

**ZYHB AD 2.1 机场地名代码和名称 Aerodrome location indicator(ICAO / IATA) and name**

ZYHB/HRB-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 RWY05L/23R
2	机场基准点与城市的位置关系 Direction and distance from city	242° GEO, 33km from Harbin Railway Station
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	152.9 m/28.2°C(JUL)/-24.9°C(JAN)
4	机场标高位置的大地水准面波幅 Geoid undulation at AD ELEV PSN	
5	磁差（测量年份）及年变率 VAR(Year)/Annual change	11°15'W(2024)/-5'06"
6	机场管理部门、地址、电话、传真、AFS 地址、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	机场开放时间 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	航空情报服务讲解室 AIS Briefing Office	HS or O/R
5	空中交通服务报告室 ATS Reporting Office	HS or O/R

6	气象服务讲解室 MET Briefing Office	HS or O/R
7	空中交通服务 Air Traffic Service	HS or O/R
8	加油服务 Fuelling	HS or O/R
9	地勤服务 Handling	HS or O/R
10	安保服务 Security	HS or O/R
11	除冰服务 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(20-30t), baggage dollies, pallet, container trailer
2	燃油牌号 Fuel types	Jet Fuel No.3
3	滑油牌号 Oil types	Nil
4	加油设施/能力 Fuelling facilities & Capacity	Refueling truck and hydrant cart: 14 litres/sec
5	除冰设施 De-icing facilities	de-icing apron(Stands Nr. 301-303, 311-313, 402-407, 541-545,701-705), 18 aircraft de-icers, de-icing fluid(FCY-1Bio+), anti icing fluid(FCY-EGIV)
6	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; Shenzhen airlines hangar, heating and specialized refrigeration facilities, available for two A320.
7	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
8	备注 Remarks	Ground power unit, ground air supply unit

**ZYHB AD 2.5 旅客设施 Passenger facilities**

1	宾馆 Hotels	At AD and in the city
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2	餐饮 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: 86-451-96368
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, medicament reinforcement car, 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 B747 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 and 3 landing gear are damaged simultaneously.

**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 Seasonal availability/Types of clearing equipment	All seasons snow ploughs, snow slingers, snow fluid truck, flight area ground surface de-icers
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	道面 Surface	CONC
		强度 Strength	PCR 1940/R/C/W/T : Stands Nr. 518-520 PCR 1060/R/B/W/T : Stands Nr. 508-514 PCR 990/R/B/W/T : Stands Nr. 515-517 PCR 980/R/B/W/T : Stands Nr. 499-507

			PCR 950/R/A/W/T : Stands Nr. 521-527 PCR 950/R/B/W/T : Stands Nr. 541, 542 PCR 930/R/A/W/T : Stands Nr. 546 PCR 920/R/A/W/T : Stands Nr. 30-35, 39-48, 301-305, 543-545 PCR 910/R/B/W/T : Stands Nr. 36-38 PCR 860/R/A/W/T : Stands Nr. 352-355, 406, 407, 429-433, 533-540, 705, 706 PCR 850/R/A/W/T : Stands Nr. 02-10, 19-21 PCR 830/R/A/W/T : Stands Nr. 528-532 PCR 770/R/A/W/T : Stands Nr. 307-313 PCR 660/R/A/W/T : Stands Nr. 314-351, 402-405, 415-428, 701-704 PCR 570/R/A/W/T : Stands Nr. Y01-Y04
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	62m : B18, C6 56m : E5-E9 54.75m : E2 54m : B17, E3, E4 51.9m : B2 48m : A1, B3-B6, B8-B10, B14-B16, C1-C5, V3, V4 44m : D2, D3, D9, V, V0-V2 42.75m : V9 41m : B7 40.2m : B1 39.5m : E10 38.6m : E1 37m : B13 34m : B11, B12 33.5m : D1, D10 28.5m : A0, A2, A7, A8 28m : C9 26m : B20 24.5m : C8 24m : C12-C14, S, V6 23.5m : C7, C10 23m : A, A3, A5, A6, B, C, D, D4-D8, E, G, H1, H2, H7-H9, S1, S2, T1, T2, U1, U2, V5, V7, V8, W, W5, W11, Y 22.75m : C11 22.5m : B19 15m : V10, V12, V13, W1-W4, W9, W10
		道面 Surface	ASPH : A(N of TWY B16), A0-A3, A5-A8, B10-B13, Y CONC : A(S of TWY B18, BTN B16 & B18), B, B1-B9, B14-B20, C, C1-C14, D, D1-D10, E, E1-E10, G, H1, H2, H7-H9, S, S1, S2, T1, T2, U1, U2, V, V0-V10, V12, V13, W, W1-W5, W9-W11

		强度 Strength	PCR 1270/F/B/W/T : Y PCR 1260/R/A/W/T : B11 PCR 1220/R/B/W/T : B12, B13 PCR 1170/R/B/W/T : V, V0-V2 PCR 1120/R/A/W/T : B8, B14 PCR 1110/R/B/W/T : A(N of TWY B16, BTN B16 & B18), A0, A7, A8 PCR 1100/R/A/W/T : B4 PCR 1070/R/A/W/T : B5-B7 PCR 970/R/A/W/T : B1-B3, C3-C5, S, S1, S2, V5-V8 PCR 960/F/B/W/T : A1 PCR 960/R/B/W/T : B(N of B18), B9, B10 PCR 950/R/A/W/T : B15, B16, C1, C2 PCR 920/F/B/W/T : A2, A3, A5, A6 PCR 920/R/A/W/T : V4 PCR 910/R/A/W/T : B17, B18, C(N of C7), C6, C7, W(N of V9) PCR 890/R/A/W/T : V3 PCR 880/R/A/W/T : H1, H2, H7-H9, W(S of V9), W5, W11 PCR 870/R/A/W/T : A(S of TWY B18), B(S of B18), B19, B20, C(S of C7), C8-C14, D, D1-D3, D9, D10, E, E1-E10, G, T1, T2, U1, U2 PCR 830/R/A/W/T : D4-D8 PCR 820/R/A/W/T : V9 PCR 690/R/A/W/T : V10, V12, V13, W1-W4, W9, W10
3	高度表校正点的位置及其标高 ACL location and elevation	Nil	
4	VOR 校正点 VOR checkpoints	Nil	
5	INS 校正点 INS checkpoints	Nil	
6	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 of TWY and RWY. Aircraft stand identification sign boards at stands Nr. 02-10, 19-21, 30-48, 307-355, 402-407, 415-433, 499-512, 521-528, 533-540, 546, 701-705. Guide lines at all aprons. Marshalling assistance for all aircraft stands.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	跑道标志 RWY markings	THR, RWY designation, edge line, RWY center line, TDZ, aiming point

		跑道灯光 RWY lights	RTHL, WBAR(05R, 23L), REDL, RCLL, RTZL(05R), RENL
		滑行道标志 TWY markings	Edge line, center line, No-entry, intermediate holding position
		滑行道灯光 TWY lights	Edge line lights, center line lights(A, A0-A3, A5-A8, D, D1-D10, Y), No-entry bar(A1-A3, A5-A7)
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Runway guard lights: A0, A1, A8, Y	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	Nil	

