

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

ZSSS/SHA-上海/虹桥 SHANGHAI/Hongqiao

ZSSS 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	N31°11.8' E121°20.1' Center of RWY18L/36R
2	机场基准点与城市的位置关系 Direction and distance from city	253 °GEO, 13.3km from Renmin square
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	3.0 m/32.0°C(JUL)/1.4°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	5°46'W(2017)/-42"
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	Shanghai Hongqiao International Airport Company, Ltd. Nr.300 of Konggang 1st Road, Shanghai, China Post code:200335 TEL:86-21-22369728; 86-21-22381200(H24) AFS:ZSSSYDYX E-mail:boxiaoming@shairport.com
7	允许飞行种类 Types of traffic permitted(IFR/VFR)	IFR-VFR
8	机场性质/飞行区指标 Military or civil airport/Reference code	CIVIL/4E
9	备注 Remarks	Nil

ZSSS 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	HS or O/R
3	卫生健康部门 Health and sanitation	HS or O/R
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

ZSSS 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 (7t, 14t), conveyor truck, unit load device (ULD) tractor, tow-tractor, bulk trailer, baggage trailer
2	燃油牌号 Fuel types	Jet Fuel No.3, Jet A-1
3	滑油牌号 Oil types	(all grades of oil available)
4	加油设施/能力 Fuelling facilities & Capacity	Tank vehicles: 65000L and 47000L; Hydrant dispensers: 63.3L/s and 58.3L/s; Apron refueling well: 1000L/s.
5	除冰设施 De-icing facilities	19 de-icers, de-icing fluid type I, II, IV
6	过站航空器机库 Hangar space for visiting aircraft	Small hangar: one A300 below; Big hangar: two B747-400 and two narrow body aircraft; China Eastern Airlines hangar: two B747-400 and two narrow body aircraft; Business aircraft hangar Nr.1: one B737-300 and one GULF V; Business aircraft hangar Nr.2: one B737-300 and one GULF V.
7	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance for: C919, A300-600, A319/320/321, A330-200/300, A340-300/600, A350-800/900, ATR-72, B737-300/500/700/800/MAX, B757-200, B767-200/300, B777-200/300, B787-8/9, MD-11F, MD-82, MD-90, B747-400F
8	备注 Remarks	Air conditioning truck, oxygen filling truck, aircraft tractor, water truck, sewage truck, garbage truck, ferry truck, defective person lift truck, power truck, shovel truck

ZSSS AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD
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2	餐饮 Restaurants	At AD
3	交通工具 Transportation	Airport shuttle bus, taxi
4	医疗设施 Medical facilities	First-aid equipment, 6 ambulances and medical center at AD
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	At AD TEL: 86-21-68346452
7	备注 Remarks	Nil

ZSSS 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: rapid intervention vehicle, primary foam tender, dry-chemical tender, heavy-duty foam tender, illumination truck, command car, disassembly rescue truck, logistics truck; Rescue equipments: uplift air cushion
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	Up to B747-8(included); EQPT for removal: mobile surface, aircraft axle jack, hoisting gasbag, towing vehicle, drawbar, etc.
4	备注 Remarks	Nil

ZSSS 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 blowers, ice spreading car, ramp snow vehicles
2	扫雪顺序 Clearance priorities	RWY→TWY→aprons
3	备注 Remarks	Nil

ZSSS 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 970/R/B/W/T : Stands Nr. 212-217, 216E, 227-230, 267-270, 280-285, 281E PCR 960/R/B/W/T : Stands Nr. 112-115

			PCR 950/R/B/W/T : Stands Nr. 237, 238E, 240E, 246, 248, 250, 256, 257, 259E, 260 PCR 940/R/B/W/T : Apron Nr. 4, 6, Stands Nr. 286-290 PCR 920/R/A/W/T : Stands Nr. 501, 502, 504, 506 PCR 920/R/B/W/T : Stands Nr. 515-522 PCR 910/R/A/W/T : Stands Nr. 101, 102, 109-111 PCR 910/R/B/W/T : Stands Nr. 120, 121, 126, 127 PCR 900/R/B/W/T : Stands Nr. 508, 510, 511, 514 PCR 890/R/B/W/T : Stands Nr. 318-322, 325-327, 330-332, 335-342 PCR 880/R/B/W/T : Stands Nr. 261-266 PCR 870/R/B/W/T : Stands Nr. 313-317, 323, 324, 328, 329, 333, 334 PCR 860/R/B/W/T : Stands Nr. 218-226, 220E, 231-236, 271-279, 523-525 PCR 750/R/A/W/T : Stands Nr. 310-312
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	60m : D9, D13 56m : D3-D8, D10-D12, D14-D17, H2(BTN C & D), H3(BTN C & D), H5(BTN C & D), H6(BTN C & D) 47m : H1(BTN C & D), H7(BTN C & D) 45m : K1 39m : H2(BTN B & C), H3(BTN B & RWY18R), H4(BTN RWY36R & C), H5(BTN B & RWY36L), H6(BTN B & C) 35m : K2, K4 34m : K6, K7 32m : K5 31m : H1(east of C), H7(BTN C & RWY36R) 29m : H4(BTN L01 & A) 28.5m : A1-A4 23m : A, B, B1-B8, BN, BS, C, C1-C4, D, H3(BTN C & RWY18R), H4(BTN A & RWY36R), H5(BTN RWY36L & C), H7(east of RWY36R), N, S, T1, T6
		道面 Surface	ASPH : BN, BS CONC : A, A1-A4, B, B1-B8, C, C1-C4, D, D3-D17, H1-H7, K1, K2, K4-K7, L01, N, S, T1, T6
		强度 Strength	PCR 1390/R/A/W/T : A4 PCR 1240/R/B/W/T : T1 PCR 1190/R/B/W/T : H7(BTN A & RWY36R) PCR 1180/R/A/W/T : A PCR 1080/R/A/W/T : D3-D13, H3(west of C) PCR 1080/R/B/W/T : H7(east of A) PCR 1070/R/A/W/T : D14-D17, H5(west of C) PCR 1050/R/A/W/T : K2 PCR 1040/R/A/W/T : K1 PCR 1030/R/B/W/T : H1(east of RWY18L), K6

		PCR 1010/F/C/X/T : BS PCR 1010/R/B/W/T : K7 PCR 1000/F/C/X/T : BN PCR 990/R/A/W/T : H1(west of B), H6 PCR 990/R/B/W/T : B4 PCR 980/R/A/W/T : C PCR 950/R/A/W/T : H2, T6 PCR 940/R/B/W/T : L01 PCR 930/R/A/W/T : K5 PCR 920/R/A/W/T : H7(west of B) PCR 920/R/B/W/T : B3 PCR 910/R/A/W/T : B7, B8, C1-C4 PCR 910/R/B/W/T : A1, A3, B5, B6 PCR 900/R/A/W/T : D, H3(east of C), H5(east of C) PCR 900/R/B/W/T : B2, H4(BTN B & RWY36R), K4 PCR 890/R/A/W/T : B1 PCR 890/R/B/W/T : H4(east of A) PCR 880/R/B/W/T : H7(BTN B & RWY36R) PCR 860/R/B/W/T : H4(BTN A & RWY36R) PCR 850/R/A/W/T : H4(west of B) PCR 840/R/A/W/T : N, S PCR 810/R/A/W/T : A2 PCR 770/R/A/W/T : H1(BTN RWY18L & B) PCR 760/R/A/W/T : B
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	B8: Rapid exit TWY grooved in full length B7: Rapid exit TWY grooved in full length C1: Rapid exit TWY grooved in full length C3: Rapid exit TWY grooved in full length C2: Rapid exit TWY grooved in full length C4: Rapid exit TWY grooved in full length

ZSSS 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	<p>Taxiing guidance signs at all intersections of TWY and RWY.</p> <p>Taxiing guidance signs at all holding positions.</p> <p>Aircraft stand identification sign boards at stands Nr. 101, 102, 109-115, 120, 121, 126, 127, 212-216, 216E, 217-220, 220E, 221-237, 238E, 240E, 246, 248, 250, 256, 257, 259E, 260-281, 281E, 282-290, 310-322, 338, 340-342, 401, 404-406, 410-413, 413E, 414-416, 501, 502, 504, 506, 508, 510, 511, 520-525, 601-603, 604A, 607, 608.</p> <p>Guide lines at all TWYs.</p> <p>Guide lines at all aprons.</p> <p>Visual docking guidance system at aircraft stands Nr. 101, 102, 109-115, 120, 121, 126, 127, 221-237, 238E, 240E, 246, 248, 250, 256, 257, 259E, 260-275,</p> <p>Marshalling assistance for other aircraft stands.</p>	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	跑道标志 RWY markings	RWY designation, edge line, RWY center line, TDZ, aiming point, displaced THR
		跑道灯光 RWY lights	RTHL, WBAR, REDL, RCLL, RENL, THLs
		滑行道标志 TWY markings	Edge line, center line, enhanced TWY center line, TWY shoulder marking, No-entry, RWY holding position, intermediate holding position
		滑行道灯光 TWY lights	Edge line lights, center line lights, No-entry bar, RELs , RETILs, intermediate holding position lights
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Runway guard lights	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	<p>RWY holding positions(Pattern B) established at both ends of TWY A.</p> <p>Unidirectional Yellow center line lights only used for rapid exit TWYs.</p> <p>Unidirectional Green center line lights only used for rapid exit TWYs and TWY BS, BN.</p> <p>RELs of RWY18L/36R installed on TWY H1, T1, H4, H7, T6, and RELs of RWY18R/36L installed on TWY H1, H2, H3, H4, H5, H6, H7.</p>	

ZSSS AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对 18L/36R 跑道中心) Obstacles within a circle with a radius of 15km (centered on the center of RWY 18L/36R)					
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	003/2676	19.7		RWY36R Take-off path
ELECTRICAL_E XIT_LIGHT 002	ELECTRI CAL_EXI T_LIGHT	003/3047	22.4		
Antenna 003	Antenna	003/5383	48.7		
ELECTRICAL_E XIT_LIGHT 004	ELECTRI CAL_EXI T_LIGHT	004/2937	22.1	LGT	RWY36R Take-off path
Antenna 005	Antenna	005/2671	15.6		RWY36R Take-off path
BLDG 006	BLDG	006/5846	45.9	LGT	
SIGN 007	SIGN	007/3064	24.3		
BLDG 008	BLDG	007/7156	68.2		
Antenna 009	Antenna	008/1301	17		RWY18L precision approach final
ELECTRICAL_E XIT_LIGHT 010	ELECTRI CAL_EXI T_LIGHT	008/3025	23.3		
BLDG 011	BLDG	010/6881	64.6		RWY18L/R GP INOP
BLDG 012	BLDG	015/5808	54.9	LGT	
Antenna 013	Antenna	022/2700	46	LGT	RWY18L VOR/DME final approach

半径 15 千米内主要障碍物 (相对 18L/36R 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 18L/36R)

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BLDG 014	BLDG	025/5422	76		RWY18L VOR/DME final approach
BLDG 015	BLDG	031/4856	63		
BLDG 016	BLDG	032/4331	57		
BLDG 017	BLDG	035/5538	63		
BLDG 018	BLDG	042/6459	112		MVA SECTOR
BLDG 019	BLDG	048/5583	103	LGT	
BLDG 020	BLDG	071/5539	114	LGT	
BLDG 021	BLDG	076/5689	122	LGT	
BLDG 022	BLDG	077/7684	265	LGT	MSA
BLDG 023	BLDG	078/11358	284	LGT	MVA SECTOR
BLDG 024	BLDG	078/13546	335		
BLDG 025	BLDG	079/12212	252		
BLDG 026	BLDG	080/4258	99		
BLDG 027	BLDG	082/10857	262		
BLDG 028	BLDG	084/5810	145	LGT	
BLDG 029	BLDG	087/5940	152		

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BLDG 030	BLDG	090/5640	148		
Control TWR 031	Control TWR	111/520	47	LGT	RWY18L ILS/DME missed approach
BLDG 032	BLDG	120/5085	97	LGT	
BLDG 033	BLDG	122/892	52	LGT	
BLDG 034	BLDG	128/5792	125	LGT	
Bridge 035	Bridge	129/14218	222		
BLDG 036	BLDG	140/3232	64	LGT	
BLDG 037	BLDG	140/5599	84	LGT	
TOWER 038	TOWER	145/1022	48		
BLDG 039	BLDG	148/2056	52		
BLDG 040	BLDG	151/1435	51		
BLDG 041	BLDG	161/1566	49	LGT	
BLDG 042	BLDG	170/3319	52		RWY36L VOR/DME final approach
BLDG 043	BLDG	173/4860	43.7		
BLDG 044	BLDG	176/4511	44.8		
Antenna 045	Antenna	177/1301	17.7		RWY36R ILS/DME final approach

半径 15 千米内主要障碍物 (相对 18L/36R 跑道中心)

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BLDG 046	BLDG	177/6530	64		RWY36L GP INOP
BLDG 047	BLDG	179/3840	45.0		RWY18L Take-off path
BLDG 048	BLDG	179/4741	42		
BLDG 049	BLDG	180/3377	26		
BLDG 050	BLDG	180/3390	28		
BLDG 051	BLDG	181/2551	20.6		RWY18L Take-off path
BLDG 052	BLDG	181/3071	28.8		RWY18L Take-off path
BLDG 053	BLDG	181/3522	34		RWY18L Take-off path
BLDG 054	BLDG	182/3063	28.6		RWY18L Take-off path
BLDG 055	BLDG	182/3094	29.2		RWY18L Take-off path
BLDG 056	BLDG	183/4438	46.5		RWY18R Take-off path
BLDG 057	BLDG	183/4982	43		
ELECTRICAL_EX IT_LIGHT 058	ELECTRI CAL_EXI T_LIGHT	185/3011	18.8		
BLDG 059	BLDG	185/3688	35.3		RWY18R Take-off path
BLDG 060	BLDG	185/4107	41.5		

