

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

ZYHB-哈尔滨/太平 HARBIN/Taiping

**ZYHB 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	N45°37.5' E126°15.1' Center of RWY
2	方向、距离 Direction and distance from city	242° GEO, 33km from Harbin Railway Station
3	标高/参考气温 Elevation / Reference temperature	139.3m/28.9°C(JUL)
4	机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation	RWY 05 THR/-
5	磁差/年变率 MAG VAR/ Annual change	10°W/
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	Heilongjiang Managemant Group CO.LTD. Harbin Taiping International Airport, Harbin 150079, Heilongjiang Province, China Post code:150079 TEL:86-451-87753030 FAX:86-451-87753022 AFS:ZYHBYDYX
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

**ZYHB 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)	HS or O/R
2	海关和移民 Customs and immigration	HS or O/R(24 HR PN required)
3	卫生健康部门 Health and sanitation	HS or O/R(3-5 days PN required)

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

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

1	货物装卸设施 Cargo-handling facilities	platform lift(7-14t), baggage handling(0.6-1t), tractors(4t), baggage dollies, pallet, container trailer
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 and hydrant cart: 14 litres/sec
4	除冰设施 De-icing facilities	de-icing apron(Stands Nr.301-304,541-545), 15 aircraft de-icers, 3 RWY de-icers, de-icing fluid(FCY-1Bio+), anti icing fluid(FCY-9311)
5	过站航空器机库 Hangar space for visiting aircraft	China Southern airlines hangar, heating and specialized refrigeration facilities, available for two A320 or one A330; Sichuan airlines hangar, heating and specialized refrigeration facilities, available for one A320
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for various types of aircraft on request

7	备注 Remarks	Ground power unit, ground air supply unit
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**ZYHB 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 and in the city
3	交通工具 Transportation	Passenger's coaches, taxis
4	医疗设施 Medical facilities	First aid center at AD, hospital in the city
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	In the city TEL+FAX: 86-451-2896407
7	备注 Remarks	Nil

**ZYHB 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	Primary foam tender, rapid intervention vehicle, demolition truck, illumination truck, heavy-duty foam tender, heavy-duty water tank truck, medicament reinforcement car, personnel carrier, ambulance, command cars, medical supplies car, puncture arm
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to A380 Uplift air cushion, mobile surface operation devices, platform trailer, fork, towing unit, hoisting unit, tie-down equipment.
4	备注 Remarks	platform trailer can not be used for ARJ21, Y-12, MA60

**ZYHB 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 snow ploughs, snow slingers, snow fluid truck
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2	扫雪顺序 Clearance priorities	RWY, TWY, Apron
3	备注 Remarks	Nil

**ZYHB 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 95/R/B/W/T(Stands Nr.301-305, 543-545) PCN 83/R/B/W/T(Stands Nr.30-48, 528-532) PCN 82/R/B/W/T(Stands Nr.541, 542) PCN 74/R/B/W/T(Stands Nr.499, 500, 508-514, 533-540, 701-712) PCN 65/R/B/W/T(Stands Nr.501-507, 521-527) PCN 62/R/B/W/T(Stands Nr.515-520)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	51.9m: B2; 48m: A1, B3-B6, B8-B10, B14-B16, C1-C5, TWY U, U1, U2; 44m: T, T1, T2; 41m: B7; 40.2m: B1; 37m: B13; 35.5m-48m: J; 34m: B11, B12; 28.5m: A0, A2, A7, A8; 24m: G, N, TWY S; 23m: A3, A5, A6, B, C, H, parallel TWY A, S1, S2;
		Surface:	Asphalt(A, A0, A1-A3, A5-A8) CONC (B, B1-B16, C, C1-C5, G, H, J, N, S, S1, S2, T, T1, T2, U, U1, U2)
		Strength:	PCN 96/F/B/X/T(A1, A3, A5, A6) PCN 95/F/B/X/T(A2) PCN 95/R/B/W/T(B1-B5, B14-B16, C, C1-C5, G, H, J, N, S1, S2, TWY S, TWY U, U1, U2) PCN 78/F/B/W/T(A0, A7, A8, parallel TWY A) PCN 74/R/B/W/T(B, B6-B8, B11-B13, T, T1, T2) PCN 62/R/B/W/T(B9, B10)
3	高度表校正点的位置及其标高	Nil	

	ACL location and elevation	
4	VOR/INS 校正点 VOR/INS checkpoints	Nil
5	备注 Remarks	Nil

### ZYHB 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 signs at all intersections with TWY and RWY and at all holding positions. Guide lines at apron. Nose-in guidance at aircraft stands.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	RWY designation marking, threshold marking, touchdown zone marking, aiming point marking, RWY centre line marking, RWY side stripe marking
		RWY lights	RWY centre line lights, RWY edge lights, RWY threshold identification lights, RWY end lights
		TWY markings	TWY centre line marking, TWY edge line, taxi holding positions, NO ENTRY marking
		TWY lights	TWY edge lights, TWY centre line lights(A, A0-A3, A5-A8), RWY guard lights(A0, A1, A8), No-entry bar(A2, A3, A5-A7)
3	停止排灯 Stop bars	Nil	
4	备注 Remarks	Nil	

### ZYHB 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 05/23						
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	Lightning Rod	001	1225	171.8		

Obstacles within a circle with a radius of 15km centered on the center of RWY 05/23						
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
2	*BLDG	024	1060	172.1		
3	Chimney	034	2093	161.1		
4	BLDG	036	1914	149.1		
5	*Chimney	041	3319	160.4		
6	TWR	041	4121	176		
7	TWR	044	3088	164.7	RWY23 ILS/DME GP INOP, ILS GP INOP, VOR/DME, NDB/DME, NDB final approach	
8	TWR	046	3088	164.7	RWY05 Take-off path	
9	Antenna	049	2704	151.1		
10	Antenna	049	8637	163.1		
11	Light Pole	051	1856	137.2	RWY05 Take-off path	
12	Chimney	064	2969	163.2		
13	TWR	090	4501	206	CAT B circling	
14	Water TWR	092	6600	174.1		
15	Pole	094	2089	167.8		
16	TWR	139	8559	245	CAT D circling	
17	Plateau	146	3400	159		
18	Chimney	175	6638	203.7		
19	TWR	178	8397	234	CAT C circling	
20	TWR	192	11287	246	RWY05 ILS/DME, VOR/DME , initial approach	
21	TWR	219	11553	246	RWY05 ILS/DME, VOR/DME, initial approach, intermediate	