ZYHB AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对机场 ARP) Obstacles within a circle with a radius of 15km (centered on the ARP)					
障碍物名称 或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志, 灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
1	2	3	4	5	6
Pole 001	Pole	040/2204	157.7		RWY05L departure, RNAV departure
Trees 002	Trees	040/2617	152.9		RWY05L take-off path
Pole 003	Pole	040/2914	162.3		RWY05L take-off path
Trees 004	Trees	043/2364	148.5		RWY05L take-off path
Pole 005	Pole	044/1898	139.9	RED/LIL/FLOOD	RWY05L take-off path
Pole 006	Pole	044/1940	142.1	RED/LIM/STROB E	RWY05L take-off path
Trees 007	Trees	046/3016	155.0		RWY05L take-off path
Antenna 008	Antenna	047/3088	164.8	WHITE/LIM/STR OBE	RWY05L RNAV departure; RWY05L take-off path

半径 15 千米内主要障碍物 (相对机场 ARP)

Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志, 灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Trees 009	Trees	049/1973	140.2		RWY05L take-off path
Trees 010	Trees	049/1975	140.5		RWY05L take-off path
Antenna 011	Antenna	055/8561	176.7		RWY23R GP INOP, VOR/DME final approach
Antenna 012	Antenna	088/8066	224.8		RWY05R RNAV departure
BLDG 013	BLDG	157/1553	181.7		
BLDG 014	BLDG	159/1572	181.1		RWY05R take-off path
BLDG 015	BLDG	176/784	173.8	RED/LIM/STROB E	RWY23L GP INOP final approach
BLDG 016	BLDG	183/862	173.8	RED/LIM/STROB E	RWY05R take-off path
Antenna 017	Antenna	194/11290	245.9		Circling CAT C
Trees 018	Trees	199/2003	157.9		RWY05R take-off path
Trees 019	Trees	199/2004	157.8		RWY05R take-off path
Trees 020	Trees	199/2025	157.1		RWY05R take-off path
Trees 021	Trees	199/2025	157.5		RWY05R take-off path
Trees 022	Trees	201/1876	153.7		RWY05R take-off path
Trees 023	Trees	201/1878	153.6		RWY05R take-off path
Trees 024	Trees	202/1860	154.0		RWY05R take-off path

半径 15 千米内主要障碍物 (相对机场 ARP)

Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类 型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志, 灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Trees 025	Trees	202/1863	154.0		RWY05R take-off path
TRANSMISSION _LINE 026	TRANSMISSION_L INE	203/1918	151.0		RWY05R take-off path
Antenna 027	Antenna	205/2274	150.0		RWY05R take-off path
TRANSMISSION _LINE 028	TRANSMISSION_L INE	207/2123	147.6		RWY05R take-off path
Pole 029	Pole	213/1309	171.0	RED/LIL/FLOOD	RWY05R departure, RNAV departure
TRANSMISSION _LINE 030	TRANSMISSION_L INE	213/10895	228.8		RWY23L RNAV departure
Antenna 031	Antenna	219/10858	227.5		RWY23L take-off path
Antenna 032	Antenna	220/11555	241.2		RWY05L VOR/DME final approach; RWY23L take-off path
TRANSMISSION _LINE 033	TRANSMISSION_L INE	220/13575	228.8		RWY23L departure
Antenna 034	Antenna	222/5725	156.7	RED/LIL/FLOOD	RWY05R ILS/DME CAT II final approach
Pole 035	Pole	223/2763	171.8	RED/LIL/FLOOD	RWY23R departure, RNAV departure
Pole 036	Pole	223/3524	163.3	RED/LIL/FLOOD	RWY23L ILS/DME final approach
Antenna 037	Antenna	224/6395	158.8	RED/LIL/FLOOD	RWY23L take-off path
Trees 038	Trees	224/7092	167.7		RWY23L take-off path



半径 15 千米内主要障碍物 (相对机场 ARP)

Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志, 灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Trees 039	Trees	224/7096	167.8		RWY23L take-off path
Trees 040	Trees	224/7096	167.9		RWY23L take-off path
Trees 041	Trees	224/7128	169.0		RWY23L take-off path
Trees 042	Trees	224/7128	169.3		RWY23L take-off path
Trees 043	Trees	224/7146	169.9		RWY23L take-off path
Trees 044	Trees	224/7285	173.8		RWY23L take-off path
Pole 045	Pole	225/6290	158.3	RED/LIL/FLOOD	RWY23L take-off path
Pole 046	Pole	225/6299	158.5	RED/LIL/FLOOD	RWY23L take-off path
Pole 047	Pole	225/6440	159.0	RED/LIL/FLOOD	RWY05R ILS/DME CAT A/B final approach
Pole 048	Pole	225/6499	159.2	RED/LIL/FLOOD	RWY05R ILS/DME CAT C/D final approach
Antenna 049	Antenna	226/1262	144.8	RED/LIL/FLOOD	RWY05L ILS/DME final approach
Pole 050	Pole	226/3381	166.2	RED/LIL/FLOOD	RWY23R take-off path
Pole 051	Pole	227/5943	184.8	RED/LIL/FLOOD	
Antenna 052	Antenna	228/4341	184.9	RED/LIM/STROB E	RWY23R take-off path
Antenna 053	Antenna	228/4342	184.9	RED/LIM/STROB E	RWY23R take-off path
Antenna 054	Antenna	228/4352	184.9	RED/LIM/STROB E	RWY05L GP INOP final approach

半径 15 千米内主要障碍物 (相对机场 ARP)

Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类 型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志, 灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Antenna 055	Antenna	229/7492	183.4		RWY23L departure, RNAV departure
Antenna 056	Antenna	229/8146	178.5		RWY05R GP INOP final approach behind SDF
Moving OBST 057	Moving OBST	235/2295	158.7		RWY23R take-off path
Trees 058	Trees	235/3924	175.7		RWY23R take-off path
Trees 059	Trees	236/3915	175.2		RWY23R take-off path
WINDMILL 060	WINDMI LL	255/14142	287.0		RWY23R departure
WINDMILL 061	WINDMI LL	258/14001	287.4		Circling CAT D
Pole 062	Pole	286/1572	245.3		Circling CAT A/B
Pole 063	Pole	337/415	162.9	RED/LIL/FLOOD	RWY23R ILS/DME CAT A/B final approach
Pole 064	Pole	345/436	162.6	RED/LIL/FLOOD	RWY23R ILS/DME CAT C/D final approach

半径 15 千米-50 千米内主要障碍物 (相对机场 ARP)

Obstacles between two circles with the radius of 15km and 50km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类 型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志、灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Antenna 065	Antenna	021/18604	201		RWY23L/R RNAV initial approach

半径 15 千米-50 千米内主要障碍物 (相对机场 ARP)

Obstacles between two circles with the radius of 15km and 50km (centered on the ARP)