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BLDG 061	BLDG	185/6647	62.5		
SIGN 062	SIGN	186/2969	18.9		
ELECTRICAL_E XIT_LIGHT 063	ELECTRI CAL_EXI T_LIGHT	186/2975	17.6		
ELECTRICAL_E XIT_LIGHT 064	ELECTRI CAL_EXI T_LIGHT	186/3048	21.2		
Moving OBST 065	Moving OBST	188/2164	15.6		RWY18R Take-off path MAG 197° DIST 2269m Height of moving aircraft (including vertical tail) < 13m
ELECTRICAL_E XIT_LIGHT 066	ELECTRI CAL_EXI T_LIGHT	188/3003	20.2		
ELECTRICAL_E XIT_LIGHT 067	ELECTRI CAL_EXI T_LIGHT	188/3086	23.8		
ELECTRICAL_E XIT_LIGHT 068	ELECTRI CAL_EXI T_LIGHT	188/3088	22.3		
ELECTRICAL_E XIT_LIGHT 069	ELECTRI CAL_EXI T_LIGHT	189/2958	22.5		
ELECTRICAL_E XIT_LIGHT 070	ELECTRI CAL_EXI T_LIGHT	189/3060	23.8		
BLDG 071	BLDG	189/3972	40.6	LGT	RWY18R Take-off path

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Moving OBST 072	Moving OBST	190/1642	15.6		RWY18R departure Height of moving aircraft (including vertical tail) < 13m
ELECTRICAL_E XIT_LIGHT 073	ELECTRI CAL_EXI T_LIGHT	190/2881	20.6		
ELECTRICAL_E XIT_LIGHT 074	ELECTRI CAL_EXI T_LIGHT	190/2952	20.1		
Pole 075	Pole	191/2842	22.1		
BLDG 076	BLDG	192/2752	23.5		RWY18R Take-off path
ELECTRICAL_E XIT_LIGHT 077	ELECTRI CAL_EXI T_LIGHT	192/2773	18.7		
ELECTRICAL_E XIT_LIGHT 078	ELECTRI CAL_EXI T_LIGHT	192/2789	21.1		
BLDG 079	BLDG	193/6707	62		RWY36L GP INOP
ELECTRICAL_E XIT_LIGHT 080	ELECTRI CAL_EXI T_LIGHT	194/2683	19.4		RWY18R Take-off path
ELECTRICAL_E XIT_LIGHT 081	ELECTRI CAL_EXI T_LIGHT	195/2639	18.9		RWY18R Take-off path
Antenna 082	Antenna	196/1019	17.8		RWY36L ILS/DME final approach
ELECTRICAL_E XIT_LIGHT 083	ELECTRI CAL_EXI T_LIGHT	196/2581	17.5		

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ELECTRICAL_EXIT_LIGHT 084	ELECTRICAL_EXIT_LIGHT	198/2497	15.5		
BLDG 085	BLDG	203/4809	50.5	LGT	
BLDG 086	BLDG	205/5246	64.0		
BLDG 087	BLDG	207/5743	63	LGT	
BLDG 088	BLDG	211/5851	88.9	LGT	Circling CAT B/C/D RWY36L VOR/DME final approach
BLDG 089	BLDG	213/5419	61		
BLDG 090	BLDG	215/5722	63		
BLDG 091	BLDG	240/3966	50	LGT	
Antenna 092	Antenna	280/2476	44	LGT	Circling CAT A
Antenna 093	Antenna	323/2159	44	LGT	
Antenna 094	Antenna	349/1019	17.8		RWY18R ILS/DME final approach
Moving OBST 095	Moving OBST	350/2336	15.6		RWY36L Take-off path MAG 358 °DIST 2260m Height of moving aircraft (including vertical tail) < 13m
BLDG 096	BLDG	350/5647	48.3	LGT	

半径 15 千米内主要障碍物 (相对 18L/36R 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 18L/36R)

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
ELECTRICAL_E XIT_LIGHT 097	ELECTRI CAL_EXI T_LIGHT	352/3063	20.9		
BLDG 098	BLDG	352/3482	41.5		RWY18L VOR/DME final approach RWY36L Take-off path
BLDG 099	BLDG	353/2834	22.0		RWY36L Take-off path
BLDG 100	BLDG	353/5167	46.2		
BLDG 101	BLDG	355/5117	46.2		
BLDG 102	BLDG	356/4854	45		
Moving OBST 103	Moving OBST	357/1740	15.6		RWY36L departure Height of moving aircraft (including vertical tail) < 13m
ELECTRICAL_E XIT_LIGHT 104	ELECTRI CAL_EXI T_LIGHT	357/3056	23.2		
BLDG 105	BLDG	358/4821	45.5		
Pole 106	Pole	360/2960	26.3		RWY36L/R Take-off path
BLDG 107	BLDG	360/3835	36.4		RWY36R Take-off path

半径 15 千米-50 千米内主要障碍物 (相对 18L/36R 跑道中心)

Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 18L/36R)

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
Power plant 108	Power plant	019/30231	244		
Power plant 109	Power plant	061/30315	245		MVA SECTOR
Bridge 110	Bridge	077/20476	231	LGT	
TOWER 111	TOWER	078/15909	466	LGT	
BLDG 112	BLDG	080/16325	424	LGT	
BLDG 113	BLDG	081/16182	635		MSA MVA SECTOR
BLDG 114	BLDG	081/16486	495	LGT	
Power plant 115	Power plant	147/19609	215		
Antenna 116	Antenna	163/33334	173	LGT	
Power plant 117	Power plant	177/23378	183		RWY36L ILS/DME initial approach
Antenna 118	Antenna	263/20434	171	LGT	
MT 119	MT	281/87910	343		MVA SECTOR
Antenna 120	Antenna	341/21886	154	LGT	RWY18L/R ILS/DME initial approach MVA SECTOR
STACK 121	STACK	358/43264	244		
Remarks:					

ZSSS 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	Hongqiao Aerodrome MET Office, MET Center of ATMB, East China regional administration, CAAC
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	MET Center of ATMB, East China regional administration, CAAC;9h, 30h;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
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, real-time data, forecast, satellite and radar material, data forecast product
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	MET Service Terminal
9	提供气象情报的空中交通服务单位 ATS units provided with information	Hongqiao TWR, Shanghai ACC, Shanghai APP
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: 110m E of RCL, 322m inward DTHR18L; B: 110m E of RCL, 1600m inward DTHR36R; C: 115m E of RCL, 337m inward DTHR36R; D: 100m E of RCL, 351m inward DTHR18R

		E: 100m E of RCL, 1430m inward DTHR36L F: 100m E of RCL, 321m inward DTHR36L SFC wind sensors 18L: 110m E of RCL, 332m inward DTHR18L; 18L/36R: 110m E of RCL, 1590m inward DTHR36R; 36R: 110m E of RCL, 333m inward DTHR36R; 18R: 115m E of RCL, 341m inward DTHR18R; 18R/36L: 115m E of RCL, 1430m inward DTHR36L; 36L: 115m E of RCL, 351m inward DTHR36L; Ceilometer 18L: 120m E of RCL, 336m inward DTHR18L; 36R: 120m E of RCL, 333m inward DTHR36R; 18R: 115m E of RCL, 331m inward DTHR18R; 36L: 115m E of RCL, 331m inward DTHR36L.
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

ZSSS 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
18L	177.34 °GEO 183 °MAG	3400×45	(0-100m) PCR 880/R/B/W/T CONC (100-3300m) PCR 1030/R/A/W/T ASPH (3300-3400m) PCR 880/R/B/W/T CONC/-	Nil	THR 1.9m DTHR 1.9m TDZ 2.3m	0%(100m)/0.02% (3200m)/0%(100 m)

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
36R	357.34 °GEO 003 °MAG	3400×45	(0-100m) PCR 880/R/B/W/T CONC (100-3300m) PCR 1030/R/A/W/T ASPH (3300-3400m) PCR 880/R/B/W/T CONC/-	Nil	THR 2.6m DTHR 2.6m TDZ 2.8m	0%(100m)/-0.02 %(3200m)/0%(10 0m)
18R	177.33 °GEO 183 °MAG	3300×60	PCR 880/R/A/W/T CONC/CONC	Nil	THR 2.6m DTHR 2.6m TDZ 2.6m	0%(300m)/0.03% (1350m)/-0.03%(1350m)/0%(300 m)
36L	357.33 °GEO 003 °MAG	3300×60	PCR 880/R/A/W/T CONC/CONC	Nil	THR 2.6m DTHR 2.6m TDZ 2.6m	0%(300m)/0.03% (1350m)/-0.03%(1350m)/0%(300 m)
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
18L	Nil	Nil	3320×300	240×120	Nil	-
36R	Nil	Nil	3320×300	240×120	Nil	-
18R	150×60	60×300	3420×300	240×150	Nil	-
36L	150×60	60×300	3420×300	240×150	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
Remarks: 18L/36R:RWY shoulder:7.5m on each side 60*60m blast pad on the both ends of RWY THR of RWY18L/36R displaced 100m inwards, ENDS of RWY18L/36R displaced 100m inwards, surface of displaced parts is CONC; 18R/36L:RWY shoulder:7.5m on each side 120*75m blast pad on the both ends of RWY THR of RWY18R/36L displaced 300m inwards, ENDS of RWY18R/36L displaced 150m inwards, surface of displaced parts is CONC; RWY18R/36L grooved at full length, 60m in width; The distance between RCL18R/36L and RCL18L/36R is 365m, and their north ends aligned.						

ZSSS 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
18L	3300	3300	3300	3200	THR displaced 100m inwards,END displaced 100m inwards
18L	3188	3188	3188	NOT AVBL	FM T1,THR displaced 100m inwards,END displaced 100m inwards
36R	3300	3300	3300	3200	THR displaced 100m inwards,END displaced 100m inwards
36R	3188	3188	3188	NOT AVBL	FM H7,THR displaced 100m inwards,END displaced 100m inwards

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
18R	3150	3210	3300	2850	THR displaced 300m inwards,END displaced 150m inwards
18R	2988	3048	3138	NOT AVBL	FM H2,THR displaced 300m inwards,END displaced 150m inwards
36L	3150	3210	3300	2850	THR displaced 300m inwards,END displaced 150m inwards
36L	2988	3048	3138	NOT AVBL	FM H6,THR displaced 300m inwards,END displaced 150m inwards

ZSSS 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
18L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 438m inward DTHR18L 3° 22.3m	Nil	3200 m spacing 30m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3400 m spacing 60m 0-100m, RED 100-2700m, WHITE 2700-3300m, YELLOW VRB LIH	RED	Nil

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
36R	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI RIGHT 438m inward DTHR36R 3° 22.3m	Nil	3200 m spacing 30m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3400 m spacing 60m 0-100m, RED 100-2700m, WHITE 2700-3300m, YELLOW VRB LIH	RED	Nil
18R	PALS CAT I SFL 840 m VRB LIH	GREEN Yes	PAPI LEFT 393m inward DTHR18R 3° 19.5m	Nil	3150 m spacing 30m 0-2250m, WHITE 2250-2850m, RED/WHITE 2850-3150m, RED VRB LIH	3150 m spacing 60m 0-300m, RED 300-2550m, WHITE 2550-3150m, YELLOW VRB LIH	RED	150 m RED
36L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI RIGHT 393m inward DTHR36L 3° 19.5m	Nil	3150 m spacing 30m 0-2250m, WHITE 2250-2850m, RED/WHITE 2850-3150m, RED VRB LIH	3150 m spacing 60m 0-300m, RED 300-2550m, WHITE 2550-3150m, YELLOW VRB LIH	RED	150 m RED
Remarks: RWY18L runway lighting:3300-3400m Red REDL; from APCH view, 4 upright red REDL installed 100m before DTHR. RWY18L runway lighting:RCLL from DTHR to THR replaced by APCH LGTs. RWY18L runway lighting:Red RENL added at 3400m RWY END. RWY18R stopway lighting:150m SWY centerline LGTs, Red. RWY36L stopway lighting:150m SWY centerline LGTs, Red. RWY36R runway lighting:3300-3400m Red REDL; from APCH view, 4 upright red REDL installed 100m before DTHR. RWY36R runway lighting:RCLL from DTHR to THR replaced by APCH LGTs. RWY36R runway lighting:Red RENL added at 3400m RWY END.								

ZSSS 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: 18L: 90m E of RCL, 450m inward THR18L, LGT. 36R: 90m E of RCL, 450m inward THR36R, LGT. 18R: 120m E of RCL, 380m inward THR18R, LGT. 36L: 120m E of RCL, 380m inward THR36L, LGT.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: yellow center line lights, green center line lights, green and yellow center line lights, blue edge line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	Dual feed, diesel engine driven generator/ CAT I, HUD I: 15s; HUD II: 1s
5	备注 Remarks	Nil

ZSSS 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

ZSSS 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
Shanghai/Hongqiao tower control area	Within 10km west of RCL and 7km east of RCL as the landing track or ILS established from north or south.	SFC-QNH300m (inclusive)				
Fuel Dumping Area	N3113E12300-N3130E12400-N3100E12400-N3100E12300-N3113E12300	3000m and above				Refer to Fuel Dumping Area Chart, Maximum Fuel Dumping Speed 500km/h
Restricted Area	N311449E1212726-N311214E1212547-N311201E1212554-N311223E1212730-N311224E1213008-N311519E1213234-N311557E1213156-N311449E1212726	SFC-QNH1500m(exclusive)				

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
Altimeter setting region and TL/TA	SASAN-PIKAS-'NTG' VOR-N315826E121255 4-UDOXI-IBEGI-N314 611E1224630-EMSAN-DUMET-N311241E122 4630 -BONGI-PONAB-N301 500E1221200-'AND' VOR-'NXD' VOR-SASAN	TL 3600m TA 3000m 3300m(QNH \geq 1031hPa) 2700m(QNH \leq 979hPa)				Aircraft taking-off or landing in ZSSS/ZSPD shall follow the rules: 1. above 900m: use ZSPD QNH; 2. at 900m or below: use QNH of the taking-off or landing aerodrome. 3. above TA: do as usual.

