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

1	机场基准点坐标及其在机场的位置 ARP coordinates and site at AD	N19°56.0' E110°27.6' Center of RWY09/27
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℃(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	2°7′W(2019)/-
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:uplift air cushion, mobile surface operation device, towing rack, 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 Types of clearing equipment	All seasons 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

1	停机坪道面和强度 Apron surface and strength	Surface:	CONC
		Strength:	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)) 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)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	71m: V1; 69m: B15, B16; 67.5m: B17; 64m: B14; 61m: C4-C6, C12, C13; 60.25m: C3; 58m: C10, C11; 53.5m: C7, C8; 52.75m: C2; 52.5m: B13; 50m: B12(south of B); 43m: C14; 42m: N3; 37m: D1;

			36m: C1; 35m: D2, D4, D9, D11; 34m: A2, B6-B8, B9(south of B), B10(south of B); 30m: D12; 28.5m: A1, A7; 27m: A3-A6; 25m: B3, D, D5, D8, 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, D6, D7, N4, N8(north of N7), N9(north of N7), S3, T1, T3, T4, V2, Y1, Y2; 18m: B1(north of B), B18, B19, N1(BTN T1&T2), N2(BTN T1&T2), N5, N7, S2
		Surface:	CONC
		Strength:	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) PCN 91/R/B/W/T(B(BTN B12 & B17), B13-B17) PCN 88/R/B/W/T(C, C1-C8, C10-C14, D, D1, D2, D4, D9, D11, D12, N3-N9, T1-T4, V1, V2, Y1, Y2) PCN 70/R/B/W/T(B(east of B17), B18, B19, D5-D8, N1, N2) PCN 62/R/B/W/T(B1(north of B))
3	高度表校正点的位置及其标高 ACL location and elevation	Nil	
4	VOR/INS 校正点 VOR/INS checkpoints	Nil	
5	备注 Remarks	Width of TWY shoulder 17.5m: B3, B15, B17, C2-C8, C10-C14, D, D1, D2, D4, D5, D8, D9, D11, D12, N3, T2, 3.5m: N1(T1-T2), N2(T1-T2), N5, N7, N8(north of N7) 10.5m: others	

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	Taxiing guidance signs at all intersections of TWY / RWY and at all holding positions. Guide lines at all TWYs and aprons. Identification signs at aircraft stands.

	guide lines and visual docking / parking guidance system of aircraft stands	Mashaller is available at all stands.	
2	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
		RWY lights	Center line, edge line, THR, RWY end, TDZ, THR wing bar(10/28)
		TWY markings	Center line, edge line, intermediate holding position, RWY holding positions, TWY shoulder, 'No entry' markings for TWY A3-A6 & D5-D8
		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 Stop bars	D1, D2, D4	
4	备注 Remarks	Blue apron edge line lights; intermediate holding position lights located at HP2 and HP3; runway guard lights located at TWY A1, A2, A7, D1, D2, D4, D9, D11, D12.	

ZJHK AD 2.10 机场障碍物 Aerodrome obstacles

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	*Control TWR	012	924	133.6	Circling CAT A/B/C/D RWY 09/27/28 GP INOP final approach	
2	BLDG	049	3873	66		
3	BLDG	061	4156	30.7	RWY10 take-off flight path	
4	BLDG	062	4078	30.4	RWY10 take-off flight path	
5	*Antenna	093	2950	37		
6	Water TWR	095	4020	63		
7	MT	183	8500	99.8		

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
8	*BLDG	264	12985	131.3		
9	*Antenna	273	2850	38.2		
10	TWR	288	6290	100.5	RWY28 take-off flight path RWY10 GP INOP final approach	
11	TWR	289	7987	95	RWY28 take-off flight path	
12	BLDG	308	3159	44.5	RWY28 take-off flight path	
13	BLDG	311	3297	43.1	RWY28 take-off flight path	
14	BLDG	311	3511	49.3	RWY28 take-off flight path	
15	*Control TWR	360	989	96.8		
Others: RWY09/27 NO take-off flight path significant obstacle						

Obstacles between two circles with the radius of 15km and 50km 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	MT	042	22000	117		
2	MT	089	43000	207		
3	MT	182	47000	269	MSA(ARP)	
4	MT	195	24000	200		

Obstacles between two circles with the radius of 15km and 50km 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
5	MT	224	111100	1411	Minimum surveillance altitude sector Nr.1	
6	MT	226	63000	250		
7	MT	240	91300	512	Minimum surveillance altitude sector Nr.2	
8	MT	260	73800	244	Minimum surveillance altitude sector Nr.3	
9	MT	271	26000	222		
10	*BLDG	299	20927	292	MSA(MLT,NYB)	
11	*BLDG	304	19300	267		
12	*BLDG	306	19000	272		
Others: Nil						

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 Flight documentation, Languages used	Chart, International MET Codes, Abbreviated Plain Language Text 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, MDRS, 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 RWY09/27 CL, 350m inward THR09; B: 110m S of RWY09/27 CL, 1810m inward THR09; C: 110m S of RWY09/27 CL, 350m inward THR27; D: 120m N of RWY10/28 CL, 380m inward THR10; E: 120m N of RWY10/28 CL, 1800m inward THR10; F: 120m N of RWY10/28 CL, 375m inward THR28; SFC wind sensors RWY09: 110m S of RCL,367m, 379m inward THR09; RWY09/27 center: 110m S of RCL, 1800m inward THR09; RWY27: 110m S of RCL,360m, 372m inward THR27; RWY10: 120m N of RCL, 400m inward THR10; RWY10/28 center: 120m N of RCL, 1815m inward THR10; RWY28: 120m N of RCL, 380m inward THR28; Ceilometer RWY09/27: on the RCL extension line, 1050m outward THR09 and THR27;

		RWY10: 75m S of RCL, 340m outward THR10; RWY28: 75m S of RCL, 340m outward THR28.
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	089.82 °GEO 092 °MAG	3600×45	95/R/B/W/T CONC/-		THR22.6m
27	269.82 °GEO 272 °MAG	3600×45	95/R/B/W/T CONC/-		THR19.7m
10	089.82 °GEO 092 °MAG	3600×60	88/R/B/W/T CONC/-		THR13.2m TDZ14.1m
28	269.82 °GEO 272 °MAG	3600×60	88/R/B/W/T CONC/-		THR16.8m TDZ16.8m
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
See Remark	Nil	Nil	3720×300	Nil	240×150

See Remark	Nil	Nil	3720×300	Nil	240×150

Remark:

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

THR10→THR28:0.1%(0-3600m);

1.RWY10/28 grooved.