障碍物名称 或编号 Obstacle ID/ Designation	障碍物类 型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或 (高) Elevation /(Height) (m)	障碍物标志、灯光 类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及 起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
TRANSMISSION _LINE 066	TRANSMISSION_L INE	053/16831	259		RWY23L/R base turn, RNAV ILS/DME intermediate approach
BLDG 067	BLDG	053/25304	226		RWY23L RNAV initial approach
TRANSMISSION _LINE 068	TRANSMISSION_L INE	056/16166	258		RWY23L/R intermediate approach RWY05R RNAV departure turn
BLDG 069	BLDG	057/27242	367		RWY23L/R RNAV initial approach
BLDG 070	BLDG	072/24381	283		RWY23L/R racetrack, RNAV initial approach
TOWER 071	TOWER	079/35732	480		MSA sector
Antenna 072	Antenna	229/16963	242		RWY05R GP INOP final approach
WINDMILL 073	WINDMILL	245/25673	324		RWY23L RNAV departure turn
Remarks:					

## ZYHB AD 2.11 提供的气象情报、气象观测和报告

## Meteorological information provided &amp; meteorological observations and reports

提供的气象情报 Meteorological information provided		
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;9h, 24h;3h, 6h
4	趋势预报及发布间隔	trend 1h

	Trend forecast/Interval of issuance	
5	所提供的讲解或咨询服务 Briefing/Consultation provided	Briefing provided: P, T
6	飞行文件及其使用语言 Flight documentation/Language(s) used	Chart, international MET codes, abbreviated plain language text;Ch,En
7	讲解或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	Briefing provided: Synoptic charts, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data
8	提供气象情报的辅助设备 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	其他信息 Additional information	Nil
气象观测和报告 Meteorological observations and reports		
1	机场观测类型与频率、自动观测设备 Type & frequency of observation /Automatic observation equipment	Hourly plus special observation/Yes
2	气象报告类型及所包含的补充资料 Type of MET Report/Supplementary information included	METAR, SPECI
3	观测系统及安装位置 Observation system/Site(s)	RVR EQPT A: 100m SE of 05L/23R RCL, 397m inward THR05L; B: 110m SE of 05L/23R RCL, 1573m inward THR05L; C: 100m SE of 05L/23R RCL, 443.5m inward THR23R; D: 110m SE of 05R/23L RCL, 335m inward THR05R; E: 110m SE of 05R/23L RCL, 1785m inward THR05R; F: 110m SE of 05R/23L RCL, 345m inward THR23L; SFC wind sensors 05L: 105m SE of 05L/23R RCL, 382m inward THR05L; 05L/23R RWY center: 100m SE of 05L/23R RCL, 1560m inward THR05L; 23R: 105m SE of 05L/23R RCL, 398.5m inward THR23R; 05R: 105m SE of 05R/23L RCL, 382m inward THR05R; 05R/23L RWY center: 100m SE of 05R/23L RCL, 1785m inward THR05R; 23L: 100m SE of 05R/23L RCL, 345m inward THR23L; Ceilometer 05L: 105m SE of 05L/23R RCL, 397m inward THR05L;

		23R: 105m SE of 05L/23R RCL, 413.5m inward THR23R; 05R: 05R/23L RCL, 910m outward THR05R; 23L: 05R/23L RCL, 910m outward THR23L.
4	观测系统的工作时间 Hours of operation for meteorological observation system	H24
5	气候资料 Climatological information	Climatological tables AVBL
6	其他信息 Additional information	Nil

ZYHB AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 RWY Designator	真方位和 磁方位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度、跑道和停 止道道面 RWY strength/ Surface of RWY /SWY	跑道入口坐标、 跑道末端坐标、 跑道入口大地水 准面波幅 THR coordinates & RWY end coordinates & THR geoid undulation	跑道入口标高和 精密进近跑道接 地带最高标高 THR elevation & highest elevation of TDZ of precision APP RWY	跑道和停止道坡 度 Slope of RWY/SWY
1	2	3	4	5	6	7
05L	039.43° GEO 051° MAG	3200×45	PCR 1390/R/B/W/T ASPH/-	Nil	THR 139.3m TDZ 139.3m	-0.18%(110m)/-0.3%(100m)/-0.24%(380m)/-0.17%(180m)/-0.07%(410m)/-0.14%(70m)/-0.29%(140m)/-0.2%(240m)/-0.2%(400m)/-0.1%(400m)/-0.15%(670m)/-0.1%(100m)

跑道号码 RWY Designator	真方位和 磁方位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度、跑道和停 止道道面 RWY strength/ Surface of RWY /SWY	跑道入口坐标、 跑道末端坐标、 跑道入口大地水 准面波幅 THR coordinates & RWY end coordinates & THR geoid undulation	跑道入口标高和 精密进近跑道接 地带最高标高 THR elevation & highest elevation of TDZ of precision APP RWY	跑道和停止道坡 度 Slope of RWY/SWY
1	2	3	4	5	6	7
23R	219.43° GEO 231° MAG	3200×45	PCR 1390/R/B/W/T ASPH/-	Nil	THR 134.0m TDZ 135.3m	0.1%(100m)/0.15 %(670m)/0.1%(4 00m)/0.2%(400m )0.2%(240m)/0.2 9%(140m)/0.14% (70m)/0.07%(410 m)/0.17%(180m)/ 0.24%(380m)/0.3 %(100m)/0.18%( 110m)
05R	039.43° GEO 051° MAG	3600×45	PCR 880/R/A/W/T CONC/-	Nil	THR 152.9m TDZ 152.9m	-0.35%(1672m)/- 0.33%(30m)/-0.4 5%(1078m)/-0.67 %(30m)/-0.33%( 30m)/-0.33%(30 m)/0%(30m)/-0.3 3%(30m)/0%(670 m)
23L	219.43° GEO 231° MAG	3600×45	PCR 880/R/A/W/T CONC/-	Nil	THR 141.5m TDZ 142.3m	0%(670m)/0.33% (30m)/0%(30m)/0 .33%(30m)/0.33 %(30m)/0.67%(3 0m)/0.45%(1078 m)/0.33%(30m)/0 .35%(1672m)
跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区 长宽 RESA dimensions (m)	拦阻系统的 位置及描述 Location & Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
05L	Nil	Nil	3320×300	240×150	Nil	Nil

跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区 长宽 RESA dimensions (m)	拦阻系统的 位置及描述 Location& Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
23R	Nil	Nil	3320×300	240×150	Nil	Nil
05R	Nil	Nil	3720×280	240×150	Nil	Nil
23L	Nil	Nil	3720×280	240×150	Nil	Nil
Remarks: Distance between RCL of RWY05L/23R and RCL of RWY05R/23L is 760m; THR23L is 800m south of THR05L.						

