ZJHK AD 2.1 机场地名代码和名称 Aerodrome location indicator and name

ZJHK-海口/美兰 HAIKOU/Meilan

ZJHK AD 2.2 机场地理位置和管理资料 Aerodrome geographical and administrative data

| | 机场基准点坐标及其在机场的位置 | N19 '56.0' E110 '27.6' | |
|---|---|--|--|
| 1 | ARP coordinates and site at AD | Center of RWY | |
| 2 | 方向、距离 Direction and distance from city | 302 °GEO, 18.8km from Haikong international square | |
| 3 | 标高/参考气温 Elevation / Reference temperature | 22.6m/33.3 °C(JUN) | |
| 4 | 机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation | THR09/- | |
| 5 | 磁差/年变率 MAG VAR/ Annual change | 0°30′W(1970)/ | |
| 6 | 机场管理部门、地址、电话、传真、AFS、电子邮箱、网址 AD administration, address, telephone,telefax, AFS, E - mail, website | Haikou Meilan International Airport CO. LTD. Linshan town, Meilan District, Haikou, Hainan province, China Post code:571126 TEL:86-898-69966909 FAX:86-898-69966310 Email:hwyxzhzx@hnair.com | |
| 7 | 允许飞行种类 Types of traffic permitted(IFR / VFR) | IFR/VFR | |
| 8 | 机场性质/飞行区指标 Military or civil airport &Reference code | CIVIL/4E | |
| 9 | 备注 Remarks | Nil | |

ZJHK AD 2.3 工作时间 Operational hours

| 1 | 机场当局(机场开放时间) AD Administration (AD operational hours) | H24 |
|---|---|-----|
| 2 | 海关和移民 Customs and immigration | H24 |
| 3 | 卫生健康部门 Health and sanitation | H24 |

| 4 | 航行情报服务讲解室 AIS Briefing Office | H24 |
|----|---|-----|
| 5 | 空中交通服务报告室 ATS Reporting Office (ARO) | H24 |
| 6 | 气象讲解室 MET Briefing Office | H24 |
| 7 | 空中交通服务 ATS | H24 |
| 8 | 加油 Fuelling | H24 |
| 9 | 地勤服务 Handling | H24 |
| 10 | 保安 Security | H24 |
| 11 | 除冰 De-icing | Nil |
| 12 | 备注 Remarks | Nil |

ZJHK AD 2.4 地勤服务和设施 Handling services and facilities

| 1 | 货物装卸设施 Cargo-handling facilities | Tow tractor, baggage transporter, dolly, platform lift, pallet, tractor,baggage tractor |
|---|---|---|
| 2 | 燃油/滑油牌号 Fuel/oil types | Nr.3 jet fuel |
| 3 | 加油设施/能力 Fuelling facilities/capacity | Refueling truck(1200 litres/min), hydrant cart(single tube: 1300 litres/min), hydrant cart(double tube: 3000 litres/min) |
| 4 | 除冰设施 De-icing facilities | Nil |
| 5 | 过站航空器机库 Hangar space for visiting aircraft | East maintenance hangar(nearby THR27): AVBL for 2 A330 and 5 B737-800 advanced schedule maintenance simultaneously. The painting area(nearby THR27): AVBL for 1 B737-800. |
| 6 | 过站航空器的维修设施 Repair facilities for visiting aircraft | General maintenance: engine changes available for various types of aircraft on request, spare parts and other maintenance work by prior arrangement. |

| | | Line maintenance: Schedule check for various types of aircraft and maintenance. |
|---|---------------|---|
| 7 | 备注 Remarks | Power units, air supply units, air preconditioning units available |

ZJHK AD 2.5 旅客设施 Passenger facilities

| 1 | 宾馆 Hotels | At AD and in the city |
|---|-------------------------------|-------------------------------------|
| 2 | 餐馆 Restaurants | At AD |
| 3 | 交通工具 Transportation | Passenger's coaches, taxis, bus |
| 4 | 医疗设施 Medical facilities | First aid center, Clinic at AD |
| 5 | 银行和邮局 Bank and Post Office | Bank at AD, Post Office in the city |
| 6 | 旅行社 Tourist Office | At AD |
| 7 | 备注 Remarks | Nil |

ZJHK AD 2.6 援救与消防服务 Rescue and fire fighting services

| 1 | 机场消防等级 AD category for fire fighting | CAT 9 | |
|---|--|---|--|
| 2 | 援救设备 Rescue equipment | Fire fighting facilities: primary foam tender, heavy-duty foam tender, water tank truck, dry-chemical tender, logistic truck, illumination truck, communication command car, rescue and fire-fighting truck, medicament reinforcement car, disassembly rescue equipment, etc. Rescue equipment: crane, corresponding steel plate, fire tender, uplift air cushion, mobile surface operation device, rubber pad, etc. | |
| 3 | 搬移受损航空器的能力 Capability for removal of disabled aircraft | MTWA up to B747-400 | |
| 4 | 备注 Remarks | Nil | |

ZJHK AD 2.7 可用季节- 扫雪 Seasonal availability-clearing

| 1 | 可用季节及扫雪设备类型 | All seasons |
|---|------------------------------|----------------|
| 1 | Types of clearing equipment | Not applicable |
| 2 | 扫雪顺序 Clearance priorities | Not applicable |
| 3 | 备注 Remarks | Nil |

ZJHK AD 2.8 停机坪、滑行道及校正位置数据 Aprons, taxiways and check locations data

| | 停机坪道面和强度 | Surface: | CONC |
|---|---|-----------|--|
| | | | PCN 104/R/B/W/T(Stands Nr. 309-313) PCN 92/R/B/W/T(Stands Nr. 1-11) |
| | | | PCN 88/R/B/W/T(Stands Nr. 29-33, 37, 38, 42-45, 45L, 45R, 46-49, 53, 54, 109-114, 401-403(cargo apron), 901(isolated apron)) |
| 1 | Apron surface and strength | Strength: | PCN 85/R/B/W/T(Stands Nr. 12-24, 211-220, 314-319, 601, 602, 605, 606) |
| | | | PCN 76/R/B/W/T(Stands Nr. 25-28, 201-206) |
| | | | PCN 70/R/B/W/T(Stands Nr. 34-36, 39-41, 50-52, 55-63, 101-108, 801-820(east maintenance apron)) |
| | | | PCN 62/R/B/W/T(Stands Nr. 301-308) |
| | | | 71m: V1; |
| | | Width: | 69m: B15, B16; |
| | | | 67.5m: B17; |
| | 滑行道宽度、道面和强度 Taxiway width, surface and strength | | 64m: B14; |
| | | | 61m: C4-C6, C12, C13; |
| | | | 60.25m: C3; |
| 2 | | | 58m: C10, C11; |
| 2 | | | 53.5m: C7, C8; |
| | | | 52.75m: C2; |
| | | | 52.5m: B13; |
| | | | 50m: B12(south of B); |
| | | | 43m: C14; |
| | | | 42m: N3; |
| | | | 36m: C1; |

| | | | 34m: A2, B6-B8, B9(south of B), B10(south of B); |
|---|----------------------------|-----------|--|
| | | | 28.5m: A1, A7; |
| | | | 27m: A3-A6; |
| | | | 25m: B3, D, N6, T2; |
| | | | 23m: A, B, B1(south of B), B2, B4, B5, B9(north of B), B10(north |
| | | | of B), B11, B12(north of B), C, N4, N8(north of N7), N9(north of |
| | | | N7), S3, S4, T1, T3, T4, V2, Y1, Y2; |
| | | | 18m: B1(north of B), B18, B19, N1, N2, N5, N7, N8(south of N7), |
| | | | N9(south of N7), S2 |
| | | Surface: | CONC |
| | | | PCN 104/R/B/W/T(B(west of B6), B1(south of B), B2-B5) |
| | | | PCN 95/R/B/W/T(A, A1-A7, B(BTN B6 & B12), B6-B12, S4) |
| | | | PCN 92/R/B/W/T(S2, S3) |
| | | G. A | PCN 91/R/B/W/T(B(BTN B12 & B17), B13-B17) |
| | | Strength: | PCN 88/R/B/W/T(C, C1-C8, C10-C14, D, N3-N9, T1-T4, V1, V2, |
| | | | Y1, Y2) |
| | | | PCN 70/R/B/W/T(B(east of B17), B18, B19, N1, N2) |
| | | | PCN 62/R/B/W/T(B1(north of B)) |
| | 高度表校正点的位置及其标高 | | ' |
| 3 | ACL location and elevation | Nil | |
| | VOR/INS 校正点 | | |
| 4 | | Nil | |
| | VOR/INS checkpoints | | |
| 5 | 备注 | | |
| | Remarks | | |

ZJHK AD 2.9 地面活动引导和管制系统与标识 Surface movement guidance and control system and markings

| 1 | 航空器机位号码标记牌、滑行道引导 线、航空器目视停靠引导系统的使用 Use of aircraft stand ID signs, TWY guide lines and visual docking / parking guidance system of aircraft stands | Taxiing guidance sign positions. Guide lines at all TW Identification signs at Mashaller is available | t aircraft stands. |
|---|---|---|---|
| | 跑道和滑行道标志及灯光 RWY and TWY marking and LGT | RWY markings | RWY designation, TDZ, edge line, THR, center line, aiming point, marking before THR |
| 2 | | RWY lights | Center line, edge line, THR, RWY end, TDZ |
| | | TWY markings | Center line, edge line, intermediate holding position, |

| | | | RWY holding positions, TWY shoulder, 'No entry' markings for TWY A3-A6 |
|---|-----------|--|---|
| | | TWY lights | Edge line(reflect sticks for straight section), center line, rapid exit TWY indicator, intermediate holding position, runway guard lights |
| 3 | 停止排灯 | Nil | |
| | Stop bars | | |
| 4 | 备注 | Blue apron edge line lights; intermediate holding position lights located at H and HP3; runway guard lights located at TWY A1, A2, A7. | |
| 4 | Remarks | | |