Obstacles within a circle with a radius of 15km centered on the center of RWY 05/23						
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
					approach	
22	Antenna	223	1268	140.4		
23	Chimney	224	1261	141.0	RWY05 ILS/DME (SA CAT-II) final approach	
24	BLDG	225	2746	153.7	RWY23 take-off path	
25	Trees	226	3091	167.1	RWY23 take-off path	
26	Trees	228	3056	162.4	RWY23 take-off path	
27	*Antenna	229	1900	143.4		
28	Antenna	229	2602	150.7		
29	Pole	230	2832	156.6	RWY23 take-off path	
30	Light Pole	231	1906	143.4	RWY23 take-off flight path; RWY05 ILS/DME (SA CAT-II) final approach	
31	Trees	235	3914	174.8	RWY05 ILS/DME GP INOP, ILS GP INOP, VOR/DME, NDB/DME, NDB final approach	
32	Light Pole	246	841	151.1	RWY05 ILS/DME, ILS/DME (SA CAT-II) , ILS final approach	
33	Lightning Rod	275	860	201.8	CAT A circling	
34	*BLDG	279	500	154.1		
35	*Water TWR	306	750	168.7		
36	*TWR	327	732	181.7	RWY23 ILS/DME, ILS approach	
37	Light Pole	346	415	162.6		
38	*Control TWR	350	594	166.8		

Obstacles within a circle with a radius of 15km centered on the center of RWY 05/23						
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
39	BLDG	352	594	154.1		
Others:						

Obstacles between two circles with the radius of 15km and 50km centered on the center of RWY 05/23						
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	TWR	052	16832	259	RWY23 ILS/DME, VOR/DME, PBN initial approach	
2	TWR	055	16165	258	RWY23 ILS/DME, ILS, VOR/DME intermediate approach	
3	Antenna	077	33000	265		
4	TWR	077	35732	479	Sector	
5	Chimney	088	16271	264	RWY23 ILS/DME, VOR/DME initial approach	
6	MT	135	44000	257		
7	TWR	222	20401	223	RWY05 ILS/DME initial approach	
8	TWR	225	16963	242	RWY05 ILS/DME, ILS intermediate approach, PBN initial approach	
Others:						
Other obstacles refer to AD OBST chart						



**ZYHB 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	Harbin MET station of ATMB
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	Harbin MET station of ATMB 9 HR, 24HR; 3HR, 6HR
4	趋势预报发布间隔 Issuance interval of trend forecast	Trend 1 HR
5	所提供的讲解/咨询服务 Briefing/consultation provided	P, T
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
8	提供信息的辅助设备 Supplementary equipment available for providing information	FAX
9	提供气象情报的空中交通服务单位 ATS units provided with information	TWR, Harbin ACC
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, TEND
12	观测系统及位置 Observation System & Site(s)	RVR EQPT A: 100m SE of RCL, 397m inward THR05

		B: 110m SE of RCL,1573m inward THR05 C: 100m SE of RCL,443.5m inward THR23 SFC wind sensors 05: 105m SE of RCL,382m inward THR05 RWY center: 100m SE of RCL,1560m inward THR05 23: 105m SE of RCL,398.5m inward THR23 Ceilometer 05: 105m SE of RCL,397m inward THR05 23: 105m SE of RCL,413.5m inward THR23
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	Nil

### ZYHB 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 / SWY surface	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
05	039°GEO 049°MAG	3200×45	78/F/B/W/T ASPH/-		THR139.3m
23	219°GEO 229°MAG	3200×45	78/F/B/W/T ASPH/-		THR133.9m
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 AOC	Nil	Nil	3320×300	Nil	Nil

See AOC	Nil	Nil	3320×300	Nil	Nil
Remark:					

**ZYHB 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
05	3200	3200	3200	3200	Nil
23	3200	3200	3200	3200	Nil
Remarks:					

**ZYHB 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
05	PALS CAT I* 900m LIH	GREEN --	PAPI LEFT 3°	Nil	3200m** spacing 30m	3200m*** spacing 60m	RED	Nil
23	PALS CAT I* 900m LIH	GREEN --	PAPI LEFT 3°	Nil	3200m** spacing 30m	3200m*** spacing 60m	RED	Nil
Remarks:* SFL ** 0-2300m white, 2300-2900m white/red, 2900-3200m red, LIH *** 0-2600m white, 2600-3200m yellow, LIH								

**ZYHB 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: RWY23:L of RWY, 315m inward THR23, lighting RWY05:L of RWY, 359m inward THR05, lighting
3	滑行道边灯和中线灯 TWY edge and center line lighting	Blue TWY edge line lights available for all TWYS; green TWY centre line lights available for all TWYS
4	备份电源/转换时间 Secondary power supply/switch-over time	Dual feed, diesel engine driven generator/ <15s; UPS secondary power supply available for RWY centre line lights, RWY edge line lights, THR lights and RWY end lights/ <1s
5	备注 Remarks	Nil

### ZYHB 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

### ZYHB 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
Harbin tower control area	BY ATC	BY ATC	
Fuel Dumping Area	N4540.0E12603.0 - N4527.0E12445.0 - N4517.0E12439.0 - N4531.0E12608.0 - N4540.0E12603.0	4500m and above	
Altimeter setting region and TL/TA	N460638 E1262223 - N454751 E1265050 - N453212 E1265748 - N452250 E1263756 - N450936 E1260042 - N451951 E1254042 - N455846 E1254459 - N460638 E1262223	TL 3600m TA 3000m 3300m(QNH $\geq$ 1031hPa) 2700m(QNH $\leq$ 979hPa)	

## ZYHB 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		127.4	H24	D-ATIS available
APP	Harbin Approach	APP01:119.65(127.75)	H24	
APP	Harbin Approach	APP02:119.05(127.75)	by ATC	
TWR	Harbin Tower	118.7(118.1) 130.0	H24	
GND	Harbin Ground	121.85	HO	DCL available
APN	Harbin Apron	121.625(121.95)	H24	
Delivery	Harbin Delivery	121.725	HO	DCL available