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
05L	3200	3200	3200	3200	Nil
23R	3200	3200	3200	3200	Nil
23R	2969	2969	2969	NOT AVBL	FM A1
05R	3600	3600	3600	3600	Nil
05R	3010	3010	3010	NOT AVBL	FM D9
23L	3600	3600	3600	3600	Nil
23L	3505	3505	3505	NOT AVBL	FM D2
23L	3010	3010	3010	NOT AVBL	FM D3

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

跑道 号码 RWY Desig nator	进近灯 类型、长 度、强度 APCH LGT type/ LEN/ /INTST	入口灯 颜色、翼 排灯 THR LGT colour/ WBAR	目视进近坡度 指示系统类 型、位置、仰 角、跑道入口 最低眼高 Type of VASIS/Position /Angle/MEHT	接地 带 灯长 度 TDZ LGT LEN	跑道中线灯长度、 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
05L	PALS CAT I SFL 720 m VRB LIH	GREEN Nil	PAPI LEFT 340m inward THR05L 3° 15.0m	Nil	3200 m spacing 30m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3200 m spacing 60m 0-2600m, WHITE 2600-3200m, YELLOW VRB LIH	RED	Nil
23R	PALS CAT I SFL 900 m VRB LIH	GREEN Nil	PAPI LEFT 350m inward THR23R 3° 17.3m	Nil	3200 m spacing 30m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3200 m spacing 60m 0-2600m, WHITE 2600-3200m, YELLOW VRB LIH	RED	Nil
05R	PALS CAT II SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 479m inward THR05R 3° 21.2m	900 m	3600 m spacing 15m 0-2700m, WHITE 2700-3300m, RED/WHITE 3300-3600m, RED VRB LIH	3600 m spacing 60m 0-3000m, WHITE 3000-3600m, YELLOW VRB LIH	RED	Nil
23L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 445m inward THR23L 3° 21.2m	Nil	3600 m spacing 15m 0-2700m, WHITE 2700-3300m, RED/WHITE 3300-3600m, RED VRB LIH	3600 m spacing 60m 0-3000m, WHITE 3000-3600m, YELLOW VRB LIH	RED	Nil
Remarks: Nil								



**ZYHB AD 2.15 其它灯光,备份电源 Other lighting, secondary power supply**

1	机场灯标或识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation	Nil
2	着陆方向标和风向标位置和灯光 LDI/ WDI location and LGT	WDI: 05L: L of RWY, 359m inward THR05L, LGT; 23R: L of RWY, 315m inward THR23R, LGT; 05R: L of RWY, 400m inward THR05R, LGT; 23L: L of RWY, 400m inward THR23L, LGT.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: blue edge line lights TWYs A, A0-A3, A5-A8, D, D1-D10, Y: green center line lights
4	备份电源及转换时间 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 TLOF and/or FATO elevation	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

空域名称和水平范围 Designation and lateral limits		垂直范围 Vertical limits	空域分类 Airspace class	空中交通服务单位 呼号和使用语言 ATS unit callsign Language	工作时间 Hours of applicability	备注 Remarks
1	2	3	4	5	6	7
Harbin airport control area	The area surrounded by the all of THRs as the center, the radius of 13 km arc and tangent line between adjacent 2 arcs.	QNH 900m or below				
Harbin tower control area	The area surrounded by the all of THRs as the center, the radius of 13 km arc and tangent line between adjacent 2 arcs.	QNH 900m or below				
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	N445448E1244818-N463400E1245430-N462956E1262711-N455748E1272444-N450146E1271037-N442931E1261506-N443022E1260739-N443156E1255351-N443246E1254623-N445448E1244818	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 Callsign	频率 Frequency (MHz)	卫星话音通信 号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
ATIS		127.4			H24	D-ATIS available
APP	Harbin Approach	APP01:119.65 (127.75)			H24	
		APP02:119.05 (127.75)			by ATC	

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星话音通信 号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
		APP03:120.65 (127.75)			by ATC	
TWR	Harbin Tower	TWR01:118.7 (118.1)			H24	
		TWR02:118.325 (118.1)			by ATC	
GND	Harbin Ground	GND01:121.85 (121.725)			by ATC	DCL available
		GND02:121.775 (121.725)			by ATC	DCL available
APN	Harbin Apron	APN01(N):121.95 (121.55)			H24	
		APN02(S):121.625 (121.55)			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

设施名称及类型、磁差、支持运行类别、 Name and type of aid, VAR, Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标 及相对位置 Coordinates of transmitting antenna/ Position	DME 发射 天线标高 Elevation of DME transmitting antenna	备注 Remarks
1	2	3	4	5	6	7
Harbin VOR/DME	HRB	112.5 MHz CH 72X	H24	N45°37.6' E126°15.6' 065°MAG/825m FM RWY05L/23R center	137 m	
Shuiquan NDB	LS	445 kHz	H24	N45°27.0' E126°02.7' 231°MAG/23500m FM RWY05L THR		

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR, Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作 时间 Hours of operation	发射天线坐标 及相对位置 Coordinates of transmitting antenna/ Position	DME 发射 天线标高 Elevation of DME transmitting antenna	备注 Remarks
LMM 05L	L	220 kHz	H24	N45°36.4' E126°13.8' 231°MAG/1000m FM THR05L		U/S
OM 05L		75 MHz		231°MAG/8500m FM THR05L		
LOC 05L ILS CAT I	ILL	110.3 MHz		051°MAG/295m FM RWY05L end		Beyond -20° of front course U/S
GP 05L		335.0 MHz		115m E of 05L/23R RCL, 337m inside THR05L		Angle 3° RDH 16.2m
DME 05L	ILL	CH 40X (110.3 MHz)			151m	Co-located with GP 05L
LOM 23R	MJ	417 kHz	H24	N45°40.9' E126°19.3' 051°MAG/6900m FM THR23R		
LMM 23R	M	202 kHz	H24	N45°38.4' E126°16.2' 051°MAG/1000m FM THR23R		
LOC 23R ILS CAT I	IMJ	109.9 MHz		231°MAG/595m FM RWY23R end		
GP 23R		333.8 MHz		125m E of 05L/23R RCL, 310m inside THR23R		Angle 3° RDH 16.5m
DME 23R	IMJ	CH 36X (109.9 MHz)			147m	Co-located with GP 23R
IM 05R		75 MHz	H24	231°MAG/340m FM THR05R		
LOC 05R ILS CAT II	ICC	111.1 MHz	H24	051°MAG/320m FM RWY05R end		
GP 05R		331.7 MHz	H24	120m E of 05R/23L RCL, 326m inside THR05R		Angle 3°, RDH 16.8 m

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR, Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作 时 间 Hours of operation	发射天线坐标 及相对位置 Coordinates of transmitting antenna/ Position	DME 发射 天线标高 Elevation of DME transmitting antenna	备注 Remarks
DME 05R	ICC	CH 48X (111.1 MHz)	H24	125m E of 05R/23L RCL, 327m inside THR05R	157m	Co-located with GP 05R
LOC 23L ILS CAT I	IDG	110.7 MHz	H24	231°MAG/320m FM RWY23L end		
GP 23L		330.2 MHz	H24	120m E of 05R/23L RCL, 304m inside THR23L		Angle 3°, RDH 16.3 m
DME 23L	IDG	CH 44X (110.7 MHz)	H24	125m E of 05R/23L RCL, 306m inside THR23L	147m	Co-located with GP 23L

ZYHB AD 2.20 本场规定

ZYHB AD 2.20 Local aerodrome 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 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。

2. 跑道和滑行道的使用

2.1 跑道运行规定

2.1.1 跑道起飞、着陆使用规定

2.1.1.1 05L/23R 跑道进、出港混合运行。

2.1.1.2 05R/23L 跑道进、出港混合运行。

2.1.1.3 进出港高峰时两条跑道使用隔离平行运行模式用于进出港。

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 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. Use of runways and taxiways

2.1 General rules for the use of runways

2.1.1 Regulations on the use of runways for take off and landing

2.1.1.1 05L/23R is used for departure and arrival.