ZJHK AD 2.10 机场障碍物 Aerodrome obstacles

| Obstacles within | Obstacles within a circle with a radius of 15km centered on the center of RWY 09/27 | | | | | | | |
|------------------|---|-----------------------------|---------------|----------------------|--|---------------|--|--|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks | | |
| 1 | *Antenna | 091 | 2950 | 37 | RWY09 Take-off flight path; RWY27 Final approach | | | |
| 2 | Water TWR | 093 | 4020 | 63 | RWY09 Take-off flight path; RWY27 Final approach | | | |
| 3 | MT | 181 | 8500 | 99.8 | Circling for CAT D | | | |
| 4 | *BLDG | 262 | 12985 | 131.3 | | | | |
| 5 | *Antenna | 271 | 2850 | 38.2 | RWY09 Final approach; RWY27 Take-off flight path | | | |
| 6 | TWR | 286 | 6290 | 100.5 | RWY09 NDB/DME Final approach;Circling for CAT B/C | | | |
| 7 | *Control TWR | 358 | 989 | 89.2 | RWY09/27 missed approach, Circling for CAT A | | | |
| Others: | | | | | | | | |

| 序号 | 障碍物类型(*代表 | 磁方位 | 距离 | 海拔高度 | 影响的飞行程序及起飞 | 备注 |
|------------|----------------|---------------|---------|-----------------|---------------------------|---------|
| Serial Nr. | 有灯光) | BRG | DIST(m) | Elevation(m) | 航径区 | Remarks |
| | Obstacle | (MAG)(degree) | | | Flight procedure / take - | |
| | type(*Lighted) | | | | off flight path area | |
| | | | | | affected | |
| 1 | MT | 040 | 22000 | 117 | | |
| 2 | MT | 087 | 43000 | 207 | | |
| 3 | MT | 180 | 47000 | 269 | Sector centred ARP | |
| 4 | MT | 193 | 24000 | 200 | | |
| 5 | MT | 222 | 111100 | 1411 | Minimum surveillance | |
| 3 | 171 1 | 222 | 111100 | 1411 | altitude sector Nr.1 | |
| 6 | MT | 224 | 63000 | 250 | Sector centred 'NYB' | |
| 7 | MT | 238 | 91300 | 512 | Minimum surveillance | |
| / | IVI I | 236 | 91300 | 312 | altitude sector Nr.2 | |
| 8 | MT | 258 | 73800 | 244 | Minimum surveillance | |
| 0 | 1V1 1 | 230 | 73600 | ∠ ++ | altitude sector Nr.3 | |
| 9 | MT | 269 | 26000 | 222 | Sector centred 'MLT' | |

ZJHK AD 2.11 提供的气象信息、机场观测与报告 Meteorological information provided & aerodrome observations and reports

| 1 | 相关气象台的名称 Associated MET Office | Hainan ATMB MET station |
|---|--|------------------------------------|
| 2 | 气象服务时间;服务时间以外的责任气象 台 Hours of service, MET Office outside hours | H24 |
| 3 | 负责编发 TAF 的气象台;有效时段;发布间隔 Office responsible for TAF preparation,Periods of validity; Interval of issuance | Hainan ATMB MET station 24 HR; 6HR |
| 4 | 趋势预报发布间隔 Issuance interval of trend forecast | 1 HR |
| 5 | 所提供的讲解/咨询服务 | P, T, Video |

| | Briefing/consultation provided | |
|----|---|--|
| 6 | 飞行文件及其使用语言 | Chart, International MET Codes, Abbreviated Plain Language Text |
| 0 | Flight documentation, Languages used | Ch, En |
| 7 | 讲解/咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation | Synoptic charts, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data, SIGMET, AIRMET, cloud and mist radar, aerodrome warnings, numerical forecast product graph, TAF, METAR, SPECI |
| 8 | 提供信息的辅助设备 Supplementary equipment available for providing information | FAX, air broadcast, MET Service Terminal, radar display, satellite cloud display, AWOS data display |
| 9 | 提供气象情报的空中交通服务单位 ATS units provided with information | TWR, ACC, APP |
| 10 | 观测类型与频率/自动观测设备 Type & frequency of observation/Automatic observation equipment | Hourly plus special observation/ Yes |
| 11 | 气象报告类型及所包含的补充资料 Type of MET Report & supplementary information included | METAR, SPECI |
| 12 | 观测系统及位置 Observation System & Site(s) | RVR EQPT A: 110m S of RCL, 350m inward THR09 B: 110m S of RCL, 1810m inward THR09 C: 110m S of RCL, 350m inward THR27 SFC wind sensors 09: 110m S of RCL, 367m, 379m inward THR09 center: 110m S of RCL, 1800m inward THR09 27: 110m S of RCL, 360m, 372m inward THR27 Ceilometer Near LMM of each RWY |
| 13 | 气象观测系统的工作时间 Hours of operation for meteorological observation system | H24 |
| 14 | 气候资料 Climatological information | Climatological tables AVBL |
| 15 | 其他信息 Additional information | MET station TEL: 86-898-65751699 |

ZJHK AD 2.12 跑道物理特征 Runway physical characteristics

| 跑道号码 Designations RWY NR | 真方位和磁方 位 TRUE &MAG BRG | 跑道长宽 Dimensions of RWY(m) | 跑道强度(PCN), 跑道道面/停止 道道面 RWY strength (PCN), RWY surface / SWYsurface | 着陆入口坐标及 高程异常 THR coordinates and geoid undulation | 跑道入口标高,精密进近 跑道接地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY |
|---------------------------------|---------------------------------|---------------------------------|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 09 | 090 GEO 091 MAG | 3600×45 | 95/R/B/W/T CONC/- | | THR22.6m |
| 27 | 270 GEO 271 MAG | 3600×45 | 95/R/B/W/T CONC/- | | THR19.7m |
| 跑道-停止道坡度 Slope of RWY-SWY | 停止道长宽 SWY dimensions(m) | 净空道长宽 CWY dimensions(m) | 升降带长宽 Strip dimensions(m) | 无障碍物区 OFZ | 跑道端安全区长宽 RWY end safety area dimensions(m) |
| 7 | 8 | 9 | 10 | 11 | 12 |
| See Remark | Nil | Nil | 3720×300 | Nil | 240×150 |
| See Remark | Nil | Nil | 3720×300 | Nil | 240×150 |

Remark:

 $Slope\ of\ RWY\ -\ SWY: THR09 \rightarrow THR27: -0.14\% (0-1200m)/-0.1\% (1200-1260m)/0\% (1260-2200m)/-0.08\% (2200-3600m);$

Forced landing area is 3720×120m, located at south of RWY 09/27.

ZJHK AD 2.13 公布距离 Declared distances

| | ī | | ı | | |
|----------------|----------|---------|----------|--------|---------|
| 跑道号码 | 可用起飞滑跑距离 | 可用起飞距离 | 可用加速停止距离 | 可用着陆距离 | 备注 |
| RWY Designator | TORA(m) | TODA(m) | ASDA(m) | LDA(m) | Remarks |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 09 | 3600 | 3600 | 3600 | 3600 | Nil |
| 09 | 3469 | 3469 | 3469 | 3600 | FM A2 |
| 27 | 3600 | 3600 | 3600 | 3600 | Nil |
| Remarks: | • | | • | | |

ZJHK AD 2.14 进近和跑道灯光 Approach and runway lighting

| 跑道 代号 RWY Desig nator | 进近灯 类型、 长度、 强度 APCH LGT type LEN INTST | 入口灯 颜色、 翼排灯 THR LGT colour WBAR | 目视进近坡 度指示系统(跑道入口最 低眼高),精 密进近航道 指示器 VASIS (MEHT) PAPI | 接地地带 灯长度 TDZ LGT LEN | 跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST | 跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST | 跑道末端 灯颜色 RWY end LGT colour | 停止道灯 长度、颜 色 SWY LGT LEN, colour |
|-----------------------------------|--|---|---|-------------------------------|---|--|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 09 | PALS CAT II* 900m VRB LIH | GREEN | PAPI LEFT 434m inward THR09 3° 21.52m | 900m | 3600m** spacing 30m | 3600m*** spacing 60m | RED | Nil |
| 27 | PALS CAT I* 900m VRB LIH | GREEN | PAPI LEFT 415m inward THR27 3° 19.46m | Nil | 3600m** spacing 30m | 3600m*** spacing 60m | RED | Nil |

Remarks: *SFL

ZJHK AD 2.15 其他灯光,备份电源 Other lighting, secondary power supply

| 1 | 机场灯标/识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation | Nil |
|---|--|--|
| 2 | 着陆方向标/风向标位置和灯光 LDI/WDI location and LGT | WDI: 09:300m inward of THR09, 130m N of RCL (lighted); 27:175m inward of THR27, 130m S of RCL (lighted). |
| 3 | 滑行道边灯和中线灯 TWY edge and center line lighting | Blue TWY edge line Green TWY center line(RWY09/27 rapit exit TWY center line(yellow/green)) |

