

[ICN](#)

[FUK](#)

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[AOJ](#)

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WELCOME PA

손님 여러분, 안녕하십니까?

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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

ICN

CGO

ICN

DYG

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/차오양촨
HGH	황저우/샤오산
WHE	웨이하이/따쉐이푸오
XIY	시안/시엔양
CSX	창사/후앙후아
HKG	홍콩
TSN	톈진/빈하이
CGO	정저우/신정
DYG	장자제/허화

China

S.E Asia

ICN

CXR

ICN

SGN

ICN

PNH

ICN

MNL

ICN

RMQ

ICN

TPE

PUS

TPE

ICN

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PUS

BKK

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S.E Asia

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

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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.

RKSS(GMP) 59ft | RKPC(CJU) 119ft

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

PA

KE CJU 129.4



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 : EO32L/R, R225
YJU R271

14L/R : EO14L/R, 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
RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)			
ILS Z 25	DOTOL xT(xM)	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

Rwy 32L **Landing**

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

/18:00L~21:00L)



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

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 -> 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 : EO32L/R, R225
 YJU R271

14L/R : EO14L/R, 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	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)

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' 36R(8') 8999'	18R(13') 8530' 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)

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

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
PAR	RWxx EXT 8NM, Do not Tune ILS		
HUD	04R(46')	9301'	22L(48')
	04L(46')	9301'	22R(48')
FIX	04R : SAMUL(For reference)		

End of RWY Vacating 9301'

LOC 22L, VOR 22L/R -> LOC/VOR LNAV 지시 고도 유지 후

Final Establish 이후 강하 (TERR!!)

PAR 04L/R, 22R 가능 : 강하각 3도 (6NM, 3도)

TAXI MAX 15 kts (Max 30kts by ATC)

<u>RKJJ(KWJ) 48ft</u>	<u>RKPC(CJU) 119ft</u>
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KE KWJ 129.4 NO DCL	<u>PA</u>	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
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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
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RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)

ILS Z 25	DOTOL xT(xM)	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

PA

KE CJJ 129.05

NO DCL, ATIS

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 **Caution TCAS RA**

PEBRI FL150, 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 안줌)
ILS Z 24R	NO STAR (MATIZ x)	OSPOT (HYEIN tx)	HYEIN (STAR 안줌)
PAR	RWxx EXT 8NM, Do not Tune ILS		

HUD	06L(166')	9003'	24R(182')
	06R(173')	9003'	24L(191')

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

Unless ATC, Taxi SPD less than 20KTS

RKTU(CJJ) 192ft

RKPC(CJU) 119ft

KE CJJ 129.05

NO DCL, ATIS

PA

KE CJU 129.4

CJJ : SID (NADP 1) Caution TCAS RA

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

When ASR is out, RNAV SID

(06L : BUKIL 1, 2 RNAV)

(24R : OLREG 1, UPTIL 1)

CHO 109.0

06L 110.3

24R 111.7

06L/R : CHO /1.7, R235

24L/R : None

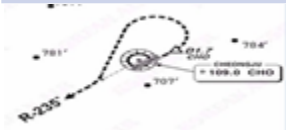
HUD	06L(166')	9003'	24R(182')
	06R(173')	9003'	24L(191')

Upslope from Apron to RWY

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

Unless ATC, Taxi SPD less than 20KTS

Do not Cross Holdline without ATC



Domestic

CJU : STAR

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

ILS Z 07

DOTOL xP

YUMIN

DOTOL 160

RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)

ILS Z 25

DOTOL xT(xM)

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	
PAR	RWxx EXT 8NM, Do not Tune ILS (13R Caution GPWS)		
HUD	31L(118')	9039'	13R(111') 3.3
	31R(120')	8999'	13L(112')

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

13R ILS 3.3도 PAPI 3.3도 (산악지형 주의)

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

Stand 6-9 Oversteering Needed

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

KE TAE 129.2

DCL Available

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) 전방기 최소 2000ft 간격
1F, 2F New Holding Point



Domestic

CJU : STAR

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

ILS Z 07	UPGOS xP	YUMIN	
RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)			
ILS Z 25	UPGOS xT(xM)	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

RKPC(CJU) 119ft

RKPK(PUS) 13ft

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')	

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

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	<div>36L(13') 10499'</div> <div>36R(8') 8999'</div>	<div>18R(13') 8530'</div> <div>18L(13') 8999'</div>
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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	
RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)			
ILS Z 25	UPGOS xT(xM)	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

RKSI(ICN) 23ft			RKPK(PUS) 13ft		
KE ICN 131.5 DCL -10분 TOBT5분 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 : EO34L/R, 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)					
ICN 국제선 이후 TRANSIT GD 필요(팀장님)					
-> PUS PASSPORT Immigration 해야함.					
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)					

RKPK(PUS) 13ft			RKSI(ICN) 23ft		
KE Gimhae 129.2 DCL -5분		PA		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 10kts 이상, HIRO			

<u>RKSI(ICN) 23ft</u>	<u>RKTN(TAE)120ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	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 : EO34L/R, 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)

Domestic

TAE : NO STAR (TL 140 확인)

ILS 31L	TGU/-10	CF31L222/7	CF31L
ILS 13R	TGU	YAWAN	
PAR	RWxx EXT 8NM, Do not Tune ILS (13R Caution GPWS)		

HUD	31L(118')	9039'	13R(111') 3.3
	31R(120')	8999'	13L(112')

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

13R ILS 3.3도 PAPI 3.3도 (산악지형 주의) TAXI MAX 20kts (do not req) 전방기 최소 2000ft 간격 Stand 6-9 Oversteering Needed

<u>RKTN(TAE)120ft</u>	<u>RKSI(ICN) 23ft</u>
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KE TAE 129.2

NO DCL

PA

KE ICN 131.5

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) 전방기 최소 2000ft 간격
1F, 2F New Holding Point



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 10kts 이상, **HIRO**

RKPK(PUS) 13ft

RJAA(NRT) 135ft

KE Gimhae 129.2

DCL -5분

PA

KE Tokyo 131.7

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
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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](#)

[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	18 Circling Click!!