ZSSS 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		132.25			H24	D-ATIS available
APP	Shanghai Approach	APP01:120.3 (119.75)			by ATC	
		APP02:125.4 (124.05)			H24	
		APP03:125.85 (119.2)			by ATC	
		APP04:123.8 (119.2)			by ATC	

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星语音通信 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
		APP05:126.65 (128.05)			H24	
		APP06:126.3 (120.65)			by ATC	
		APP07:121.1 (119.75)			by ATC	
		APP08:127.75 (124.05)			by ATC	
		APP09:121.375 (128.05)			by ATC	
		APP10:125.625 (120.65)			by ATC	
		APP11:119.075 (128.05)			by ATC	
		APP12:119.975 (120.65)			by ATC	
		APP13:120.825 (124.875)			by ATC	Contact APP09 when APP13 U/S.
		APP14:124.725 (119.75)			by ATC	
TWR	Hongqiao Tower	TWR(E):118.1 (124.3)			H24	
		TWR(W):118.65 (118.25)			H24	
GND	Hongqiao Ground	GND(E):121.6 (121.575)			H24	
		GND(W):121.9 (121.575)			H24	
APN	Hongqiao Apron	APN(E):121.675 (121.55)			H24	
		APN(W):121.95 (121.55)			H24	

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星语音通信 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
Delivery	Hongqiao Delivery	121.75 (121.55)			0000-1200	Contact GND when Delivery U/S; DCL AVBL; No readback required when the delivery clearance has been received through DCL.
OP-CTL	Pujiang	130.75			H24	
EMG		121.5			H24	

ZSSS 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
Jiuting VOR/DME	JTN	109.6 MHz CH 33X	H24	N31°07.4' E121°20.5' 183 °MAG/8400m FM the Center of RWY18L	28 m	
Chonggu VOR/DME	CGT	112.5 MHz CH 72X	H24	N31°12.6' E121°11.6'	24 m	
Hongqiao VOR/DME	SHA	117.2 MHz CH 119X	H24	N31°13.4' E121°20.0' 7m W of RCL, 1064m outside DTHR18L	16 m	
Liuzao VOR/DME	PDL	109.4 MHz CH 31X	H24	N31°07.8' E121°40.3'	4 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
Nanxiang NDB	PK	208 kHz	H24	N31°17.0' E121°19.8' 003 °MAG/9630m FM the Center of RWY18L		Beyond 4NM on BRG 002 °, beyond 7NM on BRG 243 °, BTN 7-12NM on BRG 264 °, BTN 14-19NM on BRG 292 °, beyond 3.5NM on BRG 350 ° U/S.
LOC 18L ILS CAT I	IPK	111.3 MHz		183 °MAG/300m FM displaced RWY18L end		Beyond 27 ° rightside of front course U/S
GP 18L		332.3 MHz		125m E of RCL, 305m inside DTHR18L		Angle 3 °, RDH 15 m
DME 18L	IPK	CH 50X (111.3 MHz)			10m	Co-located with GP 18L
LOC 36R ILS CAT I	IWB	110.3 MHz		003 °MAG/251m FM displaced RWY36R end		
GP 36R		335.0 MHz		115m E of RCL, 305m inside DTHR36R		Angle 3 °, RDH 15 m
DME 36R	IWB	CH 40X (110.3 MHz)			10m	Co-located with GP 36R
LOC 18R ILS CAT I	IHQ	110.9 MHz		183 °MAG/287m FM displaced RWY18R end		
GP 18R		330.8 MHz		120m E of RCL, 311m inside DTHR18R		Angle 3 °, RDH 15 m
DME 18R	IHQ	CH 46X (110.9 MHz)			10m	Co-located with GP 18R
LOC 36L ILS CAT I	ISH	111.7 MHz		003 °MAG/290m FM displaced RWY36L end		
GP 36L		333.5 MHz		120m E of RCL, 311m inside DTHR36L		Angle 3 °, RDH 15 m
DME 36L	ISH	CH 54X (111.7 MHz)			10m	Co-located with GP 36L

ZSSS AD 2.20 本场规定**1. 机场使用规定**

- 1.1 禁止未装二次雷达应答机的航空器起降。
- 1.2 所有训练飞行和技术试飞，须经事先申请并得到 ATC 部门批准后方可进行。
- 1.3 凡来往上海/虹桥机场的航空器必须按规定频率与上海进近管制室、虹桥塔台和虹桥机坪管制进行联系并听从其指令。
- 1.4 本场可使用最大机型为 B747-8。
- 1.5 因空域使用限制，使用 36L/36R 跑道实施仪表离场时，要求航空器在高度 200m 转弯，除非经管制员特别许可，应严格执行。

2. 跑道和滑行道的使用**2.1 跑道运行规则**

- 2.1.1 跑道 18R/36L 主要用于离场；跑道 18L/36R 主要用于进场，经管制员同意可用于离场。
- 2.1.2 更换跑道运行方向过程中，当跑道顺风分量超过 3m/s 但不大于 5m/s 时，管制员可以短时指挥航空器顺风起飞或者着陆，当航空器驾驶员根据机型性能或者运行手册不能执行顺风跑道起飞或者着陆时，应明确告知管制员。

- 2.1.3 着陆航空器落地许可的最晚发布时机可以在着

ZSSS AD 2.20 Local aerodrome regulations**1. Airport operations regulations**

- 1.1 Take-off/landing aircraft without SSR transponder are forbidden.
- 1.2 Each and every technical test flight shall be filed in advance and shall be made only after clearance has been obtained from ATC.
- 1.3 The aircrafts shall contact Shanghai APP, Hongqiao TWR and Hongqiao Apron by the designated FREQ, follow ATC instructions.
- 1.4 Maximum aircraft type: B747-8.
- 1.5 Due to airspace restriction, aircrafts shall strictly turn at 200m in SID of RWY36L/36R, except by the special permission from ATC.

2. Use of runways and taxiways**2.1 General rules for the use of runway**

- 2.1.1 RWY18R/36L mainly used for departure; RWY18L/36R mainly used for arrival, and could be used for departure by ATC clearance.
- 2.1.2 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.

- 2.1.3 The latest time to issue landing clearance is before

- 陆航空器飞越跑道入口前，航空器驾驶员应听清管制指令。
- 2.1.4 为减少落地航空器占用跑道时间，加速飞行流量，虹桥机场使用落地航空器快速脱离跑道路序：
- 2.1.4.1 落地航空器应根据 ATC 给出的脱离方向，选择就近快速脱离滑行跑道快速脱离跑道，并在脱离后立即通报管制员。
- 2.1.4.2 落地航空器从接地到脱离跑道的的时间应控制在 50s 以内（湿跑道或污染跑道除外），使用第一或第二快速脱离道脱离跑道。如不能执行上述要求，需要使用最后一条快速脱离道及以远道口脱离跑道时，航空器驾驶员应在与塔台管制员建立首次联系时进行通报说明，管制员将根据空中和地面交通情况视情指挥航空器继续进近、落地、中止进近或复飞（湿跑道或污染跑道除外）。
- 2.1.5 起飞航空器从等待位置到对正跑道的的时间应控制在 60s 以内，如不能满足，航空器驾驶员应在进跑道之前报告塔台管制员（湿跑道或污染跑道除外）。
- 2.1.6 因噪音影响，18R/36L 跑道每日 0 点-7 点不接收航空器降落（备降除外）。
- 2.1.7 为调整飞行次序，管制员可以指挥航空器从 H2 进入 18R 跑道起飞或从 H6 进入 36L 跑道起飞，如航空器驾驶员不能执行，须在进跑道之前报告管制员。
- 2.1.8 为防止航空器落错跑道，航空器驾驶员应通过
- aircrafts flying over THR. The pilot shall hear the instructions clearly.
- 2.1.4 Procedure for rapidly vacating RWY:
- 2.1.4.1 Landing aircraft shall vacate RWY rapidly via the appropriate rapid exit TWY by ATC, and report to TWR immediately after vacating RWY.
- 2.1.4.2 All landing aircraft shall fully vacate RWY within 50s after touchdown via the first or second rapid exit TWY. If it can't fulfill the above requirements and need to vacate RWY via the last rapid exit TWY or further TWY, the pilot shall inform TWR on the first contact. TWR will instruct aircraft to continue approach, land, discontinue approach or go around according to air and ground traffic conditions(except for wet or contaminated RWY).
- 2.1.5 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 entering the RWY.
- 2.1.6 Aircraft is forbidden to land on RWY18R/36L from UTC 1600 to 2300 daily(except alternate).
- 2.1.7 ATC may instruct aircraft to enter RWY18R via H2, or enter RWY36L via H6 for take-off. If not available, pilots shall inform ATC before entering the RWY.
- 2.1.8 In order to prevent aircraft landing on the wrong

自动终端情报服务掌握落地所使用的跑道，在进近过程中，仔细检查管制指令中的落地跑道号，建议将顺序闪光灯作为重要的目视参考。

2.2 跑道穿越规则

2.2.1 穿越跑道需按照管制员指令滑行至跑道等待点外等待(绕行滑行道运行期间的进港穿越要求详见 AD2.20-2.3.3)。

2.2.2 收到穿越指令后需尽快实施穿越，不得延误，如有疑问请在穿越前证实。

2.2.3 航空器驾驶员需完整复诵所有跑道外等待和穿越跑道指令，穿越结束后需报告“已脱离跑道”。

2.2.4 穿越跑道时，航空器驾驶员应注意监听其他有关跑道指令或信息，并注意观察跑道及附近的活动；跟随起飞航空器后穿越跑道时，航空器驾驶员自行负责与起飞航空器之间的距离以免受喷流影响。

2.2.5 跑道 18R/36L 的穿越滑行道为 H1-H7；跑道 18L/36R 的穿越滑行道为 H1、H4、H7。

2.2.6 每日 0600-2400（北京时）之间禁止拖曳航空器穿越跑道。

2.3 地面以及滑行道使用规则：

2.3.1 禁止任何航空器在跑道和滑行道上做大于 90° 的转弯。

RWY, pilot shall master the used landing RWY by ATIS.

During approach, pilot shall carefully check the landing RWY number instructed by ATC. It is suggest that use SFL as an important visual reference.

2.2 RWY crossing rules

2.2.1 Taxi to the holding position by ATC and hold short of RWY (Refe to AD2.20-2.3.3 for crossing rules of arrival aircrafts when ROUTE-NORTH/SOUTH in operation).

2.2.2 Cross the RWY immediately upon receiving the crossing clearance, and any question shall be clarified before crossing RWY.

2.2.3 Repeat all the ATC instructions concerning "hold short of RWY" or "cross the RWY". When crossing is completed, report to the controller "RWY vacated".

2.2.4 When crossing RWY, pilots shall monitor the ATC instructions or information about RWY and observe the activities on and around RWY. While crossing RWY after the take-off aircraft, pilots shall be responsible for the safety distance with the aircraft to avoid the effect of wake turbulence.

2.2.5 Use TWY H1-H7 to cross RWY18R/36L; use TWY H1, H4, H7 to cross RWY18L/36R.

2.2.6 Towing aircraft to cross RWYs is strictly forbidden during UTC 2200-1600(next day).

2.3 Operation rules on ground and use of TWY:

2.3.1 Turn around exceeding 90° on RWY or TWY is forbidden.

- 2.3.2 落地航空器落地后禁止使用 H3、H4、H5 滑行道脱离跑道。

2.3.2 It's forbidden for landing aircraft to vacate RWY via TWY H3, H4 or H5.
- 2.3.3 绕行滑行道使用限制

2.3.3 Using limit for ROUTE-NORTH/SOUTH

滑行道/TWY	航空器翼展限制/Wing span limit for aircraft(m)	机身高（含垂尾）/Height of aircraft (including vertical tail) (m)
N, S, BN, BS	<36	<13

- 2.3.3.1 机场绕滑组成

2.3.3.1 Constitution of ROUTE-NORTH/SOUTH
- a. 滑行道 BS、S 或 BN、N 分别组成常用绕滑路线如下：
北绕滑：TWY BN→TWY N；
南绕滑：TWY BS→TWY S。

a. Constitution of ROUTE-NORTH (TWY BN & N)/ROUTE-SOUTH (TWY BS & S) as follows:
ROUTE-NORTH: TWY BN→ TWY N;
ROUTE-SOUTH: TWY BS→ TWY S.
- b. 使用跑道 18R/36L 离场时，须注意 N、BN、S、BS 滑行道上移动的航空器。为了避免使用绕滑的航空器影响 18R/36L 跑道起飞的航空器驾驶员判断，在 18R/36L 跑道两侧中线延长线上距跑道物理端 388m 的位置设置了红白相间斜条纹状目视遮蔽物。

b. Pay attention to aircrafts on TWY N, BN, S, BS when using RWY18R/36L for departure, because they may affect the judgment about take-off. In order to eliminate those ill effects, some visual shelter with Red/White diagonal stripe has been set 388m outside RWY END on each side of extended RCL18R/36L.
- c. 设置 4 个强制等待点，分别为 HP1、HP2、HP3、HP4。机组滑行至强制等待点时，必须原地等待进一步的管制指令。

c. Four compulsory holding points have been set: HP1, HP2, HP3, HP4. The flight crew must stop and wait for ATC instruction when reached these points.
- 2.3.3.2 机场绕滑运行程序

2.3.3.2 Operation of ROUTE-NORTH/SOUTH
- a. 绕滑正常情况下提供给停靠西机坪的进港航空器使用。

a. ROUTE-NORTH/SOUTH is normally used for arrival aircrafts parking on west apron.
- b. 绕滑可以供翼展<36m 的机型无限制使用；36m≤翼展<65m 的机型限制使用；翼展≥65m 的机型禁止

b. Aircraft with wing span<36m is avialable to use ROUTE-NORTH/SOUTH. Aircraft with 36m ≤ wing

使用。

span<65m is limited to use ROUTE-NORTH/SOUTH.

Aircraft with wing span $\geq 65\text{m}$ is forbidden to use ROUTE-NORTH/SOUTH.

c. 运行中翼展<36m 的机型原则上使用绕滑滑行。翼展 $\geq 36\text{m}$ 的机型主用 H2（或 H6）穿越 18R（或 36L）跑道。

c. Aircraft with wing span<36m normally taxi via ROUTE-NORTH/SOUTH. Aircraft with wing span $\geq 36\text{m}$ mainly cross RWY18R(or RWY36L) via TWY H2(or H6).