 $^{**0\}text{-}2700\mathrm{m}$ White VRB LIH, 2700-3300m Red/White VRB LIH, 3300m-3600m Red VRB LIH

^{*** 0-3000}m White VRB LIH, 3000-3600m Yellow VRB LIH

| 4 | 备份电源/转换时间 Secondary power supply/switch-over time | Secondary power supply available Switch-over time: RWY09/ 1sec, RWY27/ 15sec |
|---|--|--|
| 5 | 备注 Remarks | Nil |

ZJHK AD 2.16 直升机着陆区域 Helicopter landing area

| 1 | TLOF 坐标或 FATO 入口坐标及大地水准面 波幅 Coordinates TLOF or THR of FATO Geoid undulation | Nil |
|---|---|-----|
| 2 | TLOF 和/或 FATO 标高(m/ft) TLOF and/or FATO elevation (m/ft) | Nil |
| 3 | TLOF 和 FATO 区域范围、道面、强度和标志 TLOF and FATO area dimensions, surface, strength, marking | Nil |
| 4 | FATO 的真方位和磁方位 True and MAG BRG of FATO | Nil |
| 5 | 公布距离 Declared distance available | Nil |
| 6 | 进近灯光和 FATO 灯光 APP and FATO lighting | Nil |
| 7 | 备注 Remarks | Nil |

ZJHK AD 2.17 空中交通服务空域 ATS airspace

| 名称 Designation | 水平范围 Lateral limits | 垂直范围 Vertical limits | 备注 Remarks |
|---------------------------|--|----------------------|------------|
| Haikou tower control area | A circuit, 2 arcs with radius 13km centered at centers of both RWY THRs and 2 parallel lines of 13km from RWY centerline | 900 (QNH) and below | |

| 名称 Designation | 水平范围 Lateral limits | 垂直范围 Vertical limits | 备注 Remarks |
|------------------------------|-------------------------|----------------------|------------|
| | | TL 3600 | |
| Altimeter setting region and | C II'I ADD | TA 3000 | |
| TL/TA | Same as Haikou APP area | 3300(QNH≥1031hPa) | |
| | | 2700(QNH≤979hPa) | |

ZJHK AD 2.18 空中交通服务通信设施 ATS communication facilities

| 服务名称 Service Designation | 呼号 Call sign | 频率 Frequency (MHz) | 工作时间 Hours of operation | 备注 Remarks |
|-----------------------------|------------------|-----------------------|-------------------------------|------------------|
| 1 | 2 | 3 | 4 | 5 |
| ATIS | | 127.65 | НО | D-ATIS available |
| APP | Haikou Approach | AP01:119.15(120.225) | H24 | |
| APP | Haikou Approach | AP02:119.975(120.225) | by ATC | |
| TWR | Haikou Tower | 118.55(124.3) | H24 | |
| GND | Haikou Ground | 121.65 | НО | |
| GND | Haikou Delivery | 121.9 | H24 | DCL available |
| APN | Meilan Apron | 121.8 | H24 | |
| OP-CTL | Meilan Operation | 130.8 | НО | |
| EMG | | 121.5 | H24 | |

ZJHK AD 2.19 无线电导航和着陆设施 Radio navigation and landing aids

| 设施名称和类型 Name and type of aid | 识别 ID | 频率 Frequency | 发射天线位置、坐标 Antenna site coordinates | DME 发射天线标 高 Elevation of DME transmitting antenna | 备注 Remarks |
|---------------------------------|----------|-------------------|--|--|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Nanyingbindao VOR/DME | NYB | 113.3MHz CH80X | N20°00.9′ E110°08.2′ | 23m | Range: 200NM |
| Dongmulantou VOR/DME | MLT | 112.7MHz CH74X | N20°09.1′ E110°40.4′ | 58m | Range: 200NM |
| LMM 09 | Н | 389kHz | N19 '56.0' E110 '26.0' 271 °MAG/ 1050m | | |

| 设施名称和类型 Name and type of aid | 识别 ID | 频率 Frequency | 发射天线位置、坐标 Antenna site coordinates | DME 发射天线标 高 Elevation of DME transmitting antenna | 备注 Remarks |
|---------------------------------|----------|---------------------|--|--|------------------------|
| | | | FM THR09 | | |
| LOC 09 ILS CAT I | ІНН | 111.5MHz | 091 °MAG/ 250m FM end RWY 09 | | |
| GP 09 | | 332.9MHz | 135m S of RCL 338m inward THR09 | | Angle 3 ° RDH 17.5m |
| DME 09 | ІНН | CH52X (111.5MHz) | | 26m | Co-located with GP |
| LMM 27 | P | 402kHz | N19 '56.0' E110 '29.3' 091 °MAG/ 1150m FM THR27 | | |
| LOC 27 ILS CAT I | IPP | 108.5MHz | 271 °MAG/ 250m FM end RWY 27 | | |
| GP 27 | | 329.9MHz | 135m S of RCL 334m inward THR27 | | Angle 3 ° RDH 16.4m |
| DME 27 | IPP | CH22X (108.5MHz) | | 24m | Co-located with GP |

ZJHK AD 2.20 本场飞行规定

ZJHK AD 2.20 Local traffic regulations

1. 机场使用规定

1. Airport operations regulations

- 1.1 所有技术试飞需事先申请,并在得到空中交通管制部门批准后方可进行。
- 1.1 Each and every technical test flight shall be filed in advance and conducted only after clearance has been obtained from ATC.
- 1.2 未经空中交通管制部门许可,禁止未安装二次应答机的航空器起降。
- 1.2 Take-off/landing of aircraft without SSR transponder are forbidden without ATC clearance.

1.3 本场可供 B747-400 同类及其以下机型使用。

1.3 Maximum aircraft to be available: B747-400 and equivalent or below.

2. 跑道和滑行道的使用

2. Use of runways and taxiways

2.1 跑道运行规定

- 2.1 Runway operation regulations
- 2.1.1 未经允许,禁止航空器在跑道上做 180 、转弯。
- 2.1.1 180° turnaround on RWY is forbidden for all aircraft without permission.

2.1.2 非全跑道起飞运行程序

2.1.2 Partial runway taking-off procedure

2.1.2.1 使用非全跑道起飞的条件

- 2.1.2.1 Partial runway taking-off conditions
- 2.1.2.1.1 起飞航空器提出非全跑道起飞申请后,管 制员可根据实际情况批准并提供管制服务。
- 2.1.2.1.1 ATC could approve and provide service according to actual situation after taking-off aircraft applied for partial runway taking-off.
- 2.1.2.1.2 由于调配需要,管制员在征得航空器驾驶 2.1.2.1.2 In accordance with deployment, it is available 员同意后, 可实施非全跑道起飞。
 - to use partial runway to take-off when ATC get permission from aircraft pilot.
- 2.1.2.2 使用非全跑道起飞的机型限制
- 2.1.2.2 Partial runway taking-off aircraft limitations
- 09 号跑道允许翼展小于 60m (含)的航空器实施非 全跑道起飞。
- RWY09 is available to conduct intersection departure for aircraft with wing span less than 60m.
- 2.1.2.3 使用非全跑道起飞的地面运行限制
- 2.1.2.3 Partial runway taking-off ground operation limitations

经同意后, 离场航空器可以由 A2 滑行道进入 09 号 跑道使用非全跑道起飞。

Departure aircraft could enter RWY09 and conduct intersection departure via TWY A2 after getting

permission.

- 2.1.2.4 使用非全跑道起飞的其他运行限制
- 2.1.2.4 Other operation limitations
- 2.1.2.4.1 本场实施低能见度运行程序时,严禁实施 非全跑道起飞。
- 2.1.2.4.1 No intersection departure is permitted when conducting LVP operation.
- 2.1.2.4.2 在顺风大于 3m/s 或大侧风条件下, 不得实 施非全跑道起飞。
- 2.1.2.4.2 No intersection departure is permitted when head wind more than 3m/s or heavy cross wind prevails.
- 2.1.2.4.3 带有任何影响减速性能故障保留的航空器 不得申请非全跑道起飞。
- 2.1.2.4.3 No intersection departure is permitted with aircraft retaining any slow-down function failure.
- 2.1.2.4.4 飞行机组实施非全跑道起飞时,起飞襟翼 必须设置为正常起飞襟翼位置。
- 2.1.2.4.4 When conducting intersection departure, take-off flap shall set as the same as the normal take-off flap position.

2.2 跑道等待位置与使用规定

- 2.2 RWY holding positions and requirements
- 2.2.1 航空器在进入跑道前,必须在指定的跑道等待 位置处等待塔台管制员的指令,跑道等待位置详见 航图 ZJHK AD2.24-1, 2。
- 2.2.1 Aircraft shall stop and wait for the instruction of TWR ATC at the relative runway-holding positions. Locations of runway-holding positions refer to ZJHK AD2.24-1, 2.
- 2.2.2 航空器在跑道等待位置等待时, 机头应尽量靠 近跑道等待位置标志, 但不能超过此标识。
- 2.2.2 The nose of A/C shall get close to the runway holding position marking without exceeding it when A/C is waiting at the RWY holding position.
- 位置标志时,应立即向管制员报告。
- 2.2.3 航空器未获得管制员许可, 机头越过跑道等待 2.2.3 A/C shall report to ATC immediately when the nose of A/C exceeding holding position without

instruction.