HUD	36L(13') 10499' 36R(8') 8999'	18R(13') 8530' 18L(13') 8999'
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FIX	36 : IKMA/IKHE /9, /8	18 : KMH R284, R280
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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	RJGG(NGO) 12ft
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KE Gimhae 129.2 DCL -5분	PA SWISSPORT OPERATION 132.05
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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

센트레아 APP 121.05

NGO : STAR (SAMON 290, MARIA 130)

36	CHESS(CARDS) SOUTH	PROBE	ILS Z 36
18	CHESS(CARDS) NORTH	QUEST	ILS Z 18
HUD	36(15') 11483' 18(15')		

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!!!

RJGG(NGO) 12ft

RKPK(PUS) 13ft

SWISSPORT OPERATION 132.05 DCL -15분	PA KE Gimhae 129.2
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NGO : SID – TANGO tx (NADP 1)

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 133.45 – 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	<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	RJFF(FUK) 30ft
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KE Gimhae 129.2 DCL -5분	PA KE FUK 132.05
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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

KOB 118.9

FUK APP 119.65 – FUK RDR 121.125

**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	RKPK(PUS) 13ft
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KE FUK 132.05 DCL -15min, Voice -5min	PA KE Gimhae 129.2
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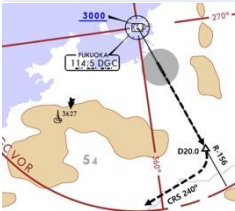
FUK : SID (Consider C2, C8 Intersection T/O)

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

16 : DGC 156/20 R240 (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](#)

[KOB 135.65](#)

[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	<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)

RKSI(ICN) 23ft			RJBB(KIX) 17ft		
KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm			PA 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 : EO34/R, 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					
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(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 10kts이 상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>RJAA(NRT) 135ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA KE Tokyo 131.70
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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 : EO34L/R, 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 – TKO 124.15 – 132.02</u>
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<u>TKO 124.1– 128.2 – TKO APP 124.4 – 120.2</u>	Japan
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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')

L/D DOWN before 14/12 DME, L/D FLAP 4 DME Arrival Taxi RTE in Jeppesen (No Numbering)
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RJAA(NRT) 135ft

RKSI(ICN) 23ft

KE Tokyo 131.70
DCL -15분

PA

KE ICN 131.5

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
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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

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 10kts 이상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>RJCC(CTS) 70ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Chitose Oper 132.05
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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 : EO34L/R, 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 124.15 – 133.02</u>	<u>Japan</u>
<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

<u>RJCC(CTS) 70ft</u>	<u>RKSI(ICN) 23ft</u>
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Chitose Oper 132.05 NO DCL -5분	PA KE ICN 131.5
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CTS : SID (NADP 1)

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

DEP 124.7

SPR 119.3 – TKO 124.5 – 132.3

FUK 133.02 – 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
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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 10kts 이상, HIRO
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<u>RKSI(ICN) 23ft</u>	<u>RJTT(HND) 21ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Delta Oper 132.075
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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 : EO34L/R, 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>	<u>Japan</u>
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HND : STAR XAC Night– APP xxx Y 1400z~ SPENS 220

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')
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xxx Z : 180kts, 160kts limit APP Chart, xxx Y After 1400z
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<u>RJTT(HND) 21ft</u>	<u>RKSI(ICN) 23ft</u>
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Delta Oper 132.075 DCL -15분	PA KE ICN 131.5
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HND : SID (xx B/C 2200-0230z 0600-1000z) NADP 1
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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

	<u>DEP ATIS</u>
	<u>TKO 120.5 – FUK 133.02</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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<u>RKSI(ICN) 23ft</u>	<u>RJGG(NGO) 12ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA SWISSPORT OPERATION 132.05
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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 : EO34L/R, 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</u>	<u>Japan</u>
<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')

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!!!

<u>RJGG(NGO) 12ft</u>	<u>RKSI(ICN) 23ft</u>
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SWISSPORT OPERATION 132.05 DCL -15분	<u>PA</u> KE ICN 131.5
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NGO : SID – TANGO tx (NADP 1)

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

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

RKSI(ICN) 23ft			RJFF(FUK) 30ft		
KE ICN 131.5 DCL -10분 TOBT5분 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 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 : EO34L/R, 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			Japan		
Kobe 118.9 – FUK APP 119.65					
FUK RDR – 121.125					
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

PA

KE ICN 131.5

FUK : SID (Consider C2, C8 Intersection T/O)

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

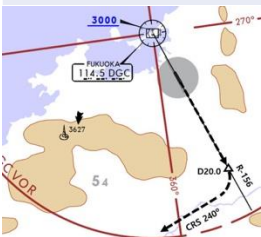
16 : DGC 156/20 R240 (DGC VOR out of 6NM A/P)

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 135.65

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 10kts 이상, **HIRO**

<u>RKSI(ICN) 23ft</u>	<u>RJSA(AOJ) 650ft</u>
KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA JPN AIR AOJ 130.17 NO ATIS

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 : EO34L/R, 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)

DEP 125.15 – TGU 134.17 – FUK 124.15
 FUK 125.15 – 133.02 – 132.3
 SPB 133.3 –127.57 – AOJ TWR 118.3

Japan

AOJ : **Obstacle Around Airport (High FE, Cold Temp)**
Hold over MRE, MELOS, YACHI Confirm CRS, EFC
 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, **CHK MRE D12 Turn 시작**
(선회 반경으로 선회 늦어짐 주의!, SPD Modify)
 RWY, TWY color Yellow, GND by TWR

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

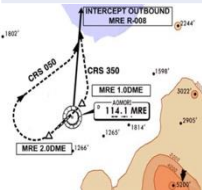
MRE 114.1

24 111.9

HUD	24(664')	9843'	06(647')
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EO	24 : MRE 241/2, MRE R008 06 : MRE 061/1, R350, MRE R008
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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
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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 10kts 이상, **HIRO**