## ZYHB 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

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
Harbin VOR/DME	HRB	112.5MHz CH72X	N45°37.6' E126°15.6'	137m	
Shuiquan NDB	LS	445kHz	N45°27.0' E126°02.7'		
LMM 05	L	220kHz	229° MAG/1000m FM THR RWY05		
OM 05		75MHz	229° MAG/8500m FM THR RWY05		
LOC 05 ILS CAT I	ILL	110.3MHz	049° MAG/295m FM RWY05 end		
GP 05		335.0MHz	115m E of RCL,337m FM THR RWY05		Angle 3° RDH 15m
DME 05	ILL	CH40X (110.3MHz)		151m	Co-located with GP05
LOM 23	MJ	417kHz	049° MAG/6900m FM THR RWY23		
LMM 23	M	202kHz	049° MAG/1000m FM THR RWY23		
LOC 23 ILS CAT I	IMJ	109.9MHz	229° MAG/595m FM RWY23 end		
GP 23		333.8MHz	125m E of RCL,310m FM THR RWY23		Angle 3° RDH 15m
DME 23	IMJ	CH36X (109.9MHz)		147m	Co-located with GP23

## ZYHB AD 2.20 本场飞行规定

## ZYHB 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 1.1 Each and every technical test flight shall be filed in

制部门批准后方可进行；

advance and conducted only after clearance has been obtained from ATC;

1.2 机场多点定位系统运行，航空器在本场落地后和推出前，打开 S 模式应答机并调至地面模式。

1.2 Multilateration system operation at airport. All aircraft transponder shall be turn on S mode and set to GND mode before push back or after landing.

## 2. 跑道和滑行道的使用

## 2. Use of runways and taxiways

2.1 可以通过塔台申请引导车和拖车服务；

2.1 Follow-me vehicle service and towing service are available via Tower Control;

2.2 禁止航空器在跑道上做 90°以上转弯。

2.2 Exceeding 90°turnaround on RWY is forbidden for all aircraft.

2.3 本场 A3, A5, A6 快速出口滑行道仅供翼展 52 米（不含）以下机型使用。

2.3 Rapid exit taxiways A3, A5 and A6 only available for aircraft with wing span less than 52m.

2.4 B 滑行线的最大翼展限制为不大于 65 米。

2.4 Taxiing lane B only available for aircraft with wing span not exceeding 65m.

2.5 翼展大于 52m（含）机型：禁止从 B12 左转进入 B 滑；禁止从 B13 右转进入 B 滑；禁止从 B 滑右转进入 B12；禁止从 B 滑左转进入 B13；禁止从 A8 滑行道进入 B16；禁止从 B16 进入 A8 滑行道。

2.5 Aircraft with wing span $\geq$ 52m are forbidden to turn left into TWY B via B12, turn right into TWY B via B13, turn right into TWY B12 via B, turn left into TWY B13 via B, enter B16 via A8, enter A8 via B16.

2.6 起飞航空器：航空器驾驶员收到进跑道指令后，必须在确保安全的前提下立即按照标准运行程序从等待线滑行至跑道内正确位置。任何情况下，航空器驾驶员必须确保在进跑道前完成所有座舱检查单以及其他必要的检查，并用最短时间完成进跑道。

2.6 Departure aircraft: pilot shall taxi from holding position to correct position in RWY immediately in a safe manner according to standard operating procedures after receiving RWY entry instruction. In all cases, pilot shall ensure that all cockpit checklists and other

如接到立即起飞指令，航空器驾驶员必须向 ATC 确认是否可以执行立即起飞。起飞航空器从接到管制员进跑道指令到对正跑道时间应控制在 60s 以内，如航空器驾驶员无法执行上述要求应当在到达跑道等待位置前通知塔台管制员（湿跑道或污染跑道除外）。

2.7 落地航空器：落地航空器应尽快退出跑道，从接地到完全滑出跑道时间应控制在 50s 以内。如机组认为无法在上述要求的时间内完成，须在提前通知塔台管制员（首次建立联系时）。

2.8 地面推出开车指令应当在 5min 内执行，若超过 5min，管制指令自动取消，机组需重新申请。

2.9 首次联系 ATC 时，完成 DCL 的机组要向 ATC 复述：公司呼号、航班号、使用跑道号、离场程序和起始高度、二次应答机编码。

2.10 更换跑道程序。满足下列条件之一时，需更换跑道方向：

2.10.1 当气象自动观测系统显示跑道顺风分量达到

necessary checks are completed before entering RWY, and enter the RWY in the shortest time. If ordered to take-off, pilot shall confirm to ATC whether the aircraft can take-off immediately or not. Departure aircraft shall finish RWY alignment within 60s from holding position. If flight crew considers that they can not fulfill the process within the required time, pilot shall inform TWR before getting to the RWY holding position (except for wet or contaminated RWY).

2.7 Landing aircraft: aircraft shall vacate RWY as soon as possible. Aircraft shall fully vacate RWY within 50s after touchdown. If considers that they cannot fulfill the process within the required time, flight crew shall inform TWR at the first contact.

2.8 The push-back and start-up instruction shall execute within 5mins, instuction will be cancelled automatically after 5mins, and flight crew shall reapply.

2.9 When connect with ATC at the first time, crew shall repeat to ATC after completing DCL: airlines callsign, flight number, RWY designation in use, departure procedure and initial altitude, secondary transponder code.

2.10 RWY change procedure: aircraft shall change RWY direction under following conditions:

2.10.1 When meteorological observation system shows



3m/s, 且有继续增大趋势时;

RWY downwind reaches 3m/s and tends to increase.

2.10.2 湿跑道或者污染跑道条件下, 当气象自动观测系统显示跑道为顺风, 且有继续增大趋势时。在转换使用跑道方向过程中, 使用跑道顺风分量大于3m/s 但小于5m/s 时, 管制员通知航空器驾驶员地面风向、风速后, 如果因航空器性能限制等原因无法接受时, 航空器驾驶员应立即通知管制员。

2.10.2 Under the condition of wet or contaminated runway, when meteorological observation system shows downwind and tends to increase, aircraft shall change RWY direction. When RWY downwind more than 3m/s but less than 5m/s during changing the direction, pilot shall inform ATC immediately if the ground wind and wind speed which notified by ATC cannot be accepted due to the performance limitation of aircraft.