2.3.3.3 机场绕滑使用时间

2.3.3.3 Operational time of ROUTE-NORTH/SOUTH

a. 原则上虹桥机场 24 小时使用绕滑。

a. Normally H24.

b. 当夜间本场全部起飞航空器结束后,可以转换为穿越跑道模式。

b. When all departure flight finish take-off at night, RWY crossing mode can be implemented.

c. 当南、北绕滑因道面等一些特殊原因不能使用时,转换为穿越跑道模式。

c. When ROUTE-NORTH/SOUTH cannot be used due to TWY surface or some special reasons, RWY crossing mode shall be implemented.

d. 虹桥机场处于低能见度运行时,使用穿越跑道模式。

d. When LVP in force, RWY crossing mode is implemented.

2.3.3.4 机场绕滑使用注意事项

2.3.3.4 Notice for ROUTE-NORTH/SOUTH

a. 在 B 滑行道的航空器驾驶员应注意与使用 H1-H7 跑道外等待航空器之间保持安全间隔。

a. Pilot using TWY B shall pay attention and keep safety separation with aircrafts holding short of RWY on TWY H1-H7.

b. 穿越跑道的进港航空器驾驶员应听清管制指令,避免错过穿越联络道。一旦错过了 B 滑行道 H2(或 H6)联络道,因受起飞爬升面影响,只能机头朝北(或朝南)在 B 滑行道 H1(或 H7)联络道前等待进一步的管制指令。

b. Arrival aircraft shall strictly follow ATC instruction to cross RWY. If missed the intersection of TWY B and TWY H2(or H6), the aircraft must nose to north(or south), stop before entering the intersection of TWY B and TWY H1(or H7) and wait for ATC instruction.

c. 绕滑仅限单向运行,在 D 滑行道与绕滑交界处设置禁止进入灯光及标志,航空器驾驶员应注意观察,防止误入。

c. ROUTE-NORTH/SOUTH shall only use for one-way. No-entry lights and markings are set at the connection parts of TWY D and ROUTE-NORTH/SOUTH. Pilot

d. 根据跑道运行方向，在起飞端 B 滑行道与绕滑交界处设置禁止进入灯光，离港航空器在滑行至 H1（或 H7）时，应注意观察，防止误入。

2.3.3.5 机场绕滑限制使用和应急处置程序

a. $36\text{m} \leq \text{翼展} < 52\text{m}$ 的航空器滑入绕滑后，立即暂停使用 18R/36L 跑道起飞，按照管制指令可以使用绕滑继续滑行。

b. $52\text{m} \leq \text{翼展} < 65\text{m}$ 的航空器滑入绕滑后，立即暂停使用 18R/36L 跑道起飞，按照机坪内滑行通道限速 20km/h （含）以下或地面引导车引导滑行，至 D 滑行道后继续按指令自主滑行进位。

c. 翼展 $\geq 65\text{m}$ 的航空器滑入绕滑后，立即暂停使用 18R/36L 跑道起飞，航空器原地关车，等待拖车拖至 B 滑后开车滑行。

2.4 仪表着陆系统敏感区保护程序

2.4.1 当启用仪表着陆系统敏感区保护程序时，航空器驾驶员必须严格按管制员指令在 B 型等待位置等待。

2.4.2 当天气条件符合运行标准时，为加速飞行流量，

shall pay attention and avoid entering by mistake.

d. According to RWY in use, no-entry lights are set near DER at the connection parts of TWY B and ROUTE-NORTH/SOUTH. Departure aircraft taxiing to TWY H1(or H7) shall pay attention and avoid entering by mistake.

2.3.3.5 Limitation and Contingency plan for ROUTE-NORTH/SOUTH

a. If the aircraft($36\text{m} \leq \text{wing span} < 52\text{m}$) gets in ROUTE-NORTH/SOUTH, stop using RWY18R/36L for take-off immediately and follow ATC instruction to continue taxiing.

b. If the aircraft($52\text{m} \leq \text{wing span} < 65\text{m}$) gets in ROUTE-NORTH/SOUTH, stop using RWY18R/36L for take-off immediately. The stray aircraft shall taxi not exceeding 20km/h on its own or guided by follow-me vehicle to TWY D, then follow ATC instruction to taxi into stand on its own.

c. If the aircraft(wing span $\geq 65\text{m}$) gets in ROUTE-NORTH/SOUTH, stop using RWY18R/36L for take-off immediately. And the aircraft shall shut down engine and wait for towing tractor, after towing back to TWY B, start-up to taxi.

2.4 Protection procedures for ILS sensitive area

2.4.1 When the protection procedures are implemented, the pilot shall follow the ATC instructions and hold at the holding position pattern B.

2.4.2 In order to accelerate the traffic flows, the

18L/36R 跑道可不启用仪表着陆系统敏感区保护程序，此时起飞航空器在跑道外等待位置等待，落地航空器进近方式改变为仪表着陆系统下滑台不工作即航向道进近方式或使用目视进近，但不表示设备故障。

protection procedures needn't to be implemented if the weather condition meets the operational standard for RWY18L/36R. In this condition, the departure aircraft shall hold short of RWY and the landing aircraft shall adopt ILS approach procedures with GP INOP(which does not mean the GP fails) or visual approach.

2.5 B747-8、B777-200/300/300ER、A340-200/600、A350-900/1000、B787-8/9/10、A330-200/300、B747-400 本场运行规则：

2.5 Operation rules for B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-8/9/10, A330-200/300, B747-400:

2.5.1 B747-8 本场运行规则

2.5.1 Operation rules for B747-8

2.5.1.1 本场接受 B747-8 运行。B747-8 离场主用跑道 18R/36L，进场主用跑道 18L/36R。

2.5.1.1 Aircraft B747-8 can operate at this airport: RWY18R/36L is mainly used for departure, RWY18L/36R is mainly used for arrival.

2.5.1.2 B747-8 正常使用停机位 248，或限制条件下使用停机位 250、411 和 511，如下：

2.5.1.2 B747-8 can normally use stand Nr.248 or use stand Nr. 250, 411 or 511 with restrictions as follows:

B747-8 使用停机位/ The stand in use for B747-8	限制使用的停机位或车道/ Using limit for stands or lane nearby
411	关闭停机位 410, 关闭停机位 411 与 412 之间的服务车道 Stand Nr.410 U/S, service vehicle lane BTN stands Nr.411 and Nr.412 U/S.
250	停机位 256 只允许停放翼展小于 61m 的航空器 Stand Nr.256 only available for aircraft with wingspan less than 61m.
511	停机位 510 只允许停放翼展小于 52m 的航空器 Stand Nr.510 only available for aircraft with wingspan less than 52m.

2.5.1.3 B747-8 须由 FOLLOW-ME 引导车引导入位。

2.5.1.3 B747-8 shall be guided by follow-me vehicle into stands.

2.5.2 相应航空器在以下转弯口进行任一方向转弯滑行时，需采用偏置转弯滑行：

2.5.2 To make a turn at the corner sections of following TWYs, aircrafts shall offset-centerline taxi:

滑行路线/Taxiing route	机型/Aircraft type
RWY18L/36R & H1, RWY18L/36R & T1, RWY18L/36R & T6, T1 & A, H7 & A, H1 & A, T6 & A, A1 & A, A2 & A, A3 & A, A4 & A, A & K4, L01 & K4, A & K6, L01 & K6, A & K7, L01 & K7, L01 & H7	B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-8/9/10, A330-200/300, B747-400
A & K1, L01 & K1	A340-200, B787-8/9, A330-200, B747-400
A & K2, L01 & K2	B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-9/10, A330-200/300, B747-400
B1 & B, RWY18R/36L & H1, RWY18R/36L & H2, RWY18R/36L & H6, RWY18R/36L & H7	A340-600, B777-300/300ER
B2 & B, B3 & B, B4 & B, B5 & B	B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-10, A330-300, B747-400
B7 & B	B747-8, B777-200/300/300ER, A340-600, A350-900/1000, A330-300
B8 & B	B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-10, A330-200/300, B747-400
H1 & B, H2 & B, H3 & B, H4 & B, H5 & B, H6 & B, H7 & B, H1 & C, H7 & C, H2 & C, H6 & C, H4 & C	A340-600, B777-300/300ER, A350-1000
H1 & D, H7 & D, H2 & D, H6 & D, H3 & D, H5 & D, D5 & D, D16 & D	A340-600
D9 & D, D13 & D	B747-8, B777-200/300/300ER, A340-600, A350-900/1000, B787-10, A330-300
all 180-degree continuous turns BTN C & D	B747-8, A340-600, B777-300/300ER, A350-1000, B787-10

2.5.3 相应航空器在以下转弯口禁止任一方向转弯通行。

2.5.3 The following aircraft is prohibited from making a turn at the corner sections of following TWYs.

滑行路线/Taxiing route	机型/Aircraft type
A & K1, L01 & K1	B747-8, B777-200/300/300ER, A340-600, A350-900/1000, B787-10, A330-300
180-degree continuous turns from L01 via H7 to A and from A via H7 to L01	A340-600, B777-300/300ER, A350-1000
L01 via K5 to A, A via K5 to L01	B747-8, B777-200/300/300ER, A340-200/600, A350-900/1000, B787-8/9/10, A330-200/300, B747-400

2.6 虹桥机场 HOT SPOT

2.6 HOT SPOT at AD ZSSS

2.6.1 HS1-HS4 的范围

2.6.1 Area of HS1-HS4

HS1: H4 滑连接 L01 滑与跑道 18L/36R 的区域;

HS1: TWY H4 connected area of TWY L01 and RWY18L/36R;

HS2: H4 滑连接跑道 18L/36R 与 18R/36L 的区域;

HS2: TWY H4 connected area of RWY18L/36R and RWY18R/36L;

HS3: H3 滑与 D 滑的连接区域;

HS3: Connected area of TWY H3 and TWY D;

HS4: H5 滑与 D 滑的连接区域。

HS4: Connected area of TWY H5 and TWY D.

2.6.2 HS1: 航空器穿越 18L/36R 跑道主用区域。穿越跑道期间, 飞行员应加强对穿越跑道目视观察, 扫视穿越跑道的相关飞行动态。当对穿越指令有疑义时, 应及时询问管制人员。该区域也是穿越跑道滑行道与主滑行道的交叉区域, 航空器滑行频繁。

2.6.2 HS1: RWY18L/36R crossing area. Pilot must be careful when crossing the RWY. Any doubts about crossing clearance should be clarified in time with ATC. Taxiing busy area.

2.6.3 HS2: 起飞航空器自东向西穿越 18L/36R 跑道后, 飞行员应注意守听指令, 避免滑错。

2.6.3 HS2: Follow ATC instructions strictly when vacated RWY18L/36R.

2.6.4 HS3、HS4: 落地航空器自东向西穿越 18R/36L 跑道后, 航空器滑行频繁, 飞行员应注意守听指令, 加强目视观察。	2.6.4 HS3 and HS4: Taxiing busy area. Follow ATC instructions strictly when vacated RWY18R/36L and pay more attention.
2.6.5 HS5-HS7 的内容参见 AD2.20-3.2.4。	2.6.5 For HS5-HS7, refer to AD2.20-3.2.4.
2.6.6 HS8-HS11 的范围	2.6.6 Area of HS8-HS11
HS8: H2 滑连接 B 滑与跑道 18R/36L 的区域;	HS8: TWY H2 connected area of TWY B and RWY 18R/36L;
HS9: H3 滑连接 B 滑与跑道 18R/36L 的区域;	HS9: TWY H3 connected area of TWY B and RWY 18R/36L;
HS10: H5 滑连接 B 滑与跑道 18R/36L 的区域;	HS10: TWY H5 connected area of TWY B and RWY 18R/36L;
HS11: H6 滑连接 B 滑与跑道 18R/36L 的区域。	HS11: TWY H6 connected area of TWY B and RWY 18R/36L.
2.6.7 HS8-HS11: 航空器穿越 18R/36L 跑道频繁区域。穿越跑道期间, 飞行员应加强对穿越跑道目视观察, 扫视穿越跑道的相关飞行动态。当对穿越指令有疑义时, 应及时询问管制人员。	2.6.7 HS8-HS11: RWY18R/36L busy crossing area. Pilot must be careful when crossing the RWY. Any doubts about crossing clearance should be clarified in time with ATC.
2.7 ILS 开启模式	2.7 ILS operation mode
2.7.1 CAT-I/HUD-I 运行时:	2.7.1 CAT-I/ HUD-I in operation:
2.7.1.1 跑道 18L 落地时: 开启 18L 和 36L, 关闭 18R 和 36R。	2.7.1.1 RWY18L landing: 18L and 36L opened, 18R and 36R closed.
2.7.1.2 跑道 36R 落地时: 开启 36R 和 18R, 关闭 18L 和 36L。	2.7.1.2 RWY36R landing: 36R and 18R opened, 18L and 36L closed.
2.7.1.3 跑道 18R 落地时: 开启 18R 和 36R, 关闭 18L 和 36L。	2.7.1.3 RWY18R landing: 18R and 36R opened, 18L and 36L closed.
2.7.1.4 跑道 36L 落地时: 开启 36L 和 18L, 关闭 18R 和 36R。	2.7.1.4 RWY36L landing: 36L and 18L opened, 18R and 36R closed.

