A330 VER. 26.6.1

# KneeBoard

Click for Update by Flyingdeuk

## Domestic

## Japan

## China

## SE Asia

## Oceania

## Mongo, ME Asia

## Differences

| | |
|---|---|
| FUEL | 1 ENG TAXI |
| LP/HP Air | Cross Start |
| Cold Temp Correction | |
| Cold Wx Operation | |
| ENG ON Deicing | ENG OFF Deicing |
| QRH | RESET |

# Domestic

| | |
|---|---|
| GMP | CJU |
| GMP | PUS |
| CJU | PUS |
| ICN | PUS |

Welcome PA

Next Page

## WELCOME PA (10분이상 지연 or 예상시 지연 방송)

손님 여러분, 안녕하십니까?
저는 여러분을 모시고 가는 기장 ___입니다.
저희 대한항공을 이용해 주셔서 대단히 고맙습니다.
___ (국제)공항까지 비행시간은 ___시간 ___분
으로 예상됩니다.
비행 중에는 항공기가 갑자기 흔들릴 수도 있으니,
자리에 앉아 계실 때에는 항상 좌석벨트를
매주시기 바랍니다. (저희 승무원 모두는)
저는 여러분을 안전하게 모시기 위해 최선을
다하겠습니다. 고맙습니다.

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 | 김포국제 |
| ICN | 인천국제 |
| CJU | 제주국제 |
| PUS | 김해국제 |

도착방송

# 도착 방송 (5시간이상, 40분전)

출발지 기준 2200-0800 Quiet Hour

**동남아 지역 난기류 대비 기내 서비스 절차**

- 6시간 미만 중거리만 1시간 전 음료서비스
- 40분전 서비스 회수
- APP PA이후 CREW 착석 강조

손님 여러분, 저는 기장입니다.

우리 비행기는 앞으로 약 (40)분 후에

___국제공항에 착륙 예정입니다.

현재 공항의 날씨는 ◐___, 기온은 섭씨 __도 입니다.

| | |
|---|---|
| ◐ 맑으며 | ◐ 눈이 오고 있으며 |
| ◐ (다소)흐리며 | ◐ 안개가 끼어 있으며 |
| ◐ (이슬)비가 내리며/소나기가 내리며 | ◐ 황사가 있으며 |
| ◐ 바람이 불고 있으며 | |

지금 이곳의 시각은 __월 __일 __요일, 오전(오후) __시 __분 입니다. 고맙습니다.

Ladies and gentlemen, this is the captain speaking.

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

The current temperature at ___ is __ degrees Celsius, or __ degrees Fahrenheit (NAVBLUE 참조)

and it is ◐___.

| | |
|---|---|
| ◐ (mostly) clear | ◐ snowing |
| ◐ (partly) cloudy | ◐ foggy |
| ◐ drizzling / raining | ◐ hazy or smoggy |
| ◐ windy | |

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

Thank you for flying with us today.

| Japan | |
|---|---|
| GMP | HND |
| ICN | KIX |
| ICN | NRT |
| ICN | HND |
| ICN | FUK |
| ICN | NGO |
| ICN | CTS |

| Welcome PA |
|---|
| Next Page |

# WELCOME PA (10분이상 지연 or 예상시 지연 방송)

손님 여러분, 안녕하십니까?
저는 여러분을 모시고 가는 기장 ___입니다.
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___ (국제)공항까지 비행시간은 ___시간 ___분
으로 예상됩니다.
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자리에 앉아 계실 때에는 항상 좌석벨트를
매주시기 바랍니다. (저희 승무원 모두는)
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Good morning (afternoon /evening), ladies and gentlemen.
This is captain <u>last name</u> 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.

| Japan | |
|---|---|
| KIX | 오사카/간사이 |
| HND | 도쿄/하네다 |
| NRT | 도쿄/나리타 |
| CTS | 삿포로/신(New) 치토세 |
| NGO | 나고야/주부(Chubu Centrair) |
| FUK | 후쿠오카 |

| China | |
|---|---|
| ICN | HKG |
| ICN | PEK |
| ICN | WUH |
| ICN | CAN |
| ICN | XIY |
| ICN | TSN |
| ICN | TAO |
| ICN | SZX |

| Welcome PA |
|---|
| Next Page |

# WELCOME PA (10분이상 지연 or 예상시 지연 방송)

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Please enjoy your flight.

| China | |
|---|---|
| HKG | 홍콩 |
| PEK | 베이징/소우뚜(Capital) |
| WUH | 우한/톈허 |
| CAN | 광저우/바이윈 |
| XIY | 시안/시엔양 |
| TSN | 톈진/빈하이 |
| TAO | 칭다오/자오둥 |
| SZX | 선전/바오안 |

| SE Asia | |
|---|---|
| PUS | BKK |
| ICN | BKK |
| ICN | SIN |
| ICN | DAD |
| ICN | SGN |
| ICN | CNX |
| ICN | DPS |
| ICN | KTI |
| ICN | TPE |
| ICN | RGN |
| ICN | PQC |
| ICN | KUL |
| ICN | CXR |
| ICN | HAN |

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| | |
|---|---|
| BKK | 방콕/수완나폼 |
| SIN | 싱가포르/창이 |
| DAD | 다낭 |
| SGN | 베트남 호찌민/탄소넛 |
| CNX | 치앙마이 |
| MNL | 필리핀 마닐라/니노이 아키노 |
| TPE | 타이완/타이페이 타오유엔 |
| DPS | 덴파사르 발리/응우라라이 |
| KTI | 프놈펜/테초 |
| TPE | 타이완/타이페이 타오유엔 |
| RGN | 양곤 |
| PQC | 푸꾸옥 |
| KUL | 쿠알라룸푸르 |
| CXR | 냐짱(나트랑)/깜라인(캄란) |
| HAN | 하노이/노이바이 |

## 도착 방송

# Oceania

| | |
|---|---|
| NRT | HNL |
| ICN | SYD |
| ICN | BNE |

Welcome PA

Next Page

# WELCOME PA (10분이상 지연 or 예상시 지연 방송)

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| Oceania | |
|---|---|
| HNL | 호놀루루/다니엘 케이 이노우에 |
| SYD | 시드니/킹스폴드 스미스 |
| BNE | 브리즈번 |

도착방송

| Mongo, ME Asia | |
|---|---|
| ICN | UBN |
| ICN | DXB |
| ICN | KTM |

| Welcome PA |
|---|
| Next Page |

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| Mongo, ME Asia | |
|---|---|
| UBN | 울란바타르/칭기스칸 |
| DXB | 두바이 |
| KTM | 카트만두/트리부반 |

도착방송

| RKSS(GMP) 59ft | | RKPC(CJU) 119ft |
|---|---|---|
| KE GMP 131.15<br>DCL -15분 가능 TOBT 5분 차이 시 CTC Comm | **PA** | KE CJU 129.4 |

L R
R L

Rwy 32R **Takeoff**
(06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)

**GMP : NADP FX-10도, CLB, CONF 1+F, Acc 4000ft**

| | | |
|---|---|---|
| 32L/R | BULTI xT<br>(BULTI xQ) | HD 324 ALT 5000 Mod NADP |
| 14L/R | BULTI xU<br>(BULTI xZ) | HD 144 ALT 6000 Mod NADP |

| KIP | 32L IKMO | 32R ISKP | 14L ISEL | 14R IOFR |
|---|---|---|---|---|
| 113.6 | 108.3 | 110.7 | 109.9 | 108.7 |

| FIX | 32L/R : EO32L/R, R225, YJU R271 | 14L/R : EO14L/R, R220, P73 /2 |
|---|---|---|

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)
**(BOKUM, NUNPI, SAMKU)**

**CJU [066/246] : STAR**
**AFT Merge PT(220kts) DCT IAF(195kts), FAF (160kts)**

| | | | |
|---|---|---|---|
| ILS Z 07 | DOTOL xP | YUMIN | NULDI 160 |
| RNP Y 07 (No LPV), RNP Z 07 AR (RNP 0.11) | | | |
| ILS Z 25 | DOTOL xM | DUKAL | NULDI 160 |
| NAV | YDM 25 ICHE 07 ICJU | | |

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

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

| RKPC(CJU) 119ft | RKSS(GMP) 59ft |
|---|---|
| KE CJU 129.4<br>DCL -10분 | **PA** KE GMP 131.15 |

Rwy 32L **Landing**
(06:00L~0900L / 12:00L~15:00L
/18:00L~21:00L)

R L
L R

## CJU : SID (NADP 1)

| | | |
|---|---|---|
| 07 | KAMIT xE | HD 066 ALT 10000 |
| 25 | KAMIT xW | HD 246 ALT 10000 |

| | | |
|---|---|---|
| YDM 109.0 | 07 ICJU 109.9 | 25 ICHE 111.3 |

| | |
|---|---|
| FIX | RW25 : YDM246/3, R290 |

07 : Passing G4 CTC TWR
25 : 31 Holding PSN on P, E1,2,3 CTC TWR
**Caution RW31 Holding Sign**

## GMP [324/144] : STAR

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

| | |
|---|---|
| NAV | KIP 32L IKMO, 32R ISKP, 14L ISEL, 14R IOFR |
| FIX | YJU R271, P73 /2, P518 068, 278 |

**32L : D3(6532'), E2(9117'), 32R(No CL L/T) : E1(6614')**
**14R : C1(6578')**

32L/R : ILS 7 DME L/G DN, 14R : LOC CAPT L/G DN
FAF : Final Flap
TWR -> GND -> APRON (All by ATC)
**RTE 1 : D3-P6-N1 H.S P5 (BOKUM, NUNPI, SAMKU)**

| RKSS(GMP) 59ft | | RKPK(PUS) 13ft |
|---|---|---|
| KE GMP 131.15<br>DCL -15분 가능 TOBT 5분 차이 시 CTC Comm | **PA** | KE Gimhae 129.2 |

Rwy 32R **Takeoff**
(06:00L~0900L / 12:00L~15:00L /18:00L~21:00L)

**GMP : NADP FX-10도, CLB, CONF 1+F, Acc 4000ft**

| | | |
|---|---|---|
| 32L/R | OSPOT xT<br>(OSPOT xQ) | HD 324 ALT 5000 Modi NADP |
| 14L/R | OSPOT xU<br>(OSPOT xZ) | HD 144 ALT 6000 Modi NADP |

| KIP | 32L IKMO | 32R ISKP | 14L ISEL | 14R IOFR |
|---|---|---|---|---|
| 113.6 | 108.3 | 110.7 | 109.9 | 108.7 |

| HUD | 32L/R : EO32L/R, R225, YJU R271 | 14L/R : EO14L/R, R220, P73 /2 |
|---|---|---|

APRON(130.875) -> GND(121.9) -> TWR (All by ATC)
**(BOKUM, NUNPI, SAMKU)**

**PUS [002/182] : STAR** (T/W 10tks, 36R, 360000lbs 제한)

| ILS 36 | KEVOX x | MASTA | 9DME LG, 8DME FLAP |
|---|---|---|---|
| VOR 18 | GAYHA x | MASTA | 18 Circling Click!! |

| NAV | KMH, 36L IKMA, 36R IKHE | |
|---|---|---|
| FIX | 36 : IKMA/IKHE /9, /8 | 18 : KMH R284, R280 |

**36L : C4 (6299'), C2(7795') 36R : E3(5866'), E2(7339')**
**18R(DIS):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<br>DCL -5분 | **PA** KE GMP 131.15 |

Rwy 32L **Landing**
(06:00L~0900L / 12:00L~15:00L
/18:00L~21:00L)

R L
L R

**PUS : NADP CLB 1500, 360000lbs TOGA, CONF 1+F**

| | | |
|---|---|---|
| 36 | SOORO x<br>KALOD tx | HD 002 ALT ATC Modi NADP |
| 18 | GIMHAE x | HD 182 ALT 5000 Modi NADP |

| | | | |
|---|---|---|---|
| KMH 113.8 | PSN 114.0 | 36L IKMA<br>108.5 | 36R IKHE<br>109.5 |

| | |
|---|---|
| FIX | 36 : KMH R091, R271, R185 |

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

**GMP [324/144] : STAR**

| | | | |
|---|---|---|---|
| ILS 32L/R | GUKDO xT | BUMSI | GUKDO 160 |
| ILS 14R | GUKDO xU | DOKDO | GUKDO 160 |

| | |
|---|---|
| NAV | KIP 32L IKMO, 32R ISKP, 14L ISEL, 14R IOFR |
| FIX | YJU R271, P73 /2, P518 068,278 |

**32L : D3(6532'), E2(9117'), 32R (No CL L/T) : E1(6614')**
**14R : C1(6578')**

32L/R : ILS 7 DME L/G DN, 14R : LOC CAPT L/G DN
FAF : Final Flap
TWR -> GND -> APRON (All by ATC)
**RTE 1 : D3-P6-N1 H.S P5 (BOKUM, NUNPI, SAMKU)**

| RKPC(CJU) 119ft | RKPK(PUS) 13ft |
|---|---|
| KE CJU 129.4<br>DCL -10분 | PA KE Gimhae 129.2 |

| CJU : SID (NADP 1) | | |
|---|---|---|
| 07 | AKPON xE | HD 066 ALT 9000 |
| 25 | AKPON xW | HD 246 ALT ATC |

| YDM 109.0 | 07 ICJU 109.9 | 25 ICHE 111.3 |
|---|---|---|

| FIX | 25 : YDM246/3, R290 |
|---|---|

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

| PUS [002/182] : STAR (T/W 10tks, 36R, 360000lbs 제한) | | | |
|---|---|---|---|
| ILS 36 | KEVOX x | ANROD | 9DME LG, 8DME FLAP |
| VOR 18 | GAYHA x | ANROD | 18 Circling Click!! |
| NAV | KMH, 36L IKMA, 36R IKHE | | |
| FIX | 36 : IKMA/IKHE /9, /8 | 18 : KMH R284, R280 | |

36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')
18R(DIS):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<br>DCL -5분 | **PA** KE CJU 129.4 |

**PUS : NADP CLB 1500, 360000lbs TOGA, CONF 1+F**

| | | |
|---|---|---|
| 36 | SOORO x TOPAX tx | HD 002 ALT ATC Modi NADP |
| 18 | BULIM x ENGOT tx | HD 182 ALT 5000 Modi NADP |

| | | | |
|---|---|---|---|
| KMH 113.8 | PSN 114.0 | 36L IKMA 108.5 | 36R IKHE 109.5 |

| | |
|---|---|
| FIX | 36 : KMH R091, R271, R185 |

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

**CJU [066/246] : STAR**

**AFT Merge PT(220kts) DCT IAF(195kts), FAF (160kts)**

| | | | |
|---|---|---|---|
| ILS Z 07 | UPGOS xP | YUMIN | |

RNP Y 07 (No LPV), RNP Z 07 AR (RNP 0.11)

| | | | |
|---|---|---|---|
| ILS Z 25 | UPGOS xT(xM) | DUKAL | |

| | |
|---|---|
| NAV | YDM 25 ICHE 07 ICJU |

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

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

| RKSI(ICN) 23ft | RKPK(PUS) 13ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA KE Gimhae 129.2 |

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

| | | |
|---|---|---|
| 33L/R | OSPOT xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | OSPOT xY | HD 333 ALT ATC SPD 230 |
| 15L/R | OSPOT xC | HD 153 ALT 5000 NADP2 |
| 16L/R | OSPOT xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

**PUS [002/182] : STAR (T/W 10tks, 36R, 360000lbs 제한)**

| | | | |
|---|---|---|---|
| ILS 36 | KEVOX x | MASTA | 9DME LG, 8DME FLAP |
| VOR 18 | GAYHA x | MASTA | 18 Circling Click!! |
| NAV | KMH KMH, 36L IKMA, 36R IKHE | | |
| FIX | 36 : IKMA/IKHE /9, /8 | 18 : KMH R284, R280 | |

**36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')**
**18R(DIS): 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<br>DCL -5분 | PA | KE ICN 131.5 |

**PUS : NADP CLB 1500, 360000lbs TOFA, CONF 1+F**

| | | |
|---|---|---|
| 36 | SOORO x<br>KALOD tx | HD 002 ALT ATC<br>Modi NADP |
| 18 | GIMHAE x | HD 182 ALT 5000 Modi NADP |

| | | | |
|---|---|---|---|
| KMH 113.8 | PSN 114.0 | 36L IKMA<br>108.5 | 36R IKHE<br>109.5 |

| | |
|---|---|
| FIX | 36 : KMH R091, R271, R185 |

RWY 36 400ft Man L/H turn, Max Taxi SPD 20KTS

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSS(GMP) 59ft | RJTT(HND) 21ft |
|---|---|
| KE GMP 131.15<br>DCL -15분 가능<br>TOBT 5분 차이시 CTC Comm | PA Delta Oper 132.075<br>Terminal 3 |

L R
R L

Rwy 32R Takeoff
(06:00L~0900L / 12:00L~15:00L
/18:00L~21:00L)

