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

ZSHC/HGH-杭州/萧山 HANGZHOU/Xiaoshan

ZSHC 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	N30°13.7′ E120°26.0′ Center of RWY07/25
2	机场基准点与城市的位置关系 Direction and distance from city	27km from city center
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	6.7 m/34.4℃(JUL)/1.9℃(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	5°40′W(2021)/-4′45″
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	Hangzhou Xiaoshan International Airport CO. LTD. Hangzhou Xiaoshan International Airport, Hangzhou, Zhejiang province, China Post code:311207 TEL:86-571-86662999 AFS:ZSHCYDYX Website:www.hzairport.com
7	允许飞行种类 Types of traffic permitted(IFR/VFR)	IFR-VFR
8	机场性质/飞行区指标 Military or civil airport/Reference code	CIVIL/RWY06/24: 4F; RWY07/25: 4E
9	备注 Remarks	Nil

ZSHC AD 2.3 工作时间 Operational hours

1	机场开放时间 AD Operational hours	H24
2	海关和移民 Customs and immigration	H24
3	卫生健康部门 Health and sanitation	H24
4	航空情报服务讲解室 AIS Briefing Office	H24

5	空中交通服务报告室 ATS Reporting Office	H24
6	气象服务讲解室 MET Briefing Office	H24
7	空中交通服务 Air Traffic Service	H24
8	加油服务 Fuelling	H24
9	地勤服务 Handling	H24
10	安保服务 Security	H24
11	除冰服务 De-icing	H24
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Tow-tractor(20kN、25kN), conveyor truck, dolly(7T, 14T, 27T, 35T), fork(2T, 3T), container tractor and collection paneling 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(65000L, 20000L); hydrant dispenser: 20L/s; a pipe system of apron aircraft-refueling well, aviation kerosene storage tank(60000CBM), gasoline pump unit, apron common pipe network(MAX 300L/s)
5	除冰设施 De-icing facilities	16 de-icers, de-icing fluid: KHF-1, Cleanwing-II
6	过站航空器机库 Hangar space for visiting aircraft	The nose-hangar is for one aircraft(A320 or below)
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, including B737, B757, B777, B787, A319, A320, A321, A330
8	备注 Remarks	Static variable power, ground power unit, ground air supply unit, ground air preconditioning unit, ladder truck

ZSHC AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD and in the city

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 and ambulances at AD
5	银行和邮局 Bank and Post Office	Bank at AD
6	旅行社 Tourist Office	Nil
7	备注 Remarks	Nil

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

1	机场消防等级 AD category for fire fighting	CAT 9
2	援救设备 Rescue equipment	Fire fighting facilities: rescue command car, illumination truck, rapid intervention vehicle, primary foam tender, demolition rescue truck, heavy-duty foam tender, heavy-duty water tank truck, dry-chemical tender, medicament reinforcement car, command car, logistics car, recovery type ambulance, transport type ambulance; Rescue equipment: ambulance, rescue command car, fire axe, medical material transport vehicle, cutter, expansion pliers, steel plate, jack, etc.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747-400. Removal equipment: trail, lifting air bag, active road surface, traction rack, ties, rope. Removal equipment for A380 and equivalent aircraft can be borrowed.
4	备注 Remarks	Nil

ZSHC 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 blower, snow pusher, snow plough, de-icing fluid spreader
2	扫雪顺序 Clearance priorities	RWY06/24 and related TWYs, RWY07/25 and related TWYs, Vertical TWYs (J, K, L) of apron, Stands and related TWYs of apron.
3	备注 Remarks	Nil

ZSHC 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 1280/R/C/W/T : Apron Nr.6(stands Nr.601-613) PCR 1140/R/A/W/T : Apron Nr.6(stands Nr.630-636, 640) PCR 1110/R/B/W/T : Apron Nr.9(stands Nr. 901-916, 929-936, 940-946, 981, 982) PCR 1060/R/B/W/T : Apron Nr.2 PCR 1050/R/A/W/T : Apron Nr.5(stands Nr.520-534) PCR 1050/R/C/W/T : Apron Nr.9(stands Nr.917-928) PCR 980/R/A/W/T : Apron Nr.4(stands Nr. 406-408, 419A, 419B, 420-432) PCR 980/R/B/W/T : Apron Nr.3 PCR 900/R/A/W/T : Apron Nr.1 PCR 870/R/A/W/T : Apron Nr.7 PCR 850/R/B/W/T : Apron Nr.6(stands Nr.616-626) PCR 790/R/A/W/T : Apron Nr.4(stands Nr. 401-405, 409-418) PCR 650/R/A/W/T : Apron Nr.5(stands Nr.500-506, 513-517)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	60m : B11 56m : D2, D3, D4-D6(N of D), D7, D8, J0, J2-J5, J6(E of J) 53m : D1 44m : B3 40m : B20 38m : C2, C7 34m : A2, A7, B1, B4-B7, B10 31.5m : C1, C8, D(E of C8) 28.5m : A1, A8 27m : A3-A6 25m : C, C3, C6, D(BTN D4 & C8), K, L(N of Z14) 23m : A, B, C4, C5, C9, D(W of D4), J, L(S of Z14)
		道面 Surface	CONC
		强度 Strength	PCR 1340/R/A/W/T : B20, J2 PCR 1300/R/A/W/T : C9 PCR 1260/R/A/W/T : B10 PCR 1230/R/C/W/T : L(N of J5) PCR 1200/R/C/W/T : C7(S of D), C8(S of D), Z14 PCR 1190/R/A/W/T : D1(N of D), D2 PCR 1150/R/A/W/T : J0 PCR 1130/R/A/W/T : A7 PCR 1120/R/B/W/T : Z13 PCR 1110/R/B/W/T : D1(S of D), D3(S of D), Z17 PCR 1090/R/B/W/T : D5(S of D)

			PCR 1080/R/A/W/T : B11(BTN Z7 & A) PCR 1070/R/B/W/T : D(BTN D5 & L, E of C8) PCR 1060/R/B/W/T : C, D(W of D5, BTN L & C8), Z10, Z11 PCR 1050/R/C/W/T : D0, Z19, Z20 PCR 1030/R/A/W/T : Z8(BTN L & stand Nr.517) PCR 1020/R/A/W/T : C2 PCR 1020/R/B/W/T : J PCR 1010/R/B/W/T : D6(S of D) PCR 1000/R/A/W/T : B7(S of Z1) PCR 1000/R/B/W/T : D7(S of J6), J6(W of D7) PCR 980/R/A/W/T : B1, E4-E9, H7, H9 PCR 980/R/B/W/T : J3-J5(W of J) PCR 960/R/A/W/T : D4 PCR 930/R/A/W/T : A2, D3(N of D), L(S of J5) PCR 890/R/A/W/T : D8 PCR 880/R/A/W/T : C8(N of D), J6(E of D7) PCR 870/R/A/W/T : A, A1, A8, B3-B5, D6(N of D), D7(N of J6), J3-J5(E of J) PCR 860/R/A/W/T : B(BTN B6 & B7), B6(S of Z1), C1, C7(N of D), D5(N of D), K PCR 800/R/A/W/T : B(BTN A1 & B6, BTN B7 & B11), Z1 PCR 770/R/A/W/T : B6(N of Z1), B7(N of Z1) PCR 730/R/A/W/T : C3-C6 PCR 680/R/A/W/T : A3-A6 PCR 660/R/A/W/T : B11(BTN Z7 & Z8) PCR 650/R/A/W/T : Z7, Z8(BTN stand Nr.517 & B11)
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	

ZSHC 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. Taxiing guidance signs at all holding positions. Aircraft stand identification sign boards at stands Nr. 102-106, 108A, 203, 211-218, 301-330, 331(R), 331(L), 332-343, 401-418, 419A, 419B, 420-432, 501-506, 513-517, 520-534, 601-613, 630-636, 640, 720, 721. Guide lines at all TWYs. Guide lines at all aprons. Visual docking guidance system at aircraft stands Nr. 211-218, 301-330, 331(R), 331(L), 332-343, 401-418, 419B, 420-432, Marshalling assistance for other 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, REDL, RCLL, RTZL(06), RENL
		滑行道标志 TWY markings	Edge line, No-entry, RWY holding position(A1, A2, A7, A8, C1, C2, C7, C8), intermediate holding position
		滑行道灯光 TWY lights	Edge line lights, center line lights , RETILs, intermediate holding position lights
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Stop bar lights: RWY06, pattern B RWY holding position of C1, C2. Red; RWY07, RWY holding position of A1, A2. Red Runway guard lights: TWY A1-A8 and TWYC1-C8	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	RWY07/25: NO-ENTRY makers and NO-ENTRY bar for 4 rapid exit TWYs. Red lights and yellow signs for closed TWY east of TWY B5. RWY06/24: NO-ENTRY maker and NO-ENTRY bar for 4 rapid exit TWYs. TWY CL LGT spacing of TWY A, A1-A8, B, B1, B3-B5, B6(A-Z1), B7(A-Z1), B11, B20, C, C1-C9, D(C8-C9, W of D7), D0-D8, E4-E9, J(Z1-A), J0, J2, J3(K-L), J4(K-L), J5(K-L), J6(E4-D7), K(A-J5), L, Z1(J-L), Z7, Z14(E of C9), Z17, Z19, Z20(D0-D1) is 15m, other is 30m. Stands Nr. 204, 206-210, 381-386, 500, 616-626, 719, 901-936, 940-946, 981, 982 use identification markings on ground.	

