

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

ZSSS-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	方向、距离 Direction and distance from city	253 °GEO, 13.3km from Renmin square
3	标高/参考气温 Elevation / Reference temperature	3.0m/32.0 °C(JUL)
4	机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation	Center of RWY18R/36L/-
5	磁差/年变率 MAG VAR/ Annual change	5°46'W(2017)/-0°42'(1970)
6	机场管理部门、地址、电话、传真、AFS、电子邮箱、网址 AD administration, address, telephone,telefax, AFS, E - mail, website	Hongqiao International Airport Corporation of SAA (Shanghai Aerodrome Authority). Nr.300 of Konggang 1st Road, Shanghai, China. Post code:200335 TEL:86-21-22342063, 021-22369728 AFS:ZSSSYDYX Email:hqzhzywk@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	机场当局(机场开放时间) AD Administration (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	航行情报服务讲解室 AIS Briefing Office	HS or O/R
5	空中交通服务报告室 ATS Reporting Office (ARO)	HS or O/R
6	气象讲解室 MET Briefing Office	HS or O/R
7	空中交通服务 ATS	HS or O/R
8	加油 Fuelling	HS or O/R
9	地勤服务 Handling	HS or O/R
10	保安 Security	HS or O/R
11	除冰 De-icing	HS or O/R
12	备注 Remarks	Nil

### 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/滑油牌号 Fuel/oil types	Jet A-1, Nr.3 jet fuel/ all grades of oil available
3	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
4	除冰设施 De-icing facilities	18 de-icers, de-icing fluid
5	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.
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance for: 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
7	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
2	餐馆 Restaurants	At AD
3	交通工具 Transportation	Passenger's coaches, taxis
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, foam tender, water tank truck, illumination truck, command car, rescue car, patrol car Rescue equipments: uplift air cushion
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747
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 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	Surface:	CONC
		Strength:	PCN 104/R/B/W/T(Apron Nr.4, 6) PCN 96/R/B/W/T(Other Stands of Apron Nr.2) PCN 80/R/B/W/T(Stands Nr.112-115, 120, 121, 126, 127) PCN 78/R/B/W/T(Stands Nr.101, 102, 109-111) PCN 72/R/B/W/T(Stands Nr.501, 502, 504, 506) PCN 71/R/B/W/T(Stands Nr.523-525) PCN 70/R/B/W/T(Stands Nr.218-225, 231-236, 261-266, 272-279 of Apron Nr.2) PCN 67/R/B/W/T(Stands Nr. 508, 510-514, 517-522) PCN 63/R/B/W/T(Stands Nr.313-342) PCN 58/R/B/W/T(Stands Nr.301-312)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	45m: K1; 40m: H7(E of TWY A); 35m: K2, K4; 34m: K6, K7; 32m: K5; 28.5m: A1-A4; 25m: K0; 23m: A, H1(E of RWY36R), H4(E of RWY36R), H7(BTN RWY36R & TWY A), T1, T6, N, S, BN, BS, other TWYs
		Surface:	CONC(other TWYs), ASPH(BN, BS)
		Strength:	PCN 104/R/B/W/T(other TWYs) PCN 88/F/B/W/T(BN, BS) PCN 80/R/B/W/T(A, H1(BTN RWY36R & TWY A), H4(E of TWY A), H7(BTN RWY36R & TWY A), K1, K2, K4(E of TWY A), T1,

			T6) PCN 74/R/B/W/T(N, S) PCN 72/R/B/W/T(H7(E of TWY A), K6, K7) PCN 63/R/B/W/T(K5) PCN 58/R/B/W/T(H4(BTN RWY36R & TWY A), K0) PCN 50/R/B/W/T(A1-A4)
3	高度表校正点的位置及其标高 ACL location and elevation	Nil	
4	VOR/INS 校正点 VOR/INS checkpoints	All stands	
5	备注 Remarks	Aircraft ACN≤63/R/B/W/T when stands Nr.313-315 for CAT E; rapid exit TWYs B7, B8, C1-C4 grooved at full length, width 23m.	