RKSI(ICN) 23ft			RJSN(KIJ) 5ft		
KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm			PA	JPN AIR Niigata 131.85	
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 : EO34L/R, 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 – 132.45 – 132.3					
KIJ BDR 121.4					
Japan					
KIJ : GTC-50NM – TERAD (Modify!!)					
At/Below 3000MSL : 200kts, Above 3000MSL : 250kts					
28	TERAD EAST	KYOGA		ILS Z 28	
10	TERAD WEST (KAETSU)	RYUTO INAHO		RNP Z 10 RNP Y 10 (AR)	
HUD	28(10')	8202'		10(27')	
28 : B4(6167'),B5(7906'), 10 : P3(6292'), B1(8100')					
LDC Data : RWY28+81ft, RWY10+274ft (Due PAPI PSN)					
RWY 10 Downslope, Vacate RWY04/22 by ATC Only GND by TWR					

RKSI(ICN) 23ft

KE ICN 131.5

TWR Voice -5min

KIJ : SID (NADP 1)

28	MOKBA xx	281	281	ATC	281
10		101	101	ATC	101

GTC 115.5

28 109.3

HUD	28(10')	8202'	10(27')
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EO	10 : GTC 101/2, R360
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Sometimes Cross 50NM SW GTC FL200



TWR 118.0

TKO 132.3 – 132.45

FUK 133.02 – 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 10kts 이상, **HIRO**

<u>RKPC(CJU) 119ft</u>	<u>RJAA(NRT) 135ft</u>
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KE CJU 129.4

DCL -10분

PA

KE Tokyo 131.70

CJU : SID (NADP 1)

07	TAMNA xE	066	066	9000	066
25	TAMNA 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					



DFP 121.2 – ICN 124.52 – KOB 118.9 – FUK 133.15 – 119.35
134.35 – TKO 125.9 – TKO APP 124.4 – 120.2 – ABR 121.27

Japan

NRT : MAMAS 240

34L/R	RUTAS E (RUTAS T)	ELGAR (TYLER)	ILS 34L/R(Z)
16L/R	RUTAS G (RUTAS 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

RKPC(CJU) 119ft

KE Tokyo 131.70
DCL -15분

PA

KE CJU 129.4

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
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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 – 128.12 – FUK 133.02 – KOB 133.55

132.7 – FUK 133.15 – KOB 118.9

ICN 124.52

APP 121.2

Japan

CJU : STAR

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

ILS Z 07	TAMNA xP	YUMIN	
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RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)

ILS Z 25	TAMNA xT(xM)	DUKAL	
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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

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

KE GMP 131.15

DCL -15분 가능 TOBT5분 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 : EO32L/R, R225
YJU R271

14L/R : EO14L/R, 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°)	
13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
900 M	3000 FT	450M	1500FT
800 M	2600 FT	400 M	1300 FT
700 M	2300 FT	350 M	1100 FT
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 -> GND -> APRON (All by ATC)

Except RWY14R Landing (Until R)

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

KE GMP 131.15 **PA** Air China Beijing 131.5
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	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 : EO32L/R, R225
YJU R271

14L/R : EO14L/R, 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°)	
13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
900 M	3000 FT	450M	1500FT
800 M	2600 FT	400 M	1300 FT
700 M	2300 FT	350 M	1100 FT
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

<div>KE GMP 131.15</div> <div>DCL -15분 가능 TOBT5분 차이 시 CTC Comm</div>	<div>PA</div> <div>KE KIX 130.95</div>
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<div> <div>L</div> <div>R</div> <div>R</div> <div>L</div> </div>	<div>Rwy 32R Takeoff</div> <div>(06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)</div>
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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	

32L/R : EO32L/R, R225 YJU R271	14L/R : EO14L/R, 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

<u>RJBB(KIX) 17ft</u>	<u>RKSS(GMP) 59ft</u>
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KE KIX 130.95 DCL -15분	PA KE GMP 131.15
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Rwy 32L Landing (06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)	
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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
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HUD	06L(15')	13123'	24R(23')
	06R (5')	13123'	24L (12')

APU Start, TAXI RTE 1, 2

DEP 119.2 TKO 132.7 – 133.8 IGU 120.57 APP 119.75	<u>Japan</u>
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GMP : STAR

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')
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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)
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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

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

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
900 M	3000 FT	450M	1500FT
800 M	2600 FT	400 M	1300 FT
700 M	2300 FT	350 M	1100 FT
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
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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
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18L (19)	MUGLO xZD(xYD)	179	179	ATIS/DCL	179
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PEK 114.7	36R 111.55	18L 109.3	01 108.5	19 108.9
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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
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RNP Y 07 (No LPV), RNP Z 07 AR (No B737-900, RNP 0.11)

ILS Z 25	LIMDI xT(xM)	DUKAL
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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

RKPK(PUS) 13ft	ZSPD(PVG) 13ft
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KE Gimhae 129.2 DCL -5분	PA	China Eastern 130.5
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PUS : SID (Mod NADP CLB2 1000, 14000 MAX)
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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'
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)
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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') 13 123' 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°)

13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

Eastbound
(360° - 179°)

13700 M	44900 FT
12500 M	41100 FT
11900 M	39100 FT
11300 M	37100 FT
10700 M	35100 FT
10100 M	33100 FT
9500 M	31100 FT
8900 M	29100 FT
8100 M	26600 FT
7500 M	24600 FT
6900 M	22600 FT
6300 M	20700 FT
5700 M	18700 FT
5100 M	16700 FT
4500 M	14800 FT
3900 M	12800 FT
3300 M	10800 FT
2700 M	8900 FT
2100 M	6900 FT
1500 M	4900 FT

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
900 M	3000 FT	450M	1500FT
800 M	2600 FT	400 M	1300 FT
700 M	2300 FT	350 M	1100 FT
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	<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)