- 2.7.2 HUD-II 运行时:

2.7.2.1 跑道 36R 落地时: 开启 36R 和 18R, 关闭 18L 和 36L。

2.7.2.2 其他跑道不具备 HUD-II 类运行能力。
- 2.7.2 HUD-II in operation:

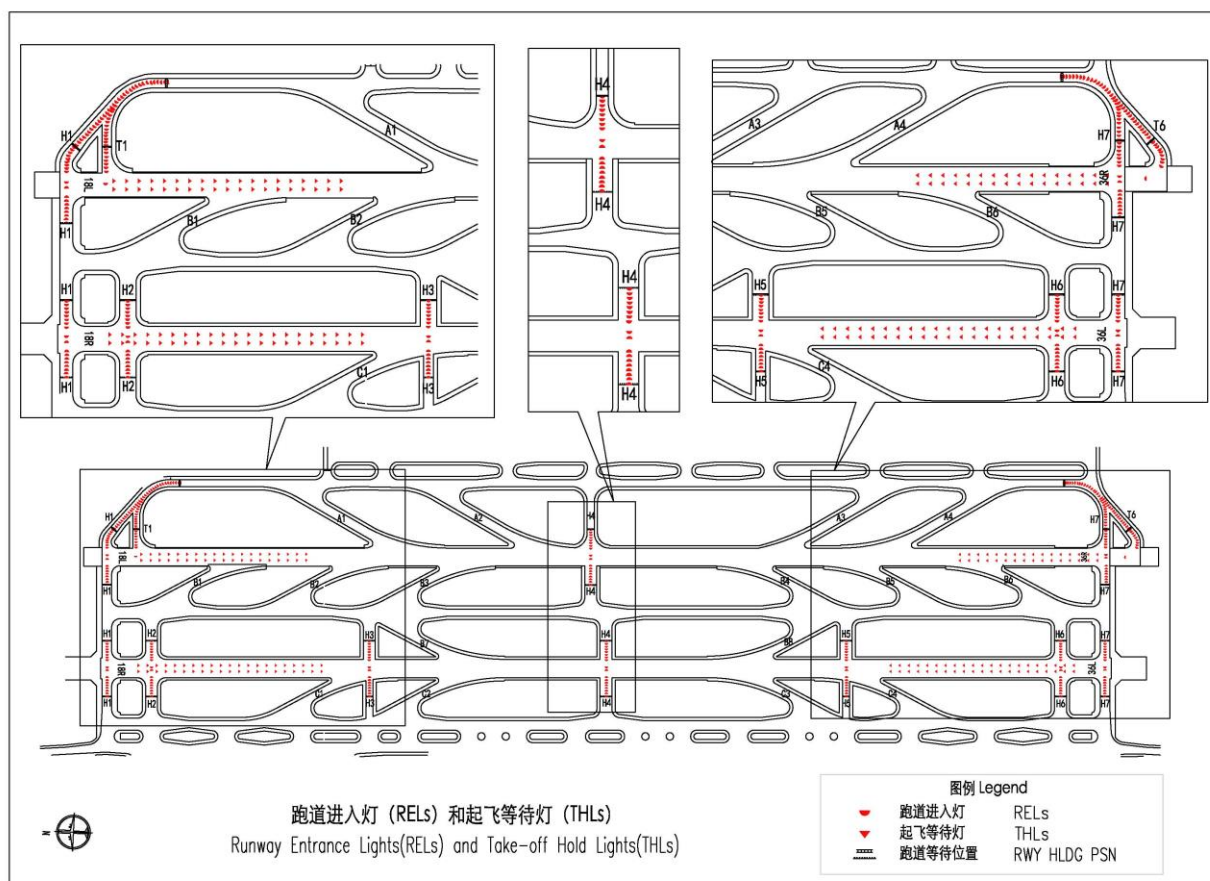
2.7.2.1 RWY36R landing: 36R and 18R opened, 18L and 36L closed.

2.7.2.2 Other RWYs are incompetent at HUD-II operation.
- 2.8 跑道状态灯 (RWSL) 使用规则

2.8.1 18L、18R、36L、36R 跑道设有起飞等待灯。H1-H7 滑行道设有进入 RWY18R/36L 的跑道进入灯; H1、T1、H4、H7、T6 滑行道设有进入 RWY18L/36R 的跑道进入灯。
- 2.8 Use of RWSL

2.8.1 THLs installed for RWY18L, 18R, 36L, 36R. RELs of RWY18R/36L installed on TWY H1-H7, and RELs of RWY18L/36R installed on TWY H1, T1, H4, H7, T6.

灯具种类/ Type of RWSL	跑道号 码/ RWY	长度/ Length	间隔/ Spacing	颜色/ Colour	强度/ INTST
THLs	18L	540m	30m	红色 (跑道占用时) / Red (RWY occupied)	可变高强度/ VRB LIH
THLs	36R	540m	30m	红色 (跑道占用时) / Red (RWY occupied)	可变高强度/ VRB LIH
THLs	18R	600m	30m	红色 (跑道占用时) / Red (RWY occupied)	可变高强度/ VRB LIH
THLs	36L	600m	30m	红色 (跑道占用时) / Red (RWY occupied)	可变高强度/ VRB LIH
RELs	18L, 18R, 36L, 36R	-	-	红色 (跑道占用时) / Red (RWY occupied)	-



2.8.2 起飞等待灯、跑道进入灯分为“亮红灯”与“熄灭”两种状态。

2.8.2 There are just two states of THLs and RELs: 'red lights on' or 'lights off'.

2.8.3 起飞与进入或穿越跑道必须得到 ATC 的许可。跑道状态灯验证 ATC 许可，它不能取代 ATC 许可。

2.8.3 It's necessary to get ATC clearance before taking off, entering or crossing RWY. RWSL are used to verify ATC clearance, but not used to replace it.

2.8.4 当得到 ATC 起飞许可实施起飞前，如起飞等待灯是红色，机组人员应立即联系 ATC 复核。当得到 ATC 进入或穿越跑道许可越过跑道等待位置前，如跑道进入灯是红色，机组人员应立即联系 ATC 复核。

2.8.4 When the aircraft is going to take off by ATC clearance, if THLs are still red, the flight crew shall verify with ATC immediately. Before moving across RWY holding position by ATC clearance of entering/crossing RWY, if RELs are still red, the flight crew shall verify with ATC immediately.

2.8.5 在起飞的过程中看到红色的起飞等待灯，或在进入或穿越跑道的过程中看到红色的跑道进入灯，机组人员应根据他们的最佳判断进行操作，并尽早联系

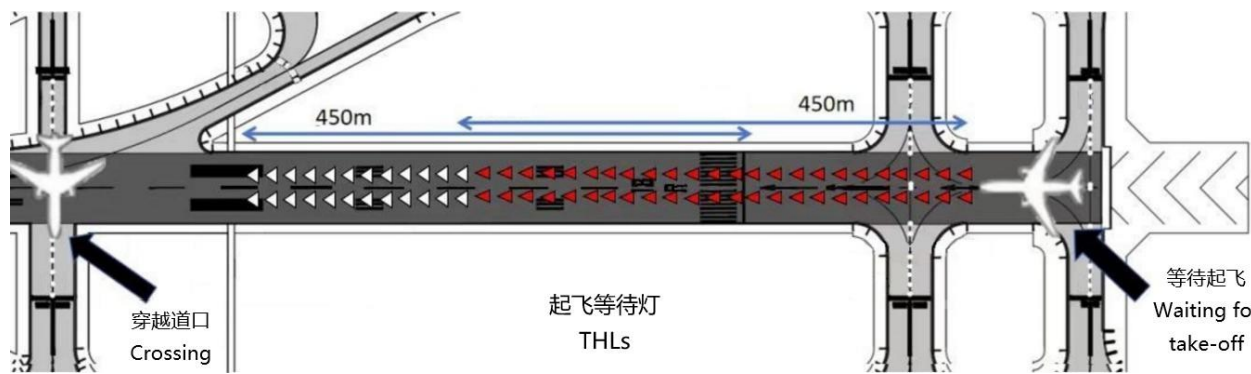
2.8.5 If flight crews see red THLs in taking off, or see red RELs during entering/crossing RWY, they shall operate according to their best judgment, and contact

ATC。

ATC ASAP.

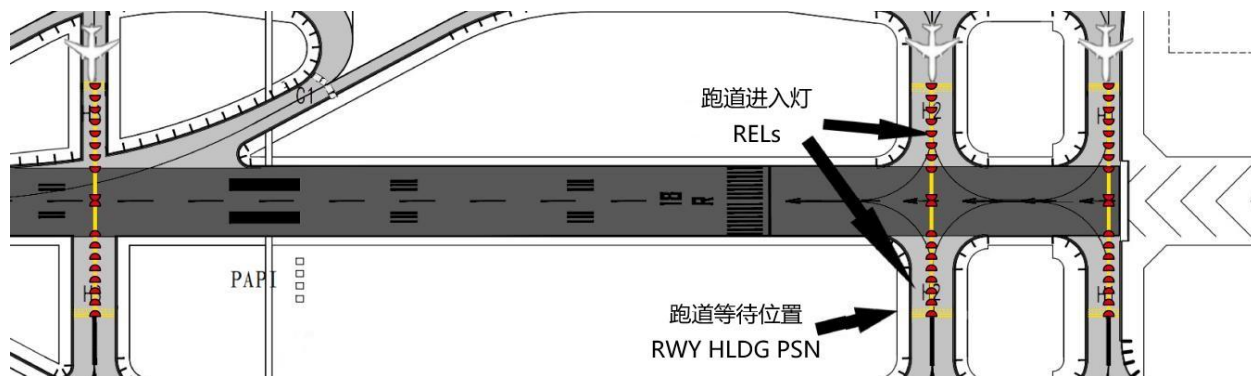
起飞等待灯示意图（仅示意功能，未按比例，起飞等待灯亮红灯时，显示长度为 450m）

Schematic Diagram of THLs(not to scale. When red lights on, THLs only show in 450m.)



跑道进入灯示意图（仅示意功能，未按比例）

Schematic Diagram of RELs(not to scale)



3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 机坪使用及滑行限制（包括机坪在冬季被雪覆盖情况下的滑行限制）

3.1 Use of apron(including covered with snow in winter) and taxiing limitation:

3.1.1 机坪滑行道翼展限制

3.1.1 Wing span limits of taxiing line on apron

机坪滑行道/ taxiing line on apron	航空器翼展限制/ wing span limits(m)
Y1-Y3, M1-M6, L16, D, L01	≤68.4
L10, L11, L15, L17-L19	<65
L12-L14, L20	<36
L08	<31

- 3.1.2 航空器在机坪上活动必须经机坪管制部门同意后，方可按指定的滑行路线滑行或牵移。
- 3.1.2 Aircraft shall taxi or be towed along the designated taxiing route with permission of APN.
- 3.1.3 未经虹桥运行指挥中心 AOC 同意，严禁航空器利用自身动力倒滑。
- 3.1.3 Aircraft is strictly forbidden to taxi backward on its own power without AOC permission.
- 3.1.4 航空器在地面滑行时，其发动机的废气、喷气或螺旋桨尾流不得对任何人或结构、财产造成损坏或构成危险，否则必须关闭发动机，使用牵引车牵引。
- 3.1.4 When taxi on ground, if the engine blust may cause damage to ground staff or structures, aircrafts shall turn off engine, ask for towing tractor.
- 3.1.5 Y1-Y3 仅供航空器进港使用，M1-M6、L11-L17 仅供航空器出港使用。禁止 Y1-Y3、M1-M6、L15-L17 中任何一条机坪滑行道路同时运行两架及以上航空器。
- 3.1.5 TWY Y1-Y3 are only used for arrival, and TWY M1-M6, L11-L17 are only used for departure. It is prohibited for two or more aircrafts to operate simultaneously on any of TWY Y1-Y3, M1-M6, L15-L17.
- 3.2 航空器进出停机位
- 3.2 Rules of aircrafts in/out parking stands
- 3.2.1 地面管制要求：
- 3.2.1 Ground control requirements:
- 3.2.1.1 进港航空器停机位分配由虹桥机场运行指挥中心（AOC）统一安排。
- 3.2.1.1 Stands distribution for arrival aircrafts is arranged by AOC(The Aerodrome Operation Center, frequency 130.75MHz, call sign Pujiang).
- 3.2.1.2 航空器驾驶员通过地面服务波道或空中交通管制部门申请使用引导车。
- 3.2.1.2 Follow-me vehicle service are available via ground service channel or ATC.
- 3.2.1.3 航空器驾驶员须知：虹桥机场地面管制向塔台管制移交航空器或东、西塔台管制之间移交航空器，管制员将使用汉语“守听”（英语“MONITOR”）或汉语“联系”（英语“CONTACT”）两种管制指令。
- 3.2.1.3 Two ATC instructions will be used when aircraft is transferred from GND to TWR or between the East TWR and West TWR, they are “Monitor” and “Contact”.
- 3.2.2 航空器进出停机位的特殊要求：
- 3.2.2 Special rules for use of stands:
- 3.2.2.1 虹桥机场相邻停机位禁止两架航空器同时运行，包括同时进入、同时推出、同时一进一出。
- 3.2.2.1 Simutaneous operation of two aircrafts at adjacent stands are forbidden, including simutaneous entry, simutaneous push-out, and one in and one out at the same time.

3.2.2.2 进港航空器和引导车，应在停机位滑行通道（或滑行道）上转入停机位引入线之前停止，观察确认无安全运行风险的情况下，减速慢行入位。

3.2.2.3 停靠远机位、专机位的航空器由人工指挥其进、离。以下停机位设有目视停靠引导系统，使用说明如下：

3.2.2.2 Arrival aircraft and follow-me vehicle shall stop on TWYs before turning into stands lead-in lines, then observe and slow speed to enter stand.