2.1.1.2 05R/23L is used for departure and arrival.

2.1.1.3 During peak arrival and departure times, the two runways operate in segregated parallel mode for both

- 2.1.2 平行跑道同时仪表运行规则

2.1.2 Rules for simultaneous instrument operations on parallel runways
- 2.1.2.1 05L/23R 跑道与 05R/23L 跑道为一组，提供隔离平行运行。

2.1.2.1 Runways 05L/23R and 05R/23L are grouped together to provide segregated parallel operations.
- 2.1.2.2 05L/23L 跑道用于离港，05R/23R 跑道用于进港。

2.1.2.2 Runway 05L/23L is used for departures, while runway 05R/23R is used for arrivals.
- 2.2 可以通过机坪管制申请引导车和拖车服务

2.2 Follow-me vehicle service and towing service are available via Apron Control.
- 2.3 禁止航空器在 05L/23R 跑道上做 90°以上转弯。

2.3 Exceeding 90° turnaround on RWY 05L/23R is forbidden for all aircraft.
- 2.4 本场滑行道航空器翼展限制如下表：

2.4 TWY wing span limits

滑行道/TWYs	航空器翼展限制（m） /Wing span limits for aircraft(m)
D1, D10, E, E1, E10, G, H9, T1	<80
A, A0-A3, A5-A8, B, B1-B10, B14-B18, C, C1-C6, D, D2-D9, E2-E9, H1, H2, H7, H8, S, S1, S2, T2, U1, U2, V1(E of V0), V2(E of V0), V6-V8, W, W5, W11, Y	<65
V0, V1(W of V0), V3, V4	<52
B11-B13, B19, B20, C7-C14, V, V2(W of V0), V5, V9, V10, V12, V13, W1-W4, W9, W10	<36

- 2.5 翼展大于 52m（含）机型：禁止从滑行道 A8 进入 B16；禁止从滑行道 B16 进入 A8。

2.5 Aircraft with wing span not less than 52m is forbidden to: enter TWY B16 via TWY A8; enter TWY A8 via TWY B16.
- 2.6 本场 A3、A5、A6、D4、D5、D6、D7、D8 滑行道禁止 A340 系列、B747 系列。

2.6 TWY A3, A5, A6, D4, D5, D6, D7, D8 not available for aircraft type A340, B747.

2.7 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。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）。本场起飞航空器如需占用跑道执行暖车程序，必须开车前向机坪管制提出申请。

2.8 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，须提前通知塔台管制员（首次建立联系时）。

2.9 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。

2.10 首次联系 ATC 时，完成 DCL 的机组要向 ATC 复述使用跑道号和起始高度，需要语音放行的机组，应复诵完整的放行许可。

2.7 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 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). If departure aircraft needs to perform warm-up procedure and occupy RWY, it must apply to APN before starting.

2.8 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.

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

2.10 When connect with ATC at the first time, crew shall read back to ATC the RWY designation in use and initial altitude after completing DCL. Crews requiring voice clearance shall read back the complete clearance

**instruction.****2.11 转换使用跑道程序**

在转换使用跑道方向过程中，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。

**2.11 RWY change procedure:**

During the process of changing the direction of the runway in use, after the controller notifies pilot the wind direction and speed, if the aircraft cannot accept it due to performance limitations or other reasons, pilot shall immediately notify the controller.

**2.12 跑道等待位置及使用规定****2.12 Rules of RWY holding position**

2.12.1 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；

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

2.12.2 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；

2.12.2 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.

2.12.3 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。

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

2.12.4 本场 A0、A8 滑行道构型特殊，航空器通过上述滑行道进入跑道前注意观察跑道等待位置标志及跑道警戒灯，防止跑道侵入。

2.12.4 TWY A0 and A8 are special in configuration. Before entering runway through the above TWYs, aircraft shall pay attention to observe runway holding position signs and runway guard lights to prevent runway intrusion.

**2.13 垂直联络道使用规则****2.13 Rules for the use of vertical TWY**

2.13.1 A1 滑行道有离港航空器等待时，禁止航空器从后方通过

2.13.1 When departure aircraft is waiting on Taxiway A1, aircraft are prohibited passing from behind.

**2.13.2 非全跑道起飞的管制运行规定****2.13.2 Partial runway taking-off regulations**

2.13.2.1 本场离港航空器，如不能执行非全跑道起飞

2.13.2.1 If departure aircraft can not conduct partial



程序，需在开车前向管制单位报告；

runway taking-off procedures, flight crew shall report ATC before start-up.

2.13.2.2 管制单位可根据实际运行情况，决定是否使用非全跑道起飞管制程序。

2.13.2.2 ATC shall determine whether to use partial runway taking-off procedures or not according to the actual operation.

## 2.14 HS1-HS9 运行规则

## 2.14 Operational rules of HS1-HS9

2.14.1 HS1：位于 B15 与 B16 之间的 A、B 滑行道以及 C3 与 C4 之间的 B、C 滑行道区域。05L 号跑道运行时，该区域航空器运行量较大，冲突较多，航空器在该区域滑行时需注意观察。V7 滑行道上的离港航空器与 C 滑行道上的进港航空器、B 滑行道的离港航空器、A 滑行道上的离港航空器在 B16 移交点附近存在汇聚冲突，航空器在该区域滑行时需注意观察，必要时向管制员确认通过顺序。B15 滑行道与 A8 滑行道相连，航空器在进入 A 滑行道时特别注意观察道口、标志牌，避免连续滑行而误入运行跑道。

2.14.1 HS1: The area located in the TWY A, TWY B between B15 and B16; TWY B, TWY C between C3 and C4. During operate in RWY 05L, this area has a large transportation volume and more conflicts, the aircraft should pay attention to observation when taxiing in this area. Departing aircraft on Taxiway V7 may encounter convergence conflicts with arriving aircraft on Taxiway C, departing aircraft on Taxiway B, and departing aircraft on Taxiway A in the vicinity of the B16 handover point. Aircraft taxiing in this area should exercise caution and, if necessary, confirm the passing sequence with the controller. TWY B15 is connected to TWY A8, the aircraft should pay special attention to observe the crossing and the sign when entering TWY A to avoid taxiing continuous and straying into the operating runway.