RKSI(ICN) 23ft			ZSNJ(NKG) 49ft		
KE ICN 131.5 DCL -10분 TOBT5분 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 : EO34L/R, 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°)	
13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZSNJ(NKG) 49ft	RKSI(ICN) 23ft
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None DCL 가능, READ BACK!	PA	KE ICN 131.5
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NKG : SID (NADP 1) (ATC Hold Expected Fuel Add!!)
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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
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[DEP 119.25](#)

[NKG APP 126.55](#)

[SHA 119.075 – 125.95 – 120.55 – 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

<u>RKSI(ICN) 23ft</u>	<u>ZSQD(TAO) 30ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 P518 R068, R278		34L/R : EO34L/R, 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)

<u>DEP 125.15 – TGU 128.7 – DLC 132.95</u>	<u>China</u>
<u>TAO 128.55 – 134.85</u>	
<u>TAO APP 119.77 – 119.4</u>	

TAO : STAR (AVBIK R014 - LAROP R159 동쪽 금지)

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, R183 (두점 연결)
--

35 : S2(5255'), S4(6624'), 17 : S1(5282'), S3(6604')
34 : R2(5278'), R4(6650'), 16 : R1(5318'), R3(6706')

위의 Point 불가시 TWR 보고, Apron CTC 주의
Follow Me Car on Lxx APU off Procedure

Meter/Feet Conversion Table

☐ China, Mongolia & North Korea

■ FL Conversion

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

<u>ZSQD(TAO) 30ft</u>	<u>RKSI(ICN) 23ft</u>
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None DCL 가능, No READ BACK! (Voice 10분전 부터)	PA KE ICN 131.5
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TAO : SID (NADP 1) Walk Around Ramp Pass & PW
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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')		

FIX : AVBIK R014, LAROP R159, R183 (두점 연결)

Heading 190, Join W209 -> DCT LATUX CRS 148

[TAO APP 119.4](#)

[TAO 119.73](#)

[TAO 134.85 – DLC 132.95](#)

[ICN 128.7 – 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 10kts 이상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>ZBAA(PEK) 116ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 P518 R068, R278	34L/R : EO34L/R, 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)

<u>DEP 125.15 – TGU 132.8 – DLC 132.95</u>	<u>China</u>
<u>TAO 133.72 – 128.15 – PEK 125.6</u>	
<u>PEK APP 120.6 – Final 119.0</u>	

PEK : STAR (RW01/19 main (RW36L/18R))
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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
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Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

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

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

Meter	Feet	Meter	Feet
1000 M	3300 FT	500M	1600FT
900 M	3000 FT	450M	1500FT
800 M	2600 FT	400 M	1300 FT
700 M	2300 FT	350 M	1100 FT
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 10kts 이상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>ZYTX(SHE) 198ft</u>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	PA China Southern Dispatch 131.5
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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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 P518 R068, R278		34L/R : EO34L/R, 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)

<u>DEP 125.15 – TGU 132.8 – DLC 132.95 – 135.65</u>	China
<u>DLC 134.325(128.775)</u>	
<u>SHE APP 125.55 – 119.825</u>	
<u>TWR 118.1</u>	

SHE : STAR (CLR Limit TOSID Late Handoff to SHE)

06	TOSID 62A, 61A	TX504	ILS Z 06
24	TOSID 72A, 11A	TX662	ILS Z 24
HUD	06(170')	10499'	24(198')

Around TOSID – Present TRK or HDG – CTC SHE CTL
--

06 : D(6210'), C(7854'), 24 : J(6227'), K(7864') - ATC

06 : HP06(03), 24 : HP06(03) Follow Me Car Normally Remain Parking Brake SET!! APU off Procedure (GND Air Cond' & GPU)

Meter/Feet Conversion Table

□ China, Mongolia & North Korea

■ FL Conversion

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

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZYTX(SHE) 198ft

RKSI(ICN) 23ft

China Southern Dispatch

PA

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	ATIS/DCL	056
24	TOSID 71,72D	236	236	ATIS/DCL	236

SEY 114.1	06 110.5	24 110.3
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HUD	06(170')	10499'	24(198')
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ADT = CTOT See Eroute ATIS

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 10kts 이상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>ZSPD(PVG) 13ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	China Eastern 130.5
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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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 YJU R271	34L/R : EO34L/R, 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 126.17 – 120.72 – 124.52(125.72)</u>	<u>China</u>
<u>SHA 120.95</u>	
<u>SHA APP 125.62(119.975) – 125.4</u>	

PVG : STAR (North of 'PVGNB', R-276 Prohibited)
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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'	17L(10')
	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°)	
13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

<u>ZSPD(PVG) 13ft</u>	<u>RKSI(ICN) 23ft</u>
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China Eastern 130.5 DCL 20분전, No READ BACK!	PA KE ICN 131.5
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PVG : SID (NADP 1) (ATC Hold Expected Fuel Add!!)
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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
HUD	34R/L(11'/12')		12467'	16L/R(12'/11')	
	35R(10')		13123'	17L(10')	
	35L(12')		11155'	17R(12')	

APU Start, TUG Connect After Beacon L/T ON Ready for Intersection T/O
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SHA APP 125.4 (Without Instruction)	<u>China</u>
SHA APP 125.62(119.975)	
SHA 120.95	
ICN 125.725(124.52) – 120.72 – 126.17	
APP – 119.75	

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

<u>RKSI(ICN) 23ft</u>	<u>ZYYJ(YNJ) 624ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	None No D-ATIS
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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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 P518 R068, R278	34L/R : EO34L/R, 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)

<u>DEP 125.15 – TGU 132.8 – DLC 132.95 – 135.65</u>
<u>128.77 – SHE 119.3 – 118.9</u>
<u>YNJ TWR 118.75</u>

China

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)
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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)