### 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	Taxiing guidance signs at all intersections of TWY and RWY and at all holding positions. Guide lines at all aprons and TWYs. Aircraft stand identification sign boards at all stands (except stands Nr. 323-337, 339, 512-514, 517-519, 604B, 605, 606). Visual docking Guidance System for aircraft stands at Nr. 221-237, 238E, 239-275, instructions refer AD1.1.5.4 Pilot instructions for Visual Docking Guidance System (I); Visual docking Guidance System for aircraft stands at Nr.112, instructions refer AD1.1.5.4 Pilot instructions for Visual Docking Guidance System (II); Visual docking Guidance System for aircraft stands at Nr. 101, 102, 109-111, 113-115, 120, 121, 126, 127, instructions refer AD1.1.5.4 Pilot instructions for Visual Docking Guidance System (III). Marshaller guidance shall be used to parking stands Nr. 301-342, 401-413, 413E, 501, 502, 504, 506, 508, 510, 511-514, 517-525, 601-603, 604A, 604B, 605-608, 212-220, 276-290.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	Displaced THR, RWY designation, TDZ, center line, edge line, aiming point
		RWY lights	Center line, edge line, THR, RWY end, THR wing bar
		TWY markings	Center line, enhanced TWY center line, edge line, intermediate holding position, RWY holding position, TWY shoulder, NO ENTRY marking
		TWY lights	Centre line, edge line, intermediate holding position, no-entry bar, runway guard light, rapid exit taxiway indicator

3	停止排灯 Stop bars	Nil
4	备注 Remarks	RWY holding positions(Pattern B) established at both end of TWY A.

## ZSSS AD 2.10 机场障碍物 Aerodrome obstacles

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
1	Lightning Rod	003	2676	19.7	RWY36R Take-off path	
2	Light Pole	003	3047	22.4		
3	Iron TWR	003	5383	48.7		
4	*Light Pole	004	2937	22.1	RWY36R Take-off path	
5	Microwave TWR	005	2671	15.6	RWY36R Take-off path	
6	*BLDG	006	5846	45.9		
7	Board	007	3064	24.3		
8	BLDG	007	7156	68.2		
9	GP Antenna	008	1301	17	RWY18L precision approach final	
10	Light Pole	008	3025	23.3		
11	BLDG	010	6881	64.6	RWY18L/R GP INOP	
12	*BLDG	015	5808	54.9		
13	*TWR	022	2700	46	RWY18L VOR/DME final approach RWY18L LNAV/VNAV approach RWY18L LNAV	

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
					approach	
14	BLDG	025	5422	76	RWY18L VOR/DME final approach	
15	BLDG	031	4856	63		
16	BLDG	032	4331	57		
17	BLDG	035	5538	63		
18	BLDG	042	6459	112	MVA SECTOR	
19	*BLDG	048	5583	103		
20	*BLDG	071	5539	114		
21	*BLDG	076	5689	122		
22	*BLDG	077	7684	265	MSA	
23	*BLDG	078	11358	284	MVA SECTOR	
24	BLDG	078	13546	335		
25	BLDG	079	12212	252		
26	BLDG	080	4258	99		
27	BLDG	082	10857	262		
28	*BLDG	084	5810	145		
29	BLDG	087	5940	152		
30	BLDG	090	5640	148		
31	*Control TWR	111	520	47	RWY18L ILS/DME missed approach	
32	*BLDG	120	5085	97		
33	*BLDG	122	892	52		
34	*BLDG	128	5792	125		
35	Bridge	129	14218	222		

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
36	*BLDG	140	3232	64		
37	*BLDG	140	5599	84		
38	Iron TWR	145	1022	48	RWY36L LNAV/VNAV approach	
39	BLDG	148	2056	52		
40	BLDG	151	1435	51		
41	*BLDG	161	1566	49	RWY36L LNAV approach	
42	BLDG	170	3319	52	RWY36L VOR/DME final approach RWY36R LNAV/VNAV approach RWY36R LNAV approach	
43	BLDG	173	4860	43.7		
44	BLDG	176	4511	44.8		
45	GP Antenna	177	1301	17.7	RWY36R ILS/DME final approach	
46	BLDG	177	6530	64	RWY36L GP INOP	
47	BLDG	179	3840	45.0	RWY18L Take-off path RWY36R LNAV approach	
48	BLDG	179	4741	42		
49	BLDG	180	3377	26.0		
50	BLDG	180	3390	28.0		
51	BLDG	181	2551	20.6	RWY18L Take-off	



Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
					path	
52	BLDG	181	3071	28.8	RWY18L Take-off path	
53	BLDG	181	3522	34	RWY18L Take-off path	
54	BLDG	182	3063	28.6	RWY18L Take-off path	
55	BLDG	182	3094	29.2	RWY18L Take-off path	
56	BLDG	183	4438	46.5	RWY18R Take-off path	
57	BLDG	183	4982	43		
58	Light Pole	185	3011	18.8		
59	BLDG	185	3688	35.3	RWY18R Take-off path	
60	BLDG	185	4107	41.5		
61	BLDG	185	6647	62.5		
62	Board	186	2969	18.9		
63	Light Pole	186	2975	17.6		
64	Light Pole	186	3048	21.2		
65	Moving OBST	188	2164	15.6	RWY18R Take-off path	(MAG)(degree)/197 DIST(m)/2269
66	Light Pole	188	3003	20.2		
67	Light Pole	188	3086	23.8		
68	Light Pole	188	3088	22.3		
69	Light Pole	189	2958	22.5		
70	Light Pole	189	3060	23.8		

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
71	*BLDG	189	3972	40.6	RWY18R Take-off path	
72	Moving OBST	190	1642	15.6	RWY18R departure	
73	Light Pole	190	2881	20.6		
74	Light Pole	190	2952	20.1		
75	Pole	191	2842	22.1		
76	BLDG	192	2752	23.5	RWY18R Take-off path	
77	Light Pole	192	2773	18.7		
78	Light Pole	192	2789	21.1		
79	BLDG	193	6707	62	RWY36L GP INOP	
80	Light Pole	194	2683	19.4	RWY18R Take-off path	
81	Light Pole	195	2639	18.9	RWY18R Take-off path	
82	GP Antenna	196	1019	17.8	RWY36L ILS/DME final approach	
83	Light Pole	196	2581	17.5		
84	Light Pole	198	2497	15.5		
85	*BLDG	203	4809	50.5		
86	BLDG	205	5246	64.0		
87	*BLDG	207	5743	63		
88	*BLDG	211	5851	88.9	Circling CAT B/C/D RWY36L VOR/DME final approach	
89	BLDG	213	5419	61		
90	BLDG	215	5722	63		

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代 表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
91	*BLDG	240	3966	50		
92	*TWR	280	2476	44	Circling CAT A	
93	*TWR	323	2159	44		
94	GP Antenna	349	1019	17.8	RWY18R ILS/DME final approach RWY18R LNAV approach	
95	Moving OBST	350	2336	15.6	RWY36L Take-off path	(MAG)(degree)/358 DIST(m)/2260
96	*BLDG	350	5647	48.3		
97	Light Pole	352	3063	20.9		
98	BLDG	352	3482	41.5	RWY18L VOR/DME final approach RWY36L Take-off path RWY18R LNAV/VNAV approach	
99	BLDG	353	2834	22.0	RWY36L Take-off path	
100	BLDG	353	5167	46.2		
101	BLDG	355	5117	46.2		
102	BLDG	356	4854	45		
103	Moving OBST	357	1740	15.6	RWY36L departure	
104	Light Pole	357	3056	23.2		
105	BLDG	358	4821	45.5		
106	Lightning Rod	360	2960	26.3	RWY36L/R Take-off path	

Obstacles within a circle with a radius of 15km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及 起飞航径区 Flight procedure / take - off flight path area affected	备注 Remarks
107	BLDG	360	3835	36.4	RWY36R Take-off path	
Others:						