2.RWY09/27，RWY10/28 shoulder: 7.5m on each side.

3.Distance between RCL of RWY09/27 and RCL of RWY10/28 is 2100m; THR10 is 700m east of THR09; THR28 is 700m east of THR27.

4.RWY09/27 Blast pad: 60m×60m on each end; RWY10/28 Blast pad: 75m×120m on each end.

ZJHK AD 2.13 公布距离 Declared distances

跑道号码 RWY Designator	可用起飞滑跑距离 TORA(m)	可用起飞距离 TODA(m)	可用加速停止距离 ASDA(m)	可用着陆距离 LDA(m)	备注 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
10	3600	3600	3600	3600	Nil
10	3460	3460	3460	3600	FM D2
28	3600	3600	3600	3600	Nil
28	3460	3460	3460	3600	FM D11

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

跑道代号 RWY Designator	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

跑道代号 RWY Designator	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
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
10	PALS CAT III* 900m VRB LIH	GREEN Yes	PAPI LEFT 446m inward THR10 15m of RCL 3°	900m	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
28	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI LEFT 463m inward THR28 15m of RCL 3°	Nil	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
Remarks: *SFL								

跑道代号 RWY Designator	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
**up to 2700m WHITE VRB LIH, 2700-3300m RED/WHITE VRB LIH, 3300-3600m RED VRB LIH ***up to 3000m WHITE VRB LIH, 3000-3600m YELLOW VRB LIH								

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); 10:400m inward of THR10, 108m N of RCL (lighted); 27:175m inward of THR27, 130m S of RCL (lighted); 28:400m inward of THR28, 103m 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(RWY09/10/27 /28rapit exit TWY center line(yellow/green))
4	备份电源/转换时间 Secondary power supply/switch-over time	Secondary power supply available， Diesel generator/≤15s UPS: RWY(10/28)/ 1sec
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）	Nil

	TLOF and/or FATO elevation (m/ft)	
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 RWY09/27 THRs and 2 parallel lines of 13km from RWY centerline	QNH900 and below	
Altimeter setting region and TL/TA	Same as Haikou APP area	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(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		ARR:127.65	HO	D-ATIS available
ATIS		DEP:126.625	HO	D-ATIS available
APP	Haikou Approach	AP01:119.15(120.225)	H24	
APP	Haikou Approach	AP02:119.975(120.225)	by ATC	

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
TWR	Haikou Tower	118.55(124.3)	H24	RWY09/27
TWR	Haikou Tower	118.225(124.3)	H24	RWY10/28
GND	Haikou Delivery	121.9	H24	DCL available
GND	Haikou Ground	121.65	HO	South Ground
GND	Haikou Ground	121.55	HO	North Ground
APN	Meilan Apron	121.7	H24	North Apron
APN	Meilan Apron	121.8	H24	South Apron
OP-CTL	Meilan Operation	130.8	HO	
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
Wenchang VOR/DME	WCF	117.5MHz CH122X	N19 °51.1' E110 °47.3' N19 °51.1' E110 °47.3'	47m	Range: 80NM
Nanyingbindao VOR/DME	NYB	113.3MHz CH80X	N20°00.9′ E110°08.2′	23m	Range: 68NM
Dongmulantou VOR/DME	MLT	112.7MHz CH74X	N20°09.1′ E110°40.4′	58m	Range: 50NM
LMM 09	H	389kHz	N19 °56.0' E110 °26.0' 272 °MAG/ 1050m FM THR09		Range: 35NM
LOC 09 ILS CAT I	IHH	111.5MHz	092 °MAG/ 250m FM end RWY 09		Range: 25NM
GP 09		332.9MHz	135m S of RCL		Angle 3 °

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
			338m inward THR09		RDH 17.5m
DME 09	IHH	CH52X (111.5MHz)		26m	Co-located with GP 09
IM 10		75MHz	272 °MAG/370m FM THR10		
LOC 10 ILS CAT III	IJK	108.95MHz	092 °MAG/ 320m FM end RWY10		Range: 25NM In operation CAT II
GP 10		329.15MHz	120m N of RCL 300m inward THR10		Angle 3 ° RDH 16.8m
DME 10	IJK	CH26Y (108.95MHz)		19m	Co-located with GP 10
LMM 27	P	402kHz	N19 °56.0' E110 °29.3' 092 °MAG/ 1150m FM THR27		Range: 34.2NM
LOC 27 ILS CAT I	IPP	108.5MHz	272 °MAG/ 250m FM end RWY 27		Range: 25NM
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 27
LOC 28 ILS CAT I	IWA	109.35MHz	272 °MAG/320m FM end RWY28		Range: 25NM
GP 28		331.85MHz	120m N of RCL 311m inward THR28		Angle 3 ° RDH 16.5m
DME 28	IWA	CH30Y (109.35MHz)		21m	Co-located with GP 28

ZJHK AD 2.20 本场飞行规定 **ZJHK AD 2.20 Local traffic regulations**

1. 机场使用规定

1.1 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。

1.2 未经空中交通管制部门特殊许可，未安装二次雷达应答机的航空器禁止起降。

1.3 本场可供 B747-400 同类及其以下机型使用。

1.Airport operations regulations

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 Take-off/landing of aircraft without SSR transponder are forbidden unless with ATC clearance.

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

2. 跑道和滑行道的使用

2.1 跑道运行规定

2.1.1 未经允许，禁止航空器在跑道上做 180°转弯。

2.1.2 跑道使用规定

管制部门可采用单跑道运行或双跑道平行运行，运行模式及使用跑道听从管制员指令。

2.1.3 非全跑道起飞运行程序

2.1.3.1 使用非全跑道起飞的条件

2.1.3.1.1 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. Use of runways and taxiways

2.1 Runway operation regulations

2.1.1 180° turnaround on RWY is forbidden for all aircraft without permission.

2.1.2 Runway use regulations

ATC department can adopt single runway operation or parallel operation of two runways,operation mode by ATC.

2.1.3 Partial runway taking-off procedure

2.1.3.1 Partial runway taking-off conditions

2.1.3.1.1 ATC could approve and provide service according to actual situation after taking-off aircraft applied for partial runway taking-off.