ZSHC AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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
MT 001	MT	002/7010	142.0		
BLDG 002	BLDG	028/3342	20.6		RWY06 Take-off path
BLDG 003	BLDG	030/3405	22.9		RWY06 Take-off path
BLDG 004	BLDG	030/3487	23.6		RWY06 Take-off path
BLDG 005	BLDG	031/3630	24.1		RWY06 Take-off path
Pole 006	Pole	031/3649	24		
ELECTRICAL_EXIT_LIGHT 007	ELECTRICAL_EXIT_LIGHT	032/3173	20.8		RWY06 Take-off path
BLDG 008	BLDG	032/3704	24.7		RWY06 Take-off path
Antenna 009	Antenna	033/3784	26.2		RWY06 Take-off path
SIGN 010	SIGN	035/3395	21.4		
BLDG 011	BLDG	035/3894	31.2		RWY06 Take-off path
BLDG 012	BLDG	036/3421	25.4		RWY06 Take-off path
BLDG 013	BLDG	036/3437	24.3		RWY06 Take-off path
SIGN 014	SIGN	036/3913	31.7		RWY06 Take-off path

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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(º)/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
BLDG 015	BLDG	036/4232	31.3		
BLDG 016	BLDG	039/4619	37.4		
BLDG 017	BLDG	040/4540	36.8		
BLDG 018	BLDG	043/3959	36.5		RWY06 Take-off path
BLDG 019	BLDG	044/3998	37.2		RWY06 Take-off path
BLDG 020	BLDG	044/4194	38		RWY06 Take-off path
BLDG 021	BLDG	044/4455	44.5		RWY06 Take-off path
BLDG 022	BLDG	045/4487	40.6		
BLDG 023	BLDG	055/5630	51.5		RWY24 GP INOP approach
BLDG 024	BLDG	064/3667	33.3		
BLDG 025	BLDG	065/2932	23.9		RWY07 Take-off path
BLDG 026	BLDG	065/3218	25.4		
BLDG 027	BLDG	067/4009	33.5		
BLDG 028	BLDG	068/3729	33.1		
NAVAID 029	NAVAID	069/2811	21		RWY07 Take-off path
BLDG 030	BLDG	069/4111	39.5		RWY07 Take-off path; RWY25 GP INOP approach

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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(º)/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
BLDG 031	BLDG	070/3497	27.4		
BLDG 032	BLDG	071/3500	28.5		
BLDG 033	BLDG	071/3524	30		
BLDG 034	BLDG	072/2772	19.6		RWY07 Take-off path
BLDG 035	BLDG	072/2796	20.6		RWY07 Take-off path
BLDG 036	BLDG	072/3579	32.9		RWY07 Take-off path
BLDG 037	BLDG	072/3622	37.3		RWY07 Take-off path
BLDG 038	BLDG	073/2971	25.7		RWY07 Take-off path
Pole 039	Pole	073/3480	31.1		RWY07 Take-off path
BLDG 040	BLDG	073/3492	28.8	LGT	
BLDG 041	BLDG	073/3509	29		
BLDG 042	BLDG	073/3559	29.2		
STACK 043	STACK	080/5966	65.5		RWY07 Take-off path; RWY25 VOR/DME approach
STACK 044	STACK	177/4773	92.1	LGT	
STACK 045	STACK	178/4756	94.4		
STACK 046	STACK	179/4617	129		

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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
BLDG 047	BLDG	181/4153	51.6	LGT	
TOWER 048	TOWER	189/5515	337.9	LGT	Circling for CAT B/C/D; 180°-300°MSA sector
TOWER 049	TOWER	220/11405	254.6		
BLDG 050	BLDG	244/3474	34.7		RWY25 Take-off path
BLDG 051	BLDG	246/2680	18.8		RWY25 Take-off path
BLDG 052	BLDG	246/3763	31.3		
WATER_TOWER 053	WATER_TOWER	247/2729	20.9		RWY25 Take-off path
BLDG 054	BLDG	247/2898	21.8		
BLDG 055	BLDG	247/3705	33.6		
BLDG 056	BLDG	248/2929	23		
TOWER 057	TOWER	250/3728	31.8		
BLDG 058	BLDG	251/2841	24.1		RWY25 Take-off path
BLDG 059	BLDG	251/2854	24		
BLDG 060	BLDG	251/3332	25.9		RWY25 Take-off path
Pole 061	Pole	252/3587	37.6		RWY07 GP INOP approach; RWY25 Take-off path
BLDG 062	BLDG	253/3265	25.6		RWY25 Take-off path

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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(º)/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
TOWER 063	TOWER	255/13102	163.1		
Antenna 064	Antenna	263/2434	60.4	LGT	easy-breaking
TOWER 065	TOWER	272/4782	43.4		RWY24 Take-off path
STACK 066	STACK	272/5002	45		
BLDG 067	BLDG	273/4845	44.4		RWY24 Take-off path
Pole 068	Pole	273/4845	45.6		RWY24 Take-off path
Pole 069	Pole	273/4973	49.3		RWY24 Take-off path
STACK 070	STACK	275/5426	51.5		RWY24 Take-off path
STACK 071	STACK	275/5484	51.3		
BLDG 072	BLDG	275/5488	51.5		RWY06 GP INOP approach
BLDG 073	BLDG	278/3752	27.4		
BLDG 074	BLDG	278/3821	30		
BLDG 075	BLDG	279/3593	26.2		RWY24 Take-off path
STACK 076	STACK	279/3843	29.3		
BLDG 077	BLDG	280/3538	24.9		RWY24 Take-off path
BLDG 078	BLDG	280/3768	24.8		

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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
BLDG 079	BLDG	280/4053	27.9		
BLDG 080	BLDG	281/3773	27.1		
BLDG 081	BLDG	282/3535	21.9		
BLDG 082	BLDG	282/3644	25.9		RWY24 Take-off path
Antenna 083	Antenna	282/3650	25.4		RWY24 Take-off path
BLDG 084	BLDG	282/3781	27.3		RWY24 Take-off path
Pole 085	Pole	282/4067	31.7		
BLDG 086	BLDG	283/3474	22.6		RWY24 Take-off path
BLDG 087	BLDG	283/3803	26.9		RWY24 Take-off path
BLDG 088	BLDG	283/3854	26.4		
SIGN 089	SIGN	283/3967	25.5		
Antenna 090	Antenna	283/3994	34.2		RWY24 Take-off path
BLDG 091	BLDG	284/14130	224.6	LGT	
BLDG 092	BLDG	289/3018	13.4		RWY06 ILS/DME approach; RWY24 Take-off path
TOWER 093	TOWER	303/1051	88		
Antenna 094	Antenna	312/4025	142.5		Circling CAT A

半径 15 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 07/25)

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(º)/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
TOWER 095	TOWER	326/2222	16.2	LGT	
TOWER 096	TOWER	347/2186	16.2	LGT	

半径 15 千米-50 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 07/25)

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(º)/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
BLDG 097	BLDG	023/46486	178		
Antenna 098	Antenna	046/40478	187		
MT 099	MT	073/34343	187		
MT 100	MT	074/41371	251		ATC SMAC
STACK 101	STACK	096/27326	215		RWY24/25 initial approach
MT 102	MT	111/45130	167		
Antenna 103	Antenna	141/21756	168		
MT 104	MT	145/46879	572		ATC SMAC
MT 105	MT	147/35566	218		
BLDG 106	BLDG	153/29512	294		

半径 15 千米-50 千米内主要障碍物 (相对 07/25 跑道中心)
Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 07/25)

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(º)/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
MT 107	MT	157/48994	672		
MT 108	MT	163/48692	572		
MT 109	MT	169/164230	1382		ATC SMAC
MT 110	MT	175/44827	703		
MT 111	MT	184/49309	373		
MT 112	MT	194/29147	499		
MT 113	MT	198/21768	348		
Other 114	Other	200/47698	253		
Antenna 115	Antenna	208/37166	227		
MT 116	MT	212/42077	583		
MT 117	MT	218/17400	372		
MT 118	MT	219/23494	462		
MT 119	MT	221/40840	509		
TOWER 120	TOWER	227/17366	224		
MT 121	MT	230/39862	597		
MT 122	MT	234/60868	1068		ATC SMAC