2.3 地面及滑行道使用规则

2.3 General rules for the use of ground and TWYs

2.3.1 可通过地面服务申请引导车和拖车服务,进港航空器均有引导车引导进机位。

2.3.1 Follow-me vehicle service and towing service are available via Ground Control. Landing aircraft is guided by follow-me vechile to stands.

2.3.2 滑行道的使用限制

2.3.2 Limits for the use of TWYs

2.3.2.1 道面滑行限制

2.3.2.1 Ground taxiing limits

2.3.2.1.1 航空器在障碍物附近滑行时其速度不得超过 15km/h, 当翼尖距离障碍物小于 10m 时, 必须有专门引导人员观察与引导或者停止航空器的滑行。

2.3.2.1.1 The taxiing speed of aircraft is no more than 15km/h when taxiing around obstacles. If the distance between wing and obstacle is less than 10m, specialized staff should observe and guide it, or stop it.

2.3.2.1.2 在滑行道等待位置设有等待标志,未经ATC许可,禁止航空器通过。

2.3.2.1.2 Holding position markings are set on the TWY holding position. Aircraft is forbidden to cross without permission from ATC.

2.3.2.1.3 航空器应按照指定的滑行路线滑行,以管制员指令为准。

2.3.2.1.3 Aircraft shall taxi on the designated taxiing routes following the instruction of ATC

2.3.2.1.4 滑行通道限制

2.3.2.1.4 TWYs limits

| 滑行道/TWYs | 航空器翼展限制/Wing span limits for aircraft | | |
|--|---------------------------------------|--|--|
| B9 (north of B), N1, N2, N5, N7, N8 (south of N7), | 26 | | |
| N9 (south of N7), S2 | 36m | | |
| B7 (north of B) | 52m | | |

的航空器。

2.3.3 滑行道中间等待位置及使用规定:海口美兰机 场现有 10 个中间等待位置,供航空器滑行中等待使 用。其中 HP2-HP5、HP7-HP10 等待点的使用依据机 坪指令等待, HP1、HP6等待点的使用依据塔台指令

等待。HP 等待点位置详见航图 ZJHK AD2.24-2。

2.3.2.1.5 N8 滑和 N9 滑限制同时运行翼展大于 64m 2.3.2.1.5 Aircrafts with wing span more than 64m taxiing on TWY N8 and TWY N9 at the same time is forbidden.

> 2.3.3 Intermediate holding position marking and requirements of Intermediate holding HP1-HP10 are established. HP2-HP5, HP7-HP10 shall be used by APN control instructions. HP1, HP6 shall be used by TWR control instructions. Refer to ZJHK AD2.24-2.

| 等待位置 | 滑行方向 | 等待位置 | 滑行方向 |
|------------------|-------------------|------------------|-------------------|
| Holding position | Taxiing direction | Holding position | Taxiing direction |
| HP1 | E to W | HP6 | E to W |
| HP2 | E to W | HP7 | E to W |
| HP3 | N to S | HP8 | N to S |
| HP4 | W to E | HP9 | N to S |
| HP5 | N to S | HP10 | N to S |

2.3.4 滑行道其他使用规定

2.3.4.1 N4 与 N8 之间的 C 滑; C4 与 C7 之间的 D 滑; V1 以南的 T3、T4 滑; B15 与 B19 之间的 B 滑; B15 至 B17 之间的 A 滑及跑道区域处于塔台视野盲区, 机组在该区域滑行时注意观察并严格执行管制指 令。

2.4 机场冲突多发地带运行要求

2.3.4 Other rules for TWYs

2.3.4.1 TWY C(BTN N4 and N8), TWY D(BTN C4 and C7), TWY T3/T4(south of V1), TWY B(BTN B15 and B19) and TWY A/RWY(BTN B15 and B17) are in the TWR blind zone. Flight crew taxing in this area shall follow the ATC instructions strictly.

2.4 Hot spot procedure

2.4.1 机动区冲突多发地带位置见航图 ZJHK 2.4.1 Refer to ZJHK AD2.24-1, 2. AD2.24-1, 2。

2.4.2 为减少运行差错,降低地面冲突的发生概率, 在机场活动区内运行的航空器需严格按照下述的要 求运行。 2.4.2 For the purpose of reducing errors that lead to ground conflicts, aircraft operating within the maneuvering area must follow the requirements below:

HS1: S3、B、B6与A4脱离道的交叉区域。 使用27跑道起降时,管制员将指令从1-11号机位滑 出的航空器在B6或B前等待,航空器需进入此区域 上A滑行道前,必须得到塔台管制员的许可。

HS1: INTERSECTIONS OF TAXIWAYS S3, B, B6
AND A4

Aircraft taxiing from stands Nr.1-11 will be instructed to hold short of TWY B6 and B when RWY27 is in use. In that case, aircraft shall not taxi into TWY A in this area without TWR clearance.

HS2: B、B9、B10与A5 脱离道的交叉区域。 使用09跑道起降时,管制员将指令从25-28号机位 滑出的航空器在B前等待、指令从201-206、211-220 号机位滑出的航空器在B10前等待,航空器需进入 此区域上A滑行道前,必须得到塔台管制员的许可。

HS2: INTERSECTIONS OF TAXIWAYS B, B9, B10 AND A5

Aircraft taxiing from stands Nr.25-28 will be instructed to hold short of TWY B and aircraft taxiing from stands Nr.201-206, 211-220 will be instructed to hold short of TWY B10 when RWY09 is in use.In that case, aircraft shall not taxi into TWY A in this area without TWR clearance.

HS3: B13、B14、T3、T4、A、B 交叉区域
1、航空器在 B 滑行道由西向东进入 T3 前,应避免 与 5-7 号停机坪和东维修机坪进出港航空器交叉冲 突,注意管制员的等待或滑行指令。

HS3: INTERSECTIONS OF TAXIWAYS B13, B14, T3, T4, A AND B

2、航空器在B滑行道由东向西进入T3前,应避免与T1航站楼出港航空器交叉冲突,加强观察并注意

Before entering TWY T3 from west to east on TWY
 B, aircraft shall avoid conflicts with deaparture/arrival aircraft from apron Nr. 5-7 and East Maintenance
 Apron, observe extremely and pay attention to ATC

管制员的等待或滑行指令。

instructions of holding or taxiing.

2. Before entering TWY T3 from east to west on TWY B, aircraft shall avoid conflicts with deaparture aircraft from TML T1, observe extremely and pay attention to ATC instructions of holding or taxiing.

HS4: C、C2、C3、D 交叉区域

管制员指令由南向北的航空器在 C 滑行道前等待,航空器在此区域进入 D 滑行道前,必须得到塔台管制员的许可。此区域存在多条交叉路线,如误入 Y1 滑行道应停止滑行并向塔台管制员报告。

HS4: INTERSECTIONS OF TAXIWAYS C, C2, C3
AND D

Aircraft from south to north shall be instructed to hold short of TWY C. Aircraft shall enter TWY D from this area after obtaining TWR permission. This is an intersection of multi-taxiways. If taxiing into TWY Y1, aircraft shall stop and report to TWR immediately.

HS5: N8、N9、C7、C8、C、D交叉区域管制员指令29-38号停机位的航空器使用N8滑出时在C滑行道前等待,并加强观察。航空器通过此区域进入D滑行道前,必须得到塔台管制员的许可。

HS5: INTERSECTIONS OF TAXIWAYS N8, N9, C7, C8, C AND D

Aircraft taxiing from stands Nr.29-38 shall be instructed to hold short of TWY C before taxiing out of TWY N8 and observe extremely. Aircraft shall enter TWY D from this area after obtaining TWR permission.

HS6: N8、N9 滑行通道区域

因 N8、N9 部分滑行通道机型使用限制, 航空器在进入 29-38 号停机位时应加强观察, 避免滑行错误。如误入该区域应停止滑行并向机坪管制员报告。

HS6: INTERSECTIONS OF TAXIWAYS N8 AND N9
For aircraft type limitation on part of TWY N8 and N9,
aircraft taxiing into stands Nr.29-38 shall pay extremely
attention to avoid taxiing into wrong taxiway. If taxiing
into this area, aircraft shall stop and report to APN

HS7: C10、C11、T3、T4、C、D交叉区域 航空器使用 T3 由南向北运行时,应注意管制员的等

HS7: INTERSECTIONS OF TAXIWAYS C10, C11, T3, T4, C AND D

immediately.

待或滑行指令。航空器在此区域进入 D 滑行道前, 必须得到塔台管制员的许可。 Aircraft taxiing on TWY T3 from south to north shall be pay attention to ATC instructions of holding or taxiing. Aircraft shall enter TWY D from this area after obtaining TWR permission.

HS8: T3、T4、V2 交叉区域

航空器在此区域滑行时应注意观察,避免与货运停机位进出港航空器交叉冲突,按照管制员指令和避让规则运行。

HS8: INTERSECTIONS OF TAXIWAYS T3, T4 AND

V2

Aircraft in this area shall observe cautiously, avoid conflicts with deaparture/arrival aircraft from cargo stands, then operate according to ATC clearance and "see and avoidance" rules.