**GMP : NADP FX-10도, CLB, CONF 1+F, Acc 4000ft**

| | | | | |
|---|---|---|---|---|
| 32L/R | EGOBA xT<br>(EGOBA xQ) | HD 324 ALT 5000 Modi NADP | | |
| 14L/R | EGOBA xU | HD 144 ALT 6000 Modi NADP | | |
| KIP<br>113.6 | 32L IKMO<br>108.3 | 32R ISKP<br>110.7 | 14L ISEL<br>109.9 | 14R IOFR<br>108.7 |
| HUD | 32L/R : EO32L/R, R225, YJU R271 | | 14L/R : EO14L/R, R220, P73 /2 | |

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

DEP 125.15 – TGU 134.17 – FUK 133.02
TKO 120.5 – TKO 133.35
TKO APP 119.1 – 119.65

**HND : STAR XAC Night– APP xxx Y 1400z~ SPENS 220**
**22/23 LDA, VOR 16L/R Tailored Procedure**

| | | | |
|---|---|---|---|
| 34L/R | XAC xK/H | KAIHO/CACAO | ILS X / VIS |
| 22[222] | XAC 1B | BACON | LDA W(RNV22-W) |
| 16R/L | XAC R | NATTY/SANDY | RNP(RNV16R/L) |
| 23[232] | XAC 2B | DANON | LDA W(RNV23-W) |
| NAV | TTE, 34L IHA, 34R ITC(LDA chk:22 IKL,23 ITL) | | |
| FIX | 22 : IKL /8, /3, TTE 015<br>23 : ITL /12,/7, TTE 178 | | Z 34L : IHA /10, /5<br>Z 34R : ITC /10, /5 |

34L:L12(6515),L13(7165), 16R(DIS):L5(5147),L3(6361)
22 : B4(6207), B3(6830), 23: D5(5072),D3(6391)
34R(DIS):C10(5780),C11(7270), 16L(DIS):C6(5925),C4(7004)

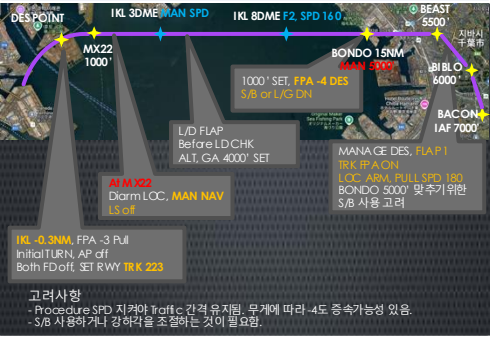
xxx Z : 180kts, 160kts limit APP Chart, xxx Y After 1400z
Gate 105P Procedure [LDA22/23 Next Page]

# A330 HND LDA 22 W

**F-PLN**

| APPR | STAR | TRANS |
|---|---|---|
| RNV22-W | XAC 1B | BACON |

**CHK IKL, IKL /8 180kts, /3 160kts, TTE 015 (GA)**




## Missed App

R/H Turn **HME 015** OUTBD (PULL TRK)

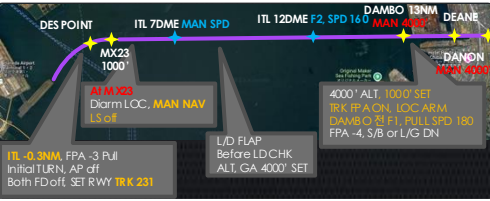
(DCT KASGA Radial In 196, MAN NAV)

# A330 HND LDA 23 W

**F-PLN**

| APPR | STAR | TRANS |
|---|---|---|
| RNV23-W | XAC 2B | BACON |

**CHK ITL, ITL /12 180kts, /7 160kts, TTE 178 (GA)**




## Missed App

L/H Turn **HME 177** OUTBD (PULL TRK)

(DCT UTIBO Radial In 357, MAN NAV)

| RJTT(HND) 21ft | RKSS(GMP) 59ft |
|---|---|
| Delta Oper 132.075<br>DCL -15분 | **PA** KE GMP 131.15 |

Rwy 32L Landing
(06:00L~0900L / 12:00L~15:00L
/18:00L~21:00L)

R L
L R

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

| ALL | BEKLA x<br>OPPAR x | HD 338/158,231/051,223/043<br>ALT ATC<br>Mod SPD 230 | | | | |
|---|---|---|---|---|---|---|
| TTE<br>117.4 | 34L IHA<br>111.7 | 16R ITA<br>111.55 | 34R ITC<br>108.9 | 16L IOC<br>111.95 | 22 IAD<br>108.1 | 23 ITD<br>110.5 |

| FIX | 34L : TTE 346/1.2, R095, 34R : TTE R071, R095, 22 : TTE /2.2 R185 |
|---|---|

34R BEKLA : KAIJI 230kts, TO FLAP SPD Until TORAM
05 OPPAR : Reduce SPD ARC TURN
RWY05 RTE5 TAXI Chart

DEP ATIS
TKO 120.5 – FUK 133.02
TGU 120.57
APP 119.75

**GMP [324/144] : STAR**

| ILS 32L/R | GUKDO xT | BUMSI | GUKDO 160 |
|---|---|---|---|
| ILS 14R | GUKDO xU | DOKDO | GUKDO 160 |

| NAV | KIP 32L IKMO, 32R ISKP, 14L ISEL, 14R IOFR |
|---|---|
| FIX | YJU R271, P73 /2, P518 068,278 |

**32L : D3(6532'), E2(9117'), 32R (No CL L/T) : E1(6614')**
**14R : C1(6578')**

32L/R : ILS 7 DME L/G DN, 14R : LOC CAPT L/G DN
FAF : Final Flap
TWR -> GND -> APRON (All by ATC)
**RTE 1 : D3-P6-N1 H.S P5 (BOKUM, NUNPI, SAMKU)**

| RKSI(ICN) 23ft | RJBB(KIX) 17ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA<br>KE KIX 130.95<br>Gate 9 |

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

| | | |
|---|---|---|
| 33L/R | EGOBA xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | EGOBA xY | HD 333 ALT ATC SPD 230 |
| 15L/R | EGOBA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | EGOBA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

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

**KIX [059/239] : STAR (SAEKI 170, RANDY 150)**

| | | | |
|---|---|---|---|
| 06R/L | ATMUG B<br>ATMUG A | BERRY<br>ATVID | ILS Z 06R/L |
| 24L/R | ATMUG M/C<br>ATMUG D/E | MAYAH<br>D/E Night | ILS Z 24L/R |

| | |
|---|---|
| NAV | KIE, 06L IKJ, 06R IKD, 24L IKN, 24R IKW |

**06R : A7(5137'), A6(6938'), 24L : A8(5269'), A9(6976')**
06L : B8(5160'), B6(6751'), 24R : B7(5318'), B9(6751')
24L Downslope

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<br>DCL -15분 | KE ICN 131.5 |

**PA**

## KIX : SID – SOUJA tx (NADP 1)

| | | |
|---|---|---|
| 06L/R | RINKU x<br>- SOUJA tx | HD 059 ATC (9000) |
| 24R/L | | HD 239 ATC (9000) SPD 210 |

| KIE | 06L IKJ | 06R IKD | 24L IKN | 24R IKW |
|---|---|---|---|---|
| 111.6 | 108.7 | 108.1 | 110.7 | 108.5 |

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

## ICN [334/153] : STAR

| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
|---|---|---|---|
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513'
15L : C4(5495'), C5(6227'), 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'

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RJAA(NRT) 135ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | KE Tokyo 131.70<br>Gate 21-27 |

PA

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

| | | |
|---|---|---|
| 33L/R | EGOBA xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | EGOBA xY | HD 333 ALT ATC SPD 230 |
| 15L/R | EGOBA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | EGOBA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 134.17

TKO 124.15 – 132.02 – 124.1 – 128.2

TKO APP 124.4 – 120.2

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

| | | | |
|---|---|---|---|
| 34L/R[337] | SWAMP E (SWAMP T) | ELGAR (TYLER) | ILS 34L/R(Z) |
| 16L/R[157] | SWAMP G (SWAMP N) | GEMIN (NORMA) | ILS Z 16L/R |

| | |
|---|---|
| NAV | NRE, 16L ITM, 16R IKF, 34L IYQ, 34R ITJ |
| FIX | 16L : ITM 4 / 34R : ITJ 14, 4 (DME)<br>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 | RKSI(ICN) 23ft |
|---|---|
| KE Tokyo 131.70<br>DCL -15분 | KE ICN 131.5 |

**PA**

**NRT : SID – ENPAR tx (NADP 1)**

| | | |
|---|---|---|
| 16L/R | TETRA x<br>ENPAR tx<br>CHK ALT | HD 158 ALT ATC |
| 34L/R | | HD 338 ALT 7000/ATC |

| NRE | 16L ITM | 16R IKF | 34L IYQ | 34R ITJ |
|---|---|---|---|---|
| 117.9 | 110.7 | 111.5 | 111.9 | 110.9 |

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

**ICN [334/153] : STAR**

| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
|---|---|---|---|
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RJTT(HND) 21ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA Delta Oper 132.075<br>Terminal 3 |

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

| | | | | |
|---|---|---|---|---|
| 33L/R | EGOBA xE/A | HD 333 ALT 5500/ATC SPD 230/x | | |
| 34L/R | EGOBA xY | HD 333 ALT ATC SPD 230 | | |
| 15L/R | EGOBA xC | HD 153 ALT 5000 NADP2 | | |
| 16L/R | EGOBA xH | HD 153 ALT 5000 NADP2 | | |
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 | | |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 134.17 – FUK 133.02

TKO 120.5 – TKO 133.35

TKO APP 119.1 – 119.65

**HND : STAR XAC Night– APP xxx Y 1400z~ SPENS 220**
**22/23 LDA, VOR 16L/R Tailored Procedure**

| | | | |
|---|---|---|---|
| 34L/R | XAC xK/H | KAIHO/CACAO | ILS X / VIS |
| 22[223] | XAC 1B | BACON | LDA W(RNV22-W) |
| 16R/L | XAC R | NATTY/SANDY | RNP(RNV16R/L) |
| 23[231] | XAC 2B | DANON | LDA W(RNV23-W) |
| NAV | TTE, 34L IHA, 34R ITC(LDA chk:22 IKL,23 ITL) | | |
| FIX | 22 : IKL /8, /3, TTE 015<br>23 : ITL /12,/7, TTE 178 | Z 34L : IHA /10, /5<br>Z 34R : ITC /10, /5 | |

34L:L12(6515),L13(7165), 16R(DIS):L5(5147),L3(6361)
22 : B4(6207), B3(6830), 23: D5(5072),D3(6391)
34R(DIS):C10(5780),C11(7270), 16L(DIS):C6(5925),C4(7004)

xxx Z : 180kts, 160kts limit APP Chart, xxx Y After 1400z

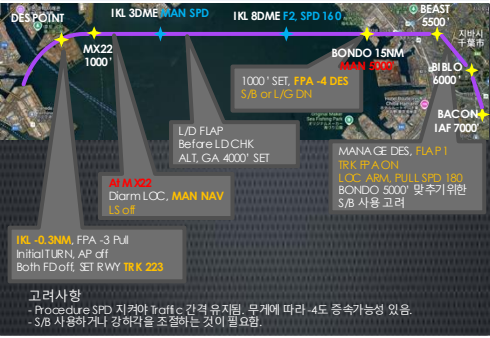
Gate 105P Procedure [LDA22/23 Next Page]

# A330 HND LDA 22 W

**F-PLN**

| APPR | STAR | TRANS |
|---|---|---|
| RNV22-W | XAC 1B | BACON |

**CHK IKL, IKL /8 180kts, /3 160kts, TTE 015 (GA)**




## Missed App

R/H Turn **HME 015** OUTBD (PULL TRK)

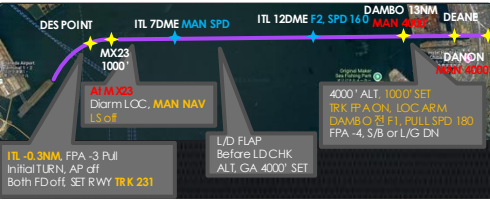
(DCT KASGA Radial In 196, MAN NAV)

# A330 HND LDA 23 W

**F-PLN**

| APPR | STAR | TRANS |
|---|---|---|
| RNV23-W | XAC 2B | BACON |

**CHK ITL, ITL /12 180kts, /7 160kts, TTE 178 (GA)**




## Missed App

L/H Turn **HME 177** OUTBD (PULL TRK)

(DCT UTIBO Radial In 357, MAN NAV)

| RJTT(HND) 21ft | RKSI(ICN) 23ft |
|---|---|
| Delta Oper 132.075<br>DCL -15분 | KE ICN 131.5 |

**PA**

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

| ALL | BEKLA x<br>OPPAR x | HD 338(158), 051(231)<br>ALT ATC<br>Mod SPD 230 |
|---|---|---|

| TTE | 34L IHA | 16R ITA | 34R ITC | 16L IOC | 22 IAD | 23 ITD |
|---|---|---|---|---|---|---|
| 117.4 | 111.7 | 111.55 | 108.9 | 111.95 | 108.1 | 110.5 |

| FIX | 34L : TTE 346/1.2, R095, 34R : TTE R071, R095, 22 : TTE /2.2 R185 |
|---|---|

34R BEKLA : KAIJI 230kts, TO FLAP SPD Until TORAM
05 OPPAR : Reduce SPD ARC TURN
RWY05 RTE5 TAXI Chart

DEP ATIS
TKO 120.5 – FUK 133.02
TGU 120.57
APP 119.75

**ICN [334/153] : STAR**

| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
|---|---|---|---|
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
|---|---|
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RJFF(FUK) 30ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | KE FUK 132.05<br>Gate 53-59 |

PA

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

| | | |
|---|---|---|
| **33L/R** | **OSPOT xE/A** | **HD 333 ALT 5500/ATC SPD 230/x** |
| **34L/R** | OSPOT xY | HD 333 ALT ATC SPD 230 |
| **15L/R** | **OSPOT xC** | **HD 153 ALT 5000 NADP2** |
| **16L/R** | OSPOT xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| **NCN 113.8** | **33L INLL 109.3** | **33R INRR 108.9** | **15L ISLL 111.9** | **15R ISRR 109.1** |
| **WNG 112.9** | **34L IRFN 109.95** | **34R IRKN 108.1** | **16L IRKS 110.35** | **16R IRFS 108.55** |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242<br>YJU R271 | 34L/R : EO34L/R,R242<br>YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

TGU 125.37

Kobe 118.9 – FUK APP 119.65

FUK RDR – 121.125

**FUK [338/158] : RDR Vectoring from IKE**
**(PAVGA 13000ft)**
**Hold W of IKE published (Confirm FMS DATA)**

| | | | |
|---|---|---|---|
| **16** | SARUP | ENTIX | ILS, RNP, LOC 16 |
| 34 | **V34**<br>HAWKS WEST | **RWY34**<br>HAWKS | VIS 34<br>ILS, RNP, LOC 34 |
| **NAV** | DGC, **16 IFO, 34 IFF** DGC VOR out of 6NM A/P | | |

**16 : C6(5505'), C7(6407'), 34 : C4(5193'), C3(6354')**

**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<br>DCL -15min, Voice -5min | KE ICN 131.5 |

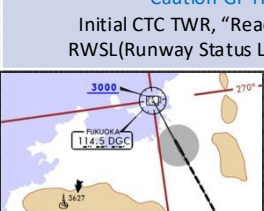
PA

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

| | | | |
|---|---|---|---|
| 16 | HAKATA | HD 158 ALT ATC (10000) | |
| 34 | XX | HD 338 ALT ATC (10000) | |
| DGC 114.5 | | 16 IFO 111.7 | 34 IFF108.9 |

| | |
|---|---|
| FIX | 16 : DGC 156/20 R240<br>(DGC VOR out of 6NM A/P) |

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

**ICN [334/153] : STAR**

| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
|---|---|---|---|
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RJGG(NGO) 12ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | SWISSPORT OPER 132.05<br>Gate 19-24 |

PA

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

| | | |
|---|---|---|
| 33L/R | EGOBA xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | EGOBA xY | HD 333 ALT ATC SPD 230 |
| 15L/R | EGOBA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | EGOBA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15

TGU 134.17 – TKO 133.8 – 133.02

셉트레아 APP – 121.05

**NGO [356/176] : STAR (SAMON 290, MARIA 130)**

| | | | |
|---|---|---|---|
| 36 | CHESS(CARDS) SOUTH | PROBE | ILS Z 36 |
| 18 | CHESS(CARDS) NORTH | QUEST | ILS Z 18 |
| NAV | CBE, 36 ICX, 18 ICY | | |

**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 | RKSI(ICN) 23ft |
|---|---|
| SWISSPORT OPERATION 132.05 DCL -15분 **PA** | KE ICN 131.5 |