Meter/Feet Conversion Table

☐ China, Mongolia & North Korea

■ FL Conversion

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

QFE Next Page

China

Y NJ Altitude / Height Conversion Table	
<div> <div>xxxx meters on STD 이후 적용</div> <div>xxxx meters on QFE xxxx -> REQ QNH</div> <div>-> QNH xxx SET후 Conversion Table 사용</div> <div>Y NJ A/P Elevation : 623ft = 22.5hPa</div> </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

ZYYJ(YNJ) <u>624ft</u>	RKSI(ICN) 23ft
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None TWR 118.75 By Voice	PA	KE ICN 131.5
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YNJ : RNP SID (NADP 1) RW27 Main CTOT from GND Staff due to Mil Train (ADD Fuel) Consider Improve C/B & NO Bleed T/O (in Summer)

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
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FIX	27 : YNJ 271/3.6, YNJ 073/10 (MAX 162kts) 09 : YNJ 091/4.5, YNJ 287/11 (MAX 162kts)
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HUD	27(597') 3.3도	8530'	09(621')
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Must Check MTOW RWY 27 180 Back(Clockwise)

	YNJ 118.75 SHE 132.35 – 119.3 DLC 128.77 – 135.65 132.95 – ICN 132.8 China
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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			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 : EO34L/R, 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)					
07/06	OKT, SUP 91A		HC410	ILS Z xx	
25/24	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°)	
13100 M	43000 FT
12200 M	40100 FT
11600 M	38100 FT
11000 M	36100 FT
10400 M	34100 FT
9800 M	32100 FT
9200 M	30100 FT
8400 M	27600 FT
7800 M	25600 FT
7200 M	23600 FT
6600 M	21700 FT
6000 M	19700 FT
5400 M	17700 FT
4800 M	15700 FT
4200 M	13800 FT
3600 M	11800 FT
3000 M	9800 FT
2400 M	7900 FT
1800 M	5900 FT
1200 M	3900 FT

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China


<u>ZSHC(HGH) 22ft</u>	<u>RKSI(ICN) 23ft</u>
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Hangzhou Reporting Office 130.65 DCL(NO Readback) Voice 10min전	PA KE ICN 131.5
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HGH: SID (NADP 1)

07/06	OKT, SUP 91D	069	069	3000 (900m)	069
25/24	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**

<u>RKSI(ICN) 23ft</u>	<u>ZSWH(WEH) 146ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	None No D-ATIS
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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
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WNG 112.9	34L 109.95	34R 108.1	16L 110.35	16R 108.55
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33L/R : NC05L/R, R242 P518 R068, R278	34L/R : EO34L/R, 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

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

QFE Next Page

China

WEH Altitude / Height Conversion Table		
<div> <div>xxxx meters on STD 이후 적용</div> <div>xxxx meters on QFE xxxx -> REQ QNH</div> <div>-> QNH xxx SET후 Conversion Table 사용</div> <div>03 Elev : 113ft = 4.0hPa, 21 Elev : 146ft = 5.2hPa</div> </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

None

PA

KE ICN 131.5

-5 Min, TWR 118.65 By Voice

WEH (TA 4930') : RNP SID (NADP 1)

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

TWR 118.65

TAO 133.725

DLC 132.95

TGU 132.8

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 10kts이 상, HIRO

RKSI(ICN) 23ft	ZLXY(XIY)1572ft
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Airport Operation Center 132.0
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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 : EO34L/R, 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)

<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

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

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

05L : A3(6778'), A2(9032'), 23R : A6(5544'), A7(6512') 05R : D4(5613'), D3(7322'), 23L : D5(5646'), D6(7408')
Follow Me Car, CTC Apron before Gate in “Closing to xx TWY, apply to change to xx Freq” Taxi RTE in Jeppesen Chart.

Meter/Feet Conversion Table

□ China, Mongolia & North Korea

■ FL Conversion

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

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

<u>ZLXY(XIY)</u> <u>1572ft</u>	<u>RKSI(ICN)</u> <u>23ft</u>
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Airport Operation Center 132.0 DCL -30~10 Min, Read Back	PA KE ICN 131.5
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XIY (TA 9850') : RNAV SID (NADP 1)

05L /R	WJC xx W/Z	052	052	ATC 1500m(4900')	052
23R /L	WJC xx X/Y	232	232	ATC 1500m(4900')	232

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, ADT = CTOT



DEP 119.9- XIY 120.95 - 124.1

PEK 126.7 - 134.15 - 128.3 - 120.35

DLC 123.2 - 132.95

TAE 132.8

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 10kts 이상, **HIRO**

<u>RKSI(ICN) 23ft</u>	<u>ZGHA(CSX)220ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Changsha Reporting Office 131.15
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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 : EO34L/R, 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)

<u>DEP 125.15 – TGU 132.8 – DLC 132.95</u>
<u>TAO 133.725 – 128.15 – PEK 127.35 – 127.5</u>
<u>PEK 132.2 – SHA 118.9 – WUH 119.7 – 134.35</u>
<u>CSX 132.55 – 125.6 – 119.65</u>
<u>HUH TWR 118.55(118.175)</u>
<u>China</u>

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

TL
TA

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

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZGHA(CSX)220ft	RKSI(ICN) 23ft
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Changsha Reporting Office 132.0 DCL -20m, Read Back	PA KE ICN 131.15
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XIY (TA 9850') : RNAV SID (NADP 1)

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)
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HUD	18R(219')	10499'	36L(198')
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	18L(212')	12467'	36R(188')
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CTC DEP 119.65 without TWR Instruction



[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

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 10kts 이상, **HIRO**

<u>RKSI(ICN) 23ft</u>	<u>VHHH(HKG) 28ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA HAS FLT Dispatch 131.6
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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 : EO34L/R, 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>ICN 124.52(125.72) – FUK 127.5 – TPE 125.5 – 126.7</u>	<u>China</u>
<u>129.1 – HKG RDR 121.3 – 126.5</u>	
<u>DEP 122.0 – Final 119.1 – 119.35</u>	

HKG : Terminal Tx RTE + STAR Chart (TL1 10)
ENPET FL260, RWY25R After TOPUN - APP Mode