3.2.2.3 Aircraft parking/docking on stand-off stand or VIP flight parking stand will be guided by marshaller for entry/exit. Visual docking guidance system for the following aircraft parking stands:

停机位编号/ Stands Nr.	目视停靠引导系统使用说明/ Visual docking guidance system
101, 102, 109-111, 113-115, 120, 121, 126, 127	详见机场 1.1，目视停靠引导系统飞行员指南（三） Refer to AD1.1, Pilot instructions for Visual Docking Guidance System (III)
112	详见机场 1.1，目视停靠引导系统飞行员指南（二） Refer to AD1.1, Pilot instructions for Visual Docking Guidance System (II)
221-237, 238E, 240E, 246, 248, 250, 256, 257, 259E, 260-275	详见机场 1.1，目视停靠引导系统飞行员指南（一） Refer to AD1.1, Pilot instructions for Visual Docking Guidance System (I)

3.2.2.4 为防止航空器尾流吹袭：

a. L12 上有航空器机头朝南运行时，禁止航空器进出停机位 232；L12 有航空器机头朝北运行时，禁止航空器进出停机位 235。

b. L13 上有航空器机头朝南运行时，禁止航空器进出停机位 262；L13 有航空器机头朝北运行时，禁止航空器进出停机位 265。

3.2.2.4 To prevent aircraft wake turbulence:

a. If aircraft operating on TWY L12 nose to south, stand Nr.232 is forbidden to enter or exit. If aircraft operating on TWY L12 nose to north, stand Nr.235 is forbidden to enter or exit.

b. If aircraft operating on TWY L13 nose to south, stand Nr.262 is forbidden to enter or exit. If aircraft operating on TWY L13 nose to north, stand Nr.265 is forbidden to

- enter or exit.
- c. 停机位 232-235 的航空器可沿相应推出线推至 L12 上相应的等待点。
c. For stands Nr.232-235, push back to holding point on TWY L12, then start-up and taxi to TWY D.
- d. 停机位 262-265 的航空器可沿相应推出线推至 L13 上相应的等待点。
d. For stands Nr.262-265, push back to holding point on TWY L13, then start-up and taxi to TWY D.
- e. 停机位 286-290 的航空器出港可沿相应推出线推至 L14 相应的等待点。
e. For stands Nr.286-290, push back to holding point on TWY L14, then start-up and taxi to TWY D.
- f. 停机位 310-312 上航空器出港应沿相应推出线推至 L08 后, 再拖曳至 AP01 等待点开车。
f. For stands Nr.310-312, push back along the corresponding line to TWY L08, then tow to holding point AP01 and start-up.
- g. 停机位 401-416、404C、408C、413E 上翼展 $<65\text{m}$ 的航空器可沿相应推出线推至 L11 相应的等待点。
g. For stands Nr.401-416, 404C, 408C, 413E, aircraft with wing span $<65\text{m}$ shall be pushed back to the holding point on TWY L11.
- h. 停机位 411 上翼展 $\geq 65\text{m}$ 的航空器, 出港必须直接推至 D 滑行道, 机头推出朝向根据管制指令执行。
h. For stand Nr.411, aircraft with wing span $\geq 65\text{m}$ shall be pushed back to TWY D directly.
- i. 停机位 524、525 的航空器出港只允许机头朝南推出至 L01 上对应的推出等待点, 特殊情况下, 需要改变航空器推出后机头朝向时, 应听从机坪管制指令。
i. The aircraft at stand Nr.524 and Nr.525 only allowed to push out with the nose of south to corresponding push-out holding position on TWY L01. When it is necessary to change the direction of aircraft after push out, follow the instruction of APN.
- j. 停机位 601-603、604A/B、605-608 上翼展 $<36\text{m}$ 的航空器出港可沿相应推出线推至 L14 上相应的等待点, 再由等待点开车进入 D 滑行道, 机头推出朝向根据管制指令执行。
j. For stands Nr.601-603, 604A/B, 605-608, aircraft with wing span $<36\text{m}$ shall be pushed back to the holding point on TWY L14, then start-up and taxi to TWY D with nose direction by ATC.
- k. 停机位 602、603、605、606 上翼展 $\geq 36\text{m}$ 的航空器, 出港必须直接推至 D 滑行道, 机头推出朝向根据管制指令执行。
k. For stands Nr.602, 603, 605, 606, aircraft with wing span $\geq 36\text{m}$ shall be pushed back to TWY D directly, with nose direction by ATC.
- l. 在拖曳航空器进出 6 号坪东航机库过程中, 禁止停
l. When towing aircraft taxi in/out hanger of China

机位 604A 的航空器机头向北推出, 禁止停机位 604B、605-608 的航空器推出。

Eastern Airlines on apron Nr.6, aircraft on stand Nr.604A are forbidden to push back nose to north, and aircraft on stands Nr. 604B, 605-608 are forbidden to push back.

3.2.2.5 停机位 310-342 的航空器出港推出后机头朝向要求如下表:

3.2.2.5 Nose direction of aircraft on stand Nr.310-342 after push out as follow:

停机位/Stands Nr.	机头朝向/Nose direction of Aircraft
313, 314	朝北/North
310-312	朝南/South
315, 339-341	朝北或朝南/North or South
316-320, 323-337	朝东或朝西/East or West
321, 322, 338	朝东或朝北/East or North
342	朝南或朝东/South or East

停机位 313、314 上 B747-8、B777-200/300/300ER、A340-600、A350-900/1000、B787-10、A330-300 航空器必沿相应推出线推至 L01 后, 再沿 L10 机头朝西推至 AP02 等待点开车。

Aircraft B747-8, B777-200/300/300ER, A340-600, A350-900/1000, B787-10, A330-300 on stands Nr.313 and 314 must be pushed along the corresponding pushback line to L01, and then pushed along L10 with nose-in west to holding point AP02 for engine start.

3.2.3 航空器进入 2 号机坪停机位 (232-235、262-265 及 286-290 除外) 一律由引导车引导入位。2 号机坪设有航空器进港等待位置 AH01-AH03 和航空器推出等待点 EOP01-EOP06、AP04-AP07, 停机位 310-314 设有航空器推出等待点 AP01、AP02, 详见停机位置图。

3.2.3 Aircrafts shall be guided by follow-me vehicle to taxi into stands of apron Nr.2(except stands Nr. 232-235, 262-265 and 286-290). Arrival holding positions AH01-AH03 and end of push points EOP01-EOP06, AP04-AP07 established on Apron Nr.2, end of push points AP01 and AP02 established on stands Nr.310-314, refer to the aircraft parking chart for details.

3.2.4 2 号机坪设 HOT SPOT (HS5-HS7)

3.2.4 HS5-HS7 established on apron Nr.2.

3.2.4.1 HS5-HS7 的范围

3.2.4.1 Area of HS5-HS7

HS5: 停机位 216E、216-228 区域;

HS5: The area of stands Nr.216E, 216-228;

HS6: 停机位 238E-259E 区域;

HS6: The area of stands Nr.238E-259E;

HS7: 停机位 269-281、281E 区域。

HS7: The area of stands Nr.269-281, 281E.

3.2.4.2 进港航空器和引导车进入 HS5-HS7 前, 应在相应进港等待位置 (AH01-AH03) 停止, 观察确认无安全运行风险的情况下减速慢行入位。

3.2.4.2 Arrival aircraft and follow-me vehicle shall stop at AH01-AH03 before taxiing into HS5-HS7, then observe and slow speed to taxi into stand.

3.2.4.3 HS 或其与相邻停机位的运行限制:

3.2.4.3 Operation limits of HS & the adjacent stands

HS5	同一时段, 只允许一架航空器运行/Two or more aircrafts are forbidden to operate simultaneously
HS5, 215	
HS5, 229	
HS6	同一时段, 只允许一架航空器运行/Two or more aircrafts are forbidden to operate simultaneously
HS6, 237	
HS6, 260	
HS7	同一时段, 只允许一架航空器运行/Two or more aircrafts are forbidden to operate simultaneously
HS7, 268	
HS7, 282	

3.2.5 航空器推出鼻轮等待点:

3.2.5 End of push points to be used for stands:

停机位/ Stands	推出等待点/ End of push points
212-216	推出线与 M1 切点 Tangency point BTN push-back line and TWY M1
216E, 217-221, 220E	EOP01

222-227	EOP02
228-231	推出线与 M2 切点 Tangency point BTN push-back line and TWY M2
236, 237, 238E	推出线与 M3 切点 Tangency point BTN push-back line and TWY M3
240E, 246, 248	EOP03
250, 256, 257	EOP04
259E, 260, 261	推出线与 M4 切点 Tangency point BTN push-back line and TWY M4
266-270	推出线与 M5 切点 Tangency point BTN push-back line and TWY M5
271-275	EOP05
276-280, 281E	EOP06
281-285	推出线与 M6 切点 Tangency point BTN push-back line and TWY M6

3.2.6 停机位限制及进出方式

3.2.6 Limits of aircraft parking 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
248	≤68.4		Taxi in, Push back
102, 111, 112, 126, 127, 216E, 220E, 250, 281E, 283, 284, 313-315, 406, 411, 413E, 414-416, 501, 502, 504, 506, 508, 510, 603, 606	<65		Taxi in, Push back

109	≤ 64		Taxi in, Push back
246, 256, 259E	≤ 64.92		Taxi in, Push back
212	≤ 64.8		Taxi in, Push back
511	≤ 64.75		Taxi in, Push back
110, 113, 121	≤ 61		Taxi in, Push back
213, 214, 229, 230, 237, 238E, 240E, 257, 260, 267, 268	≤ 60.96		Taxi in, Push back
120	≤ 60.4		Taxi in, Push back
231, 266, 602, 605	< 52		Taxi in, Push back
115	≤ 47.6		Taxi in, Push back
114	≤ 45		Taxi in, Push back
101, 226-228, 232-236, 261-265, 272, 273, 285-290, 316-342, 401-404, 404C, 405, 407, 408, 408C, 409, 410, 412, 413, 514-516, 518-525, 601, 604A, 604B, 607, 608	< 36		Taxi in, Push back
215-217, 219-225, 269-271, 274-279, 281, 282	≤ 35.8		Taxi in, Push back
218, 280	≤ 35.79		Taxi in, Push back
517	≤ 34.8		Taxi in, Push back
310-312	< 31	< 33	Taxi in, Push back

注：B747-8 停放要求见 AD2.20-2.5.1.3。

Notes: refer to AD2.20-2.5.1.3 for the parking requirements about aircraft B747-8.

3.2.7 组合停机位使用模式

3.2.7 Usage mode of combined stands

组合机位群/ Combined stands group	组合模式/ Combined mode
215, 216, 216E	215, 216
	216E
219, 220, 220E	219, 220
	220E
280, 281, 281E	280, 281
	281E
412, 413, 413E	412, 413
	413E

3.2.8 使用 TP01-TP08 临时停机位，须严格听从机坪管制和机务指令，运行限制如下：

3.2.8 Follow instructions of APN and the maintenance crew strictly when use temporary parking stands TP01-TP08, with limitation as follow:

停机位/Stand Nr.	航空器翼展限制/Wing span limits(m)	航空器停放机头朝向/Nose direction of Aircraft
TP01, TP02	<36	朝北/north
TP03-TP05	<36	朝南/south

TP06-TP08	<65	朝南/south
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3.2.9 本场设置公务机位:310-312;翼展大于等于 31m 的公务机停放于满足相应翼展限制的停机位。	3.2.9 Business stands Nr.310-312 established. The business aircraft with wing span $\geq 31\text{m}$ shall be parked in the stand which meets the wing span limit.
3.2.10 除特殊规定外,每个停机位具体停放机型在满足翼展限制的条件下按相应停止线执行。公务机停放 310-312 须在满足翼展限制的前提下,首先选择相对应停止线停放,其次选择相近机型停止线停放。公务机停放其它停机位应满足安全线、翼尖净距线等机坪安全线标准要求。	3.2.10 Different types of aircrafts shall park on corresponding stop lines, as the wing span limits satisfied primarily. Business jet on stand Nr.310-312 shall park on corresponding stop lines firstly, or on stop lines of similar type secondly. Business jet parking on other stands shall satisfy the requirements of apron safety lines.
3.3 航空器除冰雪	3.3 Rules of deicing
除冰雪机位(编号 1-8)具体位置详见停机位置图。	Refer to APDC of ZSSS for the specific location of deicing stands Nr.1-8.
3.3.1 启用西区集中除冰雪机坪时:	3.3.1 Deicing on the west aprons:
3.3.1.1 由南向北起降,启用 1-4 号除冰位。启用 3 号和 4 号除冰位期间,必须禁止停机位 601-603、604A、604B、605-608 停放航空器,禁止航空器进出 6 号机坪东航机库,禁止使用停机位 601 以南 L14 滑行线。1 号、2 号、4 号除冰位可独立使用。使用 3 号除冰位的航空器除冰结束后,需在 1 号除冰位无航空器的情况下方可滑出。1 号除冰位航空器可沿 D 滑经 H7 滑出;2 号除冰位航空器可沿 D 滑经 H6 滑出;3 号除冰位航空器沿蓝色除冰滑行引导线,经 H7 滑出;4 号除冰位航空器沿蓝色除冰滑行引导线,经 H6 或 H7 滑出。	3.3.1.1 When the RWYs operate from south to north, deicing stands Nr.1-4 can be used. When deicing stands Nr.3 & 4 in use: parking stands Nr. 601-603, 604A, 604B, 605-608 are forbidden to use; aircrafts are forbidden to enter or exit from China Eastern Airlines hangar of apron Nr.6; TWY L14(south of stand Nr.601) is forbidden to use. Deicing stands Nr.1, 2, or 4 can be used independently. When deicing finished, the aircraft on deicing stand Nr.3 can only taxi out without any aircraft on deicing stand Nr.1. The aircraft of deicing stand Nr.1 can taxi out via TWY D and then TWY H7. The aircraft of deicing stand Nr.2 can taxi out via TWY