2.1.3.1.2 由于调配需要，管制员在征得航空器驾驶员同意后，可实施非全跑道起飞。

2.1.3.1.2 In accordance with deployment, it is available to use partial runway to take-off when ATC get permission from aircraft pilot.

2.1.3.2 使用非全跑道起飞的机型限制

2.1.3.2 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.

2.1.3.3 使用非全跑道起飞的地面运行限制

2.1.3.3 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.

2.1.3.4 使用非全跑道起飞的其他运行限制

2.1.3.4 Other operation limitations

2.1.3.4.1 本场实施低能见度运行程序时，严禁实施非全跑道起飞。

2.1.3.4.1 No intersection departure is permitted when conducting LVP operation.

2.1.3.4.2 在顺风大于 3m/s 或大侧风条件下，不得实施非全跑道起飞。

2.1.3.4.2 No intersection departure is permitted when down wind more than 3m/s or heavy cross wind prevails.

2.1.3.4.3 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。

2.1.3.4.3 No intersection departure is permitted with aircraft retaining any slow-down function failure.

2.1.3.4.4 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。

2.1.3.4.4 When conducting intersection departure, take-off flap shall set as the same as the normal take-off flap position.

2.1.4 跑道更换方向规定

更换跑道运行方向过程中，当跑道顺风风量超过3.5m/s但不大于5m/s时，管制员可以短时指挥航空器顺风起飞或着陆；当航空器驾驶员根据机型性能或运行手册不能执行顺风起飞或着陆，离场航空器应在推出前告知机坪管制员，进场航空器应及时告知进近管制员。

2.1.4 RWY conversion procedure

During changing the direction of RWY in use,if downwind speed is more than 3.5m/s and not exceeding 5m/s, ATC may instruct aircraft downwind take-off or downwind landing for short time; if pilot decide not to take-off or landing on downwind RWY allocated according to aircraft performance or operation handbook, departure aircraft shall inform Apron Control before push-back, arrival aircraft shall inform APP ATC controller.

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 AD2.24-1A, 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 AD2.24-1A, 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.

2.2.3 航空器未获得管制员许可，机头越过跑道等待位置标志时，应立即向管制员报告。

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 北地面移交南地面的航空器，脱波后如未获得

2.3.1 Aircraft transfered from North Ground to South

明确管制界限的指令，使用 T3、T4 滑行时在 V1 前等待；

Ground shall hold before V1 when taxiing on the TWY T3 or T4 if without clear control boundary instruction after leaving frequency.

2.3.2 南地面移交北地面的航空器，脱波后如未获得明确管制界限的指令，使用 T3、T4 滑行时在 V2 前等待。

2.3.2 Aircraft transfered from South Ground to North Ground shall hold before V2 when taxiing on the TWY T3 or T4 if without clear control boundary instruction after leaving frequency.

2.3.3 引导车和拖车服务

2.3.3

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。

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

2.3.4 滑行道的使用限制

2.3.4 Limits for the use of TWYs

2.3.4.1 道面滑行限制

2.3.4.1 Ground taxiing limits

2.3.4.1.1 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。

2.3.4.1.1 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.

2.3.4.1.2 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。

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

2.3.4.1.3 航空器应按照指定的滑行路线滑行，以管制员指令为准。

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

2.3.4.1.4 滑行通道限制

2.3.4.1.4 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 stand Nr.37）, N9（south of stand Nr.37）, S2	36m
B7（north of B）	52m

2.3.4.1.5 N8 滑和 N9 滑限制同时运行翼展大于 64m 的航空器。

2.3.4.1.5 Aircrafts with wing span more than 64m taxiing on TWY N8 and TWY N9 at the same time is forbidden.

2.3.5 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。

2.3.5 Intermediate holding position marking and requirements of Intermediate holding position 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 Holding position	滑行方向 Taxiing direction	等待位置 Holding position	滑行方向 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

2.3.6 多跑道管制扇区划分

2.3.6 Control area scope division

2.3.6.1 北塔职责范围：滑行道 D（不含）以北的机动区；

2.3.6.1 North TWR ATC: maneuvering area north of TWY D(excluded);

2.3.6.2 北地面职责范围：南北跑道延长线对称轴以北,滑行道 D（含）以南的全部机动区；

2.3.6.2 North GND ATC: north of RWY09/27 and RWY10/28 extension line axis of symmetry, maneuvering area south of TWY D(included);

2.3.6.3 南塔职责范围：滑行道 A（不含）以南的机动区；

2.3.6.3 South TWR ATC: maneuvering area south of TWY A(excluded);

2.3.6.4 南地面职责范围：南北跑道延长线对称轴以南，滑行道 A(含)以北的全部机动区；

2.3.6.4 South GND ATC: south of RWY09/27 and RWY10/28 extension line axis of symmetry, maneuvering area north of TWY A(included);

2.3.6.5 海口美兰机场机坪管制责任范围如机场图所示，具体管制移交点及移交方式听从管制员指令执行。

2.3.6.5 Apron Control Area refers to ZJHK AD2.24-1A, the specific hand-over point and mode shall be instructed by ATC.

2.3.7 滑行道其他使用规定

2.3.7 Other rules for TWYs

航空器地面滑行过程中在进入下一管制单位责任区前，必须得到下一管制单位的许可。

Aircraft shall get clearance from next control unit before taxiing into next control unit area.

2.4 机场冲突多发地带运行要求

2.4 Hot spot procedure

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

2.4.1 Refer to ZJHK AD2.24-1A, 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。
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，加强观察并注意管制员的等待或滑行指令。

HS3: INTERSECTIONS OF TAXIWAYS B13, B14, T3, T4, A AND B
1. 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 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、D2 交叉区域

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

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。

AND D2

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、D6 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，同时避免进入 D6 滑行道。

HS5: INTERSECTIONS OF TAXIWAYS N8, N9, C7, C8, C，D AND D6

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，avoid entering TWY D6.

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 immediately.

HS7：C10、C11、T3、T4、C、D、D7 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，同时避免进入 D7 滑行道。

HS7: INTERSECTIONS OF TAXIWAYS C10, C11, T3, T4, C，D AND D7

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，avoid entering TWY D6.