半径 15 千米-50 千米内主要障碍物 (相对 07/25 跑道中心)
Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 07/25)

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
MT 123	MT	237/42469	790		300°-090°MSA sector; RWY06/07 initial approach
MT 124	MT	237/68230	835		ATC SMAC
MT 125	MT	239/25008	257		
MT 126	MT	241/35636	528		RWY06/07 initial approach; RWY06/07 PBN initial approach
MT 127	MT	244/273369	1816		ATC SMAC
MT 128	MT	251/25530	218		RWY06/07 RNAV ILS/DME intermediate approach; RWY06 PBN intermediate approach
TOWER 129	TOWER	254/19118	222		RWY06/07 intermediate approach, GP INOP approach; RWY07 VOR/DME approach
BLDG 130	BLDG	258/17236	219		
MT 131	MT	259/43862	537		RWY06/07 initial approach; 090°-180°MSA sector
MT 132	MT	260/48415	570		
BLDG 133	BLDG	271/23248	180		
MT 134	MT	274/33493	412		
BLDG 135	BLDG	278/19744	174	LGT	
BLDG 136	BLDG	279/17924	286	LGT	
BLDG 137	BLDG	279/22136	164		

半径 15 千米-50 千米内主要障碍物 (相对 07/25 跑道中心)

Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 07/25)

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(º)/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
BLDG 138	BLDG	279/22370	187		
BLDG 139	BLDG	279/22409	187		
BLDG 140	BLDG	279/22559	239		
MT 141	MT	279/33425	355		
BLDG 142	BLDG	280/18791	164		
BLDG 143	BLDG	280/18795	164		
BLDG 144	BLDG	280/19189	158		
BLDG 145	BLDG	280/22085	267		
BLDG 146	BLDG	280/22334	211		
BLDG 147	BLDG	280/22569	159		
BLDG 148	BLDG	280/22661	159		
BLDG 149	BLDG	283/21874	168		
BLDG 150	BLDG	284/20880	165		
BLDG 151	BLDG	284/21775	230		
BLDG 152	BLDG	285/22565	157		
BLDG 153	BLDG	288/27149	207		

半径 15 千米-50 千米内主要障碍物 (相对 07/25 跑道中心)
Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 07/25)

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(º)/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
MT 154	MT	291/74299	1096		ATC SMAC
MT 155	MT	295/43859	171		
STACK 156	STACK	303/31435	184		
MT 157	MT	305/48843	467		
MT 158	MT	309/28201	256		
MT 159	MT	316/27499	361		
MT 160	MT	322/31710	258		
MT 161	MT	330/25712	217		
BLDG 162	BLDG	332/25654	205		

备注：within 15km:The artificial obstacle data was verified and confirmed by Hangzhou Xiaoshan Airport Co., Ltd. on October 9, 2022.
15km-50km:The artificial obstacle data was verified and confirmed by Hangzhou Xiaoshan Airport Co., Ltd. on October 9, 2022. Other obstacles refer to AD OBST chart.

ZSHC AD 2.11 提供的气象情报、气象观测和报告
Meteorological information provided & 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	Hangzhou Xiaoshan Aerodrome MET Office
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	Hangzhou Xiaoshan Aerodrome MET Office;9h, 24h;3h, 6h
4	趋势预报及发布间隔 Trend forecast/Interval of issuance	trend 30min
5	所提供的讲解或咨询服务 Briefing/Consultation provided	Briefing provided: P, T Consultation provided: 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	Synoptic charts, significant weather charts, upper W/T charts, satellite material, AWOS real-time data, radar, temperature forecasting chart
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	FAX, MET Service Terminal
9	提供气象情报的空中交通服务单位 ATS units provided with information	Hangzhou Approach, Hangzhou Tower, Reporting office
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	Half 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 S of RCL07/25, 314m inward THR07; B: 100m S of RCL07/25, 1785m inward THR07; C: 100m S of RCL07/25, 344m inward THR25; D: 100m N of RCL06/24, 313m inward THR06; E: 100m N of RCL06/24, 1690m inward THR06; F: 100m N of RCL06/24, 343m inward THR24. SFC wind sensors 06: 110m N of RCL, 323m inward THR06; 06/24 Center: 110m N of RCL, 1700m inward THR06; 24: 110m N of RCL, 323m inward THR24; 07: 110m S of RCL, 344m inward THR07; 07/25 Center: 110m S of RCL, 1795m inward THR07; 25: 110m S of RCL, 334m inward THR25.

		Ceilometer 06: 10m N of RCL, 960m outward THR06; 24: 5m S of RCL, 905m outward THR24; 07: 969m outward THR07; 25: 1020m outward THR25.
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

ZSHC 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
06	062.95 °GEO 069 °MAG	3400×60	PCR 1010/R/B/W/T CONC/-	Nil	THR 6.7m TDZ 6.7m	0%
24	242.95 °GEO 249 °MAG	3400×60	PCR 1010/R/B/W/T CONC/-	Nil	THR 6.7m TDZ 6.7m	0%
07	062.95 °GEO 069 °MAG	3600×45	PCR 790/R/A/W/T CONC/-	Nil	THR 6.7m TDZ 6.7m	0%
25	242.95 °GEO 249 °MAG	3600×45	PCR 790/R/A/W/T CONC/-	Nil	THR 6.7m TDZ 6.7m	0%

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
06	Nil	Nil	3520×300	240×150	Nil	Yes
24	Nil	Nil	3520×300	240×150	Nil	Yes

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
07	Nil	Nil	3720×300	195×120	Nil	Yes
25	Nil	Nil	3720×300	195×130	Nil	Yes
Remarks: 06/24:RWY shoulder:7.5m on each side 120*75m blast pad on the both ends of RWY grooved at full length, width 60m; 07/25:RWY shoulder:7.5m on each side 60*60m blast pad on the both ends of RWY grooved at full length, width 45m; Distance between RCL06/24 and RCL07/25 is 2000m, THR24 is 200m W of THR25						

ZSHC 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
06	3400	3400	3400	3400	Nil
06	3187	3187	3187	3400	FM C2
24	3400	3400	3400	3400	Nil
24	3187	3187	3187	3400	FM C7
07	3600	3600	3600	3600	Nil
07	3388	3388	3388	3600	FM A2
25	3600	3600	3600	3600	Nil
25	3388	3388	3388	3600	FM A7

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

跑道号码 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
06	PALS CAT II SFL 900 m LIH	GREEN Yes	PAPI LEFT 444m inward THR06 3 ° 21.0m	900 m	3400 m spacing 15m 0-2500m, WHITE 2500-3100m, RED/WHITE 3100-3400m, RED VRB LIH	3400 m spacing 60m 0-2800m, WHITE 2800-3400m, YELLOW VRB LIH	RED	Nil
24	PALS CAT I SFL 900 m LIH	GREEN Yes	PAPI LEFT 445m inward THR24 3 ° 21.4m	Nil	3400 m spacing 15m 0-2500m, WHITE 2500-3100m, RED/WHITE 3100-3400m, RED VRB LIH	3400 m spacing 60m 0-2800m, WHITE 2800-3400m, YELLOW VRB LIH	RED	Nil
07	PALS CAT I SFL 900 m LIH	GREEN Yes	PAPI LEFT 390m inward THR07 3 ° 18.8m	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
25	PALS CAT I SFL 900 m LIH	GREEN Yes	PAPI LEFT 390m inward THR25 3 ° 19.2m	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:								

ZSHC 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: RWY06:100m N of RCL, 450m inward THR06, with light; RWY07:105m N of RCL, 350m inward THR07, with light; RWY24:100m S of RCL, 450m inward THR24, with light; RWY25:105m N of RCL, 350m inward THR25, with light.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: green center line lights, blue edge line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	RWY07/25/24: Secondary power supply available / 15s RWY06/07: Secondary power supply available / 1s RWY24/25: Secondary power supply available / 1s
5	备注 Remarks	Nil

ZSHC 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

ZSHC 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
Hangzhou TWR Control	An area encompassed by arcs with radius 13km centered at RWY ends and two parallel lines 13km from both RCLs together with tangent lines of arcs.	SFC-600m				
Fuel Dumping Area	N3113.0E12300.0-N3130.0E12400.0-N3100.0E12400.0-N3100.0E12300.0	3000m or above				Fuel dumping area is same as Shanghai/Pudong airport.
Altimeter setting region and TL/TA	DADAT-NANXUN VOR(NXD)-UDOLA-N300024E1195800-SHENGZHOU VOR(SHZ)-N293000E1220000-N295500E1220000-N301500E1221200-BAVIK-IDNIK-DADAT	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)				1. Use Pudong QNH in general; 2. When QNH difference BTN Hangzhou and Shanghai terminal is more than 4hPa, by ATC.