## 2.11 跑道等待位置及使用规定

## 2.11 Rules of RWY holding position

2.11.1 航空器在进入跑道前必须在指定的跑道等待位置外等待管制员的指令;

2.11.1 Before entering RWY, aircraft shall hold short of the designated RWY holding position and wait for ATC instruction.

2.11.2 航空器在跑道等待位置等待时, 机头应当尽量靠近跑道等待位置标志, 但不得超过此标志;

2.11.2 When aircraft hold short of the RWY holding position, the nose shall as close as possible to the RWY holding position mark, but not exceed the mark.

2.11.3 航空器未获得管制员许可, 机头越过等待位置标志时, 应当立即向管制员报告。

2.11.3 Aircraft without ATC permission shall report to ATC immediately if the nose of aircraft exceed the holding position mark.

## 3. 机坪和机位的使用

## 3. Use of aprons and parking stands

3.1 未经塔台同意, 严禁航空器利用自身动力倒滑;

3.1 Push-back of aircraft on its own power is strictly forbidden without Tower Control clearance;

3.2 发动机试车, 需经塔台许可, 并在指定的地点进行。严禁在廊桥附近和客机坪试大车;

3.2 Engine run-ups are subject to Tower Control clearance, and shall be carried out at a designated location. Fast engine run-ups near boarding bridges or on apron are strictly forbidden;

### 3.3 机位使用限制

### 3.3 Ways of aircraft entering/exiting stands

停机位/Stand	航空器翼展限制/ Wing span limits for aircraft
Nr. 30-32, 34, 36, 37, 39-46, 48, 302-305, 499-504, 508-531, 533-540, 542-544, 701-711	<36m
Nr.33, 35, 47, 505, 507, 532	<52m
Nr.38, 301, 506, 541, 545, 712	<65m

### 3.4 航空器进出机位方式

### 3.4 Ways of aircraft entering/exiting stands

停机位/Stand	滑入、滑出方式/Enter or Exit
Nr. 30-48, 499-514, 520-531, 533-540, 701-712	Taxi in and push back
Nr. 301-305, 515-519, 541-545	Taxi in and taxi out
Nr. 532	Push in and taxi out

### 3.5 航空器进出机位引导方式

### 3.5 Guidance of aircraft entering/exiting stands

停机位编号/Stand	引导方式/Guidance
Nr.30-48, 301-305, 701-703	Guide in and out
Nr.499-545, 704-712	Guide in

3.6 在机坪范围内设有 16 个机坪等待点 (AH01-AH16), 16 个滑出等待点 (HP01-HP16), 以上等待点均为强制位置报告点, 航空器在滑行接近该位置点时, 必须进行位置报告。滑入机坪活动区的航空器需要在机坪等待点等待, 得到哈尔滨机坪 (121.625MHz) 同意后可继续进行滑行, 滑出机坪活动区的航空器需要在滑出等待点等待, 得到哈尔滨塔台同意后可继续滑行。

3.6 There are 16 apron holding positions (AH01-AH16) and 16 taxi-out holding positions (HP01-HP16) on apron. All the holding positions are mandatory reporting. When aircraft get close to these holding position, aircraft shall report position. Aircraft shall hold at the holding positions when taxiing in apron movement area, and continue to taxi with APN(121.625MHz) approval. Aircraft shall hold at the taxi-out holding positions when taxiing out apron movement area, and continue to taxi with TWR approval.

滑出等待点位置/Taxi-out holding position	滑行方向/Taxi direction	机坪等待点位置/Apron holding position	滑行方向/Taxi direction
HP01-HP16	W to E	AH01-AH16	E to W

3.7 机坪管制范围: HP01-HP16 连线以西的机坪、滑行道。

3.7 APN control area: the apron and taxiway west of HP01-HP16 connection.

3.8 机坪管制运行规则: 离港航空器向塔台管制室申请放行许可, 取得放行许可后, 按塔台管制室指令转频到机坪管制室, 机坪管制室负责推出、开车、滑行指令的发布; 进港航空器按塔台管制室指令转频到机坪管制室。

3.8 Operating rules of APN control: departure aircraft shall apply for delivery from TWR. After obtain delivery permission, aircraft shall transfer frequency to APN according to the command of TWR. APN is responsible for push-out, start-up, and taxiing. Arrival aircraft shall transfer frequency to APN according to the command of TWR.

4. 进、离场管制规定

4. Air traffic control regulations

无

Nil

## 5. 机场的 II/III 类运行

## 5. CAT II/III operations at AD

5.1 使用 HUD 实施低能见度起飞和特殊批准的 I/II 类运行程序

5.1 Low visibility take-off and Special CAT-I/II operation procedure based on HUD

5.1.1 使用 HUD 可在本场 RWY05/23 实施特殊批准 I 类运行和 RVR200m 低能见度起飞, 在 RWY05 可实施特殊批准 II 类运行。

5.1.1 RWY 05/23 could operate Special CAT-I operation and low visibility take-off with RVR 200m based on HUD. RWY 05 could operate Special CAT-II operation based on HUD.

5.1.2 准备阶段天气条件

5.1.2 Preparation

当跑道视程预计 30min 内将下降至 550m 以下, 或者云高 (或垂直能见度) 将下降至 60m 以下, 本场将启动使用 HUD 特殊批准 I/II 类运行和 RVR200m 低能见度起飞的准备工作。

When RVR is expected to drop below 550m within 30min, or ceiling(vertical visibility) decrease below 60m, Special CAT-I/II operation and low visibility take-off with RVR 200m based on HUD preparation will be initiated.

5.1.3 实施阶段天气条件

5.1.3 Implementation

5.1.3.1 当跑道视程低于 550m 且不低于 450m 时, 或者云高 (或垂直能见度) 低于 60m 且不低于 45m 时, 经检查确认机场具备保障条件, 由空管塔台宣布启动使用 HUD 实施特殊批准 I 类运行。

5.1.3.1 When RVR is less than 550m but no less than 450m, or ceiling(vertical visibility) is less than 60m but no less than 45m, aerodrome and ATC have the capabilities of LVP after confirming, implementation of Special CAT-I operation based on HUD will be issued by TWR.