HS8：T3、T4、V2 交叉区域

HS8: INTERSECTIONS OF TAXIWAYS T3, T4 AND

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。	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.
HS9：C13、C、D、D11 交叉区域 航空器在此区域滑行时应注意管制员的等待或滑行指令，注意观察，避免误入跑道。	HS9: INTERSECTIONS OF TAXIWAYS C13, C, D AND D11 Aircraft in this area shall observe extremely and pay attention to ATC instructions of holding or taxiing, avoid entering runway.

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.	

3.1.1 当 45 号机位使用时，45L 和 45R 号机位停止使用；当 45L 或 45R 使用时，45 号机位停止使用。

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 Apron operations regulations

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:

3.2.1.1 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)申请推出开车许可;

3.2.1.2 Obtain push back and start up clearance via 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，按海口塔台(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 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 aircraft
抱轮 tractor	E190, A320, B737; single-engine start-up
Towing tractor(28t)	E190, A320, B737; double-engine start-up A300, A330, A340, B767, B777, B787; single-engine start-up
Towing tractor(45t)	E190, A300, A320, A330, A340, B737, B767, B777, 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于最小慢车状态。推开同步单发启动时，剩余发动

3.3.8 During the push back process, the aircrew shall 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

机组如对停机位有疑问时，应向地面管制或机坪管制证实。

4.1.3 Ground guidance

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

4.2.1.1 离港航空器必须在推出开车前 10min 内，联系地面管制申请放行许可。

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。

DCL or TWR control.

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。

4.2.1.3 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 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。

4.2.1.4 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 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。

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

4.2.2 快速起飞

4.2.2 Rapid take-off

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。

4.2.2.1 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 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。

4.2.2.2 When flighr 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 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。

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

5.1 低能见度运行（标准 II 类、低能见度起飞、HUD 低能见度起飞）。

5.1 Low visibility operation(LVO)(standard CAT II, Low visibility take-off, HUD Low visibility take-off).

5.1.1 运行方式及启动标准：

5.1.1 Low visibility procedures operation mode and commencement standard

operation mode	operation requirement		RWY AVBL
	RVR or ceiling	LVP requirement	
HUD Special ILS CAT I	450≤RVR<550 or 45≤ceiling<60	Nil	RWY09/27 RWY10/28
standard ILS CAT II(Autopilot to DH and below)	300≤RVR<550 or 30≤ceiling<60	Yes	RWY10
standard ILS CAT II(Manual operation below DH)	ACFT CAT A,B,C: 300≤RVR<550 or 30≤ceiling<60 ACFT CAT D: 350≤RVR<550 or 30≤ceiling<60	Yes	RWY10
Low visibility take-off	ACFT CAT A,B,C: 200≤RVR<400 ACFT CAT D: 250≤RVR<400	Yes	RWY10/28
HUD Low visibility take-off (RVR200m)	200≤RVR<400	Yes	RWY09/27 RWY10/28

5.1.2 低能见度运行程序的启动准备与结束

5.1.2 Low visibility procedures commencement and termination

5.1.2.1 下列情形下将进入低能见度运行程序准备阶段

5.1.2.1 LVP would be commenced when comply with the following criteria

(1)跑道视程RVR数值降至1000m且气象预报能见度呈下降趋势，或者云底高降至 90m 且气象预报云高呈下降趋势时;

(1)RVR is down to 1000m or ceiling is down to 90m and expected to decline;

(2)跑道视程 RVR 上升至 100m，并且继续上升。

（2）RVR is up to 100m and expected to rise.

当天气条件达到低能见度运行准备阶段天气标准时，海口塔台完成低能见度运行启动准备工作后，由塔台管制室通过 D-ATIS、ATIS、VHF（根据运行情况选择方式）向机组发布信息。

When the weather conditions comply with the above criteria, and Haikou TWR is ready to implement LVP,TWR ATC will inform ACFT via D-ATIS, ATIS or VHF(depending on the operation mode).

5.1.2.2 下列情形下将进入低能见度运行程序实施阶段

5.1.2.2 LVP would be implemented when comply with the following criteria

(1)开始实施低能见度运行的时机为能见到降至800m 或跑道视程 RVR 降至 550m，或者云底高降至60m 时；

(1)VIS is down to 800m or RVR is down to 550m or ceiling is down to 60m;

(2)跑道视程 RVR 上升至 200m，并且继续上升。

(2)RVR is up to 200m and expected to rise.

当天气条件达到低能见度运行实施阶段天气标准时，经确认机场和空管具备低能见度运行条件，海口塔台通过 D-ATIS、ATIS、VHF（根据运行情况选择方式）宣布正式实施低能见度运行。

When the weather conditions comply with the above criteria, aerodrome and ATC have the ability to implement LVP,TWR ATC will inform ACFT via D-ATIS, ATIS or VHF(depending on the operation

	mode).
5.1.2.3 下列情形下将结束低能见度运行程序	5.1.2.3 LVP would be terminated when comply with the following criteria
(1)跑道视程 RVR 上升至 550m 且云底高上升至 60m，并呈上升趋势;	(1)RVR is up to 550m and ceiling is up tp 60m,and expected to rise;
(2)跑道视程 RVR 小于 100m，稳定并继续变差时。	(2)RVR is lower than 100m, and keep stable or expected to decline.
5.2 在海口美兰机场实施低能见度的航空器运营人必须获得所在国民航有关部门运行批准。	5.2 The operator conducting LVP in ZJHK airport shall get authorization from the applicable foreign regulatory authority.
5.3 飞行员应该获得如下信息：	5.3 Pilot shall get the following information:
5.3.1 气象实况和预报	5.3.1 Weather conditions and forecast
5.3.2 确认低能见度程序正在实施	5.3.2 Confirm the LVP is being implemented.
5.4 准备实施低能见度的机组（HUD ILS 特殊 I 类运行外），应向空管管制员提出申请。	5.4 Aircrew ready to implement LVP(except HUD special ILS CAT I) shall apply for LVP from ATC.
5.5 地面运行规定	5.5 Ground operation regulation
5.5.1 航空器引导：在实施低能见度运行时，所有进离港航空器在停机坪区域滑行必须全程引导车引导。塔台管制地带内根据机组需求提供引导车引导。	5.5.1 Aircraft guidance: when conducting LVP,all arrival/departure aircraft shall be guided by follow-me vehicle within the apron.Follow-me vehicle is available on request by flight crew within the tower controll area.
5.5.2 II 类运行时，离场航空器应听从管制员在指定	5.5.2 When conducting LVP,departure aircraft shall

滑行道的 II 类等待位置等待，未经许可，禁止越过等待线，避免进入仪表着陆系统敏感区；进场航空器进入主滑道后表明已离开仪表着陆系统敏感区，此时必须向塔台管制室报告“已脱离跑道”并报告脱离道口。

follow ATC instruction and hold at designated TWY CAT II holding position, cannot cross holding line without permission for avoiding entering the ILS sensitive area;arrival aircraft have left ILS sensitive area once entering main TWY,pilot shall report to TWR:'RWY vacated', and report vacate TWY.