**NGO : SID – TANGO tx (NADP 1)**

| | | |
|---|---|---|
| 36 | OUMI x - TANGO tx | HD 356 ALT ATC(7000) |
| 18 | | HD 176 ALT ATC(7000) |

| | | |
|---|---|---|
| CBE 117.8 | 18 ICY 109.7 | 36 ICX 111.9 |

APU Start 30min, Prepare Intersection T/O

DEP 120.0

TKO 133.55 – 133.8 – TGU 120.52

APP – 119.75

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RJCC(CTS) 70ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | None<br>Gate 63-71 |

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

| | | |
|---|---|---|
| 33L/R | EGOBA xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | EGOBA xY | HD 333 ALT ATC SPD 230 |
| 15L/R | EGOBA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | EGOBA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 134.17 – FUK 124.15 – 133.02
TKO 132.3 – SPR 133.3 – 119.3
CTS APP 120.1

**CTS [082/182] : 01R : IDEMI 150, 19L : NAVER 170**

| | | | |
|---|---|---|---|
| 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 |
| NAV | CHE, 01R ICH, 19L ICM | | |

**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

| RJCC(CTS) 70ft | RKSI(ICN) 23ft |
|---|---|
| None<br>NO DCL -5분 | **PA** KE ICN 131.5 |

**CTS : SID (NADP 1)**

| | | | | | |
|---|---|---|---|---|---|
| ALL | DALBI x<br>SUVIT x<br>SOSHU x | HD 002 ALT ATC | | | |
| | | HD 182 ALT ATC | | | |
| CHE<br>116.9 | 01R ICH<br>110.75 | 19L ICM<br>109.35 | 01L ICN<br>110.9 | 19R ICS<br>111.5 | |

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

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VHHH(HKG) 28ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA HAS FLT Dis 131.6<br>Bay N5-N12 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

ICN 124.52(125.72) – FUK 127.5 – TPE 125.5 – 126.7
129.1 – HKG RDR 121.3 – 126.5
DEP 122.0 – Final 119.1 – 119.35

**HKG [074/254] TL110 : Terminal Tx RTE + STAR Chart**
ENPET FL260, RWY25R After TOPUN - **APP Mode**

| | | | |
|---|---|---|---|
| 07L/R<br>07C | ABBEY xxA<br>SIERA xxA/C | LIMES | ILS 07L/R/C |
| 25R/L<br>25C | ABBEY xxB<br>SIERA xxB/D | RIVMI | RNAV tx ILS 25R<br>ILS 25L/C |

**1500 – 1659 Z RWY 07R/5L no avail, (ALL DIS TH Except 25L)**

| | |
|---|---|
| NAV | SMT, 07L IZSL, 07R IZSR, 07C IZSC<br>25R ITFR, 25L ITFL, 25C ITFC |

**07L : C7(5882'), C8(7194'), 25R : C6(5882'), C5(7211')**
**07R : J7(6916'), J8(7998'), 25L : J5(6916'), J4(8192')**
07C : A7(5692'), A8(7208'), 25C : A6(5127'), A56673')

**Confirm Chart SPD vs ATC SPD (ATC First)**
Solid Line for WideBody, APU BAN off Procedure

| VHHH(HKG) 28ft | RKSI(ICN) 23ft |
|---|---|
| HAS FLT Disp 131.6<br>DCL 20분전<br>5분 차이시 CTC Comm | **PA**<br>KE ICN 131.5 |

**HKG : SID + Terminal Tx RTE Chart TA 9000**
NADP2 : 1000 No LVR CLB - FLAP 0 - LVR CLB
3000 Manage SPD (NADP 1/2 for 07L/R/C)

| | | |
|---|---|---|
| 07L/C/R | DALOL x E/C/A<br>(Z/Y/X RF LEG) | HD 074 ALT 5000 SPD 205<br>NADP 1/2 (Z/Y/X 210) |
| 25L/C/R | DALOL x B/D/F | HD 254 ALT 5000 SPD 205<br>NADP 2 TA 9000 |

| | |
|---|---|
| NAV | SMT, 07L IZSL, 07R IZSR, 07C IZSC<br>25R ITFR, 25L ITFL, 25C ITFC |
| E. O | 07L: IZSL074/3,R095, IZSL/9.1, 25R: ITFR254/10,R156<br>07C:IZSC074/2.7,R080, IZSC/6.2, 25C:ITFC254/10,R156<br>07R:IZSR074/6.2,R080,MAX200kt, 25L:ITFL254/6,R145 |

**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 [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZBAA(PEK) 116ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>Air China Beijing 132.0<br>Parking Bay 205-208 |

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

| | | |
|---|---|---|
| **33L/R** | **NOPIK xA** | **HD 333 ALT ATC** |
| **34L/R** | NOPIK xY | HD 333 ALT ATC |
| **15L/R** | **BINIL xC** | **HD 153 ALT 5000 NADP2** |
| **16L/R** | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| **NCN 113.8** | **33L INLL 109.3** | **33R INRR 108.9** | **15L ISLL 111.9** | **15R ISRR 109.1** |
| **WNG 112.9** | **34L IRFN 109.95** | **34R IRKN 108.1** | **16L IRKS 110.35** | **16R IRFS 108.55** |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.72 – 128.15 – PEK 125.6

PEK APP 120.6 – Final 119.0

**PEK [001/181] : RW01/19 main (RW36L/18R)**

| | | | |
|---|---|---|---|
| **01/36L**/36R | **DUMAP x Z** | **AA141** | **ILS Z 01 (Y 36L)** |
| **19/18R**/18L | **DUMAP x G** | **AA261** | **ILS Z 19 (Y18R)** |

| | |
|---|---|
| NAV | **PEK, 01 INJ, 36L IDK, 19 ISZ, 18R ILG**<br>36R IQU, 18L IOR |

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

**01 : Q5(5223'), Q6(7024'), 19 3.2 :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

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZBAA(PEK) 116ft | RKSI(ICN) 23ft |
|---|---|
| Air China Beijing 132.0<br>DCL 40분전, Voice 20분전<br>(COBT/STD 15분 차이 CTC Comm) | **PA** KE ICN 131.5 |

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

| | | |
|---|---|---|
| 36R (01) | MUGLO x X/Y(x X) | HD 001 ALT 2100m(1800m)<br>Maintain RWY TRK TA9850 |
| 18L (19) | MUGLO x G (x J) | HD 181 ALT DCL(1500m)<br>TA 9850 |

| PEK | 36R IQU | 18L IOR | 01 INJ | 19 ISZ |
|---|---|---|---|---|
| 114.7 | 111.55 | 109.3 | 108.5 | 108.9 |

| | |
|---|---|
| FIX | 36R : PEK 325/11, 36L : PEK 326/13, 01 : PEK 323/9 then R124 |

**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

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZHHH(WUH)115ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | None<br>Parking Bay 331-335 |

PA

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

| | | |
|---|---|---|
| 33L/R | NOPIK xA | HD 333 ALT ATC |
| 34L/R | NOPIK xY | HD 333 ALT ATC |
| 15L/R | BINIL xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.72 – 128.15 – PEK 125.6

**WUH [046/226] : WUH CTL Rep HLxxxx, RDR CTC 60NM Prepare STAR CHG**

| | | | |
|---|---|---|---|
| 04/05R/L | PONUD 01T/05T | HH310/HH357 | ILS Z |
| 22/23L/R | PONUD 02T | AVLEN | ILS Z |

| | |
|---|---|
| NAV | WHA, 04 IHN, 05R IMU, 22 ITS, 23L IQD, 05L IWF, 23R IUT |

FIX : RWxx /8(180kts) from intercept final 180kts

**04 : B8(5557'), B9(6578'), 22 : B5(6738'), B4(7939')**
**05R : F10(5475'), F11(6597'), 23L : F7(5341'), F6(6545')**

Follow Me Car TWY K/J
APU off Procedure (GND Air Cond' & GPU)

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZHHH(WUH)115ft | RKSI(ICN) 23ft |
|---|---|
| None<br>DCL 10-30분전<br>Readback to CLR | PA KE ICN 131.5 |

**WUH : SID (NADP 1) Readback RWY, ALT to CLR**
**Report Ready for P/B to CLR**

| | | |
|---|---|---|
| 04/<br>05L | BIVIP 7S | HD 046 ALT 4800m or ATC(900m) TA 9850 |
| 22/<br>23R | BIVIP 6S | HD 246 ALT 4800m or ATC(900m)<br>SPD 220/230kts TA 9850 |

| WHA | 04 IHN | 22 ITS | 05L IWF | 23R IUT |
|---|---|---|---|---|
| 112.2 | 109.3 | 108.5 | 111.5 | 111.5 |

**Uncommanded Turn RNP Departure**

DEP 119.575

SHA 120.55 – 120.95
ICN 132.8 – APP 119.75

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZGGG(CAN) 50ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>China Southern 132.0<br>Parking Bay 147 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

Detour RTE : L01 (NOTAM)
SHR – FP02(N282500E1164500)
– FP01(N274500E1160000)
– ZP01(N261500E1152000)–PLT

**CAN [017/197] TL 108 : CAN CTL, APP Freq no Chart**
**Short PTN AFT IAF, RW20 Windshear, Lower GA ALT**

| | | | |
|---|---|---|---|
| 02R/L,01L/R | OLPAB xx RNAV | GG611/GG612 | ILS Z |
| 20L/R,19R/L | | GG511/GG513 | ILS Z |
| NAV | No VOR 02R IDM, 01L IGW, 20L IXL, 19R IKU, 02L IBB, 01R IOO, 20R IAA, 19L IPP | | |

Limit : RWxx /8(180kts) from final, /6(160kts)

**02R:Y10(6227'),Y8(7263'), 20L:Y12(6217'),Y14(7240')**
01L:N5(6453'),N4(7755'), 19R:N8(6423'),N9(7742')
**Caution Cross RWY Intermediate TWY**

STD Taxi RTE in JEPP(GREEN x), EAT 3/4 in JEPP
APU off Procedure, **FLAP 0 for Refuel**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

Detour RTE : L01 (NOTAM) VICE VERSA

SHR – FP02(N282500E1164500) – FP01(N274500E1160000) – ZP01(N261500E1152000) – PLT

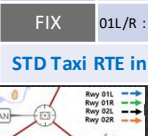
| ZHHH(CAN) 50ft | | RKSI(ICN) 23ft |
|---|---|---|
| China Southern 132.0<br>DCL 10-30분전<br>No Readback | **PA** | KE ICN 131.5 |

**CAN : TA 8900 SID Extra Fuel Delay/CRZ LVL**

| | | |
|---|---|---|
| 02L/R, 01R/L | BOVMA xx RNAV | HD 017 ALT 8900m/ATC(900m)<br>SPD 230kts TA 9850 |
| 20R/L, 19L/R | | HD 197 ATC(900m)<br>SPD 230kts TA 9850 |

| | | | | |
|---|---|---|---|---|
| POU 114.1 (no APT) | 02R IDM 108.5 | 01L IGW 109.5 | 20L IXL 111.9 | 19R IKU 108.95 |
| | 02L IBB 110.35 | 01R IOO 109.3 | 20R IAA 110.75 | 19L IPP 111.5 |
| FIX | 01L/R : IGW/IOO D5.0 R205, 02L/R : IBB/IDM D4.0/4.3 R220 | | | |

**STD Taxi RTE in JEPP(YELLOW x), Report RWY on DEP**




DEP 119.7 (DEP RWY)

Detour RTE L01 (PLT-SHR)

– Using Pilot Way Point

– Vise Versa

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZLXY(XIY)1572ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | AirPort OC 132.0<br>Parking Bay 556-561 |

PA

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

| | | |
|---|---|---|
| 33L/R | NOPIK xA | HD 333 ALT ATC |
| 34L/R | NOPIK xY | HD 333 ALT ATC |
| 15L/R | BINIL xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.725 – 128.15

PEK 125.6 – 120.35 – 133.65 – 134.15 – 126.7

XIY 125.3 – 120.95

XIY APP 119.05 – 120.2 – 125.1

**XIY [052/232] : STAR TL118**

**Spd Restriction at REF Page**

**Req ILS APP instead of Visual APP**

| | | | |
|---|---|---|---|
| 05L/R | LOVRA xx W | XY906 | RNAV ILS Z05L/R |
| 23R/L | LOVRA xx Y | XY801 | RNAV ILS Z23R/L |
| NAV | LCZ, 05L IQU, 23R IRA, 05R IXW, 23L IAQ | | |

**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

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZLXY(XIY)1572ft | RKSI(ICN) 23ft |
|---|---|
| Airport Operation Center 132.0<br>DCL -30~10 Min, Read Back | PA KE ICN 131.5 |

## XIY (TA 9850') : RNAV SID (NADP 1)

| | | |
|---|---|---|
| 05L /R | WJC xx W/Z | HD 052 ALT ATC 1500m(4900') TA 9850 |
| 23R /L | WJC xx X/Y | HD 232 ALT ATC 1500m(4900') SPD 205/230 |

| | | | | |
|---|---|---|---|---|
| LCZ 109.0 | 05L IQU 108.55 | 23R IRA 111.7 | 05R IXW 109.3 | 23L IAQ 111.1 |

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

## ICN [334/153] : STAR

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZBTJ(TSN) 6ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA Air China TSN 132.0<br>Parking Bay 105-107 |

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

| | | |
|---|---|---|
| **33L/R** | **NOPIK xA** | **HD 333 ALT ATC** |
| **34L/R** | NOPIK xY | HD 333 ALT ATC |
| **15L/R** | **BINIL xC** | **HD 153 ALT 5000 NADP2** |
| **16L/R** | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| **NCN 113.8** | **33L INLL 109.3** | **33R INRR 108.9** | **15L ISLL 111.9** | **15R ISRR 109.1** |
| **WNG 112.9** | **34L IRFN 109.95** | **34R IRKN 108.1** | **16L IRKS 110.35** | **16R IRFS 108.55** |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 132.8 – DLC 132.95

TAO 133.72 – 128.15 – PEK 125.6

TSN APP 119.27

TWR 118.425(130.0)

**TSN [161/341] : STAR (Missed App 1970' Initially)**

| | | | |
|---|---|---|---|
| **16L**/16R | **DUMAP xK**/R/H | **TJ960**<br>TJ919 | **ILS 16L**/16R |
| **34R**/34L | **DUMAP xQ** | **TJ841** | **ILS 34R**/34L |

| | |
|---|---|
| NAV | **TAJ, 16L ICU, 34R IKD, 16R IJS, 34L ICG** |
| FIX | RWxx /8, **RWxx /6 160kts(JEPP REF)** |

**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

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZBTJ(TSN) 6ft | RKSI(ICN) 23ft |
|---|---|
| Air China Tianjin 132.0<br>DCL 30분전, Voice 10분전<br>(Read Back!) | KE ICN 131.5 |

**PA**

**TSN : SID (NADP 1)** Caution 600m Level Off – SPD Inc

| | | |
|---|---|---|
| 16R /16L | MUGLO xT | HD 161 ALT ATC(600m) TA 3000m |
| 34L /34R | MUGLO xW/R | HD 341 ALT ATC(600m) SPD 230 TA 3000m |

| TAJ | 16R IJS | 34L ICG | 16L ICU | 34R IKD |
|---|---|---|---|---|
| 112.1 | 110.9 | 110.5 | 109.7 | 111.5 |

16R : Do not pass A11

Confirm Parking Brake Release before Push back

DEP 119.27

PEK 125.6

DLC 123.2 – 132.95

ICN 128.7 – APP 119.75

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZSQD(TAO) 30ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | Air China Beijing 132.0<br>Parking Bay 131-141 |

PA

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

| | | |
|---|---|---|
| **33L/R** | **NOPIK xA** | **HD 333 ALT ATC** |
| **34L/R** | NOPIK xY | HD 333 ALT ATC |
| **15L/R** | **BINIL xC** | **HD 153 ALT 5000 NADP2** |
| **16L/R** | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| **NCN 113.8** | **33L INLL 109.3** | **33R INRR 108.9** | **15L ISLL 111.9** | **15R ISRR 109.1** |
| **WNG 112.9** | **34L IRFN 109.95** | **34R IRKN 108.1** | **16L IRKS 110.35** | **16R IRFS 108.55** |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

DEP 125.15 – TGU 128.7 – DLC 132.95

TAO 128.55 – 134.85

TAO APP 119.77 – 119.4

**TAO [350/170] : AFT AGAVO – IKEKA- LATUX**

| | | | |
|---|---|---|---|
| **35**/34 | **LAT 91A/01A** | **QD700** | **ILS Z 35**(34) |
| **17**/16 | **LAT 81A/11A** | **QD305** | **ILS Z 17**(16) |

| | |
|---|---|
| NAV | **JDG, 35 IQX, 17 IQD,** 34 IIN, 16 IDA |
| Limit | RW xx /6 160kts |

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

1st TWY GND, 2nd TWY Apron, CTC Apron
Caution HOT SPOT (HP01,HP02)
Follow Me Car on Lxx, APU off Procedure

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZSQD(TAO) 30ft | RKSI(ICN) 23ft |
|---|---|
| None<br>DCL 가능, No READ BACK!<br>(Voice 10분전 부터) | **PA** KE ICN 131.5 |