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 停机位限制/Limits for aircraft parking on the following stands:

| 停机位/Stands | 航空器翼展限制/Wing span limits for aircraft |
|---|---------------------------------------|
| Nr. 45(45L/R not AVBL simultaneously), 901 | 80m |
| Nr. 37, 38, 43, 44, 46-48, 53, 54 | 69m |
| Nr. 7, 10, 20, 24, 42, 309-312, 401 | 65m |
| Nr. 402 | 52m |
| Nr. 403 | 51.5m |
| Nr. 9, 11-14, 19, 21-23, 313 | 48 m |
| Nr. 15-18 | 38.5 m |
| Nr. 1-6, 8, 25-28, 201-206, 211-220, 301-308, 314-319, 601, 602, 605, 606 | 37.5m |
| Nr. 29-36, 39-41, 45L, 45R, 49-52, 55-63, 101-114, 801-820 | 36m |

Remarks:

Aircraft parking on stands except Nr.109-114, 201-206, 301-308, 314-316, 318, 319, 901 shall be pushed back.

- 使用; 当 45L 或 45R 使用时, 45 号机位停止使用。
- 3.1.1 当 45 号机位使用时, 45L 和 45R 号机位停止 3.1.1 When stands Nr.45 is used, Nr.45L and 45R are forbidden to use; When stands Nr.45L or 45R is used, Nr.45 is forbidden to use.
- 3.2 机坪运行管理规定
- 3.2.1 离港航空器推出开车滑行五个阶段的具体操 作程序:
- 3.2.1 Procedure for push back, start up and taxiing of departure aircraft:

3.2 Apron operations regulations

- 3.2.1.1 航空器向海口放行席申请放行许可;
- 3.2.1.1 Obtain delivery clearance via Haikou Delivery;
- 3.2.1.2 航空器准备完毕,向海口放行(DELIVERY) 3.2.1.2 Obtain push back and start up clearance via 申请推出开车许可;
- Haikou Delivery when aircraft stand by;
- 3.2.1.3 经海口放行(DELIVERY)同意后,向美兰机坪 (APN)申请推出开车许可;
- 3.2.1.3 With clearance of Haikou Delivery, obtain push back and start up clearance via Meilan Apron;
- 3.2.1.4 航空器推出开车后,向美兰机坪(APN)申请机 坪区域内的滑行许可;
- 3.2.1.4 Obtain taxiing clearance via Meilan Apron after start up;
- 3.2.1.5 航空器离开停机坪前,按照美兰机坪(APN) 的指令,向海口塔台(TWR)或海口地面(GND)申请进 一步滑行许可。
- 3.2.1.5 Obtain taxiing clearance via TWR or GND following the instruction of APN before vacating the apron.

3.2.2 进港航空器滑行工作流程:

- 3.2.2 Procedure for arrival aircraft:
- 3.2.2.1 进港航空器计划落地前 15min 需与美兰机场 指挥中心(OP-CTL)联系,通报预计降落时间。停机 位由美兰机场指挥中心统一安排或调整;
- 3.2.2.1 Contact Meilan Operation(OP-CTL) 15 minutes before landing to notify the estimated landing time. Parking stands are arranged by OP-CTL;

3.2.2.2 航空器脱离跑道后,由海口塔台(TWR)指挥滑行;

3.2.2.2 Obtain taxiing clearance via TWR after vacating the runway;

3.2.2.3 航空器进入机坪前,接海口塔台(TWR)指令 联系美兰机坪(APN)索取停机位信息及进一步滑行 许可。 3.2.2.3 With instructions of TWR, aircraft shall contact Meilan Apron for stands information and taxiing clearance before enter apron.

3.2.3 凡是有飞行活动的时间内,未经海口塔台、美兰机坪同意,严禁航空器利用自身动力滑行或使用拖车拖行。

3.2.3 Taxiing on own power or by tow tractor is strictly forbidden without Haikou TWR and Meilan Apron clearance during flight activities.

3.2.4 发动机试车,须经地面管制许可,并在指定地点进行。严禁在廊桥附近、客机坪和滑行道试大车。

3.2.4 Engine run-ups are subject to Ground Control clearance, and shall be carried out at a designated location. Fast engine run-ups in the vicinity of boarding bridges and on apron or TWYs are strictly forbidden.

3.2.5 本场测试应答机须经管制部门同意。

3.2.5 Testing transponder should be with ATC permission.

3.2.6 航空器在机坪区域内的滑行速度不得超过50km/h,在障碍物附近滑行时其速度不得超过15km/h,当翼尖距离障碍物小于10m时,必须有专门引导人员观察与引导或者停止航空器的滑行。航空器直线牵引速度不得超过10km/h,转弯时不得超过3km/h。

3.2.6 The taxiing speed of aircraft is no more than 50km/h within apron, and no more than 15km/h when taxiing around obstacles. If the distance between wing and obstacle is less than 10m, specialized staff should observe and guide it, or stop it. Towing speed of aircraft is no more than 10km/h, and no more than 3km/h while turning.

3.3 实施航空器推开同步的程序和要求

3.3 Implement the procedures and requirements for the aircraft 'push back and start-up synchronization'

3.3.1 推开同步程序是指在允许的机位或机坪区域,

3.3.1 'Push back and start-up synchronization'

离港航空器在推出过程中启动发动机并全程处于最 小地面慢车功率状态,待完成推到位、机务撤离后 即可滑出。 procedure means that in the allowed stands or apron area, departure aircrafts start-up the engine during the push back process and maintain the minimum ground idle power state, and then taxi out after the aircrafts are fully pushed in place and the aircraft maintenance staff are evacuated.

3.3.2 允许实施推开同步的机位包括: 3-25、211-214、309-313。其他机位除特殊申请外,禁止实施推开同步程序。

3.3.2 'Push back and start-up synchronization' procedure is available for stands Nr.3-25, 211-214, 309-313. Other aircraft stands are prohibited from implementing the 'push back and start-up synchronization' procedure except for special applications.

3.3.3 允许实施推开同步的对应机型及要求如下表:

3.3.3 The types and requirements of aircraft allow 'push back and start-up synchronization' as follows:

| 牵引车型号/Types of tractor | 推开同步运行机型及要求/Types and requirements of |
|----------------------------|---|
| + 11+ ± 1/1ypcs of tractor | aircraft |
| 抱轮 tractor | E190, A320, B737; single-engine start-up |
| | E190, A320, B737; double-engine start-up |
| Towing tractor(28t) | A300, A330, A340, B767, B777, B787; single-engine |
| | start-up |
| Towing tractor(A5t) | E190, A300, A320, A330, A340, B737, B767, B777, |
| Towing tractor(45t) | B787; double-engine start-up |

3.3.4 航空器有影响发动机、飞控、刹车、转弯和液 压等系统的故障保留或推出过程突发上述故障时,

3.3.4 When the aircraft has a fault-retaining that affects the engine, flight control, brakes, turning and hydraulic

禁止实施推开同步运行。

systems or the above-mentioned faults are happened in the process of pushing back, it is prohibited to implement the 'push-back and start-up synchronization' operation.

3.3.5 机组须接受推开同步运行培训,熟悉运行流程 和相关应急处置程序。

3.3.5 The aircrew must receive 'push back and start-up synchronization' training and be familiar with the operational procedures and relative emergency procedures.

3.3.6 经机组、机务人员、牵引车驾驶员三方共同评 估并确认后方可实施推开同步运行,有一方评估未 达运行条件则禁止实施推开同步运行,并由机务人 员向机坪管制中心通报相关信息。

3.3.6 After the aircrew, the aircraft maintenance staff and the tow-car driver jointly evaluated and confirmed, the 'push back and start-up synchronization' operation can be implemented; if one party fails to meet the operating conditions, it is prohibited to implement the 'push back and start-up synchronization' procedure, and the aircraft maintenance staff informs the apron control center of relevant information.

3.3.7 机务人员完成准备阶段全部工作后,应向机组 报告是否实施推开同步(标准用语:"机组你好,该 机位可以/不可以边推边启动发动机,实行单发或双 发启动程序"),在得到机组确认后,将计划实施推 开同步单发或双发启动的情况通报给牵引车司机。

3.3.7 After completing all the work in the preparation phase, the aircraft maintenance staff should report to the aircrew whether to implement 'push back and start-up synchronization' (standard term: 'Hello, the aircrew, the stand can/cannot start the engine while pushing back'). After the aircrew's confirmation, inform the tow-car driver whether to start the engine while pushing.

3.3.8 在推出过程中, 机组应保持发动机功率不得大 3.3.8 During the push back process, the aircrew shall 于最小慢车状态。推开同步单发启动时,剩余发动 maintain engine power not greater than the minimum

机须等航空器推到位,设置好停留刹车后再启动。

ground idle state. The 'push back and start-up synchronization' operation only allows one engine to be started, and the remaining engines can start after the aircraft to be pushed in place and set the parking brake.

3.3.9 如推出过程中航空器出现非正常情况需要停住, 机组应及时通报机务人员, 等航空器停稳, 机务许可后方可设置停留刹车。

3.3.9 If the aircraft needs to stop in the abnormal situation during the push back process, the aircrew shall inform the aircraft maintenance staff in time, and set the parking brake waiting until the aircraft comes to a stop and the permission of the aircraft maintenance staff.

3.3.10 在推出航空器过程中,如出现机组、机务人员、牵引车司机三方通讯中断的情况,应及时更换通讯工具或使用标准手势进行沟通。

3.3.10 In the process of pushing the aircraft, if the three-party communication of the aircrew, the aircraft maintenance staff and the tow-car driver is failure, they shall change the communication tools or use standard gestures to communicate in time.

3.3.11 在实施过程中发生突发情况时,应立即中断 推开同步程序,并通报运行指挥中心处置。

3.3.11 When emergency situation is happened during the implementation, the 'push and start-up synchronization' procedure shall be interrupted immediately. And inform the Airport Operation Command Center to dispose.