ZSHC 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		127.25			H24	D-ATIS available
APP	Hangzhou Approach	APP01:120.05 (124.65)			0030-1500	Contact APP04 when APP01 U/S.
		APP02:125.55 (119.15)			by ATC	Contact APP04 when APP02 U/S.
		APP03:126.05 (125.275)			H24	
		APP04:120.4 (119.15)			2300-1600(next day)	Contact APP03 when APP04 U/S.
		APP05:119.425 (125.275)			0030-1100	Contact APP03 when APP05 U/S.
		APP06:Nil			by ATC	Contact APP02 when APP06 U/S.
		APP07:127.7 (124.65)			by ATC	Contact APP03 when APP07 U/S.
		APP08:Nil			by ATC	Contact APP04 when APP08 U/S.
TWR	Hangzhou Tower	(N):123.65 (118.75)			HO	RWY06/24
		(S):118.3 (118.75)			HO	RWY07/25
GND	Hangzhou Ground	121.65			HO	
Delivery	Hangzhou Delivery	121.95			22:30-15:00	DCL 24h available
EMG	Hangzhou Tower/ Hangzhou Approach	121.50			H24	
RAMP	Hangzhou Ramp	Ramp(N):121.725 (121.55)			H24	
		Ramp(S):121.85 (121.55)			HO	

ZSHC 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、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
1	2	3	4	5	6	7
Dangshan VOR/DME	DSH	117.3 MHz CH 120X	H24	N30°08.9′ E120°30.1′ 10803m S of RCL, 171m inward THR25	38 m	
Hangzhou VOR/DME	HGH	113.0 MHz CH 77X	H24	N30°14.4′ E120°27.7′ 069 °MAG/1010m FM THR25	13 m	
Jianqiao NDB	CJ	324 kHz	H24	N30°18.3′ E120°10.0′		
Wenyan NDB	WY	572 kHz	H24	N30°07.3′ E120°12.1′ 249 °MAG/23482m FM THR07 371m south		
MM 06		75 MHz		249 °MAG/960m FM THR06		
IM 06		75 MHz		249 °MAG/335m FM THR06		
LOC 06 ILS CAT II	IXS	110.5 MHz		069 °MAG/310m FM end RWY06		
GP 06		329.6 MHz		120m N of RCL, 307m inward THR06		Angle 3 °, RDH 15 m
DME 06	IXS	CH 42X (110.5 MHz)			13m	Co-located with GP 06
LOC 24 ILS CAT I	IHZ	111.5 MHz		249 °MAG/310m FM end RWY24		
GP 24		332.9 MHz		120m N of RCL, 307m inward THR24		Angle 3 °, RDH 15 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 24	IHZ	CH 52X (111.5 MHz)			13m	Co-located with GP 24
LOC 07 ILS CAT I	IXX	110.35 MHz		069 °MAG/255m FM end RWY07		
GP 07		334.85 MHz		120m S of RCL, 309m inward THR07		Angle 3 °, RDH 15 m
DME 07	IXX	CH 40Y (110.35 MHz)			11m	Co-located with GP 07
LOC 25 ILS CAT I	IDD	108.5 MHz		249 °MAG/255m FM end RWY25		
GP 25		329.9 MHz		120m S of RCL, 309m inward THR25		Angle 3 °, RDH 15 m
DME 25	IDD	CH 22X (108.5 MHz)			11m	Co-located with GP 25

ZSHC AD 2.20 本场规定

1. 机场使用规定

1.1 未安装二次雷达应答机的航空器起降需事先申请，并在得到空中交通管制部门批准后方可进行；禁止未安装二次雷达应答机的航空器起降;

1.2 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;

1.3 06/24，07/25 跑道可使用最大机型：A380 及其同类机型。翼展 65m 及以上航空器全年任意连续三个月不得超过 700 次。07/25 跑道只适用于 A380 执行训练、

ZSHC AD 2.20 Local aerodrome regulations

1.Airport operations regulations

1.1 Take-off/landing of aircraft without SSR transponder are subject to ATC prior clearance before the execution of flight operation; Take-off/landing of aircraft without SSR transponder are forbidden;

1.2 Technical test flight shall be filed in advance and shall be made only after clearance has been obtained from ATC;

1.3 Maximum aircraft to be available for RWY06/24 and RWY07/25: A380 and equivalent. Aircraft with wingspan no less than 65m can not land more than 700

维修、调机等任务。

times in three consecutive months. RWY07/25 only to be available for A380 execute training, maintaince, ferry flight and other tasks.

1.4 本场提供地面滑行引导车服务，可以通过杭州机坪(121.725MHz)申请引导车服务;

1.4 Follow-me vehicle service is available via Hangzhou Ramp(121.725MHz);

1.5 机组可通过 DCL 和管制指令两种方式取得放行许可，DCL 24h 可用。本机场放行时不再要求机组话音复诵已经通过数据链成功发布的放行许可。

1.5 Obtain delivery clearance through DCL and ATC clearance, DCL is available for 24HR. No readback required when the delivery clearance has been received through DCL.

1.6 本场实施机坪运行管理，由杭州塔台负责塔台地面管制区域：机动区（除 D，J，K，L 及 A2 以东的 B 滑行道）；由杭州机坪负责机坪管制区域：非机动区和 D，J，K，L 及 A2 以东的 B 滑行道；机坪管制实施双扇区指挥工作模式，停机位 319（含）以北区域为北机坪，停机位 319（不含）以南区域为南机坪，具体分区界限参见航图手册 ZSHC-1A 和 ZSHC-2。

1.6 Tower Ground Control Area: Manoeuvring area except TWY D, J, K, L and TWY B(E of A2);
Ramp Control Area: Non manoeuvring area and TWY D, J, K, L and TWY B(E of A2);
Ramp control implement double sector control mode. North ramp is located at N of Stand Nr.319(including Stand Nr.319), and south ramp is located at S of Stand Nr.319(not including Stand Nr.319), specific partition boundaries reference to ZSHC-1A and ZSHC-2.

1.7 杭州机坪向杭州塔台以道口移交的方式移交出港航空器，驾驶员必须严格遵守机坪管理规定或听从管制员指令滑行。

1.7 Ramp Control transfer the departure aircraft to Tower Control at the intersections of TWYs. Aircrew shall taxi following ATC instructions.

1.7.1 07 号跑道离港航空器：默认移交点为 B3 和 B1。102-106、108A 机位出港航空器移交点为 B1，其余机位出港航空器移交点为 B3。

1.7.1 Departure aircraft on RWY07: B1 and B3 are transfer points. B1 is the point for Stands Nr.102-106, 108A; B3 is the point for others.

1.7.2 25 跑道离港航空器：默认移交点为 B10 和 JA。停机位 500-506、513-517、520-534 出港航空器移交点为 B10，其余停机位出港航空器移交点为 JA。

1.7.2 Departure aircraft on RWY25: B10 and JA are transfer points. B10 is the point for Stands Nr. 500-506, 513-517, 520-534; JA is the point for others.

1.7.3 06 号跑道离港航空器：默认移交点为 D3 和 D5。

1.7.3 Departure aircraft on RWY06: D3 and D5 are

719-721、901-928 机位出港航空器移交点为 D3,其余机位出港航空器移交点为 D5。

transfer points. D3 is the point for Stands Nr. 719-721, 901-928; D5 is the point for others.

1.7.4 24 跑道离港航空器：默认移交点为 C7 和 JC。停机位 601-613、616-626、630-636、640 出港航空器移交点为 C7，其余停机位出港航空器移交点为 JC。

1.7.4 Departure aircraft on RWY24: C7 and JC are transfer points. C7 is the point for Stands Nr. 601-613, 616-626, 630-636，640 JC is the point for others.