6. 除冰规则

无

6. Rules for deicing

Nil

7. 平行跑道同时仪表运行

无

7. Simultaneous operations on parallel runways

Nil

8. 警告

8.1 跑道北侧机场高速公路灯光与跑道灯光相似，注意识别。

8.2 每天 11:00-13:00, 17:00-19:00, 23:00-01:00 (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。

8.3 航空器绕飞天气时,注意避免进入 D155 危险区。

8. Warning

8.1 Do not mistake the freeway lights located at north of runway for runway lights.

8.2 Ascent of MET balloon take place at N200000 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 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 号机位。

Taking off and landing are forbidden on the parking 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

1.1 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

2.1 10/28 号跑道起落航线以跑道北侧为主，A、B 类航空器高度 300m，C、D 类航空器高度 500m。

2.2 09/27 号跑道起落航线以跑道南侧为主，A、B 类航空器高度 300m，C、D 类航空器高度 500m。

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。

1. General

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

2.1 Traffic circuits shall be normally made to the north of RWY10/28, at the altitude of 300m for aircraft CAT A/B, and 500m for aircraft CAT C/D.

2.2 Traffic circuits shall be normally made to the south of RWY09/27, at the altitude of 300m for aircraft CAT A/B, and 500m for aircraft CAT C/D.

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. 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。

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。

4.3 最低监视引导高度扇区

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 Radar control is end when aircraft obtain visual approach clearance or APP indicate aircraft to contact TWR.

4.3 Surveillance Minimum Altitude Sectors

Sector Nr.1	ALT limit: 1750m or above
N191500E1082000-N203000E1082000-N203000E1084000-N193015E1084000-N193015E1101354-N191500E1101354-N191500E1082000	
Sector Nr.2	ALT limit: 850m or above
N193015E1091136-N194534E1091136-N194534E1110815-N191500E1110815-N191500E1101354-N193015E1101354-N193015E1091136	
Sector Nr.3	ALT limit: 600m or above
N194534E1091136-N203000E1091136-N203000E1113000-N191500E1113000-N191500E1110815-N194534E1110815-N194534E1091136	
Sector Nr.4	ALT limit: 1150m or above
N193015E1084000-N203000E1084000-N203000E1091136-N193015E1091136-N193015E1084000	
Sector Nr.5	ALT limit: 2650m or above
N191500E1080300-N203000E1080300-N203000E1082000-N191500E1082000-N191500E1080300	
Sector Nr.6	ALT limit: 3000m or above
N191604E1071123-N195733E1075547-N203000E1080300-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进近运行，此运行方式须得到 ATC 许可。

With the prior permission of ATC, visual separation and 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.

9.6 航空器地面运行时，应确保应答机 S 模式处于运行状态。

9.6 When aircraft operate on the ground, transponder S mode shall be confirmed to be used.

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

1. Waypoint list

ID	COORDINATES(WGS-84)	ID	COORDINATES(WGS-84)
HK404	N195601.4 E1100818.1	HK526	N200241.3 E1104855.4
HK405	N195559.7 E1100203.8	HK530	N200239.8 E1103354.5
HK406	N195557.6 E1095511.3	HK535	N195716.4 E1105508.1
HK407	N195050.9 E1095513.2	HK536	N195716.5 E1110051.8
HK408	N195053.1 E1100205.5	HK537	N200241.7 E1110052.1
HK410	N195054.7 E1100819.5	HK540	N200241.6 E1105508.0
HK411	N195056.5 E1101604.3	HK550	N194533.5 E1102833.0
HK412	N195059.3 E1103349.6	HK560	N201052.3 E1104854.8
HK413	N194534.2 E1103350.3	HK570	N195053.4 E1100327.2
HK416	N195555.6 E1094927.5	HK580	N195044.3 E1093727.3
HK417	N195049.0 E1094929.5	HK601	N195714.8 E1103550.4
HK424	N195709.0 E1100817.8	HK602	N195415.6 E1103550.9
HK425	N195707.1 E1100203.5	HK603	N194710.3 E1101818.7
HK426	N195704.7 E1095510.9	HK607	N195410.1 E1101901.7
HK430	N200234.1 E1100816.2	HK617	N195711.8 E1101854.5
HK431	N200237.6 E1102143.9	HK618	N200605.7 E1101833.3
HK432	N200538.2 E1102311.6	HK619	N201357.4 E1101814.5

HK436	N195702.5 E1094927.0	HK624	N200607.9 E1102921.8
HK440	N194530.8 E1101326.8	HK625	N201926.0 E1102932.9
HK450	N200923.8 E1100200	HK626	N201511.9 E1102241.1
HK451	N201658.4 E1095501.6	HK628	N201354.6 E1100757.8
HK460	N200241.3 E1104816.7	HK691	N200607.3 E1102547.7
HK461	N194535.1 E1104657.4	HK692	N200608.9 E1103549.1
HK470	N195553.7 E1094413.3	HK693	N201110.6 E1103432.8
HK480	N200411.6 E1095508.3	HK694	N194712.8 E1103552.0
HK490	N201707.7 E1090335.6	MLT	N2009.1 E11040.4
HK504	N195606.9 E1104337.1	NYB	N2000.9 E11008.2
HK505	N195607.1 E1104856.1	WCF	N1951.1 E11047.3
HK506	N195100.4 E1104856.2	AGTEL	N2030.0 E11017.6
HK507	N194535.2 E1104856.5	ASSAD	N1820.5 E10740.9
HK509	N195100.4 E1105508.3	DABUB	N1931.2 E10911.6
HK510	N195057.7 E1102207.3	DOMGO	N2030.0 E11050.4
HK515	N195607.1 E1105508.2	LIDLU	N2030.0 E10943.0
HK516	N195607.0 E1110052.0	PORAP	N1915.0 E10958.8
HK517	N195100.3 E1110052.0	RUNEG	N2030.0 E10811.1
HK524	N195715.8 E1104337.0	SAMAS	N2030.3 E11029.7
HK525	N195716.2 E1104855.7	UPRIS	N191500 E1094609