**TAO : SID (NADP 1) Walk Around Ramp Pass & PW**

| | | |
|---|---|---|
| 34<br>(35) | LAT 91D/01D | HD 350 ALT 3000(900m)<br>SPD 250 TA9850 |
| 16<br>(17) | LAT 81D/11D | HD 170 ALT 3000(900m)<br>SPD 250 TA 9850 |

| JDG | 35 IQX | 34 IIN | 17 IQD | 16 IDA |
|---|---|---|---|---|
| 114.45 | 109.75 | 108.55 | 110.15 | 111.9 |

Heading 190, Join W209 -> DCT LATUX CRS 148(328)

Caution HOT SPOT (HP01,HP02)

TAO APP 119.4 (RWY. INI ALT)

TAO 119.73

TAO 134.85 – DLC 132.95

ICN 128.7 – APP 119.75

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZGSZ(SZX) 13ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>SZX Disp Southern131.3<br>Paking Bay 301-319 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

Detour RTE : L01 (NOTAM)

SHR – FP02(N282500E1164500)

– FP01(N274500E1160000)

– ZP01(N261500E1152000)–PLT

**SZX [336/156] TL 108 : SPD Restriction JEPP**
**Caution Freq CHG & RDR Vectoring (TERR !!)**
**Do not Cross HKG Boundary (No more)**

| | | | |
|---|---|---|---|
| 15/16R/16L | SAR 9/8 XA | SZ462 | RNP ILS Z |
| 33/34L/34R | SAR 9/8 ZA | NLG | RNP ILS Z |
| NAV | No VOR, 16 ISZ, 34 IBA, 15 IQJ, 33 IMH | | |

Limit : 30NM 220kts, RWxx /8(180kts), /5(160kts)

16R : H6(5449'), H8(6676'), 34L : H6(5413'), H5(6561')
15: C8(6725'), C9(8152'), 33 : C5(6548'), C4(8175')
**Be carefull RWY 16L then TWY Q,R**

CTC Apron Before Entering, MAX wingspan in JEPP
APU OFF but Remain

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

Detour RTE : L01 (NOTAM) VICE VERSA

SHR – FP02(N282500E1164500) – FP01(N274500E1160000) – ZP01(N261500E1152000) – PLT

| ZGSZ(SZX) 13ft | RKSI(ICN) 23ft |
|---|---|
| SZX Dispatch 131.3<br>DCL Avail | **PA** KE ICN 131.5 |

**SZX : TA 8900 SID**

| | | |
|---|---|---|
| 15/16L | IDU<br>9WD/XD | HD 156 ALT 1200m<br>SPD 230kts TA 8900 |
| 33/34R | IDU<br>9YD/ZD | HD 356 ATC 1200m<br>SPD 230/250kts TA 8900 |

| no APT VOR | 16 ISZ 108.1 | 34 IBA 109.1 | 15 IQJ 111.3 | 33 IMH 110.7 |
|---|---|---|---|---|
| FIX | 15 : IQJ 155/3.5, R205, 16 : ISZ 155/3.5, R205 | | | |

**CTC DEP AUTO Report RWY**

DEP ATIS (AUTO) Report DEP RWY

Detour RTE L01 (PLT-SHR)

- Using Pilot Way Point
- Vise Versa

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKPK(PUS) 13ft | VTBS(BKK) 4ft |
|---|---|
| KE Gimhae 129.2<br>DCL -5분 | KE Bangkok 131.25<br>Stand F,G 1-5 |

PA

**PUS : NADP CLB 1500, 360000lbs TOGA, CONF 1+F**

| | | |
|---|---|---|
| 36 | SOORO x TOPAX tx | HD 002 ALT ATC Modi NADP |
| 18 | BULIM x ENGOT tx | HD 182 ALT 5000 SPD 230 Modi NADP |

| | | | |
|---|---|---|---|
| KMH 113.8 | PSN 114.0 | 36L IKMA 108.5 | 36R IKHE 109.5 |

| | |
|---|---|
| HUD | 36 : KMH R091, R271, R185 |

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

DEP 125.5 – TGU 128.17 – 124.52(125.72)

FUK 127.5(SENKA /20)

TPE 125.5 – 129.1 – HKG 132.15 – 127.1

SNY 122.6 – HNI 123.3 – VTN 128.3

BKK 132.1 – 133.1 – APP 119.1

**BKK [015/295] : TL130 UTC+7 (SPD CTL via STAR Chart)**

| | | | |
|---|---|---|---|
| 19,20R/L | EASTE xxC | Select Tx | ILS Z 19/20L RNP 20R |
| 01,02L/R | EASTE xxD | Select Tx | ILS Z 010/02R RNP 02L |

| | |
|---|---|
| NAV | SVB, 01 ISES, 02R ISWS, 19 ISEN, 20L ISWN |
| FIX | RWxx /8 (180tks), /5 (160-150kts) |

19 : B8(5567’), B10(6965’), 01 : B7(5964’), B5(7962’)
20L : E9(5052’), E13(7139’), 02R : E12(4872’), E7(6958’)
20R : F7(6994’), F9(8471’), 02L : F6(5725’), F4(7496’)

**HIRO, 01/19, 02L/20R No Groov, AFT LD CONF 1**

**Standard Taxi Route, APU Off Procedure**

| VTBS(BKK) 4ft | RKPK(PUS) 13ft |
|---|---|
| KE Bangkok 131.25<br>DCL -20min, Voice 133.8 | KE Gimhae<br>129.2 |

**PA**

**BKK : RNAV SID (NADP 1) TA 11000**
**A-CDM REQ Pushback +-5min of TSAT**
**TSAT/CTOT Inform to GND CTL**

| | | |
|---|---|---|
| 19,20L/R | LIPLI x J, G/E | HD 195 ALT 6000 19 SPD 220 TA 11000 |
| 01,02R/L | LIPLI x K, F/H | HD 015 ALT 6000 01 SPD 220 TA 11000 |

| SVB | 19 ISEN | 02R ISWS | 20L ISWN | 01 ISES |
|---|---|---|---|---|
| 111.4 | 110.5 | 109.1 | 109.5 | 110.1 |

APU Start within 10min, Standard TAXI Route
**19R Do not Pass E1, D2**
**01/19, 02L/20R No Groov**

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

**PUS [002/182] T/W 10tks, 36R, 360000lbs 제한**

| | | | |
|---|---|---|---|
| ILS 36 | KEVOX x | MASTA | 9DME LG, 8DME FLAP |
| VOR 18 | GAYHA x | MASTA | 18 Circling Click!! |
| NAV | KMH KMH, 36L IKMA, 36R IKHE | | |
| FIX | 36 : IKMA/IKHE /9, /8 | 18 : KMH R284, R280 | |

**36L : C4 (6299'), C2(7795') / 36R : E3(5866'), E2(7339')**
**18R(DIS): 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 | VTBS(BKK) 4ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | KE Bangkok 131.25<br>Stand F,G 1-5 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5(SENKA /20)
TPE 125.5 – 129.1 – HKG 132.15 – 127.1
SNY 122.6 – HNI 123.3 – VTN 128.3
BKK 132.1 – 133.1 – APP 119.1

**BKK [015/295] : TL130 UTC+7 (SPD CTL via STAR Chart)**

| | | | |
|---|---|---|---|
| 19,20R/L | EASTE xxC | Select Tx (No Tx) | ILS Z 19/20L RNP 20R |
| 01,02L/R | EASTE xxD | Select Tx (No Tx) | ILS Z 010/02R RNP 02L |

| | |
|---|---|
| NAV | SVB, 01 ISES, 02R ISWS, 19 ISEN, 20L ISWN |
| FIX | RWxx /8 (180tks), /5 (160-150kts) |

19 : B8(5567'), B10(6965'), 01 : B7(5964'), B5(7962')
20L : E9(5052'), E13(7139'), 02R : E12(4872'), E7(6958')
20R : F7(6994'), F9(8471'), 02L : F6(5725'), F4(7496')

HIRO, 01/19, 02L/20R No Groov, AFT LD CONF 1
Standard Taxi Route, APU Off Procedure

| VTBS(BKK) 4ft | RKSI(ICN) 23ft |
|---|---|
| KE Bangkok 131.25<br>DCL -20min, Voice 133.8 | KE ICN 131.5 |

**PA**

**BKK : RNAV SID (NADP 1) TA 11000**
**A-CDM REQ Pushback +-5min of TSAT**
**TSAT/CTOT Inform to GND CTL**

| | | |
|---|---|---|
| 19,20L/R | LIPLI x J, G/E | HD 195 ALT 6000 19 SPD 220 TA 11000 |
| 01,02R/L | LIPLI x K, F/H | HD 015 ALT 6000 01 SPD 220 TA 11000 |

| SVB | 19 ISEN | 02R ISWS | 20L ISWN | 01 ISES |
|---|---|---|---|---|
| 111.4 | 110.5 | 109.1 | 109.5 | 110.1 |

APU Start within 10min, Standard TAXI Route
**19R Do not Pass E1, D2**
**01/19, 02L/20R No Groov**

DEP 119.25 (AUTO) – BKK 133.1 – VIE 128.3
HNI 123.3 – SNY 122.6 – HKG 127.1 – 125.35
TPE 129.1(126.7, 127.9) – 125.5
FUK 127.5 (SENKA /20)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | WSSS(SIN) 22ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | SATS Flt Oper 131.22<br>Gate G18-G21 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

SENKA /20 ETA KABAM 119.3 – ETA MIGUG

MAVRA 8942/5655 – MIGUG Rep MESOX 120.7

Rep MAPNO

(RPHI – VVHM CPDLC Tx Manual)

**SIN [023/203] TL130 UTC+8, CPDLC WSJC -10min FIR SPD CTL via STAR Chart, No IAF RDR Vector**

| | | | |
|---|---|---|---|
| 02L/C | MABAL/KARTO xxA | No Tx | ILS 02L/C |
| 20R/C | MABAL/KARTO xxB | No Tx | ILS 20R/C |

**RNP 02R/20L** : L/D CHK -> LUVUL/OBGIS -> Arm APPR

| | |
|---|---|
| NAV | VTK 02L ICW, 02C ICE, 02R ICX, 20R ICH, 20C ICC |
| FIX | RWxx /8 (180kts), /4 (150kts) |

02L : W5(6519’), W4(7916’), 20R : W6(5498’), W7(6423’)
02C : T6(6781’), T5 (8467’), 20C : T7 (6420’), T8 (7910’)
02R : A6(6738’), A5 (7995’), 20L : A7 (6250’), A8 (7395’)

**HIRO Unable ATC, Exit TWY 2 way but Same Name VTK Out of A/P, TWY R/S Max 20kts, AFT LD CONF 1**

| WSSS(SIN) 22ft | RKSI(ICN) 23ft |
|---|---|
| SATS Flt Oper 131.22<br>DCL -20min , Voice -5min | KE ICN 131.5 |

**PA**

**SIN : RNAV SID (NADP 1) TA 11000**

**REQ P/B +-5min of TSAT, CPDLC WSJC Before DEP**

| | | |
|---|---|---|
| 20C/R | TOMAN xx<br>CHANGI xD | HD 203 ALT 3000 SPD 230<br>230kts Until 4000 TA11000 |
| 02C/L | TOMAN xx<br>CHANGI xC | HD 023 ALT 3000 SPD 230<br>230kts Until 4000 TA11000 |

| VTK | 20C ICC | 20R ICH | 02C ICE | 02L ICW |
|---|---|---|---|---|
| 116.5 | 109.7 | 108.9 | 108.3 | 110.9 |

G18-21 **Standard P/B**, TWY R/S Max 20kts

**Cross LUSMO/AKMON xxx, T/O Before xxx**

**RWY 20C/R : CHK Min Climb Grad by NAVBLUE**

DEP 120.3 – GUTUP (SIN 6556/8942)

HCM AKMON 133.05 – UDOSI 120.7

ARESI 8942/5655 Unable AKOTA 119.3

SENKA /20

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

**33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')**
**15L : C4(5495'), C5(6227'), 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')**

**HIRO,** Parr TAXI 10kts이상, **R17 Max 15kts**

| RKSI(ICN) 23ft | VVDN(DAD) 30ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | None ATIS 30'<br>Bay 14-20 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |
| FIX | 33L/R : NC05L/R, R242 YJU R271 | | 34L/R : EO34L/R,R242 YJU R271 | |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

(SENKA /20)

SANYA BD Report 122.6

**DAD [353/173] : STAR TL100 UTC+7, C/S xxx Heavy**
**SPD CTL via STAR Chart, VOR 17 Available**

| | | | |
|---|---|---|---|
| 35L/R | BUNTA x M/N/L/K<br>L/K : RNAV Arrs<br>Long STAR Primary | TAMLA | ILS V 35L/R |
| 17R/L<br>3.5 | BUNTA x D<br>BUNTA x E | DAN<br>D057O | VOR Z 17R/L<br>VOR Y 17R/L |

| | |
|---|---|
| NAV | DAN, 35L DAD, 35R IDR |
| FIX | RWxx /12 (200tks), /5 (160kts) |

35L : G4(6702'), G6(9803'), 17R : G2(7089'), G1(9776')
35R : E4(7198'), E6(10275'), 17L : E2(8044'), E1(10754')
NO RAPID EXIT TWY, 90 Degree TURN, AFT LD CONF 1

**Follow me Car on E, E2,3,4 Narrow Over-steering**
**TWY D 사용 금지, 소형기 on D시만 E 사용가능**
**Gate IN From TWY E Only, 5m 1kts Ready for STOP**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

Detour RTE : L01 (NOTAM) –> VICE VERSA

SHR – FP02(N282500E1164500) – FP01(N274500E1160000)
– ZP01(N261500E1152000) – PLT

| VVDN(DAD) 30ft | RKSI(ICN) 23ft |
|---|---|
| None ATIS 30' GND By Voice | KE ICN 131.5 |

# PA

**DAD : RNAV SID (NADP 1) TA 9000**
**Consider Extra Fuel Due FL**

| | | |
|---|---|---|
| 35R/L | BUNTA xG/C RNAV Deps | HD 353 ALT 8000/ATC TA9000 |
| 17L/R | BUNTA xA | HD 173 ALT ATC SPD 240 TA9000 |

| | | |
|---|---|---|
| DAN 114.4 | 35R IDR 111.5 | 35L DAD 110.5 |

| | |
|---|---|
| FIX | 35L/R : DAN 353/5, R060<br>17L/R : DAN 173/4.5, R130 |

Complete P/B – ENG Start, Follow me Car
35R CAT I Hold Point Before E1, 17L Hold Short 가까움
TWY D 사용 금지, 소형기 on D시만 E 사용가능

DEP 120.45
SANYA BD Report 122.6
(SENKA /20)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VVTS(SGN) 33ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | None<br>Bay 9-16 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |
| FIX | 33L/R : NC05L/R, R242 YJU R271 | | 34L/R : EO34L/R,R242 YJU R271 | |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5(SENKA /20) – TPE 125.5 – 127.9 – 129.1

MNL 119.3 – Monitor MNL RDO 8942(5655)

At MIGUG HCM 120.7 – 132.35

SGN APP 125.5

**SGN [070/250] : STAR TL190 UTC+7 (CPDLC : VVHM)**

| | | | |
|---|---|---|---|
| 25R(L) | DALAP xxH | SOKAN | ILS W 25R/L |
| 07L(R) | DALAP xxG | SAMDU | ILS W 07R, VOR 07L |
| NAV | TSH, 25R HCM, 07R ITS, 25L SGN | | |
| FIX | RWxx /25 (190-200tks), /5 (150-160kts) | | |

25R:P4(6158'), P5(6991'), 07L : P3(6266'), P2(8907')
07R DIS :S5(6574',110도) S3(7598') then V(Heavy)
25L : S7(6824'), S8(9671') Do not Confuse TWY S/S8
After Vacate then TWY V

AFT LD CONF 1, Follow Me Car Service in Ramp
(Caution Sudden STOPBAR L/T)
Sensitive VDGS!!! (0.5m이내, 2m STOP시 바로 정지)

| VVTS(SGN) 33ft | RKSI(ICN) 23ft |
|---|---|
| None<br>-15min, DEL 121.8 By Voice | KE ICN 131.5 |

PA

**SGN : RNP SID (NADP 1) TA 18000'**

**Request RWY due to Performance, Sudden M2000ft**

| | | |
|---|---|---|
| 25L(R) | KADUM xxD/F | HD 250 ALT 11000/ATC<br>SPD x/240 TA 18000 |
| 07L(R) | KADUM xxA | HD 070 ALT ATC TA 18000 |

| | | | |
|---|---|---|---|
| TSH 116.8 | 25R HCM 110.5 | 07R ITS 111.7 | 25L SGN 108.3 |

Caution TSAT +- 5min, ATC CLR, RWY CHG After TAXI

Caution Sudden STOPBAR L/T, Follow Car Service

1,2,3T is Stand name, Caution S1, P1 for Lineup

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)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VTCC(CNX)1036ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | CNX Traffic 131.5<br>D-ATIS Bay 5-7 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5(SENKA /20)