1.8 航空器应取得杭州机坪(121.725MHz)许可后方可推出开车并在 5min 之内执行，否则机组需重新申请;

1.8 Aircraft shall contact Hangzhou Ramp (121.725MHz) for push-back and start-up clearance and conduct within 5min, otherwise, apply the clearance once more again;

1.9 航空器起飞后首次联系进近时，机组应向管制员通报起飞跑道号。

1.9 Departure aircraft shall report the take-off RWY designator upon initial contact with APP.

2. 跑道和滑行道的使用

2. Use of runways and taxiways

2.1 禁止航空器在滑行道上做 180°转弯，航空器在跑道上做 180°转弯必须获得管制员许可;

2.1 180 °turnaround on TWY is forbidden for all aircraft, 180 °turnaround on RWY is forbidden for all aircraft without ATC clearance;

2.2 航空器在进入跑道前必须在指定的跑道等待位置处等待机场管制塔台的指令；航空器未获管制员许可，机头越过跑道等待位置时，立即向管制员报告；航空器在跑道等待位置等待时，机头应尽量靠近跑道等待位置标志，但不能超过此标识。

2.2 Aircraft shall stop and wait for the instruction of TWR Control at the relative RWY holding positions; Aircraft shall report to TWR Control when the nose of aircraft exceeding holding position without instruction;
The nose of aircraft shall get close to the RWY holding position marking without exceeding it when aircraft is waiting at the RWY holding position.

2.3 塔台根据跑道实际运行情况，将安排航空器使用非全跑道起飞，如航空器驾驶员不能接受非全跑道起飞，请立即告知管制员。

2.3 ATC shall arrange non full-length taking-off procedures for aircraft in accordance with the RWY actual operation situation. If aircraft can not accept non full-length taking-off procedures, inform ATC immediately.

2.4 当滑行道 A2，A7，C2，C7 上有航空器滑行时，平滑 A，C 滑行道上相应道口不得有航空器通行。

2.4 No aircraft are permitted to pass through the intersection area of TWY A and A2, A7 or TWY C and C2, C7 when there is aircraft on TWY A2, A7 or C2, C7.

2.5 跑道运行规则

2.5 General rules for using RWYs

2.5.1 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。如机组认为无法在上述要求的时间内完成，须在到达跑道外等待点之前向塔台管制员说明(湿跑道或污染跑道除外);

2.5.1 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 ATC before entering the RWY(except for wet or contaminated RWY);

2.5.2 落地航空器应尽快退出跑道，从接地到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，须在建立航向道前通知进近管制员(湿跑道或污染跑道除外);

2.5.2 All landing aircraft shall fully vacate RWY within 50s after touchdown. If flight crew can not fulfill the process within the required time, pilot shall inform ATC before localozer is established(except for wet or contaminated RWY);

2.5.3 落地航空器脱离跑道后应及时向塔台管制员报告已脱离跑道和脱离所使用的滑行道。

2.5.3 Landing aircraft shall report to TWR Control 'RWY vacated' and TWY using for vacating.

2.5.4 着陆航空器使用 07 跑道落地时应尽快由 A5 快速脱离道脱离，如需选择其他道口脱离跑道时应在首次联系塔台时报告管制员;

2.5.4 Landing aircraft shall vacate RWY07 via A5. Aircraft shall inform the TWR control at the initial contact if need to vacate RWY via other TWY;

2.5.5 着陆航空器使用 25 跑道落地时应尽快由 A4 快速脱离道脱离，如需选择其他道口脱离跑道时应在首次联系塔台时报告管制员。

2.5.5 Landing aircraft shall vacate RWY25 via A4. Aircraft shall inform the TWR control at the initial contact if need to vacate RWY via other TWY.

2.5.6 在转换跑道方向过程中，短时使用跑道顺风风量大于 3m/s 但不大于 5m/s 时，管制员将该信息通知相关航空器的驾驶员。航空器驾驶员应该根据机型性能或者运行手册，决定是否使用管制员安排的顺风跑道起飞或者着陆，并将决定通知管制员。

2.5.6 During changing the direction of RWY in use, if downwind speed is more than 3m/s and not exceeding 5m/s, ATC may instruct aircraft downwind take-off or downwind landing for short time. Pilot shall inform controller if decide not to take-off or landing on

downwind RWY allocated according to aircraft performance or operation handbook.

2.6 机动区冲突多发地带位置见 ZSHC AD2.24-1A,2;

2.6 Refer to ZSHC AD2.24-1A, 2;

2.6.1 HS1: 航空器从 B10/J/K 进入 A 滑行道前，应在 B10/J/K 上等待,未经管制员许可不得进入 A 滑行道; 航空器从 B10 向西滑行转入 A 滑行道时，注意避免误入 A6。

2.6.1 HS1: Aircraft shall hold short of TWYs B10/J/K before enter TWY A; Aircraft are forbidden to enter TWY A without ATC clearance; Aircraft taxiing from TWY B10 to TWY A shall avoid entering TWY A6 by mistake.

2.6.2 HS2: 航空器从 B6/B7 进入 A 滑行道前，应在 B6/B7 上等待，未经管制员许可不得进入 A 滑行道; 航空器从 B6 向东或西滑行及 B7 向西滑行转入 A 滑行道时，注意避免误入 A5。

2.6.2 HS2: Aircraft shall hold short of TWYs B6/B7 before enter TWY A; Aircraft are forbidden to enter TWY A without ATC clearance; Aircraft taxiing from TWYs B6/B7 to TWY A shall avoid entering TWY A5 by mistake.

2.6.3 HS3: 航空器从 B3 进入 A 滑行道前，应在 B3 上等待，未经管制员许可不得进入 A 滑行道; 航空器从 B3 向东或西滑行转入 A 滑行道时，注意避免误入 A4。

2.6.3 HS3: Aircraft shall hold short of TWY B3 before enter TWY A; Aircraft are forbidden to enter TWY A without ATC clearance; Aircraft taxiing from TWY B3 to TWY A shall avoid entering TWY A4 by mistake.

2.6.4 HS4: 航空器从 D5 进入 C 滑行道前，应在 D5 上等待，未经管制员许可不得进入 C 滑行道; 航空器从 D5 向东或西滑行转入 C 滑行道时，注意避免误入 C4。

2.6.4 HS4: Aircraft shall hold short of TWY D5 before enter TWY C; Aircraft are forbidden to enter TWY C without ATC clearance; Aircraft taxiing from TWY D5 to TWY C shall avoid entering TWY C4 by mistake.

2.6.5 HS5: 航空器从 D7/D8 进入 C 滑行道前，应在 D7/D8 上等待，未经管制员许可不得进入 C 滑行道; 航空器从 D7 向东滑行及 D8 向西滑行转入 C 滑行道时，注意避免误入 C5。

2.6.5 HS5: Aircraft shall hold short of TWYs D7/D8 before enter TWY C; Aircraft are forbidden to enter TWY C without ATC clearance; Aircraft taxiing from TWYs D7/D8 to TWY C shall avoid entering TWY C5 by mistake.

2.6.6 HS6: 航空器从 J/K/L 进入 C 滑行道前，应在 J/K/L 上等待，未经管制员许可不得进入 C 滑行道;

2.6.6 HS6: Aircraft shall hold short of TWYs J/K/L before enter TWY C; Aircraft are forbidden to enter

航空器从J向东或西滑行及K向西滑行转入C滑行道时，注意避免误入C6。

TWY C without ATC clearance; Aircraft taxiing from TWYs J/K to TWY C shall avoid entering TWY C6 by mistake.

2.7 A380 航空器运行规则

2.7 Operational rules for A380

2.7.1 A380 无限制运行区：跑道 06/24、07/25，其中07/25 跑道仅供 A380 执行调机、维修、训练等使用；滑行道 A、A1-A8、B1、B3-B5、B6（B 以南）、B7（B 以南）、C、C1-C6、C7（D 以北）、C8、D（D5 以东）、D1（D 以北）、D2、D3（D 以北）、D4-D6、D7（J6 以北）、D8（D 以北）、J（J6 以北、B 以南）、J6（D7 以西）、K（J6 以北、B 以南）、L（J5 以北）、Z11（Z1 以南）；停机位 214、331、607、609。

2.7.1 Operational areas without limits: RWY06/24, RWY07/25(only for A380 execute ferry, maintenance, training and other task); TWYs: A, A1- A8, B1, B3-B5, B6(S of B), B7(S of B), C, C1-C6, C7(N of D), C8, D(E of D5), D1(N of D), D2, D3(N of D), D4-D6, D7(N of J6), D8(N of D), J(N of J6, S of B), J6(W of D7), K(N of J6, S of B), L(N of J5), Z11(S of Z1); Stands Nr. 214, 331, 607, 609.