2. Database coding table

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/ TCH	Navigation Specification
RWY09 SID AGT-9WD								
CF	HK602		107					RNAV1

TF	HK692					MAX 230		RNAV1
TF	HK693							RNAV1
TF	HK626							RNAV1
TF	AGTEL							RNAV1
RWY09 SID SAM-9WD								
CF	HK602		107					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK693							RNAV1
TF	SAMAS							RNAV1
RWY09 SID UPR-8WD(BY ATC)								
CF	HK602		107					RNAV1
TF	HK694					MAX 230		RNAV1
TF	HK603							RNAV1
TF	UPRIS							RNAV1
RWY09 SID UPR-9WD								
CF	HK602		107					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK693							RNAV1
TF	HK626							RNAV1
TF	NYB				6900 or by ATC			RNAV1
TF	UPRIS							RNAV1
RWY09 SID ASS-9WD								
CF	HK602		107					RNAV1

TF	HK692					MAX 230		RNAV1
TF	HK693							RNAV1
TF	HK626							RNAV1
TF	HK450							RNAV1
TF	DABUB							RNAV1
TF	ASSAD							RNAV1
RWY09 SID HOLDING (outbound time: 1 min)								
HM	HK626	Y	226	R	by ATC			RNAV1
HM	HK693	Y	292	L	by ATC			RNAV1
RWY10 SID AGT-9XD								
CF	HK601		092					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK691							RNAV1
TF	HK626							RNAV1
TF	AGTEL							RNAV1
RWY10 SID SAM-9XD								
CF	HK601		092					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK693							RNAV1
TF	SAMAS							RNAV1
RWY10 SID UPR-8XD(BY ATC)								
CF	HK601		092					RNAV1
TF	HK694					MAX 230		RNAV1
TF	HK603							RNAV1

TF	UPRIS							RNAV1
RWY10 SID UPR-9XD								
CF	HK601		092					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK691							RNAV1
TF	HK626							RNAV1
TF	NYB				6900 or by ATC			RNAV1
TF	UPRIS							RNAV1
RWY10 SID ASS-9XD								
CF	HK601		092					RNAV1
TF	HK692					MAX 230		RNAV1
TF	HK691							RNAV1
TF	HK626							RNAV1
TF	HK450							RNAV1
TF	DABUB							RNAV1
TF	ASSAD							RNAV1
RWY10 SID HOLDING (outbound time: 1 min)								
HM	HK626	Y	226	R	by ATC			RNAV1
HM	HK693	Y	349	R	by ATC			RNAV1
RWY27 SID AGT-9YD								
CF	HK607		257					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK619							RNAV1
TF	AGTEL							RNAV1

RWY27 SID SAM-9YD								
CF	HK607		257					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK624							RNAV1
TF	HK625							RNAV1
TF	SAMAS							RNAV1
RWY27 SID UPR-8YD(BY ATC)								
CF	HK607		257					RNAV1
TF	HK570					MAX 230		RNAV1
TF	UPRIS							RNAV1
RWY27 SID UPR-9YD								
CF	HK607		257					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK619							RNAV1
TF	HK628							RNAV1
TF	NYB				6900 or by ATC			RNAV1
TF	HK570							RNAV1
TF	UPRIS							RNAV1
RWY27 SID ASS-9YD								
CF	HK607		257					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK619							RNAV1
TF	HK628							RNAV1

TF	HK580							RNAV1
TF	DABUB							RNAV1
TF	ASSAD							RNAV1
RWY27 SID HOLDING (outbound time: 1 min)								
HM	HK619	Y	360	R	by ATC			RNAV1
HM	HK625	Y	003	R	by ATC			RNAV1
RWY28 SID AGT-9ZD								
CF	HK617		272					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK619							RNAV1
TF	AGTEL							RNAV1
RWY28 SID SAM-9ZD								
CF	HK617		272					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK624							RNAV1
TF	HK625							RNAV1
TF	SAMAS							RNAV1
RWY28 SID UPR-8ZD(BY ATC)								
CF	HK617		272					RNAV1
TF	NYB					MAX 230		RNAV1
TF	UPRIS							RNAV1
RWY28 SID UPR-9ZD								
CF	HK617		272					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1

TF	HK619							RNAV1
TF	HK628							RNAV1
TF	NYB				6900 or by ATC			RNAV1
TF	UPRIS							RNAV1
RWY28 SID ASS-9ZD								
CF	HK617		272					RNAV1
TF	HK618				↓1800 or by ATC	MAX 230		RNAV1
TF	HK619							RNAV1
TF	HK628							RNAV1
TF	HK580							RNAV1
TF	DABUB							RNAV1
TF	ASSAD							RNAV1
RWY28 SID HOLDING (outbound time: 1 min)								
HM	HK625	Y	003	R	by ATC			RNAV1
HM	HK619	Y	360	R	by ATC			RNAV1
RWY09/10 STAR DOM-5XA (by ATC)								
IF	DOMGO					MAX 250		RNAV1
TF	HK560							RNAV1
TF	HK460							RNAV1
TF	WCF							RNAV1
TF	HK461							RNAV1
TF	HK413							RNAV1
TF	HK440							RNAV1
TF	HK410							RNAV1
TF	HK408							RNAV1

TF	HK407							RNAV1
TF	HK417				900	MAX 205		RNAV1
RWY09/10 STAR DOM-6XA (by ATC)								
IF	DOMGO					MAX 250		RNAV1
TF	HK560							RNAV1
TF	HK460							RNAV1
TF	WCF							RNAV1
TF	HK412							RNAV1
TF	HK411				900 or by ATC			RNAV1
TF	HK410							RNAV1
TF	HK408							RNAV1
TF	HK407							RNAV1
TF	HK417				900	MAX 205		RNAV1
RWY09/10 STAR DOM-7XA (by ATC)								
IF	DOMGO					MAX 250		RNAV1
TF	HK560							RNAV1
TF	HK460							RNAV1
TF	WCF							RNAV1
TF	HK461							RNAV1
TF	HK413							RNAV1
TF	HK440							RNAV1
TF	HK410				900	MAX 205		RNAV1