TPE 125.5 – 129.1 – HKG 132.15 – 127.1

**CNX [001/181] : TL130 UTC+7, Caution TERR**

BKK to CNX APP 80NM, FL160 – Rep PSN, ALT, SQ

**(SPD 220kts 20-25 TRK Mile, 180kts IF, 150-160kts FAF)**

| | | | |
|---|---|---|---|
| 36 | MONLO xx A | PUKAT | ILS Z 36 |
| 18 | MONLO xx B | PILEX | RNP 18 |
| NAV | CMA, 36 ICMA | | |

36 : E(6558', 90도), D(7483')
18 **DIS** : F(6853', 90도) , G(9199', 90도)
Narrow RWY, No TWY CL L/T, Yellow Center Line

**Difference VDGS, After LD CONF 1**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| VTCC(CNX)1036ft | RKSI(ICN) 23ft |
|---|---|
| CNX Traffic 131.5<br>-5min, By Voice GND | KE ICN 131.5 |

**PA**

**CNX : RNAV SID (NADP 1) TA 11000**

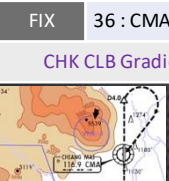
**After Airborne L TURN DCT MONLO then R-207**

| | | |
|---|---|---|
| 36 | MONLO xN | HD 001 ALT 11000 SPD 250 TA 11000 |
| 18 | MONLO xS | HD 181 ALT 6000(Init CL) SPD 230 TA 11000 |

| | |
|---|---|
| CMA 116.9 | 36 ICMA 109.9 |

| | | |
|---|---|---|
| FIX | 36 : CMA /4,/7, R180 | 18 : CMA /7, R180 |

CHK CLB Gradient, RECMD FLEX Due EGT Limit




DEP 129.6 – BKK 133.1

VIE 128.3 – HNI 128.3

SNY 122.6 – HKG 127.1 – 125.35

TPE 129.1(126.7, 127.9) – 125.5

FUK 127.5 (SENKA /20)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | WADD(DPS) 14ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>Gapura Operation<br>Bali 131.95 No DATIS<br>Stand A15-25 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242<br>YJU R271 | 34L/R : EO34L/R,R242<br>YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

SENKA /20

CPDLC

– POTIB 10–25min RPHI

– MAMOK 15–30min WAAF

**DPS [087/267] : TL130 UTC+8**

RWY27 Before DOBMA(EMTAS) FL300

for CTC Bali 119.7 (Prevent Late DES)

Late DES due TERRSPD MAX 180kts 10NM, 150kts 4NM

| | | | |
|---|---|---|---|
| 09 | DOBMA/EMTAS xx C | KHUTA | RNP 09 |
| 27 | DOBMA/EMTAS xx D | BENOA | ILS 27 |

| | |
|---|---|
| NAV | BLI, 27 IDPS |

09 : N3(6817', 90도), N2(8448', 90도)

27 : N6(7513', Rapid) , N7(9645', 90도)

Narrow RWY, No RWY/TWY CL L/T, Yellow C/L Only

**VDGS but Marshaller, GND REG No, After LD CONF 1**

| WADD(DPS) 14ft | RKSI(ICN) 23ft |
|---|---|
| Gapaura Op Bali 131.95<br>-20min, By Voice GND/TWR | KE ICN 131.5 |

**PA**

**DPS : RNAV SID (NADP 1) TA 11000**
**+-15min Req Pushback, Report Bay, Res No, POB**

| | | |
|---|---|---|
| 09 | DOBMA/<br>EMTAS x A | HD 087 ALT 9000<br>TA 11000 |
| 27 | DOBMA/<br>EMTAS x B | HD 267 ALT FL240(ATC)<br>TA 11000 |
| BLI 116.2 | | 27 IDPS 110.3 |
| FIX | 09 : BLI 087/6, R130 | |

**Caution Interm HP W/E, CPDLC Before DEP WAAF**

DEP 119.7
CPDLC
- Before DEP WAAF
- GORAI 10-25min RPHI
- GURAG RJJJ

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR | | |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS | | |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 | | |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VDTI(KTI) 22ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>Techo DIS 129.0<br>D-ATIS Bay 107-123 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

SENKA /20

CPDLC

– POTIB 10–25min RPHI, MONBO 15–45min VVHM

ETA KABAM(RTA) – ETA MIGUG

Report MAVRA, Report MIGUG

At MIGUG CTC HCM 120.7

**KTI [048/228] : TL ATIS, UTC+7**

Do not Confuse ANAT, ANAB, TCAS RA Des Rate!

| | | | |
|---|---|---|---|
| 05 | SUSEL/ELNAK xxD | NULPI/IKOMO | ILS Z 05 |
| 23 | SUSEL/ELNAK xxC | AKPEG/LELUN | ILS Z 23 |
| NAV | TIA, 05 IKTA, 23 IKTI | | |

**05 : A5(6562'), A6(7677'), 23 : A4(6562'), A3(7677')**

**Rapid Exit, Non-Grooved RWY**

**Caution Complex Lead Line into MARS**

| VDTI(KTI) 22ft | RKSI(ICN) 23ft |
|---|---|
| Techo DIS 129.0<br>PUSHBACK -10min GND 121.9 | KE ICN 131.5 |

PA

**KTI : RNAV SID (NADP 1) TA 10000'**

| | | |
|---|---|---|
| 05 | ELNAK xx<br>SUSEL xx | HD 048 ATC (6000) FL170<br>TA 10000 |
| 23 | | HD 228 ATC(6000) SPD 230<br>TA 10000 |

| | | |
|---|---|---|
| TIA 111.0 | 23 IKTI 110.1 | 05 IKTA 108.75 |

RWY23 Do not Overshoot B17

APP 123.8 (AUTO)

CPDLC – AKOTA 15–45min VVHM

– POTIB 10–25min RPHI

ETA ARESI

MNL RDO 8942/5655 At ARESI

MNL 119.3 At –10NM AKOTA

ETA POTIB

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | RCTP(TPE)108ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA Dynasty Oper 131.3<br>Bay A1-9 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

SENKA /20

**TPE [054/234] : 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 |

| | |
|---|---|
| NAV | no VOR, 05L ITIA, 23R ITYA, 05R ICKS, 23L ICJN |

**05L : N7(5787'), N8(7411'), 23R : N4(6656'), N3(9340')**
**05RDIS:S6(5419'),S7(7244'),23LDIS:S5(5442'),S4(7470')**

**No VOR at TPE, A-VDGS see below**
**Center Green, Deviation by Arrow, Distance Yellow**

| RCTP(TPE)108ft | RKSI(ICN) 23ft |
|---|---|
| Dynasty Operation 131.3<br>DCL no time, Voice -5min | **PA** KE ICN 131.5 |

**TPE : RNAV SID (NADP 1) TA 11000**
**Be Ready Intersection T/O, A030 -> 3000ft**

| | | | |
|---|---|---|---|
| 05R/L | PIANO xxA/C | HD 054 ALT ATC TA 11000 | |
| 23L/R | PIANO xxD/B | HD 234 ALT ATC SPD 210 TA 11000 | |
| 05L ITIA 111.1 | 23R ITYA 109.3 | 05R ICKS 110.7 | 23L ICJN 111.9 |

**"DCT PIANO then L3 RNAV Transition"**

SENKA /20

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VYYY(RGN)110ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | Oscar Papa 131.8<br>D-ATIS Avail BUT<br>Stand 6,7 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242<br>YJU R271 | 34L/R : EO34L/R,R242<br>YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

NAR not apply due Single RWY

**RGN [214/034] : TL 075, UTC+6:30**

**BGO(BAGOO), HGU(HLEGU) ILS Z 21 GNSS Required**

**GPS Interference --> RDR Vector + ILS Y 21**

| | | | |
|---|---|---|---|
| 21 | GPS OUT<br>RELAP xxA | RDR Vector<br>PAKSU | ILS Y 21<br>ILS Z 21 |
| 03 | BAGOO xxB | KOSDA | RNP 03 |
| NAV | no A/P VOR, BGO, HGU, 21 IYGN | | |

**21 : A3(8152'), R1(8415'), 03 : A5(7972'), A6(11069')**

**RWY 21 Upslope(0.6%), Exit End of RWY or By ATC**

**Caution WingTip (Watch out Safety Line)**

**Ramp Area Dark(Consider LD L/T)**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

Detour RTE : L01 (NOTAM) –> VICE VERSA

SHR – FP02(N282500E1164500) – FP01(N274500E1160000)
– ZP01(N261500E1152000) – PLT

| VYYY(RGN)110ft | RKSI(ICN) 23ft |
|---|---|
| Oscar Papa 131.8<br>-15 Min GND By Voice | PA<br>KE ICN 131.5 |

RGN : RDR Vector/RNAV SID (NADP 1) TA 6000'
GPS 1+2 Fail Defer MEL 34-50-08F, 34-50-09B (RTG)
No RNP RTE, ADS-B No RVSM Equipment
RADIONAV Update within 1NM no Problem

| | | |
|---|---|---|
| SEL<br>RW21 | RDR Vector<br>(VISAM xxA/C) | SEL HD 214 ATC TA 6000<br>SID GNSS Required |
| SEL<br>RW03 | RDR Vector<br>(BAGOO xxA) | SEL HD 034 ATC TA 6000<br>SID GNSS Required |

| | |
|---|---|
| no VOR, BGO(BAGOO), HGU(HLEGU) | 21 IYGN 109.9 |

RWY 03 Taxi Upslope(more PWR),
Caution WingTip (Watch out Safety Line)
Ramp Area Dark(Consider LD L/T)

RGN RDR 128.75
- After BOMAS GPS Back to NOR
- Sometimes Spoofing

ICN [334/153] : STAR

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VVPQ(PQC) 23ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | None No ATIS<br>Bay 7, 8, 11, 13A |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

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
120.9(STAR RWY Wx) – No APP Freq
At OSOTA PQC TWR 118.6

**PQC [096/276] : STAR TL100 UTC+7 (CPDLC : VVHM)**
**STAR RWY Wx From PHN or HCM Control(120.9)**

| | | | |
|---|---|---|---|
| 28 | OSOTA x E<br>TRUMI x C | PQ328<br>TUNPO tx, PQ428 | ILS Z 28 |
| 10 | OSOTA x F<br>TRUMI x B | PQ310<br>TUNPO tx, PQ210 | ILS Z 10 |
| NAV | PQU , 28 IPH, 10 IPQ | | |

**28 : S6(6758'), S8(9662'), 10 : S4(6761'), S2(9665')**
**RWY 28 PAPI R/H not Accurate**

**AFT LD CONF 1, Stand 13A only Widebody**
**(Caution Sudden STOPBAR L/T)**
**Sensitie VDGS!!! (0.5m이내, 2m STOP시 바로 정지)**

| VVPQ(PQC) 23ft | RKSI(ICN) 23ft |
|---|---|
| None No ATIS<br>GND 121.92 By Voice | KE ICN 131.5 |

**PA**

**PQC : RNP SID (NADP 1) TA 9000'**
**Request RWY due to Performance, Sudden M2000ft**

| | | |
|---|---|---|
| 28 | OSOTA xxC | HD 276 ALT 6000<br>SPD 250 TA 9000 |
| 10 | OSOTA xxD | HD 096 ALT ATC TA 9000 |

| | | |
|---|---|---|
| PQU 113.0 | 28 IPH 108.7 | 10 IPQ 108.1 |

**LINE UP via RWY 28 S2/S1 or RWY 10 S8/S9**

TWR 118.6
Report FL100 PNH 132.4/127.5 or HCM 120.9
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)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | WMKK(KUL) 69ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA<br>Layang Sat. 132.9<br>Stand C2, 4, 12 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

SENKA /20 ETA KABAM 119.3 – ETA MIGUG
MAVRA 8942/5655 – MIGUG Rep MESOX 120.7
Rep MAPNO
(RPHI – VVHM – WSJC – WMFC)

**KUL [326/146] TL130 UTC+8, ATC Req POB**
**Long Track STAR Expect Short Cut**

| | | | |
|---|---|---|---|
| 32R/33<br>14L/15 | SAROX x G/H<br>+ Initial APP Chart | EGURI<br>MESUP | ILS |
| NAV | VKL 32R IER, 33 IWM, 14L IEL, 15 IWK | | |
| LIMIT | 20NM 220kts, 15NM 185kts, 10-5NM 160kts | | |

32R : A5(6938'), A4(8343'), 14L : A6(6922'), A7(8425')
33: Y5(6948'), Y4(8425'), 15 : Y6(6948'), Y7(8415')

**RWY 32L via C5 Caution D5,6**
**Wingtip CLR P1-3, Q5-7, Y1-8 ATC Req HLxx/LD Time**
**Standard TWY RTE, AFT LD CONF 1**

| WMKK(KUL) 69ft | RKSI(ICN) 23ft |
|---|---|
| Layang Satellite 132.9<br>TSAT -10min Voice | KE ICN 131.5 |

**PA**

**KUL : RNAV SID (NADP 1) TA 11000**

**REQ P/B +-5min of TSAT CTOT from Staff**

| | | |
|---|---|---|
| 32L/33 | KIMAT x E/F | HD 326 ALT ATC (6000)<br>TA11000 |
| 14R | KIMAT x B<br>RNP 1600-2100Z | HD 146 ALT ATC (6000)<br>TA11000 |

| VKL | 32L IWL | 33 IWM | 14R IWR | 15 IWK |
|---|---|---|---|---|
| 116.1 | 111.9 | 111.5 | 110.7 | 110.1 |

**Standard TAXI RTE**, P/B Exit S8 -> Taxi out S8

**Cross DUDIS xxx, T/O Before xxx**

**Wingtip CLR P1-3, Q5-7, Y1-8**

DEP 135.25(Before 2000ft)

GUTUP 6556/8942 – AKMON 133.05 – UDOSI 120.7

ARESI 8942/5655 Unable AKOTA 119.3

SENKA /20

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

**33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')**
**15L : C4(5495'), C5(6227'), 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')**

**HIRO**, Parr TAXI 10kts이상, **R17 Max 15kts**

| RKSI(ICN) 23ft | VVCR(CXR) 46ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA None D-ATIS Avail<br>Bay 36 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

FUK 127.5 – TPE 125.5 – 127.9 – 129.1

MNL 119.3 – CPDLC RPHI RDO 8942(5655)

HCM 120.7 – 132.35 – 134.05

CXR APP 127.9

**CXR [200/020] : STAR (Wx, Using RWY from HCM CTL)**

RWY20 Max Tail Wind 15kts / CHK LDW due to PCR

**CAAV STAR, APP not Authorized**

| | | | |
|---|---|---|---|
| 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 |
| NAV | CRA 20L ICA 02R ICX 02L ICR | | |

**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!!**

| VVCR(CXR) 46ft | RKSI(ICN) 23ft |
|---|---|
| None<br>TWR 118.2 By Voice | **PA** KE ICN 131.5 |

**CNX : RNP SID (NADP 1)** CHK TOW due to PCR
Follow Restrictions due to Military Traffic

| | | | |
|---|---|---|---|
| 02L/R | NIHOA xxA | HD020 7000 TA9000 | |
| 20R/L | NIHOA xxB | HD200 ATC/FL100 SPD250 TA9000 | |
| CRA 116.5 | 02R ICR 111.9 | 02L ICR 110.7 | 20L ICA 110.3 |
| FIX | 02 : CRA 020/3, R090<br>20 : CRA 200/6, R150 | | |

TWY Y5 only below wingspan 36m/118ft

DEP 127.9 – HCM 134.05
DAD 123.3 – SNY 122.6 (~5min)
HKG 132.15 – 127.1 – TPE 129.1
125.5 – FUK 127.5 (SENKA /20)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR | | |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS | | |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 | | |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VVNB(HAN) 43ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | None<br>Bay 15-21 |

PA

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |
| FIX | 33L/R : NC05L/R, R242 YJU R271 | | 34L/R : EO34L/R,R242 YJU R271 | |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

(SENKA /20)

SANYA BD Report 122.6

**HAN [289/109] : STAR TL100 UTC+7, TEBAK FL240**
**SPD CTL via STAR Chart, GS Fluctuations**

| | | | |
|---|---|---|---|
| 11L/R | NAKHA x H/E/F/G J/K : RNAV ARR | VILOX NB362 | ILS X 11L/R |
| 29R/L | NAKHA x L/M/N/P RNAV ARR | NB462 NB452 | ILS X 29R/L |
| NAV | NOB, 11L NB, 29R INA, 11R NBA, 29L INB | | |
| FIX | RW /25 190-200k, /10 180-160k, /5 150-160k | | |

11L : P7(6929'), P8(8366,90도), 29R : P4(6361'), EOR
11R : S7(7555'), S8(10377'), 29L : S4(7732'), S3(10213')

**AFT LD CONF 1, Follow me Car on S**
**SPD REST : Max RWY 40, TWY 30, Apron 15, Turn 10**
**5m 1kts Ready for STOP**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