2.7.2 A380 限制运行区：滑行道：B（K 以西、B3 以东）、C7（D 以南）、D（D5 以西）、J6（停机位 331 以东）。

2.7.2 Operational areas with limits: TWYs: B(W of K, E of B3), C7(S of D), D(W of D5), J6(E of stand Nr.331).

2.7.3 A380 航空器运行规则

2.7.3 Operational rules for A380

2.7.3.1 在塔台地面管制区，按塔台管制员指令滑行，在杭州机坪管制区，按杭州机坪指令滑行。当 07/25 跑道同时用做起飞和降落跑道时，为避免 A380 等待起飞时，须在进入 A1 或 A8 前的 A 滑行道上等待。在 C7（D 以南）、J6（停机位 331 以东）运行时需关闭相关服务车道。滑行道 A、B（K 以西）不能同时运行 A380；当 A380 在滑行道 B（K 以西）滑行时，Z1 滑行道禁止翼展 52m 及以上航空器运行。

2.7.3.1 Aircraft shall taxi following Hangzhou Tower instruction in Tower Ground Control Area and Hangzhou Ramp instruction in Ramp Control Area. When RWY07/25 used for departure and landing at the same time, A380 shall wait at TWY A before entry TWY A1 or A8. When operate on TWY C7(S of D) or TWY J6(E of stand Nr.331), related service road shall be closed. TWY A and TWY B(W of K)can not be available for A380 at the same time. When A380 taxi on TWY B(W of K), TWY Z1 is forbidden for aircraft with wingspan no less than 52m.

2.7.3.2 A380 在杭州机坪管制区域进出港全程由引导

2.7.3.2 A380 use follow-me vehicle in Ramp Control

车引领滑行。

Area.

2.7.4 A380 暂不能提供除冰雪服务。

2.7.4 Snow cleaning and de-icing service is not available for A380.

2.8 B747-8 本场运行规则

2.8 Operational rules for B747-8

2.8.1 B747-8 无限制运行区

2.8.1 Operational areas without limits

满足 B747-8 运行条件的区域包括: 跑道 06/24、07/25; 滑行道 A、A1-A8、B（K 以西）、B1、B3-B6、B7（Z1 以南）、C、C1-C8、D、D1（D 以北）、D2、D3（D 以北）、D4-D6、D7（J6 以北）、D8、J0、J3、J4（J 以东）、J6、L、Z1、Z11（Z1 以南）、Z13（Z1 以南）、Z14; 停机位 108A、214、331、338、607、609、719-721; 其中 214、331、338 为廊桥机位。除上述区域外，其他区域禁止 B747-8 运行。

RWYs: 06/24, 07/25;
TWYs: A, A1-A8, B(W of K), B1, B3-B6, B7(S of Z1), C, C1-C8, D, D1(N of D), D2, D3(N of D), D4-D6, D7(N of J6), D8, J0, J3, J4(E of J), J6, L, Z1, Z11(S of Z1), Z13(S of Z1), Z14; Stands: Nr. 108A, 214, 331, 338, 607, 609, 719-721.

2.8.2 B747-8 运行规则

2.8.2 Operational rules for B747-8

2.8.2.1 在塔台地面管制区，按塔台管制员指令滑行，在杭州机坪管制区，按杭州机坪指令滑行。

2.8.2.1 Aircraft shall follow TWR when taxiing in Hangzhou Tower Ground Control Area; aircraft shall follow Ramp when taxiing in Hangzhou Ramp Control Area.

2.8.2.2 B747-8 在杭州机坪管制区域进出港由引导车引领滑行。

2.8.2.2 B747-8 use follow-me vehicle in Ramp Control Area.

2.8.2.3 B747-8 停靠停机位 108A 时，尾部服务车道应关闭。

2.8.2.3 B747-8 park on Stands Nr. 108A, ground service road near tail should be closed.

2.8.2.4 本场仅满足同时接收不超过 8 架 B747-8 停场的需要，一小时内接收不超过两架。

2.8.2.4 Aerodome can accomodate 8 sorties of B747-8 at most, and no more than 2 sorties an hour.

2.9 滑行道的滑行限制

2.9 Taxiing limits:

滑行道/TWYs	航空器翼展限制（m）/Wing span limits for aircraft(m)

C7, C8, D(E of D4), D4(S of D), D5, D6, J6(BTN E4&D7), K	< 80 m
B3, B6, B7, B11, D(W of D4), D3, E4, E5, E6, J, J0, J2-J5, J6(E of D7), L, Z1,Z10, Z11(BTN B & stand Nr.214), Z13(BTN B & Z1), Z14	< 65 m
Z13(BTN Z1&stand Nr.217)	< 48 m
B(BTN K & B11), B10, B20,D0,D7(BTN stands Nr.339&343), E7-E9, H7, H9, Z7, Z8, Z11(BTN stand Nr.206&210), Z13(BTN stand Nr.217&218), Z17,Z19, Z20	< 36 m

2.10 翼展 36m 及以上机型在部分滑行道转弯时需遵守以下规定:

2.10 For aircraft with a wingspan of 36m and above, the requirements must be followed when turning on certain taxiways.

2.10.1 禁止 A340-500、A340-600、A350-900、A350-1000、B747-8、B777-200、B777-300、B777 Freighter、B787-10 机型沿 A3、A4 快速滑行道向西滑行转入 A 滑行道。

2.10.1 The following aircraft is prohibited from making a westbound turning from TWYs A3 and A4 to TWY A: A340-500, A340-600, A350-900, A350-1000, B747-8, B777-200, B777-300, B777 Freighter, B787-10.

2.10.2 航空器沿 A3、A4 快速滑行道向西滑行转入 A 滑行道时，除 A340-500、A340-600、A350-900、A350-1000、B747-8、B777-200、B777-300、B777 Freighter、B787-10 外的翼展 36m 及以上机型要求采用偏置转弯滑行; 航空器沿 A3、A4 快速滑行道向东滑行转入 A 滑行道及在 A5、A6、B1、B3、B4、B5、B6、B7、B10 道口运行时，翼展 36m 及以上机型要求采用偏置转弯滑行。

2.10.2 When making westbound turning from TWYs A3 and A4 to TWY A, Judgement Oversteering Method turning is required for aircraft with a wingspan of 36m and above, except for A340-500, A340-600, A350-900, A350-1000, B747-8, B777-200, B777-300, B777 Freighter, and B787-10. When making eastbound turning from TWYs A3 and A4 to TWY A and junctions on A5, A6, B1, B3, B4, B5, B6, B7, and B10, Judgement Oversteering Method turning is required for aircraft with

a wingspan of 36m and above.

3. 机坪和机位的使用

3.1 未经杭州机坪同意，严禁航空器利用自身动力滑行或使用拖车拖行;

3.2 发动机试车须由杭州现场指定地点（航空器试慢车位置在 102-105、106、108A、203、204、381-386、500、6 号机坪、7 号机坪、9 号机坪；航空器试大车位置在停机位 500、636、B 和 B4 交叉口东侧的 B 滑行道、停机位 913 和 914 之间的 Z17 滑行道、D0 与 Z19 交叉口西侧的 Z19 滑行道），并经杭州机坪许可后进行，严禁在指定区域外的机坪试大车;

3.3 杭州现场指挥中心频率：130.65MHz，航空器可通过现场指挥中心申请拖车服务;

3.4 停机位 206-210、381-386、501-506、616-626、905-928 为自滑进出；停机位 981、982 为推进推出，机头朝北；其它停机位为自滑进顶推出;

3.5 本场航空器采用机位除冰和集中除冰两种方式。航空器集中除冰作业指定的地点为停机位 381-386（优先使用停机位 385、386）、618-626、D 与 Z14 之间的 C8 滑行道。离港航空器除冰时，机组应事先向现场指挥中心提出申请;

3.6 机位使用限制

3. Use of aprons and parking stands

3.1 Push-back of aircraft on its own power or by tow car is strictly forbidden without Ramp Control clearance;

3.2 Engine run-ups are subject to the clearance of Hangzhou Ramp and may only be carried out at a designated location. Engine idle test can be carried on stands Nr.102-105, 106, 108A, 203, 204, 381-386, 500, apron Nr.6, apron Nr.7, apron Nr.9. Fast engine run-ups can be carried on stands Nr.500, Nr.636, TWY B(E of intersection of TWY B and B4), TWY Z17(between stands Nr.913 and Nr.914), Z19(W of intersection of TWY D0 and Z19). Fast engine run-ups on other locations are strictly forbidden;

3.3 Hangzhou Operation control: 130.65MHz, contact them to get towing service;

3.4 Aircraft at stands Nr. 206-210, 381-386, 501-506, 616-626, 905-928 can taxi in and taxi out by itself; stands Nr. 981, 982 shall be pushed into and pushed back, nose to north; others stands shall be taxi in by itself and pushed back;

3.5 Two ways applied for deicing service: deicing at local stands or deicing at stands Nr.381-386(priority for stands Nr. 385, 386), 618-626 and TWY C8 between TWY D and Z14 for severe icing conditions. Departure aircraft shall apply to Hangzhou Operation control in advance for deicing in line;