5.1.3.2 当跑道视程低于 450m 且不低于 350m 时, 或者云高 (或垂直能见度) 低于 45m 且不低于 30m 时,

5.1.3.2 When RVR is less than 450m but no less than 350m, or ceiling(or vertical visibility) is less than 45m

经检查确认机场具备保障条件，由空管塔台宣布启动使用 HUD 实施特殊批准 II 类运行。	but no less than 30m, aerodrome and ATC have the capabilities of LVP after confirming, implementation of Special CAT-II operation based on HUD will be issued by TWR.
5.1.3.3 当跑道视程低于 400m 且不低于 200m 时，经检查确认机场具备运行保障条件，由空管塔台宣布启动使用 HUD 实施 RVR200m 低能见度起飞。	5.1.3.3 When RVR is less than 400m but no less than 200m, aerodrome and ATC have the capabilities of LVP after confirming, implementation of low visibility take-off with RVR 200m based on HUD will be issued by TWR.
5.1.4 结束阶段天气条件	5.1.4 Termination
5.1.4.1 当天气持续稳定在 RVR550m 以上时，或经检查确认机场不具备保障条件，由空管塔台宣布终止特殊 I 类着陆类运行。	5.1.4.1 When weather condition continues to be stable above RVR550m, or the airport is confirmed to have no guarantee conditions after inspection, implementation of Special CAT-I operation based on HUD will be stopped by TWR.
5.1.4.2 当天气持续稳定在 RVR450m 以上时，或经检查确认机场不具备保障条件，由空管塔台宣布终止特殊 II 类着陆类运行。	5.1.4.2 When weather condition continues to be stable above RVR450m, or the airport is confirmed to have no guarantee conditions after inspection, implementation of Special CAT-II operation based on HUD will be stopped by TWR.
5.1.4.3 当天气持续稳定在 RVR400m 以上时，或经检查确认机场不具备保障条件，由空管塔台宣布终止 RVR200m 起飞运行。	5.1.4.3 When weather condition continues to be stable above RVR400m, or the airport is confirmed to have no guarantee conditions after inspection, implementation of low visibility take-off with RVR 200m based on HUD will be stopped by TWR.

5.1.5 需要执行 HUD 特殊批准的 I/II 类运行程序的航空器，应主动向管制员报告。

5.1.5 Aircraft requiring Special CAT-I/II operation based on HUD shall report to ATC initiatively.

## 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

本场跑道东南侧现有一条灯光带，长度 10km，夜间发光，红色，机组需注意。

Red lights strip located at southeast of RWY, length 10km, glow at night. Exercise caution while landing and take-off.

## 9. 直升机飞行限制，直升机停靠区

## 9. Helicopter operation restrictions and helicopter parking / docking area

无

Nil

## ZYHB AD 2.21 噪音限制规定及减噪程序

## ZYHB AD 2.21 Noise restrictions and Noise abatement procedures

无

Nil

## ZYHB AD 2.22 飞行程序

## ZYHB AD 2.22 Flight procedures

### 1. 总则

### 1. General

1.1 除经塔台特殊许可外，在塔台管制区内的飞行，

1.1 Flights within Tower Control Area shall operate

必须按照仪表飞行规则进行。

under IFR unless special clearance has been obtained from Tower Control.

1.2 哈尔滨太平机场以 PBN 飞行程序为主用，传统飞行程序为备用运行模式。

1.2 Performance-based navigation procedures are mainly used, conventional procedures are standby procedures in Harbin/Taiping airport.

1.3 凡不符合哈尔滨太平机场 PBN 程序运行要求的航空器，驾驶员应在首次联系时告知管制员。

1.3 Any aircraft does not meet the PBN operational requirements in Harbin/Taiping airport, the pilot should inform ATC at the first contact.

1.4 禁止未安装二次雷达应答机的航空器起降，特殊情况须经东北空管局空管部批准。

1.4 Aircraft without SSR is prohibited to take-off and landing, special circumstances must be approved by authority.

1.5 重型机机组首次与哈尔滨进近或塔台建立通讯联系时，须主动报告机型为“重型”或“HEAVY”。

1.5 When heavy aircraft connect with Harbin approach or TWR at the first time, aircrew shall report the type as "HEAVY" initiatively.

## 2. 起落航线

## 2. Traffic circuits

起落航线一律在跑道西侧进行。A、B 类航空器，高度 450m(QNH); C、D 类航空器：高度 600m(QNH)。

Traffic circuits shall be made to the west of RWY. For aircraft CAT A/B: 450m(QNH); for aircraft CAT C/D: 600m(QNH).

## 3. 仪表飞行程序

## 3. IFR flight procedures

因哈尔滨太平机场实施进离场航线分离程序，请按如下飞行规定执行：

As a result of the implementation of departure and arrival separation procedures, please follow the following flight regulations:

- 3.1 严格按照航图中公布的进、离场程序和进近程序飞行，详见标准仪表进、离场图及进近图。当 ATC 指令高度与进离场程序中各类限制高度有冲突时以 ATC 部门的指令高度为准。
- 3.2 正常情况下，所有进出港航空器按空中交通管制员指定的程序进场或离场。
- 3.3 如有需要，航空器由 ATC 部门指挥在指定的航路、导航台和定位点上空等待或做机动飞行。
- 3.4 等待：等待程序见标准仪表进场图。
- 3.5 哈尔滨太平机场起降航空器，在进入哈尔滨管制区或申请离场放行许可前必须收听 ATIS，以确认使用跑道。
- 3.6 哈尔滨太平机场往返 G212 航路通辽方向航空器，请按如下飞行规定执行：
- 3.6.1 使用 05 号跑道：  
通辽方向航空器沿  
OTABO-RUSBO-IGPUP-W204-LEGAG 进场；  
通辽方向航空器沿  
BIKOB-PIGAM-W203-LUVMO-RUSBO-OTABO 离场。
- 3.6.2 使用 23 号跑道：  
通辽方向航空器沿
- 3.1 Strict adherence is required to the relevant arrival/departure/approach procedures published in the aeronautical charts. Follow ATC instructions when the instructions conflict with the height limits in the charts.
- 3.2 All flights shall operate departure and arrival procedure under ATC clearance.
- 3.3 Aircraft may, if necessary, hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.
- 3.4 Holding procedures refer to STAR.
- 3.5 Flights within Harbin Control Area shall listen to ATIS before getting clearance, in order to confirm the RWY to be used.
- 3.6 Aircraft operates between Harbin/Taiping airport and TGO by G212, please follow the following flight regulations:
- 3.6.1 RWY05 in use:  
From TGO arrival by:  
OTABO-RUSBO-IGPUP-W204-LEGAG;  
To TGO departure by:  
BIKOB-PIGAM-W203-LUVMO-RUSBO-OTABO.
- 3.6.2 RWY23 in use:  
From TGO arrival by:



OTABO-RUSBO-LUVMO-W203-PIGAM 进场;  
通辽方向航空器沿

DUBIK-LEGAG-W204-IGPUP-RUSBO-OTABO 离场

OTABO-RUSBO-LUVMO-W203-PIGAM;

To TGO departure by:

DUBIK-LEGAG-W204-IGPUP-RUSBO-OTABO.