Obstacles between two circles with the radius of 15km and 50km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代表有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected	备注 Remarks
1	Power plant	019	30231	244		
2	Power plant	061	30315	245	MVA SECTOR	
3	*Bridge	077	20476	231		
4	*TWR	078	15909	466		
5	*BLDG	080	16325	424		
6	BLDG	081	16182	635	MSA MVA SECTOR	
7	*BLDG	081	16486	495		
8	Power plant	147	19609	215		
9	*TV TWR	163	33334	173		
10	Power plant	177	23378	183	RWY36L ILS/DME initial approach	
11	*TV TWR	263	20434	171		
12	MT	281	87910	343	MVA SECTOR	
13	*TV TWR	341	21886	154	RWY18L/R ILS/DME initial approach MVA SECTOR	

Obstacles between two circles with the radius of 15km and 50km centered on the center of RWY 18L/36R						
序号 Serial Nr.	障碍物类型(*代表 有灯光) Obstacle type(*Lighted)	磁方位 BRG (MAG)(degree)	距离 DIST(m)	海拔高度 Elevation(m)	影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected	备注 Remarks
14	Chimney	358	43264	244		
Others:						

**ZSSS AD 2.11 提供的气象信息、机场观测与报告****Meteorological information provided & aerodrome observations and reports**

1	相关气象台的名称 Associated MET Office	MET Center of Shanghai Hongqiao 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	MET Center of Huadong regional ATMB; 24 HR, 9 HR; 6HR, 3HR
4	趋势预报发布间隔 Issuance interval of trend forecast	Trend 30 min
5	所提供的讲解/咨询服务 Briefing/consultation provided	P, T
6	飞行文件及其使用语言 Flight documentation, Languages used	Chart, International MET Codes, Abbreviated Plain Language Text Ch, En
7	讲解/咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation	Synoptic charts, real-time data, forecast, satellite and radar material, data forecast product
8	提供信息的辅助设备 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 APP, Shanghai ACC

10	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
11	气象报告类型及所包含的补充资料 Type of MET Report & supplementary information included	METAR, SPECI
12	观测系统及位置 Observation System & Site(s)	RVR EQPT A: 120m W of RCL, 460m inward THR18L B: 120m W of RCL, 1750m inward THR36R C: 120m W of RCL, 440m inward THR36R D: 100m E of RCL, 651m inward THR18R E: 100m E of RCL, 1730m inward THR36L F: 100m E of RCL, 621m inward THR36L SFC wind sensors 18L: 115m W of RCL, 405m inward THR 36R: 125m E of RCL, 430m inward THR 18R: 115m E of RCL, 641m inward THR 18R/36L: 115m E of RCL, 1730m inward THR36L 36L: 115m E of RCL, 651m inward THR Ceilometer 18L/36R: near RVR 18R: 115m E of RCL, 631m inward THR 36L: 115m E of RCL, 631m inward THR
13	气象观测系统的工作时间 Hours of operation for meteorological observation system	H24
14	气候资料 Climatological information	Climatological tables AVBL
15	其他信息 Additional information	Nil

**ZSSS AD 2.12 跑道物理特征 Runway physical characteristics**

跑道号码 Designations RWY NR	真方位和磁方位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度(PCN), 跑道道面/ 停止 道道面 RWY strength	着陆入口坐标及 高程异常 THR coordinates and geoid	跑道入口标高,精密进近 跑道接地带最高标高 THR elevation and highest elevation of TDZ of
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			(PCN), RWY surface / SWY surface	undulation	precision APP RWY
1	2	3	4	5	6
18L	177.3 °GEO 183 °MAG	3400×45	83/R/B/W/T (0-100m) CONC 120/F/C/W/T (100-3300m) ASPH 83/R/B/W/T (3300-3400m) CONC/-		THR1.9m DTHR1.9m TDZ2.3m
36R	357.3 °GEO 003 °MAG	3400×45	83/R/B/W/T (0-100m) CONC 120/F/C/W/T (100-3300m) ASPH 83/R/B/W/T (3300-3400m) CONC/-		THR2.6m DTHR2.6m TDZ2.8m
18R	177.3 °GEO 183 °MAG	3300×60	104/R/B/W/T CONC/CONC		THR2.6m DTHR2.6m TDZ2.6m
36L	357.3 °GEO 003 °MAG	3300×60	104/R/B/W/T CONC/CONC		THR2.6m DTHR2.6m TDZ2.6m
跑道-停止道坡度 Slope of RWY-SWY	停止道长宽 SWY dimensions(m)	净空道长宽 CWY dimensions(m)	升降带长宽 Strip dimensions(m)	无障碍物区 OFZ	跑道端安全区长宽 RWY end safety area dimensions(m)
7	8	9	10	11	12
See AOC	Nil	Nil	3520×300	Nil	140×120
See AOC	Nil	Nil	3520×300	Nil	130×120