3.6 Limits for aircraft parking on the following stands:

停机位编号/Stands Nr.	翼展限制（m）/Wing span limits(m)	机身长度限制（m）/Fuselage limits(m)	进出方式/Enter or Exit
430	< 80	≤77	Taxi in, Push back
607, 609	< 80	≤76	Taxi in, Push back
331(L)	< 80	≤76.3	Taxi in, Push back
214	≤79.8	≤76.3	Taxi in, Push back
719-721	≤68.5	≤76.5	Taxi in, Push back
338	≤68.4	≤76.3	Taxi in, Push back
108A	≤68.4	≤70.7	Taxi in, Push back
319, 323, 324, 328, 331(R)	< 65	≤78	Taxi in, Push back
204, 406-408, 420-423, 425-429, 431, 432, 608, 630-636, 640, 901-904	< 65	≤76	Taxi in, Push back
385, 386	< 65	≤76	Taxi in, Taxi out
203	< 65	≤75.4	Taxi in, Push back
102	< 65	≤71.5	Taxi in, Push back
303	< 65	≤70.7	Taxi in, Push back
216	≤64.9	≤70.7	Taxi in, Push back
309, 311	≤60.9	≤73.9	Taxi in, Push back
215, 305	≤60.9	≤63.7	Taxi in, Push back
316, 332, 602-606	< 52	≤62	Taxi in, Push back
610-612	≤48	≤55	Taxi in, Push back
616, 617	≤48	≤55	Taxi in, Taxi out
217	≤48	≤48.5	Taxi in, Push back
304, 306, 307	≤47.6	≤54.9	Taxi in, Push back

620, 621, 624, 625	< 38.5	< 47.5	Taxi in, Taxi out
313-315, 317, 318, 320-322, 325-327, 329, 330, 333-337, 339-343, 513, 514, 601	< 36	≤47	Taxi in, Push back
618, 619, 622, 623, 626	< 36	≤47	Taxi in, Taxi out
302, 308, 310, 312	< 36	≤46.5	Taxi in, Push back
401-405, 409-418, 419A, 419B, 424, 500, 520-534, 613, 929-936, 940-946	< 36	≤45	Taxi in, Push back
905-928	< 36	≤45	Taxi in, Taxi out
981, 982	< 36	≤45	Push in, Push back
103, 104, 211-213, 218, 301, 515-517	< 36	≤44.51	Taxi in, Push back
206-210, 381-384, 501, 503-506	< 36	≤44.51	Taxi in, Taxi out
106	≤34.4	≤44.51	Taxi in, Push back
105	≤32	≤44.51	Taxi in, Push back
502	≤24	≤32.5	Taxi in, Taxi out

3.7 本场在停机位 102-105、108A，215、304-315、317、318、329、330、332-337、339-342、403-405、407、409-411、415-418、419B、420、422、427-429、515、516、520-526、528-534、602-613、630-633、640、719-721、901-904、930-936、940-946 上设置了航空器红色/蓝色推出程序,用于杭州机坪指挥地面工作人员按照指定方向推出航空器。有关工作要求如

3.7 Aircraft Red/Blue push back procedure are established at stands Nr. 102-105, 108A, 215, 304-315, 317, 318, 329, 330, 332-337, 339-342, 403-405, 407, 409-411, 415-418, 419B, 420, 422, 427-429, 515, 516, 520-526, 528-534, 602-613, 630-633, 640, 719-721, 901-904, 930-936, 940-946 used by Hangzhou Ramp to command ground worker to push

下:

back aircraft in the designated direction. The operation rules are published as follows:

3.7.1 杭州机坪在发布指令给机组后，机组应复诵并转告地面人员。

3.7.1 After receiving Hangzhou Ramp clearance for push-back, pilot shall repeat and tell ground worker.

3.7.2 地面人员在接到机组转达的推出指令后，应复诵确认。航空器推出前，地面人员应再次确认推出方向。

3.7.2 After receiving push-back instruction from pilot, ground worker shall repeat and recognize. Before aircraft is pushed back out of the stand, ground worker shall ensure the push-back direction again.

3.7.3 杭州机坪或地面人员在推出过程中发现异常时，应及时联系。

3.7.3 If Hangzhou Ramp and ground worker find unnormal condition, shall contact in time.

3.8 因停机位 313、322、325 安全线与相邻机位安全线有重叠，重叠部分用红色斜线区域表示；航空器进出停机位过程中，应确认无任何人员、车辆和设备进入该红色斜线区域。

3.8 Stands Nr. 313, 322, 325 safety lines are overlap the adjacent stands safety lines, the overlapping lines are shown in red stripe area; Aircrew shall ensure that no vehicles and people in this area when aircraft in/out of the stands.

3.9 为降低碳排放及噪音，所有停靠廊桥机位的航空器必须关闭 APU，使用 400Hz 桥载电源及航空器专用空调设备。以下特殊情况除外:

3.9 Aircraft parking at boarding bridge stands shall turn off APU, use bridge power supply equipment(400Hz) and special air conditioner. Aircraft can use APU as the following situation:

3.9.1 服务方不能够提供有效的桥载设备服务;

3.9.1 Bridge equipment is unserviceable.

3.9.2 航空器因启动发动机而需开启 APU;

3.9.2 Aircraft needs APU to start up engine.

3.9.3 航空器进行 APU 的维修检测活动;

3.9.3 APU is under maintained.

3.9.4 遇到影响航班安全、正常运行的特殊情形，例如极端天气、专机保障、航班过站时间不足等有关情况。

3.9.4 In case of exceptional circumstance influencing the regularity and safty of operation, such as extreme weather, special plane support, and insufficient flight transtion time, aircraft can use APU.

3.10 所有航空器必须按指定的滑行路线滑行: 翼展 65m 及以上航空器停靠使用停机位 331 时，沿黄色虚

3.10 All aircraft shall follow the designated taxiing route. Aircraft with wingspan no less than 65m parking

线滑行线滑行，翼展 65m 以下航空器用黄色实线滑行靠桥。

on stand Nr.331 shall follow the yellow dashed taxiing line. Aircraft with wingspan less than 65m shall follow the yellow solid taxiing line to lounge bridge.

4. 低能见度运行

4. Low visibility operation

4.1 低能见度运行

4.1 Low Visibility Operation

4.1.1 低能见度运行程序的准备、启动和结束

4.1.1 Preparatory, implement and termination of Low Visibility Operation Procedures

4.1.1.1 下列情形下将进入低能见度运行程序准备阶段:

4.1.1.1 Preparatory phase for low visibility operation:

（1）当跑道视程（RVR）为 800m，并且预计能见度继续下降，或云高为 90m，并且预计继续下降;

(1)When RVR is 800m and forecast to descend or ceiling is 90m and forecast to descend;

（2）气象预报 RVR 将上升至 150m（含）以上;

(2)When Meteorological forecast RVR rise to 150m or above;

（3）在机场天气趋势变差较快的情况下，浙江空管分局塔台管制室将启动低能见度运行的准备工作。

(3)Preparation for Low Visibility Operation Procedures shall start-up under deterioration of weather conditions.

4.1.1.2 下列情形下，由浙江空管分局塔台控制室通过 D-ATIS、ATIS、VHF 发布信息，宣布低能见度运行程序启动:

4.1.1.2 Under the following circumstances, TWR declared start-up of Low Visibility Operation Procedures via D-ATIS, ATIS and VHF

（1）当跑道视程（RVR）测报值大于等于 150m，小于 600m;

(1)When 150m≤RVR＜600m;

（2）云高测报值大于等于 30m，小于 60m;

(2)When 30m≤ceiling＜60m;

（3）经确认，杭州萧山机场和浙江空管分局具备低能见度程序运行保障能力。

(3)When airport and ATC confirmed to have operation capability.

4.1.1.3 下列情形下，由浙江分局塔台管制室通过 D-ATIS、ATIS、VHF 发布信息，宣布低能见度运行程序结束:

4.1.1.3 Under the following circumstances, TWR declared termination of Low Visibility Operation Procedures via D-ATIS, ATIS and VHF.

（1）跑道视程（RVR）测报值上升至 600m，且云高

(1)When RVR rise to 600m, ceiling rise to 90m and

抬升至 90m，并预计有好转趋势或稳定 20min 后；

（2）跑道视程（RVR）测报值小于 150m，或云高小于 30m 时，并且预计未来一小时以上无法转好；

（3）经确认，杭州萧山机场和浙江空管分局不具备低能见度运行保障能力。

4.2 低能见度运行时地面滑行路线详见《低能见度运行滑行线路图》，或听从管制指令。

4.3 在杭州萧山机场实施低能见度运行的航空运营人应当获得所在国民航有关部门运行批准。

4.4 飞行员应该获得如下信息:

4.4.1 气象预报

4.4.2 低能见度程序正在实施

5. 直升机飞行限制，直升机停靠区

无

6. 警告

无

forecast to clear-up or keep the status for 20min;

(2)When RVR < 150m or ceiling < 30m and weather condition is not expected to improve in the next hour;

(3)When airport and ATC not confirmed to have operation capability.