4. 进、离场管制规定

4. Air traffic control regulations

4.1 进港航空器管制规定

4.1 Air traffic control regulations for arrival aircraft

4.1.1 快速脱离

4.1.1 Rapid exit

4.1.1.1 航空器在着陆后应尽快(飞越跑道入口端至 4.1.1.1 Landing aircraft shall vacate the runway as soon

完全脱离跑道应在 50s 内) 脱离跑道, 如需使用更长 的时间占用跑道应在着陆前通知管制员。

as possible(within 50 seconds from flying over RWY THR to vacating the RWY), otherwise inform TWR controller before landing.

4.1.1.2 在脱离跑道首次与管制员联系时,尤其在低 能见度情况下,必须向地面管制员报告具体位置。

4.1.1.2 Landing aircraft must report the vacated runway designation and the taxiway in use during initial contact with GND control, especially under low visibility condition.

4.1.2 管制移交

4.1.2 Hand-over

4.1.2.1 进港航空器与塔台管制员脱波后,应立即与 美兰机坪(APN)建立联系。

4.1.2.1 Pilot shall contact Meilan Apron(APN) as soon as leaving TWR frequency.

4.1.2.2 机场机坪区域由机场机坪管制部门负责,具 体的移交点和移交方式听管制员指挥。

4.1.2.2 Aircraft shall be instructed by APN in airport apron area. The specific hand-over point and mode shall be instructed by ATC.

4.1.3 地面引导

4.1.3 Ground guidance

机组如对停机位有疑问时, 应向地面管制或机坪管 制证实。

Flight crew shall verify the questions about stands via GND or APN.

4.2 离港航空器管制规定

4.2 Air traffic control regulations for departure aircraft

4.2.1 放行许可

4.2.1 Delivery clearance

系地面管制申请放行许可。

4.2.1.1 离港航空器必须在推出开车前 10min 内, 联 4.2.1.1 Departing aircraft shall contact GND Control for delivery clearance within 10 minutes before start-up.

4.2.1.2 航空器可以通过两种方式取得放行许可:数 4.2.1.2 Aircraft could obtain delivery clearance through

字放行 DCL 和人工播发放行。

4.2.1.3 收到 DCL 数字放行许可后, 航空器应在报告 准备好开车前 5min, 通过话音放行频率向放行管制 席复述放行许可内容: (a)航空器呼号、(b)跑道号、 (c)起始爬升高度等。

4.2.1.4 通过以上方式抄收完放行许可后,离港航空器在准备好推出及开车时通报放行管制席,取得地面管制许可后方可推出开车。

4.2.1.5 当 DCL 无法完成放行许可的申请或发布时, 飞行员可采用话音方式申请或发布放行许可。

4.2.2 快速起飞

4.2.2.1 通常情况下,离场航班获得进跑道许可后,从跑道外等待点滑行至进跑道完成起飞准备的时间 应在 1min 内,如需更长时间,应及时通知管制员。

4.2.2.2 机组在收到管制员的起飞指令后应尽快执行,如在1min内无法开始滑跑的要尽早通知管制员。

4.2.3 管制移交

机场机坪区域由机场机坪管制部门负责, 具体的移交点和移交方式听管制员指挥。

DCL or TWR control.

4.2.1.3 After obtaining delivery clearance, aircraft should repeat "call sign, runway designation and initial altitude" to delivery controller 5 minutes before reporting "ready to push back and start-up".

4.2.1.4 When departure aircraft is ready to push back and start-up, they shall inform Delivery Control, then conduct it after obtaining delivery clearance.

4.2.1.5 If the DCL service is not available, pilots shall contact controller for verbal ATC clearance.

4.2.2 Rapid take-off

4.2.2.1 Departure aircraft shall enter RWY and be ready to take off from RWY holding position within 1min after receiving ATC instructions of entering runway; If need more time, pilot shall inform TWR controller in time.

4.2.2.2 When flight crew receive ATC instruction to take off, they shall conduct it as soon as possible. If flight crew consider that they can not fulfill the process within 1min, pilot shall inform TWR controller as soon as possible.

4.2.3 Hand-over

Aircraft shall be instructed by APN in airport apron area. The specific hand-over point and mode shall be

instructed by ATC.

5. 机场的 II/III 类运行

5. CAT II/III operations at AD

无

Nil

6. 除冰规则

6. Rules for deicing

无

Nil

7. 平行跑道同时仪表运行

7. Simultaneous operations on parallel runways

无

Nil

8. 警告

8. Warning

8.1 跑道北侧机场高速公路灯光与跑道灯光相似, 注 8.1 Do not mistake the freeway lights located at north 意识别。

of runway for runway lights.

8.2 每天 11:00-13:00, 17:00-19:00, 23:00-01:00 8.2 Ascent of MET balloon take place at N200000 (UTC),海口永庄(N200000E1101500)释放气象探 空气球, 球体高 1.2-2.0m, 探空气球漂移半径为 100km, 上升率为 350m/min, 升限 30000m。请过往 机组注意观察。

E1101500, 11:00-13:00, 17:00-19:00, 23:00-01:00 (UTC) daily, height of balloon itself is 1.2-2.0m, floating radius: 100km, rate of ascent: 350m/min, ceiling: 30000m. Aircraft shall pay attention to the MET balloon.

8.3 航空器绕飞天气时,注意避免进入 D155 危险区。

8.3 Aircraft shall pay attention to avoid Danger Area(ZG(D)155) near airport during weather deviation.

9. 直升机飞行限制, 直升机停靠区

9. Helicopter operation restrictions and helicopter parking / docking area

不允许在机位上作起降。停靠区在 201-206、211-220 Taking off and landing are forbidden on the parking

号机位。

stands. Parking area is stands Nr. 201-206, 211-220.

ZJHK AD 2.21 噪音限制规定及减噪程序

ZJHK AD 2.21 Noise restrictions and Noise abatement procedures

1 起飞减噪程序

1 Noise abatement procedures for departure

在保证安全超障和飞行程序最低爬升梯度的条件下, 执行如下起飞减噪程序。由于非管制原因不执行减 噪程序,飞行员必须在起飞前告知管制员并说明原因 (校验飞行等特殊飞行除外)。 In condition of complying with the requirements of obstacle clearance and climb gradient required by flight procedure, the following noise abatement climb procedures shall be implemented. If the procedures can not be implemented due to any reason except ATC, pilot shall inform the controller with a reasonable explanation(except for flight check and other special flight).

- 1.1 在航空器起飞性能运行允许的情况下,尽可能使用减推力起飞:
- 1.1 The derated take-off is strongly recommended if the take-off performance of aircraft permit;
- 1.2 在 高 度 450m 时 ,起 始 爬 升 速 度 V2+20km/h(10kt),减小功率至爬升功率,保持原有襟 翼和速度继续爬升;
- 1.2 At altitude 450m, with a climb speed of V2 + 20km/h(10kt), reduce engine power/thrust to climb power/thrust and maintain a speed with flaps and slats in the take-off configuration;

1.3 高度 900m 以上时,转为正常航路爬升速度并按规定收襟翼/缝翼。

1.3 At altitude 900m or above, maintain a positive rate of climb, accelerate to normal en-route climb speed and retract flaps/slats as prescribed.

ZJHK AD 2.22 飞行程序

ZJHK AD 2.22 Flight procedures

1. 总则 1. General

1.1 除经海口进近或塔台特殊许可外,在海口进近管制区和塔台管制区内的飞行,必须按照仪表飞行规则进行。

1.2 进离港航空器在海口进近管制区和塔台管制区 以实施 PBN 运行程序为主。如航空器驾驶员无法执 行上述要求时,必须在初始联系管制员时向 ATC 申 请,并说明原因。

2. 起落航线

起落航线通常在跑道北侧,A、B类航空器高度300m, C、D类航空器高度500m;经空中交通管制部门许可,可在跑道南侧进行。

3. 仪表飞行程序

严格按照航图中公布的进、离场程序飞行。如果需要, 航空器可在空中交通管制部门指定的航路、导航台或定位点上空等待或做机动飞行。

4. 雷达程序和/或 ADS-B 程序

4.1 海口进近管制区域内实施雷达管制。航空器最小水平间隔为 6km。

1.1 Flights within Haikou Approach Control Area and Tower Control Area shall operate under IFR unless special clearance has been obtained from Haikou Approach Control or Tower Control.

1.2 Departure and arrival aircraft shall mainly conduct PBN flight procedures within Haikou APPControl Area and Tower Control Area. If aircraft cannot conduct PBN, pilots shall inform ATC on initial contact with controllers, and state reasons.

2. Traffic circuits

Traffic circuits shall be normally made to the north of RWY, at the altitude of 300m for aircraft CAT A/B, and 500m for aircraft CAT C/D. Traffic circuits to the south of runway are subject to ATC clearance.

3. IFR flight procedures

Strict adherence is required to the relevant arrival/departure procedures published in the aeronautical charts. Aircraft may, if necessary, hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.

4. Radar procedures and/or ADS-B procedures

4.1 Radar control within Haikou APP has been implemented. The minimum horizontal radar separation is 6km.

- 4.2 当航空器得到目视进近许可或进近管制已指示航空器与塔台建立通信联络时,雷达管制终止。
- 4.2 Radar control is end when aircraft obtain visual approach clearance or APP indicate aircraft to contact TWR.