Detour RTE : L01 (NOTAM) –> VICE VERSA

SHR – FP02(N282500E1164500) – FP01(N274500E1160000)
– ZP01(N261500E1152000) – PLT

| VVNB(HAN) 43ft | RKSI(ICN) 23ft |
|---|---|
| None<br>-15 min GND By Voice | **PA** KE ICN 131.5 |

**HAN : RNAV SID (NADP 1) TA 9000**

**Consider Extra Fuel Due FL, TEBAK FL250**

| | | |
|---|---|---|
| 11R/L | NAKHA x A<br>CHK NB110 | HD 109 ALT ATC TA9000 |
| 29L/R | NAKHA x C | HD 289 ALT ATC TA9000 |

| NOB | 11L NB | 29R INA | 11R NBA | 29L INB |
|---|---|---|---|---|
| 116.1 | 110.5 | 109.3 | 108.3 | 111.9 |

STD TXY RTE - "DEP 1B"

**TWY S1,3,5,6,8 항공기 있으면 TWY S 금지**

DEP 125.1

SANYA BD Report 122.6

(SENKA /20)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33<br>34 | OLMEN xE<br>OLMEN xY | ENPIL<br>PAMBI | OLMEN 180<br>OLMEN 160 |
| 16<br>15 | OLMEN xH<br>OLMEN xC | MUNAN<br>BITIM | OLMEN 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RJAA(NRT) 135ft | PHNL(HNL) 13ft |
|---|---|
| KE Tokyo 131.70<br>DCL -15분 | AOS Oper 132.0<br>No D-ATIS Gate C4-9 |

PA

**NRT : SID – NADP 1**

| | | |
|---|---|---|
| 16L/R | GULBO x | HD 158 ALT ATC |
| 34L/R | | HD 338 ALT 7000/ATC |

| NRE | 16L ITM | 16R IKF | 34L IYQ | 34R ITJ |
|---|---|---|---|---|
| 117.9 | 110.7 | 111.5 | 111.9 | 110.9 |

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

DEP 124.2

TKO 120.5 – 133.45

**HNL [042/079/259] UTC-10 TL180 CPDLC RJJJ-KZAK**

Before SYVAD/DANNO/CANON/THOMA CTC HNL

| | | |
|---|---|---|
| 08L | KLANI/BOOKE/OPACA<br>Tx Modify/RDR Vector | ILS 08L |
| 04R | | ILS Y 04R |
| 26L | | RNP AR/LDA 26L |

| | |
|---|---|
| NAV | HNL, 08L IHNL, 04R IIUM, (26L IEPC offset) |
| FIX | RWY /8 |

**08L : Y(6837'), H(7887'), 26L : R5(7759')**

**04R : END of RWY Except ATC, NO LAHSO to ATC**

AFT RWY 08L L/D : TWY H to A Caution

RAMP IN West/East Guide Line by ATC

# EDTO Procedure

## PREFLIGHT

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

RVSM CHK : **CAPT/FO 20ft, PILOT/FE 75ft (PFD/ISIS 60ft, ST-BY 300ft)**

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

HF SELCAL CHK : Jeppesen - ENT DATA Pacific

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

## AFTER LEVEL OFF (CRZ CHK)

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

## BEFORE EEP (Entry Point, ERA 기준)

60min(Theshold) : A330 420NM

One Eng : CRZ SPD 310kts, 180min 1235NM

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

FMS ALT A/P SET : **DATA – ETP 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

**Apply Actual Wx for Actual Divert**

## Diversion

- **Enroute RNP downgrade**
- **Weather min ERA AP**
- **LAND ASAP by ECAM, QRH**
- **Only 1 GEN(IDG, APU, EMER) + Multi Fail**
- **Only 1 Main GEN(IDG, APU) + G HYD(low LVL, PRESS, Overheat)**
- **Increased Fuel Consumption**

## ETP (Equal Time Point, EDTO ERA기준)

FIX Change, ETP 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)

| PHNL(HNL) 13ft | RJAA(NRT) 135ft |
|---|---|
| AOS Oper 132.0<br>By Voice, No D-ATIS | KE Tokyo 131.70<br>Gate 21-27 |

**HNL : UTC-10, TA 18000, CPDLC KZAK**

| | | | | |
|---|---|---|---|---|
| 08R/L | KEOLA x<br>Tx By Plan | HD 079 ALT 5000 TA18000 | | |
| 26L/R | | HD 259 ALT 5000 TA18000 | | |
| HNL 114.8 | | 08L IHNL 111.7 | 04R IIUM 110.5 | |
| FIX | 08R : HNL 079/1.3, 08L : HNL R045<br>04L/R : HNL /2 then CRS 160 | | | |

**Gate Hold Proc JEPP**

PushBack & Start to GND, Gate Start to RAMP

HCF 118.3

**NRT [337/157] : LESPO 150**

| | | | |
|---|---|---|---|
| 34L/R | SUPOK E<br>(SUPOK T) | ELGAR<br>(TYLER) | ILS 34L/R(Z) |
| 16L/R | SUPOK G<br>(SUPOK N) | GEMIN<br>(NORMA) | ILS Z 16L/R |
| NAV | NRE, 16L ITM, 16R IKF, 34L IYQ, 34R ITJ | | |
| FIX | 16L : ITM 4 / 34R : ITJ 14, 4 (DME)<br>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)

| RKSI(ICN) 23ft | YSSY(SYD) 21ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>Menzies SYD 129.6<br>No D-ATIS<br>Bay International |

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

| | | |
|---|---|---|
| 33L/R | OSPOT xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | OSPOT xY | HD 333 ALT ATC SPD 230 |
| 15L/R | OSPOT xC | HD 153 ALT 5000 NADP2 |
| 16L/R | OSPOT xH | HD 153 ALT 5000 NADP2 |

| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
|---|---|---|---|---|
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |
|---|---|---|

Parallel TWY 10KTS 이상(R17 MAX 15kts)

TGU 125.37
Kobe 118.9 – FUK APP 119.65
FUK RDR – 121.125

**SYD [335/155] UTC+10/11 TL110** RW34L/16R on Req
**CHK SEMAP, Curfew 2300-0600LT, CPDLC PSN rep**
**ILS PRM, Noise Abate Proc Review**

| | | | |
|---|---|---|---|
| 16L/R | BOREE x A (x P for 16R) | URDEN | ILS 16L/R |
| 34R/L | | SOSIJ | ILS 34L/R |

| | |
|---|---|
| NAV | SY, 34L ISN, 34R IKN, 16L ISS, 16R IKS |
| FIX | RW /10(185-160kt), /5(160-150kts) |

**34R : U1(5515'), L(7378'), 34L : A3(6207'), A2(6620')**
**16L DIS:T4(5718'),T6(6971'), 16R : A3(6210'),A4(6561')**
**Prefer Exit Unble ATC, min REV TH, NO LASHO**

**SY 20NM Below 9000ft, Intl x, Dom x - TWY**
**Same Spot no. International/Domestic**

# EDTO Procedure

## PREFLIGHT

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

RVSM CHK : **CAPT/FO 20ft, PILOT/FE 75ft (PFD/ISIS 60ft, ST-BY 300ft)**

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

HF SELCAL CHK : Jeppesen - ENT DATA Pacific

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

## AFTER LEVEL OFF (CRZ CHK)

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

## BEFORE EEP (Entry Point, ERA 기준)

60min(Theshold) : A330 420NM

One Eng : CRZ SPD 310kts, 180min 1235NM

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

FMS ALT A/P SET : **DATA – ETP 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

**Apply Actual Wx for Actual Divert**

**TERR Escape RTE Papua New Guinea**

## Diversion

- **Enroute RNP downgrade**
- **Weather min ERA AP**
- **LAND ASAP by ECAM, QRH**
- **Only 1 GEN(IDG, APU, EMER) + Multi Fail**
- **Only 1 Main GEN(IDG, APU) + G HYD(low LVL, PRESS, Overheat)**
- **Increased Fuel Consumption**

## ETP (Equal Time Point, EDTO ERA기준)

FIX Change, ETP 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)

| YSSY(SYD) 21ft | RKSI(ICN) 23ft |
|---|---|
| Menzies SYD 129.6<br>No ATIS, Voice by<br>CLR133.8/GND121.7 | KE ICN 131.5 |

**PA**

**SYD : UTC+10/11, TA 10000,**
**CPDLC YMMM on GND 45min/Passing 10M'**

| | | |
|---|---|---|
| 16R | GROOK x RIC tx<br>(SYD x RDR) | HD 155 ALT ATC SPD 270<br>TA 10000 |
| 34L | RIC x<br>(SYD x RDR) | HD 335 ALT ATC<br>TA 10000 |

| | | | | |
|---|---|---|---|---|
| SY 112.1 | 34L ISN<br>110.1 | 16R IKS<br>109.5 | 34R IKN<br>109.3 | 16L ISS<br>110.9 |

CASA no approval KAL (for T/O min)
CHK Special Requirement SID Chart

DEP 123.0

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | YBBN(BNE) 15ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이시<br>CTC Comm | PA<br>Menzies BNE 132.55<br>Stand 78-85 |

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

| | | |
|---|---|---|
| 33L/R | OSPOT xE/A | HD 333 ALT 5500/ATC SPD 230/x |
| 34L/R | OSPOT xY | HD 333 ALT ATC SPD 230 |
| 15L/R | OSPOT xC | HD 153 ALT 5000 NADP2 |
| 16L/R | OSPOT xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

CPDLC & PSN Report

RJJJ – KZAK(FIR) – AYPM(FIR) – YBBB(FIR)

(Cross GUM airspace 250NM 118.7, SQ2100)

FIR PSN Report Caution Wx DEV Sequence

**BNE [016/196] UTC+10 TL110** Ref ALT A/P VBCG LD WT

**REF SPD REST in CHART, CHK PRM Procedure**

| | | | |
|---|---|---|---|
| 01L/R | SMOKA x A | TANIK/GLENN | ILS 01L/R |
| 19R/L | | OSOKO/BETSO | ILS 19R/L |

| | |
|---|---|
| NAV | BN, 01L IBN, 19R IBE, 01R IBA, 19L IBS |
| FIX | RW xx : /5(160-150kts) into FIX Avail |

**01L : T6(6243'), T4(7598'), 19R : T9(6246'), T11(7595')**
**01R : A4(7043'), A3(8579'), 19L : A6(5620'), A7(8477')**
**Prefer Exit Unable ATC, min REV TH, T5, T10 No Exit**

**TWY B for L/D, TAXI with IDLE(Min PWR)**
**Short Ramp-In Lead Line, Slow Down before Turning**

# EDTO Procedure

## PREFLIGHT

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

RVSM CHK : **CAPT/FO 20ft, PILOT/FE 75ft (PFD/ISIS 60ft, ST-BY 300ft)**

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

HF SELCAL CHK : Jeppesen - ENT DATA Pacific

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

## AFTER LEVEL OFF (CRZ CHK)

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

## BEFORE EEP (Entry Point, ERA 기준)

60min(Theshold) : A330 420NM

One Eng : CRZ SPD 310kts, 180min 1235NM

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

FMS ALT A/P SET : **DATA – ETP Page(Nearest AP)**

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

**Apply Actual Wx for Actual Divert**

**TERR Escape RTE Papua New Guinea**

## COMM (CPDLC)

RJJJ – KZAK(FIR) – AYPM(FIR) – YBBB(FIR)

(Cross GUM airspace 250NM 118.7, SQ2100)

## Diversion

- Enroute RNP downgrade
- Weather min ERA AP
- LAND ASAP by ECAM, QRH
- Only 1 GEN(IDG, APU, EMER) + Multi Fail
- Only 1 Main GEN(IDG, APU) + G HYD(low LVL, PRESS, Overheat)
- Increased Fuel Consumption

## ETP (Equal Time Point, EDTO ERA기준)

FIX Change, ETP 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)

| YBBN(BNE)15ft | RKSI(ICN) 23ft |
|---|---|
| Menzies BNE 132.55<br>Voice by -5min | KE ICN 131.5 |

**PA**

**BNE : UTC+10, TA 10000,**
**CPDLC YBBB on GND 45min/Passing 10M'**

| | | |
|---|---|---|
| 01L/R | BIXAD x<br>(01R Diff Chart)<br>BNE x<br>RDR SID with H/D | HD 016 ALT ATC(6000)<br>SPD x/240 TA 10000 |
| 19R/L | | HD 196 ALT ATC(6000)<br>SPD 240 TA 10000 |

| | | | | |
|---|---|---|---|---|
| BN 113.2 | 01L IBN<br>111.5 | 19R IBE<br>109.3 | 01R IBA<br>109.5 | 19L IBS<br>110.1 |

PushBack Point C,D,E , TWY A for T/O
Do Not PASS B1 for 19L
"CNL SID, TRK EXT CL, xx Degree" -> Main RWY TRK

DEP 133.45 ←

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | GUKDO x E | ENPIL | GUKDO 180 |
| 16<br>15 | GUKDO x H<br>GUKDO x C | MUNAN<br>BITIM | GUKDO 180 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , YJU R271 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | ZMCK(UBN)4485ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA<br>None No D-ATIS<br>Stand 2, 4, 6 |

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

| | | |
|---|---|---|
| 33L/R | NOPIK xA | HD 333 ALT ATC |
| 34L/R | NOPIK xY | HD 333 ALT ATC |
| 15L/R | BINIL xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BINIL xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

5min Before POLHO

Boundary Report to UBN 126.5

**UBN [110/290] TL 148 : Hi FE,TERR/Restrict Area**

CTC UBT CTL 5min Before FIR(POLHO, INTIK)

UBT CTL ask L/D Time, **Hi FE & Sink Rate due TAS**

| | | | |
|---|---|---|---|
| 29 | MENUG xx W | ZONAM | ILS X 29 |
| 11 | MENUG xx V | CK113 | RNP 11 (Req) |
| NAV | SER, 29 CDA | | |

**29 :C(5761'), B(8241'),END RWY, 11 : C(5761'),D(8231')**

**Gate 2 A330 Must Follow Dashed Line**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| ZMCK(UBN)4485ft | RKSI(ICN) 23ft |
|---|---|
| None<br>No D-ATIS<br>CLR by Voice to TWR 129.0 | PA KE ICN 131.5 |

**UBN : SID (NADP 1) TA 128**

| | | |
|---|---|---|
| 29 | MENUG x A/C | HD 290 ALT ATC TA 12800 |
| 11 | MENUG x B/D | HD 110 ALT ATC TA 12800 |
| SER 116.9 | | 29 CDA109.9 |

| | |
|---|---|
| FIX | 29 : SER 290/4, R343, SER R133, SER 290/10, R260<br>11: SER 110/1.5, R313, SER 290/10, R260 |

**TWY F very Narrow, TWY B,D Opposite Turn Prohibit**

DEP 120.0

UBN 126.0 – 126.5

Boundary Report 15–20min

PEK 133.025

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | OMDB(DXB) 62ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | PA DNATA Oper 131.6<br>Stand C45-63 |

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

| | | |
|---|---|---|
| 33L/R | BOPTA xA | HD 333 ALT ATC |
| 34L/R | BOPTA xY | HD 333 ALT ATC |
| 15L/R | BOPTA xC | HD 153 ALT 5000 NADP2 |
| 16L/R | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| NCN 113.8 | 33L INLL 109.3 | 33R INRR 108.9 | 15L ISLL 111.9 | 15R ISRR 109.1 |
| WNG 112.9 | 34L IRFN 109.95 | 34R IRKN 108.1 | 16L IRKS 110.35 | 16R IRFS 108.55 |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

S RTE : CHILA Report YANGON, DAKHA, KOLKATA

Boundary Report

– PURPA(W112) : islamabad Before 15min

– APELO(B505) : Karachi Before 15min

– DERBO(G452) : Air Defense RDR Before10min

over IRAN : Air Defense RDR (127.8/135.1)

PSN+FL+DEP+DEST (Separate Tehran CTL)

**DXB [119/299] UTC+4, TL 150 : SPD Rest in JEPP**

**Arr : C/S, A333, passing FL -> Director : C/S Only**

| | | | |
|---|---|---|---|
| 12L/R | PUVAL, IMPED x B | REREK | ILS |
| 30L/R | PUVAL, IMPED x C | ULDOT | ILS |
| NAV | 12L IDBL, 30L IDBW, 12R IDBE, 30R IDBR | | |

**12L:M7A(6135'), M9(7253'), 30L:K9(6811'), K8(8041')**

**Late L/D CLR, Assigned Rapid Exit TWY**

**TWY J,J1,J2,J3,U,W,Y,Z Max 15kts, VDGS 2kts**

**Caution TWY Holding Point, No Wing Walker**

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

| OMDB(DXB) 62ft | RKSI(ICN) 23ft |
|---|---|
| DNATA Oper 131.6<br>DCL Avail, -10min Voice | PA<br>KE ICN 131.5 |

**DXB : SID (NADP 1) UTC+4,TA 130 Full Length to ATC**

| | | |
|---|---|---|
| 30R | DAVMO,IVURO x F | HD 299 ALT 4000 SPD 220 |
| 12R | DAVMO,IVURO x G | HD 119 ALT 4000 SPD 220 |

| | | | |
|---|---|---|---|
| 12R IDBE<br>109.5 | 30R IDBR<br>110.9 | 12L IDBL<br>110.1 | 30L IDBW<br>111.3 |