4.2 Taxiing routes under low visibility operation refer to Low Visibility Operation Route Chart, or follow ATC instructions.

4.3 Aircraft should be authorized to operate low visibility operation procedures.

4.4 The following information should be obtained by aircraft

4.4.1 Meteorological forecast

4.4.2 Low visibility procedure is implementing

5. Helicopter operation restrictions and helicopter parking/docking area

Nil

6. Warning

Nil

ZSHC AD 2.21 减噪程序

1 在起飞性能允许的情况下，尽可能使用减推力飞行。

2 采用减推力飞行时，航空器起飞爬升到450m(QNH)，调整和保持发动机爬升功率/推力，保持爬升速度 V2+20km/h，保持襟翼和缝翼在起飞状态。

ZSHC AD 2.21 Noise abatement procedures

1 With take-off performance permission, pilot shall reduced-thrust flight as far as possible.

2 In the condition of reduced-thust flight, aircraft shall climb to 450m(QNH), adjust and keep engine climbing power and thrust, keep climbing speed V2+20km/h, and keep flaps and slats in the take-off configuration.

3 采用减推力飞行时，航空器起飞爬升到 900m(QNH)以上，转为正常航路爬升速度，并按照程序收襟翼和缝翼。

3 In the condition of reduced-thust flight, aircraft shall climb to 900m(QNH) and above, adjust normal enroute climb speed, then retract flaps and slats with following normal procedure.

4 由于非管制原因不执行减噪飞行操作程序，飞行员须在起飞前告知 ATC 并说明理由。

4 If noise abatement procedure is not implemented by non-ATC control reasons, pilot shall report the reason to ATC before take-off.

ZSHC AD 2.22 飞行程序

ZSHC AD 2.22 Flight procedures

1. 总则

1. General

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

1.1 Flights within Hangzhou APP Control Area and TWR Control Area shall operate under IFR unless special clearance has been obtained from Hangzhou APP Control or TWR Control;

1.2 在较高的天气条件，实施 II 类或使用 HUD 实施特殊批准 II 类进近程序的机组不必通知管制员。

1.2 In higher weather conditions, crews implementing IAP CAT II or HUD special CAT II do not have to notify ATC.

1.3 本场 RNAV 飞行程序为主用程序，传统程序为备用程序。

1.3 RNAV flight procedures are primary and conventional procedures are secondary procedures.

1.4 凡不符合 RNAV 程序运行要求的航空器，需在首次联系时告知管制员。

1.4 Aircraft not fullfill the requirements of operating RNAV procedures shall inform ATC at the first contact.

1.5 由于天气等特殊原因，无法实施 RNAV 运行时，管制部门将通过 ATIS 告知。

1.5 If RNAV procedures can not be implemented due to special reasons, ATC shall inform aircraft via ATIS.

2. 起落航线

2. Traffic circuits

起落航线在 07/25 跑道南侧进行，A、B 类航空器高度 550m，C、D 类航空器高度 600m；经空中交通管制部门许可，起落航线也可在 06/24 跑道北侧进行，A、B 类航空器高度 450m，C、D 类航空器高度 500m。

Traffic circuits shall be made to the south of RWY07/25, at the altitude of 550m for CAT A/B, and 600m for CAT C/D. Traffic circuits to the north of RWY06/24 are subject to ATC clearance, at the altitude of 450m for

CAT A/B, and 500m for CAT C/D.

3. 仪表飞行程序

3.1 严格按照航图中公布的进、离场程序和进近程序飞行。当管制员指令高度与程序中各类限制高度不一致时，以管制员指令高度为准。

3.2 如果需要，航空器可在空中交通管制部门指定的航路、导航台或定位（航路）点上空等待或做机动飞行。

3.3 航空器应按管制员的指令高度加入等待航线进行等待。

3. IFR flight procedures

3.1 Strict adherence is required to the relevant arrival/departure/approach procedures published in the aeronautical charts. If at any time the ATC instructions do not align with the altitude restrictions in the procedures, comply with the ATC instructions.

3.2 If necessary, aircraft may hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.

3.3 Aircraft shall follow ATC instructions altitude to join the holding pattern.

4. 雷达程序和/或 ADS-B 程序

4.1 杭州进近管制区实施雷达管制，航空器最小水平间隔为 5.6km，最小垂直间隔为 300m。

4.2 最低监视引导高度扇区

4. Radar procedures and/or ADS-B procedures

4.1 Radar control within Hangzhou APP has been implemented. The minimum horizontal radar separation is 5.6km; the minimum vertical radar separation is 300m.

4.2 Surveillance Minimum Altitude Sectors

Sector 1	ALT limit: 600m or above
N304503 E1203526-N302908 E1205541-N300717 E1205309-N300733 E1203359-N301512 E1202918-N301841 E1201843-N304503 E1203526	
Sector 2	ALT limit: 900m or above
N305625 E1201654-N305310 E1202500-N304503 E1203526-N301841 E1201843-N301512 E1202918-N300733 E1203359-N300717 E1205309-N300242 E1205206-N295732 E1205428-N295659 E1203059-N300450 E1200656-N300321 E1200019-N301542 E1195304-N305625 E1201654	
Sector 3	ALT limit: 1200m or above

N301635 E1194331-N301542 E1195304-N300321 E1200019-N300450 E1200656-N295659 E1203059-N295310 E1201217-N295953 E1195747-N295502 E1194950-N300611 E1193857-N301635 E1194331	
Sector 4	ALT limit: 1800m or above
N311312 E1192618-N311200 E1193730-N305625 E1201654-N301542 E1195304-N301635 E1194331-N303127 E1194639-N305706 E1184512-N311312 E1192618	
Sector 5	ALT limit: 1500m or above
N295953 E1195747-N295310 E1201217-N295659 E1203059-N295732 E1205428-N294524 E1205925-N293907 E1200505-N295502 E1194950-N295953 E1195747	
Sector 6	ALT limit: 2100m or above
N300611 E1193857-N295502 E1194950-N293907 E1200505-N294524 E1205925-N283730 E1212648-N285200 E1204300-N285400 E1200130-N285704 E1190000-N294159 E1190306-N300611 E1193857	
Sector 7	ALT limit: 2600m or above
N305706 E1184512-N303127 E1194639-N301635 E1194331-N300611 E1193857-N294159 E1190306-N285704 E1190000-N285400 E1200130-N282216 E1193434-N280500 E1183000-N280310 E1182252-N281700 E1180800-N282642 E1175748-N294412 E1181512-N305706 E1184512	

5. 无线电通信失效程序

5.1 参见 AIP 总则 3.4.5 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执行各项操作.

5.2 使用传统程序至杭州萧山机场降落的航空器，沿进场程序飞行至 IAF 点后，飞向党山导航台（DSH）加入等待、下降高度，接入相应进近程序。

5.3 使用 RNAV 程序由 OKTUG、SUPAR 方向至杭州萧山机场跑道 24/25 降落的航空器，沿进场程序飞行

5. Radio communication failure procedures

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

5.2 Landing aircraft by conventional procedures, after flying to IAF by arrival procedure, fly to DSH and join the holding pattern, descend altitude, then join the relevant approach procedure.

5.3 Landing aircraft by RNAV procedures on RWY24/25 from OKTUG, SUPAR, after flying to IAF

至 IAF 点后，飞向 HC306 加入等待、下降高度，接入相应进近程序。

by arrival procedure, fly to HC306 and join the holding pattern, descend altitude, then join the relevant approach procedure.

6. 目视飞行程序

无

6. Procedures for VFR flights

Nil

7. 目视飞行航线

无

7. VFR route

Nil

8. 其它规定

8.1 对机组的要求

8.1.1 听清并重复地面管制员的滑行，尤其是界限性指令，发现疑问及时证实。

8. Other regulations

8.1 Requirements for pilots:

8.1.1 Repeat the taxiing instructions issued by GND Control, especially those contain boundary limitation. Make it clear when there is a doubt.

ZSHC AD 2.23 其它资料

ZSHC AD 2.23 Other information

鸟情资料

全年有鸟类活动，机场当局采取了驱赶措施，以减少鸟群活动。

Bird's information

Activities of bird flocks are found all the year round, aerodrome authority resorts to dispersal methods to reduce bird activities.

Type of bird	Time of activity	Flight altitude(m)
Ardeidae	The whole year	0-100
Phasianus colchicus	The whole year	0-50
Hawk	Sep.to Apr.(next year)	0-200
Hirundinidae	Apr.to Sep.	0-60
Lapwing	Nov.to Mar.(next year)	0-80
Anatidae	Nov.to Mar.(next year)	0-100