	D and then TWY H6. The aircraft of deicing stand Nr.3 can taxi out along the deicing taxiing guidance line(blue) and then by TWY H7. The aircraft of deicing stand Nr.4 can taxi out along the deicing taxiing guidance line(blue) and then by TWY H6 or H7.
3.3.1.2 由北向南起降，启用 5 号和 6 号除冰位。5 号和 6 号除冰位可独立使用。5 号除冰位航空器可沿 D 滑经 H1 滑出；6 号除冰位航空器可沿 D 滑经 H2 滑出。	3.3.1.2 When the RWYs operate from north to south, deicing stands Nr.5 & 6 can be used, independently. The aircraft of deicing stand Nr.5 can taxi out via TWY D and then TWY H1. The aircraft of deicing stand Nr.6 can taxi out via TWY D and then TWY H2.
3.3.2 启用东区集中除冰雪机位时：	3.3.2 Deicing on the east aprons:
3.3.2.1 由南向北起降，启用 7 号除冰位。航空器可沿 L01 机坪滑行通道滑行至除冰位停止线，机头朝南，停放在 7 号除冰位。航空器除冰后，可沿 L01 经 H7 滑出。	3.3.2.1 When the RWYs operate from south to north, deicing stands Nr.7 can be used. The aircraft can taxi along TWY L01 to the stop line of deicing stand Nr.7, nose south. As finished, taxi out via TWY L01 and then H7.
3.3.2.2 由北向南起降，使用 8 号除冰位。航空器可沿 L01 机坪滑行道滑行至 8 号除冰位停止线，机头朝北。8 号除冰位航空器除冰后，可沿 L01 经 K1 滑出。	3.3.2.2 When the RWYs operate from north to south, deicing stands Nr.8 can be used. The aircraft can taxi along TWY L01 to the stop line of deicing stand Nr.8, nose north. As finished, taxi out via TWY L01 and then K1.
3.4 航空器试车规定	3.4 Engine run-ups
3.4.1 通则	3.4.1 General rules for engine run-ups
3.4.1.1 航空器试车必须向虹桥机场运行指挥中心 AOC（以下简称“虹桥机场 AOC”）申请；	3.4.1.1 Engine run-ups are subject to Hongqiao AOC permission.
3.4.1.2 试车开始前，航空器营运人或代理人试车现场负责人必须向虹桥机场 AOC 和机坪管制通报（如在跑道上试车，同时须向塔台通报），按照指令执行；	3.4.1.2 Before engine run-ups, aircraft operator or agent shall report to AOC and APN(if on the RWY, aircraft operator or agent shall also report to TWR), and follow

	the instructions strictly.
3.4.1.3 航空器营运人或代理人必须派专人负责试车作业的安全监控，设置“试车危险区”警示标志和隔离设施；	3.4.1.3 Engine run-ups must be monitored by specialized officer. Engine run-ups area must have clear markings to keep irrelative people and vehicles away from this area.
3.4.1.4 安全监控中发现任何问题，应立即终止试车，并向机坪管制和虹桥机场 AOC 通报（如在跑道上试车，同时须向塔台通报）；	3.4.1.4 Engine run-ups must stop immediately if there comes out any safety hazard, meanwhile specialized officer shall contact Hongqiao AOC and APN(if on the RWY, aircraft operator or agent shall also report to TWR).
3.4.1.5 试车期间，发动机危险区域内(进气口和排气区域等)禁止人员或车辆通过，禁止放置其他设备。	3.4.1.5 During engine run-ups, people and vehicles are forbidden to pass through engine danger area.
3.4.2 试车位置及要求	3.4.2 Location and operation
3.4.2.1 冷转测试所有停机位都可进行。	3.4.2.1 All parking stands are available for cool running test.
3.4.2.2 慢车测试	3.4.2.2 Engine idle test
a. 停机位 286-290、313-327、338-342、401-416、404C、408C、413E、501、502、504、506、508、510、511、514-525、601-603、604A、604B、605-608 可供航空器慢车测试，测试期间：相邻停机位上禁止航空器进出；禁止其它物体（车辆、人员等）沿机坪滑行道从试车停机位尾部通过。	a. Parking stands Nr. 286-290, 313-327, 338-342, 401-416, 404C, 408C, 413E, 501, 502, 504, 506, 508, 510, 511, 514-525, 601-603, 604A, 604B, 605-608 are available for engine idle test. During the period of engine idle test, near-by stands are forbidden for aircraft to enter or exit. The TWY behind engine run-ups operating aircraft is not allowed(for vehicle, people) to pass through.
b. 停机位 101、102、109-115、120、121、126、127、212-237、216E、220E、238E、240E、246、248、250、256、257、259E、260-285、281E、328-337 上的航空器必须推出至对应的推出等待点上进行慢车测试。停	b. Aircraft parking on stands Nr. 101, 102, 109-115, 120, 121, 126, 127, 212-237, 216E, 220E, 238E, 240E, 246, 248, 250, 256, 257, 259E, 260-285, 281E, 328-337 shall be pushed back to the corresponding holding point for

机位 310-312 上的航空器必沿相应推出线推至 L08 后, 再拖曳至 AP01 等待点进行慢车测试。

c. 发动机位于尾部的航空器必须推出至对应的推出等待点上进行慢车测试。

3.4.2.3 大功率测试原则上于 4 号机坪试车位进行, 该试车位位于 D 滑行道中线以西 83m, 停机位 402 与 405 之间; 当因天气或停机位安排等因素时, 可安排至跑道上进行(当日航班结束之后至次日航班开始前一小时之间)。使用试车位限制如下:

a. 停机位 401-407 之间的 L11 机坪滑行道禁止使用期间, 方可启用 4 号机坪试车位。

b. 仅供一架 B747-8 或翼展小于 65m 的航空器大功率测试, 机头朝南。

c. B747-8 使用 4 号机坪试车位前, 还必须清空停机位 401-406、404C 的航空器。

3.5 机场桥载设备代替 APU 管理规定

3.5.1 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:

a. 廊桥桥载设备发生故障, 不能提供服务。

engine idle test. Aircraft parking on stands Nr.310-312 shall be pushed back along the corresponding line to TWY L08, then towed to holding point AP01 for engine idle test.

c. Aircraft with engine on the tail part shall be pushed back to the corresponding holding point for engine idle test.

3.4.2.3 Fast engine run-ups. Engine run-ups stand installed on apron Nr.4, 83m W of TWY D center line, between stands Nr.402 and Nr.405. If weather or stands not permit, fast engine run-ups could be operated on RWY. Fast engine run-ups on RWY must be implemented between finishing the last flight and 1 hour before the first flight(next day). Using rules as follow:

a. Engine run-ups stand on apron Nr.4 can be used only when TWY L11 between stands Nr.401 and Nr.407 is not in use.

b. Only a B747-8 or an aircraft with wing span < 65m on engine run-ups stand can carry out, aircraft nose to south.

c. Stands Nr.401-406, 404C must be empty before B747-8 operates engine run-ups on apron Nr.4.

3.5 Rules about bridge equipment replacing APU

3.5.1 All aircrafts parking on boarding bridge stands shall turn off APU and use bridge equipment(400Hz) and special air conditioning, except for the following circumstances:

a. Bridge equipment is unavailable.

- b. 航空器因启动发动机而需要开启 APU。 b. Aircraft needs APU to start up engine.
- c. 航空器进行 APU 的维修检测活动。 c. APU is under maintenance.
- d. 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。 d. In case of exceptional circumstances influencing the operation safety, such as extreme weather, special plane support, insufficient flight transition time.
- e. 航空器使用廊桥桥载设备后机舱温度超过 26°C。 e. The temperature of cabin exceed 26 °C after using bridge equipment.
- f. 廊桥桥载静变电源无法满足特殊机型用电要求。 f. Frequency solid power supply of bridge equipment cannot meet the demand of special types of aircraft.

3.5.2 如航空公司希望使用 APU, 必须致电上海虹桥国际机场公司机电信息保障部现场管理中心(电话: 021-22381500) 进行申请, 申请被批准后方可使用 APU。

3.5.2 If aircraft requires to use APU, airlines shall contact Equipment Support Management Center of Shanghai Hongqiao International Airport(TEL: 86-21-22381500) and apply for permission.

3.6 本场机坪运行管理规定

3.6 Apron operation rules

3.6.1 本场实施机坪运行管制。机坪管制职责: 负责机坪管制区域航空器的推出、开车、滑行和其他涉及航空器运行的指挥工作。

3.6.1 Apron operation control is implemented in Hongqiao Airport. APN is responsible for aircraft push-back, start-up, taxiing and other control issues related to aircraft operation.

3.6.2 机场机坪管制负责区范围: 详见机场图、停机位置图, 具体管制移交点及移交方式听从管制员指令执行。

3.6.2 Apron operation control area is depicted in ADC and APDC of ZSSS. The specific transfer of control points and transfer modes refer to ATC instruction.

3.6.3 机坪运行管理范围内的离港航空器推出开车滑行流程:

3.6.3 The procedure of departure aircraft push-back, start-up and taxi in apron operation control areas:

- a. 离港航空器在推出开车前先联系虹桥放行, 并申请空中交通管制放行许可, 空中交通管制放行许可的申请不早于发动机开车前 10min 进行;
- b. 取得放行许可, 待塔台放行席位指挥脱波后, 向机

- a. Departure aircraft shall contact Hongqiao delivery and get clearance before push-back. Aircraft shall not apply for delivery clearance 10min earlier than start-up;
- b. Aircraft shall apply to APN for push-back and start-up

坪管制申请推出开车；

after getting delivery clearance and issuing the frequency of next control unit;

c. 离港航空器首次联系机坪管制时,应向机坪管制通报停机位；

c. Departure aircraft shall report parking stand number to APN at the first contact;

d. 机坪管制发布“推出开车”指令后航空器驾驶员必须在 3min 内执行,如超时管制指令自行取消,航空器驾驶员需重新申请“推出开车”；

d. Aircraft shall begin to push-back and start-up within 3min after getting clearance. If overtime, the clearance is cancelled automatically, the pilot should apply for clearance again;

e. 航空器开车后,向机坪管制申请滑行许可,并按其指令执行；

e. Aircraft shall apply to APN for taxiing clearance after start-up, and execute according to instructions;

f. 需引导车引导的区域,航空器需跟随引导车滑行至规定位置等待,根据机坪管制的指令联系虹桥地面。

f. Aircraft shall follow the follow-me vehicle to taxi to the designated position in the areas requiring follow-me guidance, contact GND according to APN instruction.

3.6.4 机坪运行管理范围内航空器进港：

3.6.4 Rules about arrival aircrafts in apron operation control areas:

a. 航空器进入机坪前,联系机坪管制申请进一步滑行许可。

a. Aircraft shall contact with APN for further taxiing clearance before entering apron.

b. 需引导车引导的区域,航空器根据机坪管制指令跟随引导车滑行至指定停机位。

b. Aircraft shall follow the follow-me vehicle to taxi-in the designated stands according to APN in the areas requiring follow-me guidance.

4. 低能见度运行

4. Low visibility operation

4.1 HUD 特殊批准 I/II 类运行程序：

4.1 HUD Special CAT I/II operation:

4.1.1 虹桥机场 18L/36R 和 18R/36L 跑道的 4 个方向均可实施 I 类运行、特殊批准 I 类运行和 RVR200m 起飞程序；36R 跑道可实施特殊批准 II 类运行。

4.1.1 CAT I operation, HUD Special CAT I operation and RVR200m departure procedure is available for RWY18L/36R and RWY18R/36L; HUD Special CAT II is available for RWY36R.

4.1.2 准备阶段天气条件

4.1.2 Preparation of HUD Special CAT I operation

当跑道视程下降至 800m 且预计 30min 内将下降至 550m 以下, 或者云高(或垂直能见度)下降至 80m 且预计 30min 内将下降至 60m 以下, 虹桥机场将启动 HUD 特殊批准 I 类运行的准备工作。

4.1.3 实施阶段天气条件

4.1.3.1 当跑道视程低于 550m 且不低于 450m 时, 或者云高(或垂直能见度)低于 60m 且不低于 45m 时, 由空管塔台宣布启动 HUD 特殊批准 I 类运行。

4.1.3.2 当跑道视程低于 450m 且不低于 350m 时, 或者云高(或垂直能见度)低于 45m 且不低于 30m 时, 并且 36R 跑道可用时, 由空管塔台宣布启动 HUD 特殊批准 II 类运行。

4.1.4 结束阶段天气条件

当跑道视程高于 550m, 或者云高(或垂直能见度)高于 60m 且气象预报稳定好转时, 由空管塔台宣布终止 HUD 特殊批准 I/II 类运行。

4.1.5 实施 HUD 运行时, 机组严格按照管制指令给出的地面路线滑行, 管制员优先使用 HUD 低能见度滑行路线。

4.1.6 实施特殊批准 II 类运行时, 东区航空器使用 18L/36R 跑道起飞, 需在 A 滑行道 B 型等待位等待, 经塔台允许后方可进入跑道。

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

5. 直升机飞行限制, 直升机停靠区

When RVR descend to 800m and will be lower than 550m within 30min, or ceiling(or vertical visibility) descend to 80m and will be lower than 60m within 30min, HUD Special CAT I operation is commencing.

4.1.3 Implementation of HUD Special CAT I/II operation

4.1.3.1 When $450\text{m} \leq \text{RVR} < 550\text{m}$, or $45\text{m} \leq \text{ceiling(or vertical visibility)} < 60\text{m}$, HUD Special CAT I operation is issued by TWR.

4.1.3.2 When $350\text{m} \leq \text{RVR} < 450\text{m}$, or $30\text{m} \leq \text{ceiling(or vertical visibility)} < 45\text{m}$, and RWY36R is available, HUD Special CAT II operation is issued by TWR.

4.1.4 Termination of HUD Special CAT I/II operation

When $\text{RVR} > 550\text{m}$, or ceiling(or vertical visibility) $> 60\text{m}$ and forecast a stable better trend, HUD Special CAT I/II operation is terminated by TWR.

4.1.5 When HUD operation is implementing, flight crew shall strictly follow ATC instruction to taxi, ATC prior to use HUD low visibility taxiing route.

4.1.6 When HUD Special CAT II operation is implementing, aircraft from east apron using RWY18L/36R for take-off shall hold at TWY A holding position pattern B, enter RWY after getting TWR clearance.