RWY09/10 STAR DOM-8XA								
IF	DOMGO					MAX 250		RNAV1
TF	HK560							RNAV1
TF	MLT							RNAV1
TF	HK432				1200 or by ATC			RNAV1
TF	HK430				900	MAX 205		RNAV1
RWY09/10 STAR DOM-9XA								
IF	DOMGO					MAX 250		RNAV1
TF	HK560							RNAV1
TF	HK460							RNAV1
TF	WCF							RNAV1
TF	HK412							RNAV1
TF	HK411				900 or by ATC			RNAV1
TF	HK410				900	MAX 205		RNAV1
RWY09/10 STAR POR-7XA (by ATC)								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK410							RNAV1
TF	HK408							RNAV1
TF	HK407							RNAV1
TF	HK417				900	MAX 205		RNAV1

RWY09/10 STAR POR-8XA (by ATC)								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK410				900	MAX 205		RNAV1
RWY09/10 STAR POR-9XA								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK432					MAX 205		RNAV1
TF	HK430				900			RNAV1
RWY09/10 STAR ASS-8XA (by ATC)								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK470				1800 or by ATC	MAX 205		RNAV1
RWY09/10 STAR ASS-9XA								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK470							RNAV1
TF	HK450				2100 or by ATC			RNAV1
TF	HK430				900	MAX 205		RNAV1
RWY09/10 STAR RUN-9XA (by ATC)								
IF	RUNEG							RNAV1
TF	HK490							RNAV1
TF	HK480				1800 or	MAX		RNAV1

					by ATC	205		
RWY09/10 STAR LID-9XA								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450				2100 or by ATC			RNAV1
TF	HK430				900	MAX 205		RNAV1
RWY27/28 STAR DOM-8ZA (by ATC)								
IF	DOMGO					MAX 250		RNAV1
TF	HK560				1800 or by ATC			RNAV1
TF	HK526							RNAV1
TF	HK540							RNAV1
TF	HK537				900	MAX 205		RNAV1
RWY27/28 STAR DOM-9ZA								
IF	DOMGO					MAX 250		RNAV1
TF	HK560				1800 or by ATC			RNAV1
TF	HK526				900	MAX 205		RNAV1
RWY27/28 STAR POR-6ZA (by ATC)								
IF	PORAP							RNAV1
TF	HK440							RNAV1

TF	HK550							RNAV1
TF	HK507					MAX 205		RNAV1
TF	HK506							RNAV1
TF	HK509							RNAV1
TF	HK517				900			RNAV1
RWY27/28 STAR POR-7ZA (by ATC)								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526							RNAV1
TF	HK540							RNAV1
TF	HK537				900	MAX 205		RNAV1
RWY27/28 STAR POR-8ZA (by ATC)								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK550							RNAV1
TF	HK507					MAX 205		RNAV1
TF	HK506				900			RNAV1
RWY27/28 STAR POR-9ZA								
IF	PORAP							RNAV1
TF	HK440							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or			RNAV1

					by ATC			
TF	HK526				900	MAX 205		RNAV1
RWY27/28 STAR ASS-6ZA (by ATC)								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK580							RNAV1
TF	HK570							RNAV1
TF	HK510				900 or by ATC			RNAV1
TF	HK412							RNAV1
TF	HK506							RNAV1
TF	HK509							RNAV1
TF	HK517				900	MAX 205		RNAV1
RWY27/28 STAR ASS-7ZA (by ATC)								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK580							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526							RNAV1
TF	HK540							RNAV1
TF	HK537				900	MAX 205		RNAV1

RWY27/28 STAR ASS-8ZA (by ATC)								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK580							RNAV1
TF	HK570							RNAV1
TF	HK510				900 or by ATC			RNAV1
TF	HK412							RNAV1
TF	HK506				900	MAX 205		RNAV1
RWY27/28 STAR ASS-9ZA								
IF	ASSAD							RNAV1
TF	DABUB							RNAV1
TF	HK580							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526				900	MAX 205		RNAV1
RWY27/28 STAR RUN-8ZA (by ATC)								
IF	RUNEG							RNAV1
TF	HK490							RNAV1
TF	HK480							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or			RNAV1

					by ATC			
TF	HK526							RNAV1
TF	HK540							RNAV1
TF	HK537				900	MAX 205		RNAV1
RWY27/28 STAR RUN-9ZA (by ATC)								
IF	RUNEG							RNAV1
TF	HK490							RNAV1
TF	HK480							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526				900	MAX 205		RNAV1
RWY27/28 STAR LID-4ZA (by ATC)								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK510							RNAV1
TF	HK550							RNAV1
TF	HK507					MAX 205		RNAV1
TF	HK506							RNAV1
TF	HK509							RNAV1
TF	HK517				900			RNAV1

RWY27/28 STAR LID-5ZA (by ATC)								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526							RNAV1
TF	HK540							RNAV1
TF	HK537				900	MAX 205		RNAV1
RWY27/28 STAR LID-6ZA (by ATC)								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK510							RNAV1
TF	HK412							RNAV1
TF	HK506							RNAV1
TF	HK509							RNAV1
TF	HK517				900	MAX 205		RNAV1
RWY28/27 STAR LID-7ZA (by ATC)								
IF	LIDLU					MAX 250		RNAV1

TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK510							RNAV1
TF	HK550							RNAV1
TF	HK507					MAX 205		RNAV1
TF	HK506				900			RNAV1
RWY27/28 STAR LID-8ZA								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK431							RNAV1
TF	HK530				1200 or by ATC			RNAV1
TF	HK526				900	MAX 205		RNAV1
RWY27/28 STAR LID-9ZA								
IF	LIDLU					MAX 250		RNAV1
TF	HK451							RNAV1
TF	HK450							RNAV1
TF	HK430							RNAV1
TF	HK510							RNAV1
TF	HK412							RNAV1
TF	HK506				900	MAX		RNAV1