2.14.2 HS2：位于 B12 与 B14 之间的 A 滑行道区域。23R 跑道运行时，离港航空器在经 B12、B13、B14 进入 A 滑行道前需确认对面方向无航空器，或需要向管制员确认通过顺序后快速通过，否则容易与经 A5、A6、A7 脱离跑道的航空器产生冲突。

2.14.2 HS2: The area located in the TWY A between B12 and B14. During operate in RWY 23R, departing aircraft must confirm that there are no aircraft in the opposite direction before entering TWY A via B12, B13 and B14, or need to confirm the passage sequence to ATC and pass quickly, otherwise it is easy to conflict

- 2.14.3 HS3: 位于 B4 和 B7 之间的 A 滑行道区域。05L 跑道运行时,经 A2 脱离跑道的航空器不要在此区域停留, 否则容易与 05L 跑道落地经 A2、A3 脱离跑道的航空器产生冲突。离港航空器在经 B4、B5、B6、B7 进入 A 滑行道前需确认对面方向无航空器, 或需要向管制员确认通过顺序后快速通过, 否则容易与脱离跑道的航空器产生冲突。
- 2.14.3 HS3: The area located in the TWY A between B4 and B7. During operate in RWY 05L, aircraft leaving the RWY via A2 should not stay in this area, otherwise it is easy to conflict with aircraft landing on RWY 05L via A2 and A3. Departing aircraft must confirm that there is no aircraft in the opposite direction before entering TWY A via B4, B5, B6, B7, or need to confirm the passage sequence to ATC and pass quickly, otherwise it is easy to conflict with the aircraft leaving the runway.
- 2.14.4 HS4: 位于 B1 和 B2 之间的 A 滑行道区域。23R 跑道运行时, 该区域航空器运行量较大, 冲突较多, 航空器在该区域滑行时需注意观察。B1 滑行道与 A0 滑行道相连, 在进入 A 滑行道时特别注意观察道口、标志牌, 避免连续滑行而误入运行跑道。
- 2.14.4 HS4: The area located in the TWY A between B1 and B2. During operate in RWY 23R, the aircraft in this area has a l large transportation volume and more conflicts, the aircraft should pay attention to observation when taxiing in this area. TWY B1 is connected with TWY A0, the aircraft should pay special attention to observe the crossing and sign when entering TWY A to avoid taxiing continuous and straying into the operating runway.
- 2.14.5 HS5: 位于 E2 与 D2 滑行道附近区域。23L 跑道运行时, E2 位置的离港航空器容易滑错过道口误入跑道, 航空器通过上述滑行道进入跑道前注意观察跑道等待位置标志及跑道警戒灯, 防止跑道侵入。
- 2.14.5 HS5: Located in the vicinity of TWY E2 and D2. When RWY 23L is in operation, departure aircraft at E2 may inadvertently taxi onto the RWY by mistake. Aircraft approaching the RWY via these TWYs should observe the RWY holding position signs and RWY guard lights to prevent RWY incursions.
- 2.14.6 HS6: 位于 E5 附近的 D 和 E 区域。05R 号单跑道向北运行时, 航空器从 E5 脱离会与 E 滑行道上的离港航空器在 E5 附近产生汇聚冲突, 在该区域滑
- 2.14.6 HS6: The area located in TWY D and E near E5. When operated in RWY 05R only, aircraft vacating from E5 may encounter convergence conflicts with departing

行时需注意观察，必要时向管制员确认通过顺序。

aircraft on TWY E near E5. Aircraft taxiing in this area should exercise caution and, if necessary, confirm the passing sequence with the controller.

2.14.7 HS7: 位于 E10 附近的 D 和 E 滑行道区域。05R 号单跑道向北运行时，航空器从 E10 进入 D 滑行道的航空器与 D 滑行道上的离港航空器在移交点 E10 附近产生汇聚冲突，在该区域滑行时需注意观察，通过上述滑行道进入跑道前注意观察跑道等待位置标志及跑道警戒灯，防止跑道侵入。

2.14.7 HS7: The area located in TWY D and E near E10. When operated in RWY 05R only, aircraft entering TWY D from E10 may encounter convergence conflicts with departing aircraft on TWY D near the handover point E10. Aircraft taxiing in this area should exercise caution and observe the RWY holding position signs and RWY guard lights before entering the RWY via these TWYs to prevent RWY incursions.

2.14.8 HS8: C14 与 U2 之间的 B、C 滑行道区域。05R 号单跑道向北运行时，沿 C 滑行道进入 U2 滑行道的离港航空器与沿 U1 滑行道进入 B 滑行道的进港航空器产生汇聚冲突，在该区域滑行时需注意观察，必要时向管制员确认通过顺序。

2.14.8 HS8: The area located in TWYs B and C between C14 and U2. When operated in RWY 05R only, departing aircraft on TWY C entering TWY U2 may encounter convergence conflicts with arriving aircraft on TWY U1 entering TWY B. Aircraft taxiing in this area should exercise caution and, if necessary, confirm the passing sequence with the controller.

2.14.9 HS9: 位于 C10 至 C11 之间的 B、C 滑行道区域。使用 23L 号跑道向南运行时，离港航空器在 B、C 滑行道的 T1、T2 外等待产生汇聚冲突，在该区域滑行等待时需注意观察，及时向管制员确认通过顺序。

2.14.9 HS9: The area located in TWYs B and C between C10 and C11. When RWY 23L is operated, departing aircraft waiting outside T1 and T2 on TWYs B and C may create convergence conflicts. Aircraft taxiing and waiting in this area should exercise caution and promptly confirm the passing sequence with the controller.

### 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 停机位使用限制:

## 3.2 Use of parking stands

停机位编号/Stand Nr.	翼展限制 (m) /Wing span limits(m)	进出方式/Enter or Exit
706	<80	Taxi in, Push back
03, 06, 38, 352-355, 429-433, 506	<65	Taxi in, Push back
301, 406, 407, 541, 545, 705	<65	Taxi in, Taxi out
Y01	<65	Tow in, Tow out
02, 04, 05, 33, 35, 505, 507	<52	Taxi in, Push back
532	<52	Push in, Taxi out
07-10, 19-21, 30-32, 34, 36, 37, 39-48, 314-319, 499-504, 508-514, 520-531, 533-540, 546	<36	Taxi in, Push back
302-305, 308-313, 320-351, 402-405, 415-428, 515-519, 542-544, 701-704	<36	Taxi in, Taxi out
Y02-Y04	<36	Tow in, Tow out
307	≤34.4	Taxi in, Taxi out

停机位编号/Stand Nr.	引导方式/Guidance
19-21,30-48,301-305,307-313, 314-355, 402-407, 415-433, 701-706	Guide in and out
02-10,499-546,Y01-Y04	Guide in

3.3 发动机试车, 需经机坪管制许可, 并在指定的地点进行。严禁在廊桥附近和客机坪试大车。

3.3 Engine run-ups are subject to Apron Control clearance, and shall be carried out at a designated location. Fast engine run-ups near boarding bridges or

3.4 在机坪范围内设有 26 个机坪等待点 (AH01-AH16、AH21-AH30), 36 个滑出等待点 (HP01-HP16、HP21-HP40), 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。

on apron are strictly forbidden.