See AOC	150×60	60×300	3420×300	Nil	240×150
See AOC	150×60	60×300	3420×300	Nil	240×150
<p>Remark:</p> <p>1. Distance between RCL18L/36R and RCL18R/36L is 365m; THR36L is 100m N of THR36R;</p> <p>2. THR and END of RWY18L/36R displaced 100m inwards, surface of displaced parts is CONC; Blast pad dimension 60×60m;</p> <p>3. THR of RWY18R/36L displaced 300m inwards, END of RWY18R/36L displaced 150m inwards, surface of displaced part is CONC; Blast pad dimension 120×75m;</p> <p>4. RWY18R/36L grooved at full length, width 60m;</p> <p>5. RWY18L/36R and RWY18R/36L shoulder: 7.5m on each side.</p>					

**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
18R	3150	3210	3300	2850	THR displaced 300m 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
					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
Remarks:					

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

跑道 代号 RWY Designator	进近灯 类型、 长度、 强度 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进近坡 度指示系统( 跑道入口最 低眼高), 精 密进近航道 指示器 VASIS (MEHT) PAPI	接地地带 灯长度 TDZ LGT LEN	跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST	跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST	跑道末端 灯颜色 RWY end LGT colour	停止道灯 长度、颜 色 SWY LGT LEN, colour
1	2	3	4	5	6	7	8	9
18L	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI LEFT 438m inward displaced THR18L 15m of RCL	Nil	3200m** spacing 30m	3400m**** spacing 60m	RED	Nil

跑道 代号 RWY Designator	进近灯 类型、 长度、 强度 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进近坡 度指示系统( 跑道入口最 低眼高), 精 密进近航道 指示器 VASIS (MEHT) PAPI	接地地带 灯长度 TDZ LGT LEN	跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST	跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST	跑道末端 灯颜色 RWY end LGT colour	停止道灯 长度、颜 色 SWY LGT LEN, colour
			3 °					
36R	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI RIGHT 438m inward displaced THR36R 15m of RCL 3 °	Nil	3200m** spacing 30m	3400m**** spacing 60m	RED	Nil
18R	PALS CAT I* 840m VRB LIH	GREEN Yes	PAPI LEFT 393m inward displaced THR18R 15m of RCL 3 °	Nil	3150m*** spacing 30m	3150m**** spacing 60m	RED	150m RED
36L	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI RIGHT 393m inward displaced THR36L 15m of RCL 3 °	Nil	3150m*** spacing 30m	3150m**** spacing 60m	RED	150m RED
*SFL **0-100m APCH LGT, 100-2400m White VRB LIH, 2400-3000m Red/White VRB LIH, 3000-3300m Red VRB LIH. ***0-2250m White VRB LIH, 2250-2850m Red/White VRB LIH, 2850-3150m Red VRB LIH, 3150-3300m Red SWY LGT. ****18L/36R: 0-100m Red VRB LIH, 100-2700m White VRB LIH, 2700-3300m Yellow VRB LIH, 3300-3400m Red VRB LIH; 18R/36L: 0-300m Red VRB LIH, 300-2550m White VRB LIH, 2550-3150m Yellow VRB LIH, 3150-3300m Red SWY LGT.								