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 10kts 이상, **HIRO**

<u>RKSI(ICN) 23ft</u>	<u>ZBTJ(TSN) 6ft</u>
KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Air China Tianjin 132.0

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 : EO34L/R, 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	China
TAO 133.72 – 128.15 – PEK 125.6	
TSN APP 119.27 – TWR 118.425(130.0)	

TSN : STAR (Missed App 1970' Initially)

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

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZBTJ(TSN) 6ft	RKSI(ICN) 23ft
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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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TSN : SID (NADP 1) Caution 600m Level Off – SPD Inc
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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

DEP 119.27

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

<u>RKSI(ICN) 23ft</u>	<u>ZHCC(CGO) 496ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Zhengzhou AOC 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 : EO34L/R, 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 128.7 – DLC 132.95– TAO 133.05
128.55 – 128.15 – PEK 127.35 – TAO 128.35
CGO 119.35 – 120.72 – APP 126.35

China

CGO : STAR xxL/R L/D RWY Freq CHG ATIS (Caution 12R/30L LOC false Capture, Fluctuation)
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12L/12R	NOP xxU RNAV	DZY	ILS Z 12L/12R
30R/30L	NOP xxV RNAV	CC527	ILS Z 30R/30L
HUD	12L(496')	11811'	30R(484')
	12R(494').	11155'	30L(484')

FIX : ILS Ident /8 (180kts) /6 (160kts) APP SPD in JEPP

12L : D7(5853'),D8(6955'), 30R :D6(5833'),D5(6935')
12R :H7(5702'),H8(6883'), 30L :H5(5672'),H4(6932')

Follow me car, APU Off But 26도 이하 사용가능

Meter/Feet Conversion Table

❑ China, Mongolia & North Korea

■ FL Conversion

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZHCC(CGO) 496ft

RKSI(ICN) 23ft

Zhengzhou AOC 132.0
DCL (Read Back!)

PA

KE ICN 131.5

CGO : SID (NADP 1) Lower ALT – Consider Add Fuel

12R /12L	OKT xX RNAV	116	116	1200m ATC	116
30L /30R	OKT xY RNAV	296	296	1200m ATC	296
CGO 114.5	12L 108.5	30R 110.7		12R 110.3	30L 109.3
HUD	12R(494') 12L(496')		11155' 11811'		30L(484') 30R(484')
EO	30L : CGO 296/4, R180			30R : CGO 296/4, R070	

Req Pushback to Apron 121.7



DEP 126.35(AUTO or NOT)

CGO 124.2 – 119.35

TAO 128.35 – PEK 127.35 – 128.15

DLC 132.95 – ICN 128.7

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		ZGDY(DYG) 713ft			
KE ICN 131.5 DCL -10분 TOBT5분 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 : EO34L/R, 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 – 125.32 – 132.32 – 120.1					
GZU 124.9 – 133.5 – WUH 134.35					
119.3 – CHS 123.9					
DYG TWR 118.45					
China					
DYG : STAR High Terr, ATIS within 100NM DYG TWR no RDR Service KEEP FLT PLAN RTE					
08	LIN xxA RNP	JX001	ILS X 08		
26	LIN xxA RNP	DG944	ILS X 26		
HUD	08(713') 3.2도		8530'	26(665') 3.2도	
08 : J(6530'), DownSlope 0.65% 26 : B(6530')					
Do not Intercept RWY08 inside DYG 11NM(FIX) RWY Grooved (AIP), Follow Me Car on A					

Meter/Feet Conversion Table

☐ China, Mongolia & North Korea

■ FL Conversion

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

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

TL
TA

■ ALT / HEIGHT Conversion

550M

1800ft

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

China

ZGDY(DYG) 713ft

RKSI(ICN) 23ft

None
Voice TWR

PA

KE ICN 131.5

DYG : SID (NADP 1)
(RWY Grooved AIP)

08	LIN xxD	079	079	ATC (2400m)	079
26	LIN xxD	259	259	ATC (2400m)	259
DYG 114.4		08 109.7		26 108.9	
HUD	08(713')		8530'		24(665')
EO	08 : DYG 079/8, R055			26 : DYG, R250	

[TWR 118.45](#)

[CHS 123.9](#)

[GZU 124.9 – 133.5 – 133.25 – SHA 120.1 – 132.32](#)

[128.12 – 125.32 – 126.17 – 120.55 – 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

<u>RKSI(ICN) 23ft</u>	<u>VVCR(CXR) 46ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	None No D-ATIS
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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 : EO34L/R, 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)

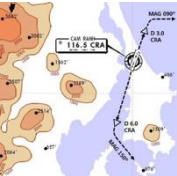
<u>FUK 127.5 – TPE 125.5 – 127.9 – 129.1 – MNL 119.3</u>	SE Asia
<u>MNL RDO 8942(5655) – HCM 120.7</u>	
<u>132.35 – 134.05 – CXR APP 127.9</u>	

CXR : STAR (Wx, Using RWY from HoChiMinh CTL) RWY20 Max Tail Wind 15kts, chk condition CAAV STAR, APP not Authorized
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20L/R	COTUN, BANKE, HUNTA, NHATA xx	CR xxx AFT IAF STEEP DES(3.8)	ILS Y 20L RNP 20R
02R/L			ILS X/Z 02L/R
HUD	02R(15') 3.5도	10000'	20L(34')
	02L(20') 3.5도	10010'	20R(46')

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!!
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VVCR(CXR) 46ft			RKSI(ICN) 23ft		
None TWR 118.2 By Voice			<div>PA</div> 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					
			<div>DEP 127.9 – HCM 134.05</div> <div>DAD 123.3 – SNY 122.6(-5min)</div> <div>HKG 132.15 – 127.1 – TPE 129.1</div> <div>125.5 – FUK 127.5(SENKA /20)</div>		
<div>SE Asia</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					

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

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 : EO34L/R, 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)