3.4 There are 16 apron holding positions (AH01-AH16, AH21-AH30) and 16 taxi-out holding positions (HP01-HP16,HP21-HP40) 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 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, HP21-HP30	W to E	AH01-AH16	E to W
HP31, HP32, HP35, HP37, HP39	S to N		
HP33, HP34, HP36, HP38, HP40	N to S		

3.5 塔台和机坪地面管制范围:

05L/23R 塔台管制范围为: 机场飞行区内, A 滑行道 (含) 以东至 05L/23R 跑道、C7 道口以北的 05L/23R 跑道、滑行道、联络道区域。

05R/23L 塔台管制范围为: 机场飞行区内, D 滑行道 (含) 以东的 05R/23L 跑道、滑行道、联络道区域。

3.5 TWR and APN control area:

TWR control area of 05L/23R: within the airfield area, the area east of TWY A (inclusive) to RWY 05L/23R, the section of RWY 05L/23R north of intersection C7, as well as the TWYs and link TWYs in this region.

TWR control area of 05R/23L: within the airfield area, the area of RWY 05R/23L E of TWY D (inclusive), as

05L/23R 机坪管制范围为：机场飞行区内，T1 滑行道以北，除 05L/23R 塔台管制范围的其他地面管制范围。

05R/23L 机坪管制范围为：机场飞行区内，T1 滑行道（含）以南，除 05R/23L 塔台管制范围的其他地面管制范围。

3.6 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。

#### 4. 低能见度运行

4.1 低能见度起飞、使用 HUD 实施低能见度起飞和特殊批准的 I 类运行程序

4.1.1 在 RWY05L/23R、RWY05R/23L 可使用 HUD 实施特殊批准 I 类运行，在 RWY05L/23R 可使用 HUD 实施 RVR150m 低能见度起飞，在 RWY05R/23L 可实施 RVR200m 低能见度起飞。

##### 4.1.2 准备阶段天气条件

当能见度 1000m 或云高 90m，并呈下降趋势时，经检查确认机场具备保障条件，由空管塔台宣布启动低能见度运行准备阶段工作。

##### 4.1.3 实施阶段天气条件

well as the TWYs and link TWYs in this region.

APN control area of 05L/23R: within the airfield area, the area N of TWY T1, excluding the TWR control area for RWY 05L/23R and other ground control areas.

APN control area of 05L/23R: within the airfield area, the area S of TWY T1 (inclusive), excluding the TWR control area for RWY 05R/23L and other control areas.

3.6 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. Low visibility operation

4.1 Low visibility take-off, low visibility take-off based on HUD and Special CAT-I operation procedure

4.1.1 RWY 05L/23R & RWY05R/23L could operate Special CAT-I operation based on HUD, RWY 05L/23R could operate low visibility take-off with RVR 150m based on HUD, RWY05R/23L operate low visibility take-off with RVR 200m.

##### 4.1.2 Preparation

When VIS drop to 1000m, or ceiling decrease to 90m, with a deteriorating trend, the TWR shall initiate LVP preparatory phase after confirming airport readiness.

##### 4.1.3 Implementation

- 4.1.3.1 当跑道视程低于 550m 且不低于 450m 时, 或者云高低于 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。
- 4.1.3.1 When RVR is less than 550m but no less than 450m, or ceiling 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.
- 4.1.3.2 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实施 RWY05R/23L RVR200m 低能见度起飞。
- 4.1.3.2 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 for RWY05R/23L will be issued by TWR.
- 4.1.3.3 当跑道视程低于 400m 且不低于 150m 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 RWY05L/23R RVR150m 低能见度起飞。
- 4.1.3.3 When RVR is less than 400m but no less than 150m, aerodrome and ATC have the capabilities of LVP after confirming, implementation of low visibility take-off with RVR 150m base on HUD for RWY05L/23R will be issued by TWR.
- 4.1.4 结束阶段天气条件
- 4.1.4 Termination
- 4.1.4.1 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 RWY05L/23R HUD RVR150m 起飞运行。
- 4.1.4.1 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 RVR150m based on HUD for RWY05L/23R will be stopped by TWR.
- 4.1.4.2 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 RWY05R/23L RVR200m 起飞运行。
- 4.1.4.2 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 RVR200m for RWY05R/23L will be stopped by TWR.
- 4.1.4.3 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
- 4.1.4.3 When weather condition continues to be stable above RVR550m, or the airport is confirmed to have no

殊 I 类着陆运行。

guarantee conditions after inspection, implementation of special CAT-I operation based on HUD will be stopped by TWR.

4.1.4.4 所有跑道的跑道视程均达到 550m, 云高达到 60m 且主导能见度达到 800m, 并呈上升趋势时, 由空管塔台宣布结束低能见度运行。

4.1.4.4 When all RWY RVR reach 550m, ceiling reach 60m, prevailing visibility reach 800m and trends indicate improvement, low visibility operation termination will be issued by TWR.

4.1.5 需要执行 RVR200m 起飞、HUD RVR150m 起飞运行程序的航空器, 应主动向管制员报告。

4.1.5 Aircraft requiring take-off with RVR200m and take-off with RVR150m based on HUD shall report to ATC initiatively.

## 5. 直升机飞行限制, 直升机停靠区

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

无

Nil

## 6. 警告

## 6. 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.

## ZYHB AD 2.21 减噪程序

## ZYHB AD 2.21 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, 必须按照仪表飞行规则进行。

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

1.2 哈尔滨太平机场以 PBN 进离港飞行程序为主用, 为实现进离港分离且满足空域主导用户的限制条件, 根据跑道运行方向不同需指定部分航空器沿传统飞

1.2 PBN arrival and departure procedures are mainly used, but some of aircraft will be designated arrival by traditional procedures because other airspace user's



行程序进港。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 跑道 05L/R 运行时, G212 航路通过方向进港航空器按照 PIGAM-07A (by ATC) 程序进港准备; A588 航路万昌方向进港航空器按照 LARUN-08A (by ATC) 程序进港准备; A588 航路黑河方向进港航空器按照 BUBDI-08A (by ATC) 程序进港准备。B451 航路齐齐哈尔方向进港航空器按照 ONINA-01A 程序进港准备。如无法执行需向管制单位提前申请。

1.4 跑道 23L/R 运行时, A588 航路黑河方向进港航空器按照 BUBDI-11A 程序进港准备。B451 航路齐齐哈尔方向进港航空器按照 ONINA-18A (by ATC) 程序进港准备。如无法执行需向管制单位提前申请。

1.5 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。

1.6 重型机或者机型为 B757 的航空器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”/“B757”。

## 2. 起落航线

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)。

## 3. 仪表飞行程序

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：

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

1.3 When RWY 05L/R in used, aircraft arrival from TGO in G212 ready to use PIGAM-07A (by ATC); from LJB in A588 ready to use LARUN-08A (by ATC); from HEK in A588 ready to use BUBDI-08A (by ATC); from NDG in B451 ready to use ONINA-01A. If it is not possible to follow these procedures, apply in advance to the ATC.