						205		
RWY09/10 HOLDING (outbound time:1min)								
HM	HK430	Y	182	L	900 or by ATC	MAX 205		RNAV1
HM	HK450	Y	141	L	by ATC	MAX 205		RNAV1
HM	HK432	Y	260	L	1200 or by ATC	MAX 205		RNAV1
HM	WCF	Y	272	L	by ATC	MAX 205		RNAV1
HM	HK411	Y	272	L	900 or by ATC	MAX 205		RNAV1
HM	HK460	Y	186	R	by ATC	MAX 205		RNAV1
HM	HK560	Y	186	L	by ATC	MAX 205		RNAV1
HM	HK490	Y	107	L	by ATC	MAX 205		RNAV1
RWY27/28 HOLDING (outbound time:1min)								
HM	HK430	Y	141	R	by ATC	MAX 205		RNAV1
HM	HK451	Y	141	L	by ATC	MAX 205		RNAV1
HM	HK530	Y	092	R	1200 or by ATC	MAX 205		RNAV1
HM	HK510	Y	092	R	900 or by ATC	MAX 205		RNAV1
HM	HK506	Y	092	R	by ATC	MAX		RNAV1

						205		
HM	HK526	Y	182	R	by ATC	MAX 205		RNAV1
HM	HK560	Y	186	L	by ATC	MAX 205		RNAV1
HM	HK490	Y	107	L	by ATC	MAX 205		RNAV1
RWY09 IAP APPROACH TRANSITION HK410								
IF	HK410				900	MAX 205		RNAV1
TF	HK408							RNAV1
TF	HK405							RNAV1
TF	HK404				600			RNAV1
RWY09 IAP APPROACH TRANSITION HK417(by ATC)								
IF	HK417				900	MAX 205		RNAV1
TF	HK416							RNAV1
TF	HK406							RNAV1
TF	HK405							RNAV1
TF	HK404				600			RNAV1
RWY09 IAP APPROACH TRANSITION HK430								
IF	HK430				900	MAX 205		RNAV1
TF	HK404				600			RNAV1
RWY09 IAP APPROACH TRANSITION HK470(by ATC)								
IF	HK470				1800 or by ATC	MAX 205		RNAV1
TF	HK416							RNAV1

TF	HK406							RNAV1
TF	HK405							RNAV1
TF	HK404				600			RNAV1
RWY09 IAP APPROACH TRANSITION HK480(by ATC)								
IF	HK480				1800 or by ATC	MAX 205		RNAV1
TF	HK406							RNAV1
TF	HK405							RNAV1
TF	HK404				600			RNAV1
RWY09 MISSED APPROACH								
CA			092		240			RNP1
DF	HK411			R	900 or by ATC	MAX 205		RNP1
RWY10 IAP APPROACH TRANSITION HK410								
IF	HK410				900	MAX 205		RNAV1
TF	HK408							RNAV1
TF	HK425							RNAV1
TF	HK424				900			RNAV1
RWY10 IAP APPROACH TRANSITION HK417(by ATC)								
IF	HK417				900	MAX 205		RNAV1
TF	HK436							RNAV1
TF	HK426							RNAV1
TF	HK425							RNAV1
TF	HK424				900			RNAV1
RWY10 IAP APPROACH TRANSITION HK430								
IF	HK430				900	MAX		RNAV1

						205		
TF	HK424				900			RNAV1
RWY10 IAP APPROACH TRANSITION HK470(by ATC)								
IF	HK470				1800 or by ATC	MAX 205		RNAV1
TF	HK436							RNAV1
TF	HK426							RNAV1
TF	HK425							RNAV1
TF	HK424				900			RNAV1
RWY10 IAP APPROACH TRANSITION HK480(by ATC)								
IF	HK480				1800 or by ATC	MAX 205		RNAV1
TF	HK426							RNAV1
TF	HK425							RNAV1
TF	HK424				900			RNAV1
RWY10 MISSED APPROACH								
CA			092		230			RNP1
DF	HK432			L	1200 or by ATC	MAX 205		RNP1
RWY27 IAP APPROACH TRANSITION HK506								
IF	HK506				900	MAX 205		RNAV1
TF	HK505							RNAV1
TF	HK504				600			RNAV1
RWY27 IAP APPROACH TRANSITION HK517(by ATC)								
IF	HK517				900	MAX 205		RNAV1
TF	HK516							RNAV1

TF	HK515							RNAV1
TF	HK505							RNAV1
TF	HK504				600			RNAV1
RWY27 IAP APPROACH TRANSITION HK526								
IF	HK526				900	MAX 205		RNAV1
TF	HK505							RNAV1
TF	HK504				600			RNAV1
RWY27 IAP APPROACH TRANSITION HK537(by ATC)								
IF	HK537				900	MAX 205		RNAV1
TF	HK516							RNAV1
TF	HK515							RNAV1
TF	HK505							RNAV1
TF	HK504				600			RNAV1
RWY27 MISSED APPROACH								
CA			272		240			RNP1
DF	HK412			L	900			RNP1
TF	HK506					MAX 205		RNP1
RWY28 IAP APPROACH TRANSITION HK506								
IF	HK506				900	MAX 205		RNAV1
TF	HK525							RNAV1
TF	HK524				900			RNAV1
RWY28 IAP APPROACH TRANSITION HK517(by ATC)								
IF	HK517				900	MAX 205		RNAV1

TF	HK536							RNAV1
TF	HK535							RNAV1
TF	HK525							RNAV1
TF	HK524				900			RNAV1
RWY28 IAP APPROACH TRANSITION HK526								
IF	HK526				900	MAX 205		RNAV1
TF	HK525							RNAV1
TF	HK524				900			RNAV1
RWY28 IAP APPROACH TRANSITION HK537(by ATC)								
IF	HK537				900	MAX 205		RNAV1
TF	HK536							RNAV1
TF	HK535							RNAV1
TF	HK525							RNAV1
TF	HK524				900			RNAV1
RWY28 MISSED APPROACH								
CA			272		230			RNP1
DF	HK530			R	1200 or by ATC	MAX 205		RNP1

ZJHK AD 2.23 其它资料

全年有鸟类活动。机场当局采取了驱赶措施，以减少鸟类活动。

ZJHK AD 2.23 Other information

Activities of bird flocks take place all the year round. 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
Migratory herons	Mar.- May; Sep.- Dec.	20:00-02:30 10:30-15:30	200-1000m
Waders	Mar.- May; Sep.- Dec.	22:00-10:30	5-1000m
Black-shouldered Kite,common kestrel	The whole year	22:30-10:00	30-400m
Grass Owl,Oriental Bay Owl	The whole year	11:00-19:30	1-10m
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
Pipits	Jan.- Apr.; Oct.- Dec.	22:30-10:30	1-200m
Pat	Feb.- Dec.	21:30-00:30 11:00-15:00	1-50m