4.1.7 Aircrafts using HUD Special CAT I/II operation procedure shall take the initiative to report to ATC.

5. Helicopter operation restrictions and helicopter

	parking/docking area
无	Nil
6. 警告	6. Warning
当航空器飞越上海市限制区时，应严格按限制区飞行高度执行，即 QNH1500m(含)以上。	Aircraft FLY over Shanghai Restricted Area(REF AD2.17) shall keep ALT QNH1500m or ABV.
ZSSS AD 2.21 减噪程序	ZSSS AD 2.21 Noise abatement procedures
1. 噪音限制规定	1. Noise restrictions
1.1 航空器起飞减噪操作程序，用于起飞爬升阶段，目的是在确保飞行安全的前提下，尽量减少噪音对地面的影响。	1.1 Aircraft take-off noise abatement operation procedure is used for take-off and climbing phase. The purpose is to minimize the impact of noise on the ground in the premise of ensuring flight safety.
1.2 虹桥机场采用国际民航组织制定的消噪声离场程序 1（NADP1），旨在降低起飞跑道末端附近区域的噪音。	1.2 Hongqiao Airport adopts the ICAO Noise Abatement Departure Procedure 1(NADP1) to reduce noise in the area near DER.
2. 减噪程序	2. Noise abatement procedures
2.1 在保证飞行安全的情况下，要求所有飞行员执行以下减噪飞行操作程序：	2.1 In condition of complying with the requirements of flight safety, the following noise abatement procedures shall be implemented:
2.1.1 在航空器起飞性能允许的情况下，尽可能使用减推力起飞；	2.1.1 The derated take-off is strongly recommended if the take-off performance of aircraft permit;
2.1.2 航空器起飞爬升到 1500ft(QNH)，调整并保持发动机爬升功率/推力，保持爬升速度 V2+10kt，保持襟翼和缝翼在起飞状态；	2.1.2 At altitude QNH450m(1500ft), adjust engine power/thrust to climb power/thrust and maintain it, maintain climbing speed at V2+10kt with flaps and slats in the take-off configuration;
2.1.3 航空器起飞爬升到 3000ft(QNH)以上，转为正常航路爬升速度，并按程序收襟翼/缝翼。	2.1.3 At altitude QNH910m(3000ft), maintain a positive rate of climb, accelerate to normal en-route climb speed and retract flaps/slats on schedule.

2.2 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（校验飞行等特殊飞行除外）。

2.2 If the procedures can not be implemented due to some reason except ATC, pilot shall inform ATC with a reasonable explanation before take-off(except for special flights such as calibration flights).

ZSSS AD 2.22 飞行程序

ZSSS AD 2.22 Flight procedures

1. 总则

1. General

1.1 上海虹桥机场正式运行 RNAV 程序，以 RNAV-1 飞行程序为主用程序（仅提供水平引导），传统飞行程序为备份程序，航空公司原则上只能执行 RNAV-1 飞行程序。

1.1 RNAV procedures are implemented in Shanghai/Hongqiao aerodrome. RNAV-1 flight procedures are primary procedures(only horizontal guidance AVBL), pilot shall execute these procedures without special reasons. Traditional procedures are secondary procedures.

1.2 除经上海进近或虹桥塔台（适用时）特殊许可外，在上海进近管制区和虹桥机场管制地带的飞行，均须按照仪表飞行规则进行。

1.2 Flights within Shanghai APP Area and Hongqiao TWR CTL Area shall operate under IFR unless special CLR has been obtained from Shanghai APP or Hongqiao TWR(if AVBL) CTL.

2. 起落航线

2. Traffic circuits

起落航线均在跑道西侧进行，C、D 类高度(QNH)450m；A、B 类高度(QNH)300m。

Traffic circuits shall be made to the west of RWY, 450m(QNH) for aircraft CAT C/D; 300m(QNH) for aircraft CAT A/B.

3. 仪表飞行程序

3. IFR flight procedures

3.1 严格按照航图中公布的进、离场程序和进近程序飞行。在上海/杭州进近管制区，严格按 ATC 指挥飞行。如果需要，航空器由 ATC 部门指挥在指定的航路、导航台或点上空等待或做机动飞行。当 ATC 指令高度与进离场程序中各类限制高度有冲突时以 ATC 部门的指令高度为准。

3.1 Strict adherence is required to the relevant ARR/DEP/APCH procedures published in the aeronautical charts. Flights within Shanghai/Hangzhou APP Area shall strictly follow ATC instructions. Aircraft may, if necessary, hold or maneuver on an AWY, over a navigation facility or a fix designated by ATC. Follow

3.2 等待：等待程序见标准仪表进、离场图。

3.3 进、离场程序：详见标准仪表进、离场图。

4. 雷达程序和/或 ADS-B 程序

4.1 距进近跑道末端 18.5km (10NM) 范围内，向同一跑道做最后进近的航空器之间无尾流间隔要求，且接地后能在 50s 内脱离跑道时，航空器之间的最小雷达间隔缩短为 5km (湿跑道或污染跑道除外)。

4.2 雷达引导与排序：通常，航空器从庵东 VOR (AND)、SASAN、横沙 VOR (HSH) 等报告点得到雷达引导和排序，直至有关的最后进近航迹(ILS、PAR、VOR/DME)，以加速空中交通流量。考虑到航空器的性能，按需要发出雷达引导和飞行高度层/高度指令，使航空器之间有一定的距离，以保持正确的着陆间隔。

4.3 速度调控：实施 RNAV ILS/DME 进近时，机组应当严格遵守速度限制。机组应尽可能准确地执行所有的速度限制。如果航空器不能执行上述速度限制，机组应及时通知 ATC 可用的速度。

4.4 最低监视引导高度扇区

ATC instructions when the instructions have a conflict with the height limits in the charts.

3.2 Holding procedures refer to SID/STAR.

3.3 Departure/arrival procedures refer to SID/STAR.

4. Radar procedures and/or ADS-B procedures

4.1 Within 18.5km(10NM) from approaching RWY end, if there is no wake turbulence separation required between two aircrafts approaching to the same RWY in final approach, and the preceding aircraft is able to vacate RWY within 50s after touchdown, the minimum radar separation can be reduced to 5km(except for wet or contaminated RWY).

4.2 Radar vectoring and sequencing: Normally, aircraft will be vectored and sequenced from Andong VOR(AND), SASAN and Hengsha VOR(HSH) to the appropriate final approach track(ILS, PAR, VOR/DME), so as to ensure an expeditious flow of traffic. Instructions about radar vectors and flight levels/altitudes will be issued, as required, for spacing and separating the aircraft so that correct landing intervals are maintained, taking into account aircraft characteristics.

4.3 Speed control: When operating RNAV ILS/DME APCH, aircrew should execute at all speed limit. If can't, they shall inform ATC of available speed immediately.

4.4 Surveillance Minimum Altitude Sectors

SECTOR 1	ALT limit: 450m or above
N312900 E1205141-N313021 E1211316-N312344 E1212327-N311730 E1212357-N311535 E1205250-N312900 E1205141	
SECTOR 2	ALT limit: 500m or above
A circle with a radius of 7km centered on N312236E1211422	
SECTOR 3	ALT limit: 600m or above
N311717 E1212021-N311730 E1212357-N310821 E1212441-N310808 E1212106-N311717 E1212021	
SECTOR 4	ALT limit: 950m or above
N311730 E1212357-N311937 E1213324-N311527 E1213731-N310907 E1213215-N310821 E1212441-N311730 E1212357	
SECTOR 5	ALT limit: 550m or above
N313021 E1211316-N313558 E1214759-N313309 E1221316-N310603 E1222313-N304247 E1220917-N304219 E1205541-N311535 E1205250-N311730 E1212357-N312344 E1212327-N313021 E1211316	
SECTOR 6	ALT limit: 900m or above
N321000E1204400- N315236E1214712- N314611E1224630- N311241E1224630- N301500E1221200- N301518E1211311- N305310E1202500- N313521E1201944- N321000E1204400, except N312900E1205141- N313021E1211316- N313558E1214759- N313309E1221316- N310603E1222313- N304247E1220917- N304219E1205541- N312900E1205141	

5. 无线电通信失效程序**5.1 航空器单向通信失效**

5.1.1 航空器如果只具有信号接收能力，根据接收到的管制指令继续飞行，同时管制员将向沿途有关管制单位发送有关通信失效的情报。

5.1.2 航空器如果只具备信号发送能力，航空器驾驶员应当立即将飞行意图告知管制员，并及时报告位置

5. Radio communication failure procedures**5.1 Aircraft communication partly failure**

5.1.1 If the radio receiver is available, aircraft shall follow the instruction to fly. At the same time, ATC shall send information to the relevant control unit about communication failure.

5.1.2 If the radio transmitter is available, pilot shall notify her/his flight intention to ATC and report aircraft

和高度信息，管制员根据航空器驾驶员报告的意图迅速调配其他的航空器避让。如有可能，管制员将通知航空器运营人使用其内部通信方式（如卫星电话）与该航空器联系。

5.2 航空器双向通信失效

5.2.1 航空器进场

5.2.1.1 如果本场不具备落地条件，航空器驾驶员可自行决定返航或备降。

5.2.1.2 已收到管制员进港程序指令的航空器，按照程序飞行和下降，并按照最后收到的通播中着陆跑道落地；

5.2.1.3 未收到管制员进港程序指令的航空器，按照现行飞行计划航路飞至上海虹桥机场提供服务的定位点，在该定位点等待直到按照或尽可能接近于最后确认收到的预计进近时刻开始下降，并按照规定的程序和最后收到的通播中着陆跑道落地。

5.2.2 航空器离场

5.2.2.1 航空器应按照最后接收到的管制指令（程序）继续离场，管制员将迅速组织其它航空器进行避让；

5.2.2.2 如航空器驾驶员选择返回起飞机场飞行，则应
按照标准仪表离场(SID)至少飞至 SID 终点，之后根据最后收到的通播中着陆跑道选择标准仪表进场(STAR)和落地跑道，并从 STAR 起点加入程序。

position. ATC will conduct the traffic accordingly. If possible, ATC shall inform aircraft operator to contact with aircraft by internal communication(such as satellite phone).

5.2 Aircraft communication totally failure

5.2.1 For arrival

5.2.1.1 If condition of airports not available for landing, the flight crew should decide to return or alternate.

5.2.1.2 Aircraft with ATC arrival instruction shall follow the procedure to fly and descend, landing on the RWY according to the last received ATIS.

5.2.1.3 Aircraft without ATC arrival instruction shall follow FPL route fly to Shanghai/Hongqiao AD fix in service. Holding at the fix until the last received EAT as nearly as possible, descend and follow the procedure to land on the RWY according to the last received ATIS.

5.2.2 For departure

5.2.2.1 Aircraft shall continue departure according to the last commanding (procedure) by ATC, ATC will conduct the traffic accordingly.

5.2.2.2 If the flight crew decide to return, aircraft shall follow SID until the end of SID, then choose STAR and RWY to land according to the last received ATIS. Aircraft shall join the STAR from the start of it.

End of SID	PIKAS, SASAN	NXD, AND, HSN, ADBAS	MIGOL, LAMEN, SURAK	IBEGI
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Start of STAR (recomm ended)	SASAN	AND	DUMET	MATNU
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5.2.2.3 如果航空器驾驶员判断无法继续实施离场飞行，且需至放油区放油的，可在放油完成后，自行根据当时的运行方向选择进近着陆方法，管制员将迅速组织其它航空器进行避让。

5.3 本场通信失效

本场无线电收发功能失效，航空器无法与管制单位建立有效的通信联系时，航空器应联系上一管制单位，并按照管制单位的管制指令继续飞行。

5.4 无线电通信恢复

失去通信联络的该航空器已经着陆，或者已经恢复联络的，可恢复正常的管制运行，并立即通知相关管制单位。

6. 目视飞行程序

6.1 等待：目视飞行在跑道西侧，按起落航线进行等待。

6.2 仪表进近程序的最后进近阶段,使用目视间隔时,航空器驾驶员应按照仪表程序进近,并保持目视判断与其他相关航空器的安全间隔。当航空器进近至决断高度或最低下降高度时,可能会遇到在同一条跑道上前面落地的航空器正在脱离,或者正在起飞的航空器即将离地的情况。当航空器驾驶员认为必要时,随时可以复飞,并立即通知管制员。

5.2.2.3 If aircraft can't continue departure procedure, and decide to use Fuel Dumping Area, shall choose way to approach and land according to the direction after dumping fuel. ATC will conduct the traffic accordingly.

5.3 Aerodrome communication failure

If aircraft cannot establish communication with the aerodrome control unit, aircraft shall contact the previous control unit, and follow the instruction to continue.

5.4 Radio communication return to normal

It is available to resume activities when the aircraft that lose touch via communication channel has landed or get in touch again. Inform the ATC office immediately.

6. Procedures for VFR flights

6.1 Holding: Visual flight on the west side of RWY, wait according to the traffic circuits.

6.2 When using VFR separation on the final approach phase of instrument approach procedures, pilot shall follow the instrument approach procedures and keep visualizing to ensure a safety separation with other aircraft. When the aircraft descends to DA or MDA, some situations may be observed, such as the preceding aircraft is vacating the same RWY, or the departure

aircraft is lifting off. Under such situation, pilot can make a missed approach at any moment if it is considered to be necessary and notify the controller immediately.

6.3 为了提高机场容量和运行效率，航空器驾驶员在得到仪表进近指令后，应随时利用机载设备或目视监控周边航空器的运行状态，并尽最大可能建立航空器间的目视能见。当管制员通报相关航空器的相对位置时，航空器驾驶员应及时向管制员报告建立目视能见。若航空器驾驶员报告不能目视相关航空器，管制员将视情指挥该航空器中止进近或复飞。

6.3 Upon receipt of approaching clearance, the pilot shall monitor the operating situations of other aircraft in the vicinity using airborne equipment and establish the visual separation as practicable, then report "visual separation established" when the controller notifies the relative positions of other aircraft. If pilot can not have the relative aircraft in sight, controller will direct the aircraft to abort approach or go around according to actual traffic situation.

6.4 上海虹桥机场实施目视进近，航空器应遵守目视间隔飞行规定。

6.4 Visual approach implemented in this airport, aircraft shall obey flight rules of visual separation.

7. 目视飞行航线

7. VFR route

无

Nil

8. 其它规定

8. Other regulations

无

Nil

ZSSS AD 2.23 其它资料

ZSSS AD 2.23 Other information

鸟情资料

Bird’s information

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。

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

Species of bird	Activity time	Flying height(m)
Ringdove	All year round	1-50

Pigeon		2-30
Magpie		1-30
Night heron	April-September	3-50
Barn swallow	March-September	1-20
Cattle egret	August-November	1-200
Hawk	June-September	5-200
Skylark	October-April(next year)	1-30
White-cheeked starling	June-July	1-50
Egret	February-May	3-50