1.4 When RWY 23L/R in used, aircraft arrival from HEK in A588 ready to use BUBDI-11A; from NDG in B451 ready to use ONINA-18A (by ATC). If it is not possible to follow these procedures, apply in advance to the ATC.

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

1.6 When heavy aircraft or B757 connect with Harbin approach or TWR at the first time, aircrew shall report the type as "HEAVY"/"B757" initiatively.

## 2. Traffic circuits

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. IFR flight procedures

As a result of the implementation of departure and arrival separation procedures, please follow the

- 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，雷达管制员为了调整飞行间隔或减少雷达引导的需要，要求航空器严格按照管制员指定的速度飞行。如未满足程序内限定或管制员指定的速度要求，导致不满足进近间隔要求，管制员有权随时终止进近。
- 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 在空域主导用户有活动时，离港航空器初始爬升阶段需在跑道西侧完成；进港航空器仪表进近阶段需在跑道西侧完成且三边不可延长。杜绝任何条件下偏离至跑道东侧。
- following flight regulations:
- 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. Radar controllers require aircraft to strictly adhere to the speeds specified by the controller in order to adjust flight spacing or reduce the need for radar guidance. If the specified speed requirements within the procedure or those designated by the controller are not met, resulting in insufficient approach spacing, the controller has the right to terminate the approach at any time.
- 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 When other airspace user in activity, the departure initial climb must be completed in the west of RWY; instrument approach must be completed on the west of RWY and downwind leg can not be extended. Do not deviation to the east side of the RWY under any condition.

**4. 雷达程序和/或 ADS-B 程序**

无

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

Nil

**5. 无线电通信失效程序**

参见 AIP GEN3.4.5 中的仪表飞行规则航空器地空双向无线电通信失效通用程序。

**5. Radio communication failure procedures**

Refer to AIP GEN3.4.5 general procedures for aircraft under instrument flight rule with air-ground two-way radio communication failure.

**6. 目视飞程序**

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。

**6. Procedures for VFR flights**

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**

无

**7. VFR route**

Nil

**8. 其它规定**

无

**8. Other regulations**

Nil

**ZYHB AD 2.23 其它资料****ZYHB AD 2.23 Other information****鸟情资料****Bird's information****1. 鸟击及动物侵入防范主要措施：****1. Bird Strike and Wildlife Intrusion Prevention****Measures:**

1.1 鸟击防范措施：使用生态治理、人工驱赶相结合方法开展鸟击防范工作。生态治理：控虫、控草、控水；人工驱赶：网捕、枪驱、声驱、光驱、味驱等。飞行区外实施巡查、驱赶、治水、毁巢、割草等鸟防措施。

1.1 Bird Strike Prevention: Combine ecological management and manual deterrence. Ecological Management: Control insects, vegetation, and water sources. Manual Deterrence: Use nets, guns, sound/light/odor deterrents, etc. Outside Flight Areas: Implement patrols, water management, nest removal, and grass cutting.

**1.2 动物侵入防范措施：开展飞行区、围界、货运区、****1.2 Wildlife Intrusion Prevention: Conduct inspections**

道口等区域巡视检查。机场区域设置动物捕捉笼、捕捉夹。

in flight zones, perimeter fences, cargo areas, and access points.Set up animal traps and cages in airport areas.

由于部分鸟类生活习性导致夜间有鸟类活动。

Some birds remain active at night due to their habits.

2. 主要危险鸟类及其它动物活动规律和特征

2. Key Hazardous Birds and Wildlife Activity Patterns

Species		Active Period	Residency Type	Flight Altitude(m)	Behavior
Birds	Magpie	Year-round	Resident	0-60	Group
	Shorebirds	Mar-May, Aug-Oct	Migratory	0-150	Group
	Barn Swallow/Red-rumped Swallow	Mar-May, Aug-Oct	Migratory	0-60	Group
	Sparrow	Year-round	Resident	0-30	Group
	Raptors (e.g., hawks)	Oct-Feb(Next year)	Mostly migratory, some resident	0-300	Solitary or in pairs
	Skylark/Hoopoe	Apr-Oct	Migratory	0-30	Group
	Owl	Year-round	Resident	0-200	Solitary
	Crow	Year-round	Resident	0-300	Group
	Pigeon	Year-round	Resident	0-200	Group
Other Animals	Bats	May-Oct	-	0-30	Small groups
	Weasels/Rodents	Year-round	-	0	Solitary

3. 机场及周边地区鸟类迁徙活动规律

3. Bird Migration Patterns near the airport

迁徙路线：黑龙江三江平原、大兴安岭及小兴安岭（繁殖地）经兴凯湖、嫩江松花江流域（中转站）至辽东

Migration Route: Breeding grounds (Sanjiang Plain, Greater/Lesser Khingan Mountains) →

半岛、山东、黄河三角洲向东南（越冬地）。

Stopovers(Khanka Lake, Nenjiang-Songhua River Basin) → Wintering grounds (Liaodong Peninsula, Shandong, Yellow River Delta → Southeast).

活动规律：

Activity Patterns:

春季(4-6月)候鸟开始繁殖迁徙，迁徙路线为从南向  
北，主要包括鸻鹬类、燕类，部分短暂停栖后继续北，  
低空活动高度为 0-150m，迁徙时高度为 800 米以上。  
此外，本地留鸟筑巢繁殖，主要包括麻雀、斑鸠、乌  
鸦、喜鹊等。

Spring (Apr–Jun): Migratory birds (e.g., shorebirds, swallows) move north at low altitudes (0-150m) or high altitudes (>800m). Resident birds (sparrows, doves, crows, magpies) nest.

夏季(7-8月)以留鸟及夏候鸟为主。夏候鸟居多，主要  
包括：鹭类、燕类、鹌鹑、戴胜、鸻鹬类。

Summer (Jul–Aug): Dominated by resident and summer migratory birds (e.g., herons, swallows, quails, hoopoes).

秋季(9-11月)候鸟开始越冬迁徙，迁徙路线为从北向  
南，主要包括：鹭类、鸻鹬类。低空活动高度为 0-150m，  
高空迁徙飞行高度 800m 以上。

Autumn (Sep–Nov): Migratory birds (herons, shorebirds) move south at low altitudes (0-150m) or high altitudes (>800m).

冬季(12月-次年2月)候鸟基本完成迁徙，以留鸟及冬  
候鸟为主。留鸟主要包括：麻雀、斑鸠、乌鸦、喜鹊、  
猫头鹰等；冬候鸟包括：毛脚鹭类猛禽。

Winter (Dec–Feb): Resident birds (sparrows, owls) and winter migratory birds(e.g., rough-legged hawks) dominate.