#### 4. 雷达程序和/或 ADS-B 程序

哈尔滨管制区空域范围实施 ADS-B 独立运行和  
ADS-B 与雷达融合运行。

4.1 实施范围：哈尔滨管制区内，漠河-甘河叉-诺敏  
大山-N492850E1225435-SIMLI-国境线-漠河之间连  
线的水平范围内,高度 S0600(含)以上至 S0980(不含)  
以下的空域范围实施 ADS-B 独立运行；哈尔滨管制  
区其余水平范围,高度 S0980(不含)以下的雷达覆盖  
空域内实施 ADS-B 与雷达融合运行。

4.2 独立运行空域内，监视手段：1090ES ADS-B  
OUT。

4.3 融合运行空域内，主用监视手段：雷达；辅助监  
视手段：1090ES ADS-B OUT。

4.4 运行期间，飞越哈尔滨管制区具备 ADS-B 能力  
的航空器机组应全程打开 ADS-B 功能，并保证  
ADS-B 发射机设置的航班识别信息（FLIGHT ID）

#### 4. Radar procedures and/or ADS-B procedures

ADS-B independent operation and ADS-B and Radar  
control merging operation implemented within Harbin  
control airspace.

4.1 ADS-B independent operation range:

lateral: within Harbin control airspace,  
Mohe-Ganhecha-Nuomin

mountain-N492850E1225435-SIMLI-border line-Mohe

vertical: S0600(included)-S980(excluded);

ADS-B and Radar control merging operation range:

lateral: Above literal range exceed within Harbin  
control airspace

vertical: GND-S980(excluded).

4.2 Within the ADS-B independent operation airspace,  
aircrafts are surveillanced by 1090ES ADS-B OUT.

4.3 Within the ADS-B and Radar control merging  
operation airspace: Radar control conduct the primary  
surveillance and 1090ES ADS-B OUT as assist.

4.4 During operation, aircrafts capable of ADS-B  
within the Harbin control airspace should continuously  
be functional and ensure that the FLIGHT ID

与 FPL 报编组 7 内航班识别呼号 (ACID) 完全正确。 designated by ADS-B and ACID in item 7 of FPL are totally correct.

4.5 航空器运营人应在 FPL 报编组 10 中明确其所运营的航空器是否具备 1090ES 的 ADS-B OUT 能力, 并对其正确性负责。 4.5 Aircraft operator shall confirm the 1090ES's capability of ADS-B OUT operation in item 10 of FPL and be responsible for its correction.

4.6 当与 ADS-B 运行相关的机载设备不正常工作时, 航空器驾驶员应及时向管制员报告。 4.6 When the ADS-B equipments are unserviceable during flight, the pilot-in-command must notify ATC as soon as possible.

## 5. 无线电通信失效程序

## 5. Radio communication failure procedures

无

Nil

## 6. 目视飞程序

## 6. Procedures for VFR flights

哈尔滨管制区 6000m (含) 以下航路 (航线), 实施目视间隔运行; 哈尔滨进近和塔台管制空域实施目视间隔和目视进近运行。

Visual separation implemented within HARBIN control area(at 6000m and below); Visual separation and visual approach implemented within HARBIN APP and TWR 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

无

Nil

## 10. 区域导航飞行程序相关数据

## 10. Data for RNAV flight procedures

Waypoint ID	COORDINATES	Waypoint ID	COORDINATES
HB401	N452251 E1263838	HRB	N4537.6 E12615.6
HB402	N454808 E1265103	LS	N4527.0 E12602.7
HB403	N460620 E1262153	BIKOB	N4525.6 E12536.5
HB404	N455857 E1254518	BUBDI	N4629.9 E12627.2
HB405	N451726 E1252017	DUBAM	N4457.5 E12550.3
HB502	N453047 E1260717	DUBIK	N4502.0 E12515.3
HB503	N452155 E1255659	DUKIR	N4431.9 E12553.9
HB504	N451641 E1255056	EMVIG	N4505.9 E12538.6
HB505	N452601 E1254951	GUXEN	N4550.9 E12631.0
HB506	N453102 E1255540	IDIMO	N4519.1 E12627.4
HB507	N454152 E1260817	IGADO	N4557.8 E12724.7
HB508	N454502 E1261159	IGDOS	N4543.6 E12533.6
HB509	N453528 E1254755	IGPUP	N4434.7 E12421.1
HB510	N450843 E1252851	KETOV	N4501.8 E12710.6
HB511	N452250 E1260955	LARUN	N4436.5 E12609.0
HB512	N453323 E1262215	LEGAG	N4452.3 E12455.7
HB513	N454304 E1263343	LUVMO	N4442.8 E12412.8
HB514	N454249 E1262122	MIBAG	N4600.1 E12526.9
HB551	N454724 E1260148	NOKUV	N4515.0 E12706.5
HB552	N454007 E1255319	ONINA	N4616.3 E12520.2
HB602	N454600 E1262507	ONOLO	N4443.2 E12610.5
HB603	N455007 E1261758	PIGAM	N4501.4 E12448.7
HB604	N453541 E1260104	PUMUP	N4444.6 E12556.6
HB605	N451533 E1260127	SAREV	N4546.5 E12715.2

HB606	N454152 E1263214	SULTI	N4618.3 E12636.8
HB607	N453203 E1260845	TOGEP	N4601.3 E12706.3
HB651	N453434 E1261141	UKDIN	N4503.2 E12651.9
HB652	N454618 E1260031	UPKED	N4503.5 E12600.1
		VETEX	N4534.8 E12636.8