TWY J,J1,J2,J3,U,W,Y,Z Max 15kts
Caution TWY Holding Point

DEP CTC by TWR 118.75
DEP 124.675 C/S, Passing LVL, Unable SPD
CTC Air Defense RDR 127.8/135.1 Before 10min
Tehran FIR(GABKO FL190)

MUM HF : 6661/8879/5658

S RTE : CHILA Report YANGON, DAKHA, KOLKATA
Boundary Report
KMG 125.75(15-20min FIR)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |

| | |
|---|---|
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

| RKSI(ICN) 23ft | VNKT(KTM)4395ft |
|---|---|
| KE ICN 131.5<br>DCL -10분 TOBT 5분 차이 시<br>CTC Comm | Nepal Airline Corp.<br>131.6 **No DATIS**<br>**Spot 1-4** |

**PA**

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

| | | |
|---|---|---|
| **33L/R** | **BOPTA xA** | **HD 333 ALT ATC** |
| **34L/R** | BOPTA xY | HD 333 ALT ATC |
| **15L/R** | **BOPTA xC** | **HD 153 ALT 5000 NADP2** |
| **16L/R** | BOPTA xH | HD 153 ALT 5000 NADP2 |

| | | | | |
|---|---|---|---|---|
| **NCN 113.8** | **33L INLL 109.3** | **33R INRR 108.9** | **15L ISLL 111.9** | **15R ISRR 109.1** |
| **WNG 112.9** | **34L IRFN 109.95** | **34R IRKN 108.1** | **16L IRKS 110.35** | **16R IRFS 108.55** |

| | | |
|---|---|---|
| FIX | 33L/R : NC05L/R, R242 YJU R271 | 34L/R : EO34L/R,R242 YJU R271 |

Parallel TWY 10KTS 이상(R17 MAX 15kts)

CPDLC VYYF(Yangon), VECF(Kolkata)
- Kolkata –10min (125.77/133.75)
- Dhaka –10min ADC No. (125.7)
- KTM –10min (126.5) C/S, A333, PSN, FL, FIR Time RTE, L/D type "Req Entering CLR"
- Report Kolkatka Establish with KTM

**KTM[022/202] UTC+5:45 TL 150 Curfew 1915-0015Z**
**Night : Only RNP Z 02(AR) Comm Policy**

| | | | | |
|---|---|---|---|---|
| **02** | **ROMEO x R** | **RATAN** | | **RNP Z 02** / VOR 02<br>**KT530/D9.0 (Vapp)** |
| NAV | **Set KTM 105&288** | FIX | **Set KTM /4, DANFE** | |

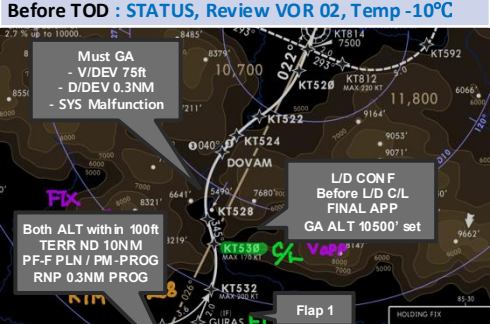
**02 : B(6814'), A(8395'), 20 : E(6387', 90º), 180 Back**
**High FE + Upslope = 50' Flare (No 40', 30')**

**Ramp Slippery NOT Rel Brake**

**RNP 02(AR) Procedure Next Page =>**

# A330 KTM RNP Z 02(AR)

**Before TOD : STATUS, Review VOR 02, Temp -10°C**




# A330 KTM VOR 02

**Do not use FINAL APP**

# SYS Fail / GA (Dual-GA, Single-GA or CONT)

**if Follow GA RTE (Acc HT 10500ft)**

- Reach 10500ft – **TH CLB - Acc** – Flaps up – Req DANFE

**Dual FMGC (NO GA RTE) (Acc HT 10500ft)**

- Man GA, 15º, 10-20kts ADD **(At RW02 R/H Turn)**
- PM **NAV B/UP** both **MCDU Menu** – TRK/FRA – Follow TRK (A/P ON) - if No GA RTE Follow VOR GA Procedure
- Reach 10500ft – **TH CLB - Acc** - Flaps-up – Req DANFE

VOR GA Procedure **(Acc HT 10500ft)**

At RW02 R/H Turn(Max 185kts) – 4 DME Arc(IN 5 DME)
After RW02 Track 288 OUTBD Until Reach 10500ft

# Meter/Feet Conversion Table

| Westbound | | Eastbound | |
|---|---|---|---|
| | | 13,700 m | 44,900 ft |
| **13,100 m** | **43,000 ft** | **12,500 m** | **41,100 ft** |
| 12,200 m | 40,100 ft | 11,900 m | 39,100 ft |
| **11,600 m** | **38,100 ft** | **11,300 m** | **37,100 ft** |
| 11,000 m | 36,100 ft | 10,700 m | 35,100 ft |
| **10,400 m** | **34,100 ft** | **10,100 m** | **33,100 ft** |
| 9,800 m | 32,100 ft | 9,500 m | 31,100 ft |
| **9,200 m** | **30,100 ft** | **8,900 m** | **29,100 ft** |
| 8,400 m | 27,600 ft | 8,100 m | 26,600 ft |
| **7,800 m** | **25,600 ft** | **7,500 m** | **24,600 ft** |
| 7,200 m | 23,600 ft | 6,900 m | 22,600 ft |
| **6,600 m** | **21,700 ft** | **6,300 m** | **20,700 ft** |
| 6,000 m | 19,700 ft | 5,700 m | 18,700 ft |
| **5,400 m** | **17,700 ft** | **5,100 m** | **16,700 ft** |
| 4,800 m | 15,700 ft | 4,500 m | 14,800 ft |
| **4,200 m** | **13,800 ft** | **3,900 m** | **12,800 ft** |
| 3,600 m | 11,800 ft | 3,300 m | 10,800 ft |
| **3,000 m** | **9,800 ft** | **2,700 m** | **8,900 ft** |
| 2,400 m | 7,900 ft | 2,100 m | 6,900 ft |
| **1,800 m** | **5,900 ft** | **1,500 m** | **4,900 ft** |
| 1,200 m | 3,900 ft | | |

# ALT/HEIGHT Conversion

| | | | |
|---|---|---|---|
| 1,000 m | 3,300 ft | 500 m | 1,600 ft |
| **900 m** | **3,000 ft** | **450 m** | **1,500 ft** |
| 800 m | 2,600 ft | 400 m | 1,300 ft |
| **700 m** | **2,300 ft** | **350 m** | **1,100 ft** |
| 600 m | 2,000 ft | 300 m | 1,000 ft |
| **550 m** | **1,800 ft** | | |

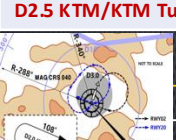
| VNKT(KTM)4395ft | RKSI(ICN) 23ft |
|---|---|
| Nepal Airline Corp. 131.6<br>No DATIS, Boarding ATC | KE ICN 131.5 |

**PA**

**KTM : SID (NADP 1) UTC+5:45 TA 135**
**Req ADC & FIC, P/B with POB, Intersection A,E**
**if Wx is Severe, Stand-by at GATE**

| | | |
|---|---|---|
| 20 | IGRIS x A | HD 202 ALT ATC TA 13500 |
| 02 | IGRIS x B | HD 022 ALT ATC TA 13500 |
| KTM 113.2 | | 02 IKT 108.1 |
| FIX | 20 : KTM /4, R340, R288 | 02 : KTM /3, R288 |
| | Maintain CONF Until 10500ft, 8000ft LVR MCT (Limit 10min) | |

**RW20 Takeoff at Painted Threshold**
**D2.5 KTM/KTM Turn Even Below 400ft (Max 180kts)**




DEP 120.6
CPDLCVECF, VYYF
– Dhaka –10min ADC No. (125.7)
– Kolkata –10min (125.77/133.75)
Radio Problem
– –80NM KTM FIR to Kolkata FIR +30NM
KMG 125.75(15–20min FIR)

**ICN [334/153] : STAR**

| | | | |
|---|---|---|---|
| 33/34 | REBIT x A | PAMBI | REBIT 170 |
| 15/16 | REBIT x H | MUNAN | REBIT 170 |
| NAV | NCN, 33L INLL, 33R INRR, 15L ISLL, 15R ISRR | | |
| | WNG, 34L IRFN, 34R IRKN, 16L IRKS, 16R IRFS | | |
| FIX | RWY /8(180kts), /5(160kts) , P518 R068, R278 | | |

33R : C5(5501'), C6(6683'), 33L : B4(7463'), B5(8513')
15L : C4(5495'), C5(6227'), 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')

HIRO, Parr TAXI 10kts이상, R17 Max 15kts

# Differences (ATS A333)

| | | | |
|---|---|---|---|
| **A322(5)**<br>HL7524-7551<br>**A323(11)**<br>HL7553-7720 | APMS | EY 252 (151)<br>EY 260 (156) | Total<br>PAX 200 NOR<br>CHK OFP PAX No |
| **A223E(3)**<br>HL82xx | APMS<br>-2.5 | EY 188 (112) | HL 80xx<br>PAX AUTO |
| **A323E(6)**<br>HL80xx<br>RNP AR, OANS<br>PAX AUTO | APMS<br>-1.5 | EY 248 (148)<br>HL8001 RNP AR X | Enhanced<br>TRIM AUTO |
| ENG START | | HL7xxx 43-48% | HL8xxx 52-54% |

## PRINCIPAL DIMENSION

WINGSPAN : ICAO E, FAA V
Weight CAT : Heavy

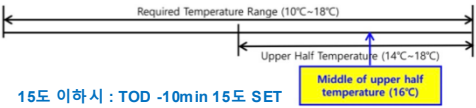
| | A330-300 / 300E | | A330-200 / 200E | |
|---|---|---|---|---|
| LENGTH | 63.69 m | 208.92 ft | 58.37 m | 191.25 ft |
| WING SPAN | 60.30 m | 197.83 ft | 60.30 m | 197.83 ft |
| HEIGHT | 16.83 m | 55.25 ft | 17.80 m / 17.30 m | 58.42 ft / 56.67 ft |
| WHEEL BASE | 25.37 m | 83.25 ft | 22.18 m | 72.75 ft |
| WHEEL TREAD | 10.68 m | 35.08 ft | 10.68 m | 35.08 ft |

Refer to FCOM DSC-20-20 Principal Dimensions 180 Back 72도 48m/(157ft)

## MTOW CAT ST-IN : C, Circling C/D(FAA)

| | | | |
|---|---|---|---|
| 238T | 524,700 lbs | 230T | 507,063 lbs |
| 217T | 478,402 lbs | 198T | 436,515 lbs |
| 192T | 423,287 lbs | | |

## LOADSHEET : CARGO No. FWD 11-21, AFT 31-41




15도 이하시 : TOD -10min 15도 SET

## CRZ FUEL Penalty (Approximation)

**A330**

4000ft below OPT ALT : 5% increase trip fuel
8000ft below OPT ALT : 10% increase trip fuel
Above OPT ALT : 3% increase trip fuel

## FUEL Consumption

**APU**

GND : **438 LBS/HR** (BLOCK FUEL산정)
IN FLT : **286 LBS/HR**

**TAXI**

2 ENG, no APU : 3300 LBS/HR **(10분 550 LBS)**

**CRZ**

- 100FT 당 8 MIN
ex) **1000FT 상승 80 MIN, 1HR 20MIN**

**Holding**

**분당 200LBS** (Actual F/F 참조, 시간당 **12000LBS**)

**Missed App & Landing**

**3000 LBS** (과거 EDTO자료 1회 Missed App+L/D)

## FUEL Loading

**Tail Tank :**

CL TANK 80000LBS 이상 5000LBS 까지

CL TANK 160000LBS 이상 10000 LBS 까지

**FUEL Overfill** : 1000LBS 기준

## ONE ENG TAXI AT ARRIVAL

 Taxi with engine 1 is recommended in order to pressurize the blue hydraulic system to ensure brake accumulator pressure

Note: If taxi is performed with engine 2, the flight crew must check that the brake accumulator pressure on the BRAKES and ACCU PRESS indicator is normal.

### AT ARRIVAL

**APU..... START / CHECK AVAIL F/O**

- **After high thrust operations:**

**ENG MIN COOL TIME ...CONSIDER CAPT**

**Note: The flight crew should operate the engines at or near idle thrust for a cooling period of 5 min before engine shutdown, in order to thermally stabilize the engines.**

- **When taxiing in a straight line:**

**ENG 2 SHUTDOWN .....ORDER CAPT**

**Note: During engine shutdown, a slight jerk forward may occur if the brakes are applied while the aircraft is moving.**

**ENG 2 ANTI ICE pb-sw ..... OFF F/O**

**ENG 2 MASTER lever..... OFF F/O**

**ENG 2 PARAMETERS .....CHECK F/O**

**X-BLEED ..... OPEN F/O**
**(To supply both packs from ENG 1)**

- **At parking:**

**ENG 1 ..... SHUT DOWN CAPT**

## PACKS USE WITH LP AIR CONDITION UNIT (SD 연결 표시없음)

공항 요구로 APU OFF후 기내 온도 조절을 위한 방법
Low Press Unit을 연결하며 APU와 동시사용 금지

**The flight crew must not use conditioned air from the packs and from the LP Air Conditioning Unit at the same time, to prevent any adverse effect on the Air Conditioning system.**

절차 POM, FCOM에 없음

APU BLEED OFF 후 LP AIR 연결

EXT PWR 연결후 APU OFF

APU Start - LP Disconnect - APU BLEED ON

## APU BLEED USE WITH HP AIR START UNIT (SD 연결 표시없음)

APU 부작동시 AIR START UNIT으로 시동을 위해 사용
외부 BLEED AIR의 역할을 함. APU BLEED 동시사용 금지

**The flight crew must not use bleed air from the APU BLEED and from the HP Air Start Unit at the same time, to prevent any adverse effect on the Bleed Air System.**

- **Before connecting the air start unit:**

**PACK 1 & 2 ..... as REQ F/O**

**HP AIR 시동전 Air Condition으로 사용시(시동시 OFF)**

**APU BLEED ..... OFF F/O**

**ENG 1 & 2 BLEED ..... OFF F/O**

**X BLEED ..... OPEN F/O**

**AIR START UNIT CONNECT ... REQ CAP**

**Two ground air start units may be used in parallel if the pressure/flow relation is expected to be marginal.**

ENG START
Next Page

# STARTING with AIR START UNIT

통상 ENG 1 먼저 **(EXT PWR Start 2 ENG)**
**"Req Engine Start up Present Positon~~~"**

- **Before connecting the air start unit:**

**PACK 1 & 2 ..... OFF F/O**

prevent any possible contamination of the packs by the air start unit. OFF L/T 들어와야함.

**APU BLEED ..... OFF F/O**

**ENG 1 & 2 BLEED ..... OFF F/O**

**X BLEED ..... OPEN F/O**

**AIR START UNIT CONNECT ... REQ CAP**

Two ground air start units may be used in parallel if the pressure/flow relation is expected to be marginal.

- **When cleared to start:**

Note: The AIR ABNORM BLEED CONFIG alert is triggered after the first engine start. It can be disregarded.

**ENG 1 ..... START CAP**

Note: As necessary, engine 2 can be started first.
In this case, check the brake ACCU pressure prior to engine start.
Note: The minimum recommended starter air supply pressure is 25 PSI when the start valve is open.

- **After engine 1 is started:** AVOD 다 꺼짐

■ If the air start unit is used to start engine 2:

**ENG 2 ..... START CAP**

- **When engine 2 is started:**

**AIR START UNIT DISC . . . . REQ CAP**

**X BLEED ..... AUTO F/O**

**ENG 1 & 2 BLEED ..... ON F/O**

**PACK 1 & 2 ..... ON F/O**

■ If the crossbleed engine start procedure is used to start engine 2: EXT PWR – AVAIL first!!!

**AIR START UNIT (EXT PWR) DISC.RQ CAP**

**ENG 1 BLEED ..... ON F/O**

**PACK 1 & 2 ..... ON F/O**

**CRSBLD ENG START PROC.APPLY**

**EXT PWR ..... CHK AVAIL CAP**

**EXT PWR DISCONNECT ..... REQ CAP**

NOTE : EXT PWR removed after 1 ENG start.
but FCOM : In order to ensure that the entire network remains electrically supplied, it is recommended to start both engines before the disconnection of the external electrical power.

**NOR PROC - AFTER START .....RESUME**

# ENG CROSSBLEED START

#1 ENG BLEED 로 #2 ENG START
Req PushBack

PushBack 완료(Parking Brake set)
One engine must be running in order to supply air for other engine start.

● Before second engine start :

APU BLEED ..... OFF F/O
The BLEED valve of the supplying engine reopens and the cross bleed valve closes.