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

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

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					

<u>RKSI(ICN) 23ft</u>	<u>VDPP(PNH) 40ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA	PNH DIS 129.0
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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 : EO34L/R, 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>FUK 127.5(SENKA /20) – TPE 125.5 – 127.9 – 129.1</u>	SE Asia
<u>MNL 119.3 – MNL RDO 8942(5655)</u>	
<u>HCM 120.7(MIGUG) – PNH 127.5</u>	
<u>APP 123.8</u>	

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

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

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

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

VDPP(PNH) 40ft

RKSI(ICN) 23ft

PNH DIS 129.0

READY! TWR 118.0 By Voice

PA

KE ICN 131.5

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
° 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 10kts 이상, HIRO

<u>RKSI(ICN) 23ft</u>	<u>RPLL(MNL) 75ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA PAGSS Oper 131.0 No D-ATIS
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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 : EO34L/R, 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>FUK 133.6 – 127.5 – 123.2 – 123.9(BISIG ETA)</u>
<u>MNL RDO 8903(13300)</u>
<u>MNL 128.7(BEDIP) – APP 124.4</u>
<u>SE Asia</u>

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

06	POLIO, NABAL (7,5,3)R/P	GONDO (DAGAT)	RNP 06 ILS 06
24	DCT MIA RDR Vec (TMA 250, 20NM 210)	MUTAN (MEDAM)	RNP 24 ILS 24
HUD	06 (16')	11188'	24 (75')

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
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<u>RKSI(ICN) 23ft</u>	<u>RCMQ(RMQ)665ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Mandarin Operation 131.85/95
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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 : EO34L/R, 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>FUK 127.5</u> (<u>SENKA /20</u>)	<u>SE Asia</u>
<u>TPE 125.5</u>	
<u>APP 128.5 – 119.7 – 130.1</u>	

RMQ : No STAR TL130 COPRA FL220 ILS Z 36: HLG31 SPD Modify

18	RDR Vector	HLG	ILS 18
36		FATAN (ARROZ)	ILS Z 36 (ILS Y 36)
HUD	18(653')	12005'	36(663')
FIX	RWxx /8		

18 : EOR(12005'), 36 : W5(8500')

E1~4, W1 for Military
Follow Me Car on W, Report W3 Intersection

RCMQ(RMQ)665ft

RKSI(ICN) 23ft

Madarin Operation 131.85/95 Voice to GND	<div>PA</div> KE ICN 131.5
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RMQ : SID (NADP 1) TA 11000

18	HLG xA (SPRAY xS)	181	181	ATC 7000	181
36	HLG xB (SPRAY xT)	001	001		001
18 111.7		36 111.5			
HUD	18(653')	12005'		36(663')	
EO	18 : TCK 181/7, R270				

ATC CLR after PushBack, Report W3 Intersection

[TWR 118.75](#)
[TPE APP 130.1 – 119.7](#)
[TPE 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

<u>RKSI(ICN) 23ft</u>	<u>RCTP(TPE)108ft</u>
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KE ICN 131.5 DCL -10분 TOBT5분 차이시 CTC Comm	PA Dynasty Operation 131.3
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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 : EO34L/R, 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 이 상(R17 MAX 15kts)

FUK 127.5(SENKA /20)

TPE 125.5

APP 128.5

125.6



SE Asia

TPE : STAR TL130 COPRA FL200 (FL250-130 : 280kts, FL130-10000ft : Max 280kts, APP Chart Text)
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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')
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No VOR at TPE, A-VDGS see above
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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					

<u>RKSI(ICN) 23ft</u>	<u>PGUM(GUM) 305ft</u>
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KE ICN 131.5 DCL -10분 TOBT 5분 차이시 CTC Comm	PA Menzies Operations 129.4 No DATIS
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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 : EO34L/R, 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>FUK 133.15 – 135.3 – 132.3</u>

<u>TKO RDO (BIXAK) 17904/8870</u>

<u>SFO RDO (PAKDO) 4666/8903</u>

<u>GUM (NATSS) 118.7</u>	SE Asia
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GUM : no STAR (UTC + 10, TL180)
CPDLC BIXAK to NATSS : RJJJ to KZAK
CTC GUM CERAP 118.7 (SQ2100) Before 250NM

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

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

Prepare GS OUT, Vacate RWY CTC Ramp CTL
--

EDTO Procedure **APU Remain ON**

PREFLIGHT

Apply Alternate Airport IFR Wx Minima for Planning
(Ops Pecs C055) -> EDTO ERA Only(ERA no Wx)

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, ERA 기준)

60min 기준 : B737-900 398NM, Others 408NM
(within MAX 120min 750NM)

1 ELEC SRC Fail Before EEP : Reroute, 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

- Drift Down 30도이상, 5NM, FL290이하, +-500ft

- Wx Dev 5NM 이상, +-300ft

EDTO Segment

1 ELEC SRC Fail After EEP : Continue

Apply Actual Wx for Actual Divert

ETP (Equal Time Point, EDTO ERA기준)

FIX, ALTN Page SET

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

Last ETP(Critical Point) Fuel less then PLAN –
Continue by PIC

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	PA	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 10kts 이상, **HIRO**

<u>RKPK(PUS) 13ft</u>	<u>RCTP(TPE)108ft</u>
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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)

TPE 125.5

APP 128.5

125.6



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

<u>RCTP(TPE)108ft</u>	<u>RKPK(PUS) 13ft</u>
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Dynasty Operation 131.3 DCL, Voice -5min	<div>PA</div> 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)

RKPK(PUS) 13ft		VTBS(BKK) 4ft			
KE Gimhae 129.2 DCL -5분		PA	KE Bangkok 131.25		
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'		18R(13') 8530'		
	36R(8') 8999'		18L(13') 8999'		
RWY36 400ft Man L/H turn, Max Taxi SPD 20KTS					