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY05 Departure LUVMO-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB509							RNAV1
TF	BIKOB				↑4200			RNAV1
TF	PIGAM							RNAV1
TF	LUVMO							RNAV1
RWY05 Departure DUKIR-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB509							RNAV1
TF	BIKOB				↑4200			RNAV1
TF	DUBAM							RNAV1

TF	PUMUP							RNAV1
TF	DUKIR							RNAV1
RWY05 Departure KETOV-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB604							RNAV1
TF	HRB				↑3900			RNAV1
TF	HB401							RNAV1
TF	KETOV							RNAV1
RWY05 Departure KETOV-08D(by ATC)								
CA			049		450			RNAV1
DF	VETEX			R				RNAV1
TF	NOKUV							RNAV1
TF	KETOV							RNAV1
RWY05 Departure IGADO-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB604							RNAV1
TF	HRB				↑3900			RNAV1
TF	HB402							RNAV1
TF	IGADO							RNAV1
RWY05 Departure IGADO-08D(by ATC)								
CA			049		450			RNAV1

DF	GUXEN				↓1800			RNAV1
TF	TOGEP							RNAV1
TF	IGADO							RNAV1
RWY05 Departure BUBDI-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB509							RNAV1
TF	IGDOS							RNAV1
TF	MIBAG				↑5100 or by ATC			RNAV1
TF	BUBDI							RNAV1
RWY05 Departure BUBDI-08D(by ATC)								
CA			049		450			RNAV1
DF	GUXEN				↓1800			RNAV1
TF	SULTI							RNAV1
TF	BUBDI							RNAV1
RWY05 Departure ONINA-09D								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	HB552				↑2700			RNAV1
TF	HB509							RNAV1
TF	IGDOS							RNAV1
TF	MIBAG				↑5100 or by ATC			RNAV1

TF	ONINA							RNAV1
RWY05 Departure ONINA-08D(by ATC)								
CA			049		450			RNAV1
DF	HB508			L		MAX230		RNAV1
TF	HB551							RNAV1
TF	ONINA							RNAV1
RWY23 Departure LGPUP-19D								
CF	LS		229					RNAV1
TF	HB503				1800			RNAV1
TF	HB504				↑2400			RNAV1
TF	EMVIG				↑3600			RNAV1
TF	DUBIK							RNAV1
TF	LEGAG							RNAV1
TF	LGPUP							RNAV1
RWY23 Departure DUKIR-19D								
CF	LS		229					RNAV1
TF	HB503				1800			RNAV1
TF	HB504				↑2400			RNAV1
TF	EMVIG				↑3600			RNAV1
TF	DUBAM							RNAV1
TF	PUMUP							RNAV1
TF	DUKIR							RNAV1
RWY23 Departure KETOV-19D								
CF	LS		229					RNAV1
TF	HB509				↓1800 or by ATC			RNAV1
TF	HB652				↑2700			RNAV1

TF	HB507				↑3600			RNAV1
TF	HRB				↑3900			RNAV1
TF	HB401							RNAV1
TF	KETOV							RNAV1
RWY23 Departure KETOV-18D(by ATC)								
CF	HB651	Y	229					RNAV1
DF	IDIMO			L				RNAV1
TF	UKDIN							RNAV1
TF	KETOV							RNAV1
RWY23 Departure IGADO-19D								
CF	LS		229					RNAV1
TF	HB509				↓1800 or by ATC			RNAV1
TF	HB652				↑2700			RNAV1
TF	HB507				↑3600			RNAV1
TF	HRB				↑3900			RNAV1
TF	HB402							RNAV1
TF	IGADO							RNAV1
RWY23 Departure IGADO-18D(by ATC)								
CF	HB651	Y	229					RNAV1
DF	VETEX			L				RNAV1
TF	SAREV							RNAV1
TF	IGADO							RNAV1
RWY23 Departure BUBDI-19D								
CF	LS		229					RNAV1
TF	HB509				↓1800 or by ATC			RNAV1



TF	IGDOS							RNAV1
TF	MIBAG				↑5100 or by ATC			RNAV1
TF	BUBDI							RNAV1
RWY23 Departure BUBDI-18D(by ATC)								
CF	LS		229					RNAV1
TF	HB509				↓1800 or by ATC			RNAV1
TF	HB652				↑2700			RNAV1
TF	HB603				↑3600			RNAV1
TF	BUBDI							RNAV1
RWY23 Departure ONINA-19D								
CF	LS		229					RNAV1
TF	HB509				↓1800 or by ATC			RNAV1
TF	IGDOS							RNAV1
TF	MIBAG				↑5100 or by ATC			RNAV1
TF	ONINA							RNAV1
RWY05 Arrival IGPUP-09A								
IF	IGPUP							RNAV1
TF	LEGAG							RNAV1
TF	DUBIK							RNAV1
TF	HB510				↓3900			RNAV1
TF	HB504				2400			RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival LARUN-09A								

IF	LARUN							RNAV1
TF	ONOLO				↓4500			RNAV1
TF	UPKED				3000			RNAV1
TF	HB504				2400			RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival KETOV-09A								
IF	KETOV							RNAV1
TF	HB401				↓3600			RNAV1
TF	HRB							RNAV1
TF	HB507				1800	MAX230		RNAV1
TF	HB506							RNAV1
TF	HB505							RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival KETOV-08A(by ATC)								
IF	KETOV							RNAV1
TF	HB401				↓3600			RNAV1
TF	HB511					MAX230		RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival IGADO-09A								
IF	IGADO							RNAV1
TF	HB402				↓3600			RNAV1
TF	HB513				↓3000			RNAV1
TF	HRB							RNAV1
TF	HB507				1800	MAX230		RNAV1
TF	HB506							RNAV1

TF	HB505							RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival IGADO-08A(by ATC)								
IF	IGADO							RNAV1
TF	HB402				↓3600			RNAV1
TF	HB513				↓3000			RNAV1
TF	HB512					MAX230		RNAV1
TF	HB511							RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival BUBDI-09A								
IF	BUBDI							RNAV1
TF	MIBAG				5100 or by ATC			RNAV1
TF	IGDOS							RNAV1
TF	HB509					MAX230		RNAV1
TF	HB506							RNAV1
TF	HB505							RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival BUBDI-08A(by ATC)								
IF	BUBDI							RNAV1
TF	HB403							RNAV1
TF	HB508							RNAV1
TF	HB507				1800	MAX230		RNAV1
TF	HB506							RNAV1
TF	HB505							RNAV1

TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Arrival ONINA-09A								
IF	ONINA							RNAV1
TF	MIBAG				5100 or by ATC			RNAV1
TF	IGDOS							RNAV1
TF	HB509					MAX230		RNAV1
TF	HB506							RNAV1
TF	HB505							RNAV1
TF	HB503				1800			RNAV1
TF	LS				1200	MAX230		RNAV1
RWY05 Approach via LS								
IF	LS				1200	MAX230		RNAV1
TF	HB502				700			RNAV1
RWY05 Missed Approach								
CF	HB514	Y	049					RNP1
DF	HB507			L	900	MAX230		RNP1
HM	HB507	Y	229	R	900	MAX230		RNAV1
RWY05 Holding (outbound time: 1min)								
HM	HB510	Y	065	L	3900	MAX250		RNAV1
HM	UPKED	Y	350	L	3000	MAX250		RNAV1
HM	HB401	Y	323	L	Alt by ATC	MAX250		RNAV1
HM	HB402	Y	258	L	Alt by ATC	MAX250		RNAV1
HM	MIBAG	Y	175	R	Alt by ATC	MAX250		RNAV1

RWY23 Arrival LUVMO-19A								
IF	LUVMO							RNAV1
TF	PIGAM							RNAV1
TF	HB405							RNAV1
TF	BIKOB							RNAV1
TF	HB506							RNAV1
TF	HB604				↑2100 ↓2400			RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Arrival LARUN-19A								
IF	LARUN							RNAV1
TF	ONOLO				↓4500			RNAV1
TF	UPKED				3000			RNAV1
TF	HB605				↑2700 ↓3000			RNAV1
TF	LS				↑2700			RNAV1
TF	HB604				↑2100 ↓2400			RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Arrival LARUN-18A(by ATC)								
IF	LARUN							RNAV1
TF	ONOLO				↓4500			RNAV1
TF	UPKED				3000			RNAV1
TF	HB605				↑2700 ↓3000			RNAV1
TF	HB512					MAX230		RNAV1
TF	HB606				900			RNAV1
RWY23 Arrival KETOV-19A								

IF	KETOV							RNAV1
TF	HB401				↓3600			RNAV1
TF	HRB							RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Arrival KETOV-18A(by ATC)								
IF	KETOV							RNAV1
TF	HB401				↓3600			RNAV1
TF	HB512					MAX230		RNAV1
TF	HB606				900	MAX230		RNAV1
RWY23 Arrival IGADO-19A								
IF	IGADO							RNAV1
TF	HB402				↓3600			RNAV1
TF	HRB							RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Arrival IGADO-18A(by ATC)								
IF	IGADO							RNAV1
TF	TOGEP							RNAV1
TF	GUXEN				900	MAX230		RNAV1
RWY23 Arrival BUBDI-19A								
IF	BUBDI							RNAV1
TF	MIBAG				5100 or by ATC			RNAV1
TF	IGDOS							RNAV1
TF	HB506							RNAV1
TF	HB604				↑2100 ↓2400			RNAV1
TF	HB507				↑900	MAX230		RNAV1

RWY23 Arrival BUBDI-18A(by ATC)								
IF	BUBDI							RNAV1
TF	SULTI							RNAV1
TF	GUXEN				900	MAX230		RNAV1
RWY23 Arrival ONINA-19A								
IF	ONINA							RNAV1
TF	MIBAG				5100 or by ATC			RNAV1
TF	IGDOS							RNAV1
TF	HB506							RNAV1
TF	HB604				↑2100 ↓2400			RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Arrival ONINA-18A(by ATC)								
IF	ONINA							RNAV1
TF	HB404							RNAV1
TF	HB652							RNAV1
TF	HB507				↑900	MAX230		RNAV1
RWY23 Approach via GUXEM								
IF	GUXEN				900	MAX230		RNAV1
TF	HB602				650			RNAV1
RWY23 Approach via HB507								
IF	HB507				↑900	MAX230		RNAV1
TF	HB603				650			RNAV1
TF	HB602				650			RNAV1
RWY23 Approach via HB606								
IF	HB606				900	MAX230		RNAV1

TF	HB602				650			RNAV1
RWY23 Missed Approach								
CF	HB607	Y	229					RNP1
DF	HB507			R	↑900	MAX230		RNP1
HM	HB507	Y	049	L	900	MAX230		RNAV1
RWY23 Holding (outbound time:1min)								
HM	HB405	Y	065	L	Alt by ATC	MAX250		RNAV1
HM	UPKED	Y	350	L	3000	MAX250		RNAV1
HM	HB401	Y	323	R	Alt by ATC	MAX250		RNAV1
HM	HB402	Y	258	R	Alt by ATC	MAX250		RNAV1
HM	MIBAG	Y	175	R	Alt by ATC	MAX250		RNAV1

ZYHB AD 2.23 其它资料

ZYHB AD 2.23 Other information

机场全年有鸟类活动，季节性明显，迁徙季节主要集中在3月至5月、8月至10月。管理部门已采取措施降低鸟类活动对飞行的影响。鸟类活动的季节性规律如下表所示：

Activities of bird flocks are found in the whole year. The migration season is mainly concentrated from March to May, and August to October. Aerodrome Authority resorts to dispersal methods to reduce bird activities. The details of bird activities as follows:

Migratory Season	Direction of activity	Flight altitude(m)	Characteristic
November-April(Next year)	Airfield area and airside	0-1000	Large /Several
The whole year	Airfield area and airside	0-200	Medium / Several



The whole year	Airfield area and airside	0-60	Medium / Several
May-October	Airfield area and airside	0-1000	Medium / Several
April-October	Airfield area and airside	0-2000	Small /Group
The whole year	Airfield area and airside	0-60	Medium /Group
The whole year	Airfield area surrounding	0-5	Large /Several
March-May, August-October	Airfield area and airside	Above 150	Small /Group
April-September	Airfield area surrounding	0-350	Small /Individuals
April-September	Airfield area and airside	0-3000	Medium /Group
March-April	Airfield area and airside	Above 200	Medium /Group
April-October	Airfield area surrounding	0-2000	Large /Group