4.3 最低监视引导高度扇区

4.3 Surveillance Minimum Altitude Sectors

| Sector Nr.1 | ALT limit: 1750m or above | | | | | | | |
|--|---|--|--|--|--|--|--|--|
| N191500E1082000-N203000E1082000-N203000E1084 | N191500E1082000-N203000E1082000-N203000E1084000-N193015E1084000-N193015E1101354-N191500E1 | | | | | | | |
| 101354-N191500E1082000 | | | | | | | | |
| Sector Nr.2 | ALT limit: 850m or above | | | | | | | |
| N193015E1091136-N194534E1091136-N194534E1110815-N191500E1110815-N191500E1101354-N193015E11 | | | | | | | | |
| 01354-N193 | 015E1091136 | | | | | | | |
| Sector Nr.3 | ALT limit: 600m or above | | | | | | | |
| N194534E1091136-N203000E1091136-N203000E11136 | 000-N191500E1113000-N191500E1110815-N194534E11 | | | | | | | |
| 10815-N194 | 534E1091136 | | | | | | | |
| Sector Nr.4 | ALT limit: 1150m or above | | | | | | | |
| N193015E1084000-N203000E1084000-N203000 | E1091136-N193015E1091136-N193015E1084000 | | | | | | | |
| Sector Nr.5 | ALT limit: 2650m or above | | | | | | | |
| N191500E1080300-N203000E1080300-N203000 | N191500E1080300-N203000E1080300-N203000E1082000-N191500E1082000-N191500E1080300 | | | | | | | |
| Sector Nr.6 | ALT limit: 3000m or above | | | | | | | |
| N191604E1071123-N195733E1075547-N203000 | E1080300-N191500E1080300-N191604E1071123 | | | | | | | |

5. 无线电通信失效程序

5. Radio communication failure procedures

无

Nil

6. 目视飞行程序

6. Procedures for VFR flights

机场塔台(进近)管制区正式实施目视间隔和目视 With the prior permission of ATC, visual separation and

进近运行,此运行方式须得到 ATC 许可。

visual approach can be implemented within TWR control area and APP control area.

7. 目视飞行航线

7. VFR route

无

Nil

8. 目视参考点

8. Visual reference point

无

Nil

9. 其它规定

9. Other regulations

9.1 听清并复诵地面管制员的滑行指令,尤其是界限性指令,发现疑问及时证实。

9.1 Repeat the whole taxiing instructions issued by GND Control and make it clear especially for boundaries when there is a doubt.

9.2 航空器在地面滑行期间, 航空器驾驶员必须按照 地面管制员指令滑行, 并加强地面观察, 当观察到 不明活动情况时, 应及时通知地面管制员。 9.2 Flight crew shall taxi following GND instruction, keep watching ATC-related activities and report the

observed activities to GND in time.

9.3 专机滑行路线应按照地面管制员指令滑行。

9.3 Taxiing routes of special flight will be instructed by ATC.

9.4 机组如在地面管制扇区移交后联系不畅,应在等待线前停止滑行,并向原地面管制扇区报告。

9.4 If failed to change to the assigned GND frequency, holding at the holding line and contact the original frequency.

9.5 当机组误操作滑错方向或路线时,应该立即停止滑行并向管制员报告。

9.5 When taxiing to the wrong direction or route by mistake, stop immediately and report ATC.

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

Waypoint list

| ID | | CC | OORDINA | TES(WGS- | 84) | | ID | | COO | RDINAT | ES(WGS-84) | |
|--------------------|----|------------------|---------|--------------------|---------------|-------|--------------|--|------------------|------------------|--------------------------|--|
| HK404 | | N195603 E1101350 | | | | | HK510 N | | N | N194902 E1102020 | | |
| HK406 | | N195602 E1100622 | | | | | | | N | 1195101 E | E1104029 | |
| HK407 | | | N200849 | E1100123 | | | HK514 | | N | 195605 E | E1104725 | |
| HK410 | | | N195100 | E1100622 | | | HK515 | | N | 1200909 E | E1104848 | |
| HK412 | | | N195101 | E1101351 | | | HK520 | | N | 1200655 E | E1101828 | |
| HK413 | | | N195101 | E1102329 | | | HK521 | | N | [201401 E | E1101819 | |
| HK414 | | | N195101 | E1103706 | | | HK522 | | N | [201349 E | E1100759 | |
| HK415 | | | N194536 | 5 E1103706 | | | NYB | | N | N2000.9 E | E11008.2 | |
| HK416 | | N194536 E1102329 | | | | | AGTEL | | N | N2030.0 E | E11017.6 | |
| HK418 | | N200655 E1102706 | | | | | ASSAD | | N | N1820.5 E | E10740.9 | |
| HK419 | | N200907 E1103503 | | | | BESVU | | | N1951.0 E11047.4 | | | |
| HK420 | | N200903 E1102448 | | | | DOMGO | | | N | N2030.0 E11050.4 | | |
| HK421 | | N200855 E1101051 | | | | | LIDLU | | | N2030.0 E10943.0 | | |
| HK422 | | | N194533 | B E1101331 | | | NUMKU | | | N2005.0 E11022.9 | | |
| HK423 | | | N195101 | E1101608 | | | PORAP | | N | N1915.0 E10958.8 | | |
| HK504 | | | N195606 | 5 E1104029 | | | SAMAS | | N | N2030.3 E11029.7 | | |
| HK506 | | | N195037 | E1102155 | | | UPRIS | | N | N1915.0 E10946.2 | | |
| Path Terminator | | ypoint ID | Fly | Magnetic Course | Tur Direct | | Altitude (m) | | AS m/h) | VPA/ TCH | Navigation Specification | |
| | | | | RWY | 709 SID 2 | AGT-9 | YD | | | | | |
| CA | | | | 091 | | | 400 | | | | RNAV1 | |
| DF | H | K420 | 420 L | | | | | | | RNAV1 | | |
| TF | AC | GTEL | | | | | | | | | RNAV1 | |
| | | | | RWY | 709 SID A | AGT-8 | SYD | | | | | |
| CA | | | | 091 | | | 400 | | | | RNAV1 | |

| DF | HK419 | | | L | | | RNAV1 |
|----|-------|-------|--------|--------------|---------------|--------|-------|
| TF | HK420 | | | | | | RNAV1 |
| TF | AGTEL | | | | | | RNAV1 |
| | | | RWY | Y09 SID SA | M-9YD | | |
| CA | | | 091 | | 400 | | RNAV1 |
| DF | HK419 | | | L | | | RNAV1 |
| TF | SAMAS | | | | | | RNAV1 |
| | | I | RWY09 | SID UPR-8Y | (D(by ATC) | | |
| CA | | | 091 | | 400 | | RNAV1 |
| DF | HK506 | | | R | ↑600 | | RNAV1 |
| TF | UPRIS | | | | | | RNAV1 |
| | | • | RW | Y09 SID UP | R-9YD | | |
| CA | | | 091 | | 400 | | RNAV1 |
| DF | HK419 | | | L | | | RNAV1 |
| TF | HK420 | | | | | | RNAV1 |
| TF | HK421 | | | | | | RNAV1 |
| | | | | | 6900 | | |
| TF | NYB | | | | or by | | RNAV1 |
| | | | | | ATC | | |
| TF | UPRIS | | | | | | RNAV1 |
| | |] | RWY09 | SID ASS-9Y | D(by ATC) | | |
| CA | | | 091 | | 400 | | RNAV1 |
| DF | HK419 | | | L | | | RNAV1 |
| TF | HK420 | | | | | | RNAV1 |
| TF | HK407 | | | | | | RNAV1 |
| TF | ASSAD | | | | | | RNAV1 |
| | | RWY09 | SID Ho | lding (outbo | und time: 1 m | inute) | |
| | | | _ | | | | |

| НМ | HK419 | Y | 348 | L | by ATC | RNAV1 | | | |
|-------------------|-------|---|-------|-------------|-----------|-------|--|--|--|
| RWY27 SID AGT-9ZD | | | | | | | | | |
| CA | | | 271 | | 400 | RNAV1 | | | |
| DF | HK520 | | | R | | RNAV1 | | | |
| TF | HK521 | | | | | RNAV1 | | | |
| TF | AGTEL | | | | | RNAV1 | | | |
| RWY27 SID SAM-8ZD | | | | | | | | | |
| CA | | | 091 | | 400 | RNAV1 | | | |
| DF | HK520 | | | R | | RNAV1 | | | |
| TF | HK521 | | | | | RNAV1 | | | |
| TF | SAMAS | | | | | RNAV1 | | | |
| | | | RWY | Y27 SID SAM | -9ZD | | | | |
| CA | | | 271 | | 400 | RNAV1 | | | |
| DF | HK418 | | | R | | RNAV1 | | | |
| TF | SAMAS | | | | | RNAV1 | | | |
| | | | RWY27 | SID UPR-8ZI | O(by ATC) | | | | |
| CA | | | 271 | | 400 | RNAV1 | | | |
| DF | HK510 | | | L | | RNAV1 | | | |
| TF | UPRIS | | | | | RNAV1 | | | |
| | | | RW | Y27 SID UPR | -9ZD | | | | |
| CA | | | 271 | | 400 | RNAV1 | | | |
| DF | HK520 | | | R | | RNAV1 | | | |
| TF | HK521 | | | | | RNAV1 | | | |
| TF | HK522 | | | | | RNAV1 | | | |
| | | | | | 6900 | | | | |
| TF | NYB | | | | or by | RNAV1 | | | |
| | | | | | ATC | | | | |