<u>DEP 125.5 – TGU 128.17 – 124.52(125.72)</u>
<u>FUK 127.5(SENKA /20)</u>
<u>TPE 125.5 – 129.1 – HKG 132.15 – 127.1</u>
<u>SNY 122.6 – HNI 123.3 – VTN 128.3</u>
<u>BKK 132.1 – 133.1 – APP 119.1</u>
SE Asia

BKK : STAR TL130 UTC+7 (SPD CTL via STAR Chart)			
19L/R	EASTE xxC	No tx Vector	ILS Z 19L/R
01L/R	EASTE xxD	No tx Vector	ILS Z 01L/R
HUD	19L(4')	13123' No Groov	01R(4')
	19R(4')	12139'	01L(4')
FIX	RWxx /8 (180tks), /5 (160-150kts)		
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 Procedure			

<u>VTBS(BKK) 4ft</u>	<u>RKPK(PUS) 13ft</u>
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KE Bangkok 131.25 DCL -20min, Voice 133.8	<u>PA</u>	KE Gimhae 129.2
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BKK : RNAV SID (NADP 1) TA 11000 A-CDM REQ Pushback +-5min of TSAT TSAT/CTOT Inform to GND CTL

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
--

<u>DEP 119.25 (AUTO) – BKK 133.1 – VIE 128.3</u>	<u>SE Asia</u>
<u>HNI 123.3 – SNY 122.6 – HKG 127.1 – 125.35</u>	
<u>TPE 129.1(126.7, 127.9) – 125.5</u>	
<u>FUK 127.5 (SENKA /20)</u>	
<u>ICN 125.725(124.52) – 128.17</u>	
<u>APP 125.5</u>	

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 이륙 전 수행, 불필요시 시동 후 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

Home

**Continue
Next Page**

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

APU Bleed OFF (no POM)

(APU 시동 후 2분뒤 APU Bleed ON을 위해서 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

After 2min, APU Bleed ON (no POM)

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

Home

COLD TEMP CORRECTION General

5도 간격은 보수적으로 보간법 적용 됨

Min 제외한 모든 고도 수정은 ATC 인가 필요

Mandatory, Missed App 고도 ATC 사전 인가 없이 금지

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	<u>Home</u>			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

Home

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 ICE**로 **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**

Home

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 full travel check (FLAP UP TAXI 고려)

Flight controls ----- Check

After Start Checklist

TAXI, BEFORE T/O, T/O Procedure

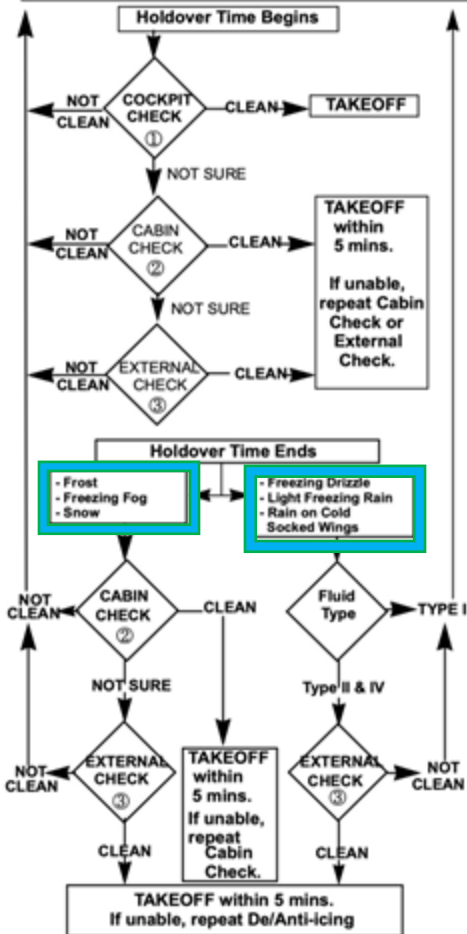
Cold Wx

DECISION TREE next page

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TAKEOFF DECISION TREE

DE/ANTI-ICE AIRCRAFT



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 Full travel check (FLAP UP TAXI 고려)

Flight controls ----- Check

AFTER START CHKlist (ATC CLR Confirm)

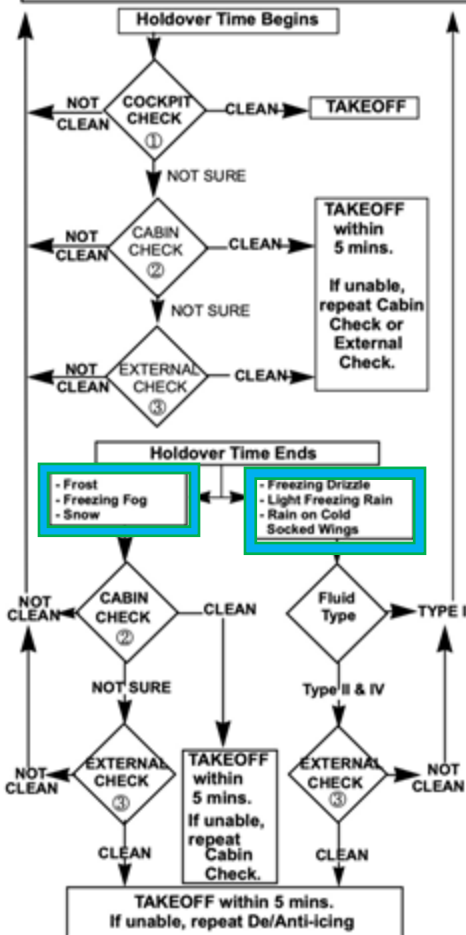
TAXI, BEFORE T/O, T/O Procedure

[Cold Wx](#)

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TAKEOFF DECISION TREE

DE/ANTI-ICE AIRCRAFT



PUS VOR 18L/R

RKPK ARRIVALS
 STARS RTE 2
 VOR18R<SEL>
 TRANS
 GAYHA<SEL>

1/1
 RUNWAYS
 <SEL>18R

 RMY EXT
 -- -NM
 FPA
 -.-

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

RUNWAYS
 18L/R

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

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