ENG BLEED (supply engine) ..... ON F/O

ENG BLEED (receive engine) ..... OFF F/O
The bleed valves of receiving engines are closed to avoid reverse flow leakage.

X BLEED..... OPEN F/O

● When cleared to start :

AREA CLEAR OF OBS ..... CONF CAP
Ensure increased power jet wake does not constitute any hazard to people or installations behind the aircraft.

THR LVR (sup eng) . ADJ BLD PRES CAP
Adjust thrust of supplying engine to obtain an engine bleed pressure of 30 PSI. If the thrust required to obtain the appropriate engine bleed pressure exceeds 40 % N1, pay particular attention to the surrounding area.

RECEIVING ENGINE ..... START ALL
Apply the normal engine start procedure.

● After start :

THR LVR (supply engine) ..... IDLE CAP

X BLEED..... AUTO F/O

ENG BLEED (receive engine) ..... ON F/O

PACK 1 &2 ..... ON F/O

## COLD TEMP CORRECTION General

5도 간격은 보수적으로 보간법 적용됨

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 |

GMP, CJU, PUS next page

# COLD TEMP CORRECTION (Domestic)

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 |

## 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.

## PRELIMINARY (OAT 3°C 이하)

**PROBE/WIN HEAT – ON (ENG START후 AUTO)**
**LOGBOOK ---------- CHECK**
**MAX TIME TO NEXT ENG ACC --- DETERMINE**
**TAXI IN TIME – NEXT ENG ACC TIME 15분 이내인지 확인**

## TAXI-OUT(OAT 3°C 이하)

**TAXI TIME ---------- MONITOR**
15분 초과 또는 Eng Vibrations시 절차 수행
**SOP SURFACE COND & AREA ------ CHECK**
**ATC ---------- NOTIFY**
**PARKING BRAKE ---------- ON**
the aircraft starts to move, immediately retard the thrust levers to IDLE.
**THR LEVERS ------ 50% N1 (NO HOLD TIME)**
**THR LEVERS ---------- RETARD TO IDLE**
Repeat this procedure at intervals not longer than 15 min, or if the engine vibrations increase.
**SOP TAXI ---------- RESUME**

## BEFORE TAKEOFF

**FLAPS lever ---------- SET FOR TAKEOFF**
**FLAPS ---------- CHECK PSN**
**T/O CONFIG pb ---------- TEST**
**T/O MEMO ---------- CHECK NO BLUE**
**AFTER START checklist ---------- COMPLETE**
**BEFORE TAKEOFF checklist -- ACCOMPLISH**

## TAKEOFF(OAT 3°C 이하)

A final engine acceleration must be performed before takeoff to entirely clean the engine from ice accretion.
**ATC ---------- NOTIFY**
**PARKING BRK(OR BRK PEDALS) ---- APPLY**
**THR LEVERS ------ 50% N1 (NO HOLD TIME)**
**THR LEVERS ---------- RETARD TO IDLE**
**SOP TAKEOFF ---------- RESUME**

## AFTER L/D

**DO NOT RETRACT FLAPS**
Ice Shedding 절차 반복

# COLD Wx Operation 2/2

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.

## PARKING

**After engine shutdown and before shutting down electrical supply:**
**FLAPS / SLATS ..... CONF FREE OF CONTAM**

**Perform a visual inspection to determine if the flaps/slats mechanism is free of contamination.**
**If necessary, perform decontamination.**
**Y ELEC PUMP pb ..... AUTO F/O**
**G ELEC PUMP pb ..... AUTO F/O**
**Y ELEC PUMP pb (guarded) ..... ON F/O**
**G ELEC PUMP pb (guarded) ..... ON F/O**

**SLATS / FLAPS ..... RETRACT F/O**
**Monitor slats/flaps retraction on ECAM upper display**
**When slats and flaps are retracted:**

**Y ELEC PUMP pb (guarded) ..... AUTO F/O**
**G ELEC PUMP pb (guarded) ..... AUTO F/O**

**NORMAL PROCEDURE ..... RESUME ALL**

# 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 xx" SQ2000
Pad Control Arrange Deicing Pad No. REQ FULL BODY
Ice Man Manage Deicing Process

**Gate 시동후 (FLAP UP, FLT CTL CHK 없이)**

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

Report Parking Brake SET - > Ice Man

**BROADBAND XMT sw ---------- OFF**

**COMMUNICATION with GND ------ ESTAB**

**DE/ANTI-ICING FLUID TYPE ------ CHECK**

**CABIN PRESS MODE SEL ---- CHK AUTO**

**ENG 1 & 2 BLEED ---------- OFF**

**Note : AIR ENG 1+2 BLEED FAULT** – Disregard

**APU BLEED ---------- OFF**

**DITCHING pb ---------- ON**

**Note : CAB PR FWD OFV NOT OPEN, CAB PR AFT OFV NOT OPEN, COND LAV + GAL VENT FALUT** – Disregard

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

**"A/C PREPARED FOR SPRAYING"**

Report Ready for Deicing - > Ice Man

**START SPRAY REQ DCL(CTC DEL)**

**UPON COMPLETE SPRAY(TIME CHK 1분)**

용액과 마지막 용액 뿌린 시간 받고 적는다.
Holdover Time 결정!!!

**PITOT STATICS (GND Crew) ---------- CHK**

**GND EQUIPMENT ---------- REMOVE**

**DITCHING pb ---------- OFF**

**OUTFLOW V/V - CHK OPEN(ECAM press)**

**TIME CHECK 1분후** **Cold Wx**

**ENG 1 & 2 BLEED ---------- ON**

**BROADBAND XMT sw ---------- ON**

**5분후**

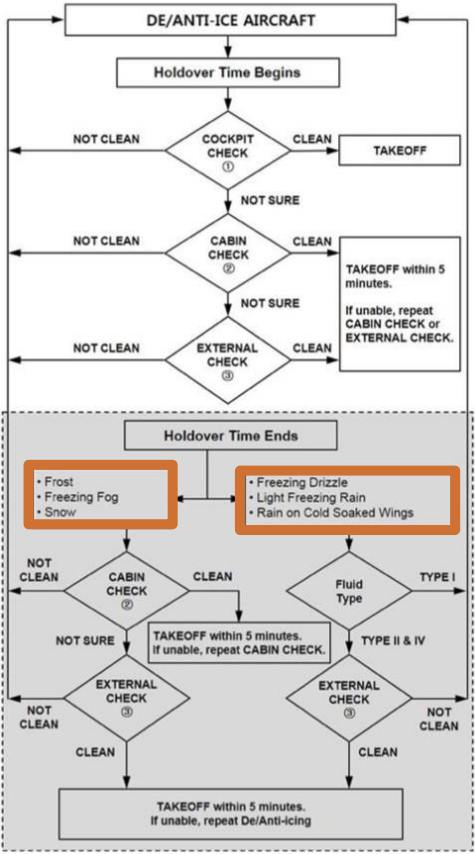
**APU BLEED ---------- AS RQRD**

**NORMAL PROCEDURE ---------- RESUME**

**FLT CONTROL CHK, FLAPS UP**

**DECISION TREE next page**

# TAKEOFF DECISION TREE



# ENG OFF Deicing in GMP...

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

**REQ DCL**

Deicing "Deicing Required PADxxx" ±5min TOBT

Apron "Req Pushback Deicing PADxxx"

**Gate 시동후 (FLAP UP, FLT CTL CHK, APU OFF 없이)**

**Engine anti-ice sw ---------- OFF**

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

**BROADBAND XMT sw ---------- OFF**

**COMMUNICATION with GND ------ ESTAB**

**DE/ANTI-ICING FLUID TYPE ------ CHECK**

**CABIN PRESS MODE SEL ---- CHK AUTO**

**(HL7524-7720) GND COOL ---------- OFF**

**ENG 1 & 2 BLEED ---------- OFF**

**APU BLEED ---------- OFF**

**DITCHING pb ---------- ON**

**Note :** CAB PR FWD OFV NOT OPEN, CAB PR AFT OFV NOT OPEN, COND LAV + GAL VENT FALUT –Disregard

**ENG MASTER sw ---------- OFF**

**SHUTDOWN CHECKLIST**

**"A/C PREPARED FOR SPRAYING"**

**UPON COMPLETE SPRAY(TIME CHK 1분)**

용액과 마지막 용액 뿌린 시간 받고 적는다.

Holdover Time 결정!!!

**(HL7524-7720) GND COOL ---------- OFF**

**PITOT STATICS (GND Crew) ---------- CHK**

**GND EQUIPMENT ---------- REMOVE**

**DITCHING pb ---------- OFF**

**OUTFLOW V/V - CHK OPEN(ECAM press)**

**TIME CHECK 1분후**

**ENG 1 & 2 BLEED ---------- ON**

**BROADBAND XMT sw ---------- ON**

**5분후**

**APU BLEED ---------- ON**

**NORMAL PROCEDURE ---------- RESUME**

**Note :** INIT B check & re-enter

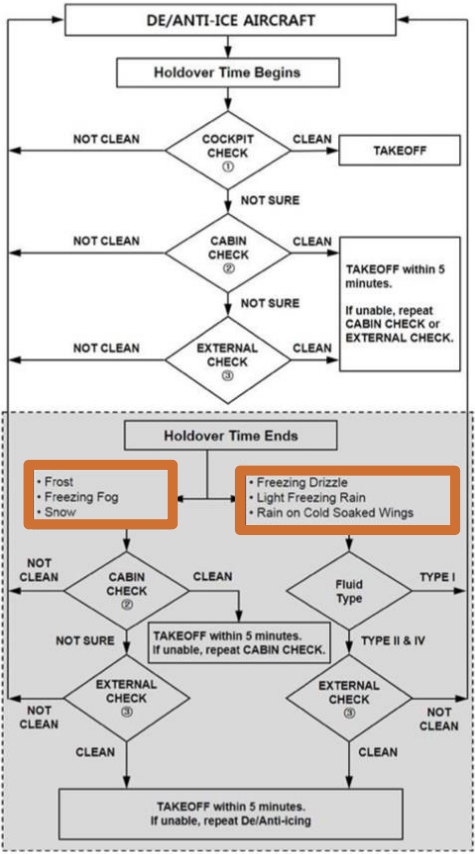
**PREFLT CHKlist -> Req STARTUP -> CHKlist**

**BOTH ENGINES ARE STARTED**

**FLT CTL CHK, FLAPS UP, APU as REQ**

**DECISION TREE next page**

# TAKEOFF DECISION TREE



# A330 PUS VOR 18L/R

ARRIVAL TO RKPK ↔

| APPR | VIA | STAR |
|---|---|---|
| VOR18R | GAYHA | GAYHA3 |
| APPR <VIAS | | TRANS KALOD |

SEC ARRIVAL TO RKPK ↔

| APPR | VIA | STAR |
|---|---|---|
| 18R | NONE | V18R |
| | | TRANS NONE |

Input PERF -> SEC COPY

CLR CP18L/R, DISCONT

MDA : [ ], L/D CONF chk

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

## Missed App

Base Turn 이전 : L/H Turn **KMH 284** OUTBD (PULL TRK)

Base Turn 이후 : Continue R/H Turn **KMH 284** OUTBD (PULL TRK)

LOC 36 Circling
Next Page

# A330 PUS LOC 36L/R Circling 18L/R

| F-PLN | | | SEC F-PLN | |
|---|---|---|---|---|
| APPR | VIA | STAR | APPR | STAR |
| LOC36L | KEVOX | KEVOX x | 18L/R | V18L/R |
| | | TRANS | (MDA: Blank) | |
| | | MASTA | (LDG CONF chk) | |

**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 (PULL TRK)

Base Turn 이후 : Continue R/H Turn **KMH 310** OUTBD (PULL TRK)

# QRH LIST Reference Only

| | |
|---|---|
| AIR | BLEED 1+2 FAULT(APU BLEED ON)<br>BLEED 1+2 FAULT(APU BLEED NOT AVAIL) |
| DOOR | COCKPIT DOOR FAULT |
| EIS | DISPLAY UNIT FAILURE<br>EIS DISPLAY DISCREPANCY |
| ELEC | C/B TRIPPED<br>ELEC EMER CONFIG SYS-REMAINING |
| ENG | ALL ENG FAIL<br>ENGINE FUEL SYS CONTAMINATION<br>ENG RELIGHT IN FLIGHT<br>ENG STALL<br>ENGINE TAILPIPE FIRE<br>HIGH ENGINE VIBRATION<br>ON GND - NON ENG SHUTDN AFT ENG OFF<br>ONE ENGINE INOPER - CIRCLING APP<br>ENG1(2) EGT OVERLIMIT |
| F/CTL | LANDING WITH SLATS OR FLAPS JAMMED<br>NO FLAPS NO SLATS LANDING<br>RUDDER JAM / RUDDER PEDAL JAM<br>RUDDER TRIM RUNAWAY |
| FUEL | FUEL IMBALANCE<br>FUEL LEAK<br>FUEL LOSS REDUCTION<br>FUEL OVERREAD<br>GRAVITY FUEL FEEDING<br>TRIM TANK FUEL UNUSABLE |
| L/G | LANDING WITH ABNORMAL L/G<br>L/G GRAVITY EXTENSION |
| NAV | ABNORMAL V ALPHA PROT<br>ADR 1+2+3 FAULT<br>UNREL SPD INDICATION<br>IR ALIGNMENT IN ATT MODE<br>NAV FM / GPS POS DISAGREE<br>ALL ADR OFF |
| SMOKE | SMOKE / FUMES / AVNCS SMOKE<br>REMOVAL OF SMOKE / FUMES<br>SMOKE / FIRE FROM LITHIUM BATTERY |
| WHEEL | WHEEL TIRE DAMAGE SUSPECTED |
| MISC | BOMB ON BOARD<br>COCKPIT WINDSHIELD/WINDOW ARCING<br>COCKPIT WINDSHIELD/WINDOW CRACKED<br>DITCHING<br>EMER EVAC<br>EMER LANDING<br>FORCED LANDING<br>OVERWEIGHT LANDING<br>SEVERE TURBULENCE<br>TAILSTRIKE VOLCANIC ASH ENCOUNTER |

# SYSTEM RESET TABLE 1/2

| CKPT CTL pb 3초, | | RESET BTN 1초 |
|---|---|---|
| A-ICE | 2 WHC | GND : A.ICE L(R) WSHLD(WINDOW) HEAT |
| AIR | ENG BLEED pb | AIR ENG 1(2) BLEED FAULT GND : AIR ENG 1(2) BLEED NOT CLSD |
| | 2 PACK CONT | PACK CONT RESET |
| COND | 1 ZONE CONT | ZONE CONT RESET |
| APU | APU MASTER | Only APU SPD below 7% |
| AUTO FLT | REF FCOM | GND/Before TAXI : AUTO FLT A/THR OFF |
| | 2 FCU | PART FCU, FCU |
| | 2 FMGEC 2 FM | AUTO FLT FM 1(2) FAULT MAP NOT AVAIL |
| | MCDU OFF | MCDU RESET |
| BRKS | REF FCOM | GND : BRAKES RESIDUAL BRAKING WHEEL N/W STRG FAULT |
| CAB PR | 2 CPC | FAULTY CPC RESET |
| COM | 2 CIDS | Cabin Intercom Data Sys RESET |
| | 2 ACP/AMU | ACP RESET |
| | RMP OFF | RMP RESET |
| | ELT RESET | ELT RESET |
| DATA LINK | 1 ATSU | INVALID DATA or ATSU RESET |
| | 1 AINS,1 CINS | AINS, CINS RESET |
| DOOR | 2 PSCU | Proxi Switch Cont Unit RESET |
| EIS | DU OFF | ECAM, PFD, ND RESET |
| | 3 DMC | DMC RESET |
| ELEC | EXT A,B OFF | GND : RESET EXT A,B |
| | 3 BAT pb OFF | BATT RESET |
| | COMM, GALL pb OFF | GND : COMMER, GALL RESET |
| ENG | 2 EIVMU | Eng Interface Vibration Monitor Unit RESET |
| F/CTL | PRIM,SEC OFF | GND : PRIM, SEC RESET |
| | 2 FCDC | FCDC RESET |
| | 2 FLAP | GND : F/CTL FLAP SYS FAULT |
| | 2 SLAT | GND : F/CTL SLAT SYS FAULT |

# SYSTEM RESET TABLE 2/2

| CKPT CTL pb 3초, | RESET BTN 1초 | |
|---|---|---|
| FUEL | 2 FCMC | GND :<br>FUEL ZFW ZFCG DISAGREE |
| FWS | 2 FWC, 2 SDAC | Waring Sys RESET |
| L/G | 2 LGCIU | LGCIU RESET |
| MISC | VSC<br>(Cabin aft C/B) | RESET VACUUM TOILET SYS<br>(Blue pb) |
| COND | 1 ZONE CONT | ZONE CONT RESET |
| SMOKE | 2 SDCU | Smoke Dectect RESET |
| VENT | 2 VENT CONT | RESET VENT CONT |
| | 1 AEVC | RESET VENT COMPUTER |

| 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 |