| TF | UPRIS | | | | | | RNAV1 |
|----|-------|----|------------|---------------|----------------------|---------|-------|
| | • | | RWY27 | SID ASS-9ZI | D(by ATC) | | · |
| CA | | | 271 | | 400 | | RNAV1 |
| DF | HK520 | | | R | | | RNAV1 |
| TF | HK521 | | | | | | RNAV1 |
| TF | HK522 | | | | | | RNAV1 |
| TF | HK407 | | | | | | RNAV1 |
| TF | ASSAD | | | | | | RNAV1 |
| | • | RW | Y27 SID Ho | lding (outbou | nd time: 1 mi | nute) | • |
| НМ | HK521 | Y | 360 | R | by ATC | | RNAV1 |
| | | | RWY09 S | TAR DOM-8 | YA(by ATC) | | |
| IF | DOMGO | | | | | | RNAV1 |
| TF | HK515 | | | | | | RNAV1 |
| TF | BESVU | | | | 1800 or by ATC | | RNAV1 |
| TF | HK414 | | | | | | RNAV1 |
| TF | HK415 | | | | | MAX 380 | RNAV1 |
| TF | HK416 | | | | | | RNAV1 |
| TF | HK422 | | | | | | RNAV1 |
| TF | HK412 | | | | ↑1200 | MAX 380 | RNAV1 |
| | | | RWY | 09 STAR DO | M-9YA | | |
| IF | DOMGO | | | | | | RNAV1 |
| TF | HK515 | | | | | | RNAV1 |
| TF | BESVU | | | | 1800 or by ATC | | RNAV1 |
| TF | HK414 | | | | | | RNAV1 |

| TF | HK413 | | | | RNAV1 |
|----|-------|---------------|----------------|---------|----------|
| TF | HK412 | | ↑1200 | MAX 380 | RNAV1 |
| | | RWY09 STA | R POR-8YA | | · |
| IF | PORAP | | | | RNAV1 |
| TF | HK422 | | | | RNAV1 |
| | | | 6900 | | |
| TF | HK423 | | or by | | RNAV1 |
| | | | ATC | | |
| TF | NUMKU | | | | RNAV1 |
| TF | HK515 | | | | RNAV1 |
| | | | 1800 | | |
| TF | BESVU | | or by | | RNAV1 |
| | | | ATC | | |
| TF | HK414 | | | | RNAV1 |
| TF | HK413 | | | | RNAV1 |
| TF | HK412 | | ↑1200 | MAX 380 | RNAV1 |
| | | RWY09 STAR PC | OR-9YA(by ATC) | | |
| IF | PORAP | | | | RNAV1 |
| TF | HK422 | | | | RNAV1 |
| TF | HK412 | | ↑1200 | MAX 380 | RNAV1 |
| | | RWY09 STAR AS | SS-9YA(by ATC) | | • |
| IF | ASSAD | | | | RNAV1 |
| TF | HK407 | | | | RNAV1 |
| TF | NYB | | 900 | MAX 380 | RNAV1 |
| | · | RWY09 STA | R LID-9YA | | <u>.</u> |
| IF | LIDLU | | | | RNAV1 |
| TF | HK407 | | | | RNAV1 |
| TF | NYB | | 900 | MAX 380 | RNAV1 |

| RWY09 Holding (outbound time: 1 minute) | | | | | | | | | |
|---|--|----|-----------|-----------------|------------|---------|-------|--|--|
| НМ | HK407 | Y | 142 | L | 1500 | MAX 380 | RNAV1 | | |
| НМ | HK412 | Y | 271 | R | 1200 | MAX 380 | RNAV1 | | |
| НМ | HK515 | Y | 185 | R | by ATC | MAX 380 | RNAV1 | | |
| | RWY09 Approach Transition (from HK412) | | | | | | | | |
| IF | HK412 | | | | ↑1200 | MAX 380 | RNAV1 | | |
| TF | HK410 | | | | | | RNAV1 | | |
| TF | HK406 | | | | 900 | | RNAV1 | | |
| TF | HK404 | | | | 600 | | RNAV1 | | |
| | | R' | WY09 Appı | roach Transitio | n (from NY | B) | | | |
| IF | NYB | | | | 900 | MAX 380 | RNAV1 | | |
| TF | HK404 | | | | 600 | | RNAV1 | | |
| | | | RWY | 709 Missed app | oroach | | | | |
| CA | | | 091 | | 400 | | RNAV1 | | |
| DF | HK413 | | | R | 900 | | RNAV1 | | |
| TF | HK412 | | | | | MAX 380 | RNAV1 | | |
| | | | RWY | 27 STAR DON | M-9ZA | | | | |
| IF | DOMGO | | | | | | RNAV1 | | |
| | | | | | 2100 | | | | |
| TF | HK515 | | | | or by | MAX 380 | RNAV1 | | |
| | | | | | ATC | | | | |
| RWY27 STAR POR-8ZA | | | | | | | | | |
| IF | PORAP | | | | | | RNAV1 | | |
| | | | | | ↑6900 | | | | |
| TF | HK423 | | | | or by | | RNAV1 | | |
| | | | | | ATC | | | | |
| TF | NUMKU | | | | | | RNAV1 | | |
| TF | HK515 | | | | 2100 | MAX 380 | RNAV1 | | |

| | | | | | or by | | |
|----|-------|----|------------|---------------|----------------|---------|-------|
| | | | | | or by | | |
| | | | DWW27.0 | TAR DOD O | ATC | | |
| | | | RWY27 S | TAR POR-92 | ZA(by ATC) | | |
| IF | PORAP | | | | | | RNAV1 |
| TF | HK423 | | | | | | RNAV1 |
| TF | HK513 | | | | ↑1200 | MAX 380 | RNAV1 |
| | | | RWY27 S | TAR ASS-92 | ZA(by ATC) | | |
| IF | ASSAD | | | | | | RNAV1 |
| TF | HK407 | | | | | | RNAV1 |
| TF | NYB | | | | | | RNAV1 |
| TF | HK423 | | | | | | RNAV1 |
| TF | HK513 | | | | ↑1200 | MAX 380 | RNAV1 |
| | | | RWY | 27 STAR LI | D-9ZA | | • |
| IF | LIDLU | | | | | | RNAV1 |
| TF | HK407 | | | | | | RNAV1 |
| TF | NYB | | | | | | RNAV1 |
| TF | HK423 | | | | | | RNAV1 |
| TF | HK513 | | | | ↑1200 | MAX 380 | RNAV1 |
| | | RV | VY27 Holdi | ng (outbound | d time: 1 minu | ite) | - |
| HM | HK407 | Y | 142 | L | by ATC | MAX 380 | RNAV1 |
| HM | HK513 | Y | 091 | L | 1200 | MAX 380 | RNAV1 |
| | | | | | 2100 | | |
| НМ | HK515 | Y | 185 | R | or by | MAX 380 | RNAV1 |
| | | | | | ATC | | |
| | I | RV | VY27 Appro | ach Transitio | on (from HK5 | 15) | 1 |
| | | | | | 2100 | | |
| IF | HK515 | | | | or by | MAX 380 | RNAV1 |
| | | | | | ATC | | |

| TF | HK514 | | | | 900 | | | RNAV1 |
|-----------------------|--|--|-----|---|-------|---------|--|-------|
| TF | HK504 | | | | 600 | | | RNAV1 |
| | RWY27 Approach Transition (from HK513) | | | | | | | |
| IF | HK513 | | | | ↑1200 | MAX 380 | | RNAV1 |
| TF | BESVU | | | | | | | RNAV1 |
| TF | HK514 | | | | 900 | | | RNAV1 |
| TF | HK504 | | | | 600 | | | RNAV1 |
| RWY27 Missed approach | | | | | | | | |
| CA | | | 271 | | 400 | | | RNAV1 |
| DF | HK513 | | | L | 1200 | MAX 380 | | RNAV1 |

ZJHK AD 2.23 其它资料

ZJHK AD 2.23 Other information

全年有鸟类活动。机场当局采取了驱赶措施,以减 Activities of bird flocks take place all the year round. 少鸟类活动。

Aerodrome Authority resorts to dispersal methods to reduce bird activities.

| Bird name | Activity month | Activity time | Flying height | |
|-------------------------|----------------|---------------|---------------|--|
| Heron | The whole year | 22:00-11:00 | 30-400m | |
| Migrotowy horong | Mar May; | 20:00-02:30 | 200-1000m | |
| Migratory herons | Sep Dec. | 10:30-15:30 | 200-1000111 | |
| Waders | Mar May; | 22:00-10:30 | 5-1000m | |
| waders | Sep Dec. | 22.00-10.30 | | |
| Black-shouldered | The whole year | 22:30-10:00 | 30-400m | |
| Kite,common kestrel | The whole year | 22.30-10.00 | | |
| Grass Owl, Oriental Bay | The whole year | 11:00-19:30 | 1-10m | |
| Owl | The whole year | 11.00-17.30 | 1-10111 | |
| House Swift | The whole year | 22:00-10:00 | 10-400m | |

| Barn Swallow | Mar Aug. | 22:00-10:00 | 1-200m | |
|--------------|----------------|-------------|--------|--|
| Starlings | The whole year | 23:00-11:30 | 1-400m | |
| Diaita | Jan Apr.; | 22:30-10:30 | 1 2000 | |
| Pipits | Oct Dec. | 22.30-10.30 | 1-200m | |
| D-4 | Ed. D. | 21:30-00:30 | 1.50 | |
| Pat | Feb Dec. | 11:00-15:00 | 1-50m | |