**ZSSS AD 2.15 其他灯光,备份电源 Other lighting, secondary power supply**

1	机场灯标/识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation	Nil
2	着陆方向标/风向标位置和灯光 LDI/WDI location and LGT	WDI: 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	滑行道边灯和中线灯 TWY edge and center line lighting	Blue TWY edge line lights and Green/Green, Green/Yellow, unidirectional Green(only on rapid exit TWYs and TWY BS, BN) or Yellow(only on rapid exit TWYs) center line lights.
4	备份电源/转换时间 Secondary power supply/switch-over time	Dual feed, diesel engine driven generator/15s
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 (m/ft) TLOF and/or FATO elevation (m/ft)	Nil
3	TLOF 和 FATO 区域范围、道面、强度和标志 TLOF and FATO area dimensions,surface, strength, marking	Nil
4	FATO 的真方位和磁方位 True and MAG BRG of FATO	Nil
5	公布距离 Declared distance available	Nil
6	进近灯光和 FATO 灯光 APP and FATO lighting	Nil
7	备注	Nil

	Remarks	
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**ZSSS AD 2.17 空中交通服务空域 ATS airspace**

名称 Designation	水平范围 Lateral limits	垂直范围 Vertical limits	备注 Remarks
Shanghai/Hongqiao tower control area	After entering the landing track or ILS from north/south, within 10km W of RCL, 7km E of RCL.	SFC-300m MSL (inclusive)	
Fuel Dumping Area	N3113E12300 - N3130E12400 - N3100E12400 - N3100E12300 - N3113E12300	3000m and above	See Fuel Dumping Area Chart, Maximum Fuel Dumping Speed 500km/h
Altimeter setting region and TL/TA	SASAN-PIKAS - Nantong VOR-BUNVA-UDOXI-IBEGI - N314611 E1224630 - EMSAN - DUMET - N311241 E1224630 -BONGI - PONAB - RUXIL - N301500 E1221200 - Andong VOR - Nanxun VOR-SASAN	TL 3600m TA 3000m 3300m(QNH $\geq$ 1031hPa) 2700m(QNH $\leq$ 979hPa)	1.Above 900m:use Pudong QNH; 2.900m or below: use QNH of departure or landing aerodrome.

**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 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5
ATIS		132.25	H24	D-ATIS available
APP	Shanghai Approach	APP01:120.3(119.75)	H24	
APP	Shanghai Approach	APP02:125.4(124.05)	H24	
APP	Shanghai Approach	APP03:125.85(119.2)	by ATC	
APP	Shanghai Approach	APP04:123.8(119.2)	by ATC	
APP	Shanghai Approach	APP05:126.65(128.05)	by ATC	
APP	Shanghai Approach	APP06:126.3(120.65)	by ATC	
APP	Shanghai Approach	APP07:121.1(119.75)	by ATC	
APP	Shanghai Approach	APP08:127.75(124.05)	by ATC	

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
APP	Shanghai Approach	APP09:121.375(128.05)	by ATC	
APP	Shanghai Approach	APP10:125.625(120.65)	by ATC	
APP	Shanghai Approach	APP11:119.075(128.05)	by ATC	
TWR	Hongqiao Tower	118.1(124.3)		EAST
TWR	Hongqiao Tower	118.65(118.25)		WEST
GND	Hongqiao Ground	121.6(121.575)		EAST
GND	Hongqiao Ground	121.9(121.575)		WEST
APN	Hongqiao Apron	121.675(121.55)	H24	EAST
APN	Hongqiao Apron	121.95(121.55)	H24	WEST
Delivery	Hongqiao Delivery	121.75(121.55)	0000-1200	Contact GND when Delivery U/S
EMG		121.5	H24	

## ZSSS AD 2.19 无线电导航和着陆设施 Radio navigation and landing aids

设施名称和类型 Name and type of aid	识别 ID	频率 Frequency	发射天线位置、坐标 Antenna site coordinates	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
1	2	3	4	5	6
Chonggu VOR/DME	CGT	112.5MHz CH72X	N31 °12.6' E121 °11.6'	24m	
Liuzao VOR/DME	PDL	109.4MHz CH31X	N31 °07.8' E121 °40.3'	4m	
Hongqiao VOR/DME	SHA	117.20MHz CH119X	N31 °13.4' E121 °20.0' 7m W of RCL18L/36R, 964m outside THR18L	16m	
Jiuting VOR/DME	JTN	109.6MHz CH33X	N31 °07.4' E121 °20.5'	28m	

设施名称和类型 Name and type of aid	识别 ID	频率 Frequency	发射天线位置、坐标 Antenna site coordinates	DME 发射天线标 高 Elevation of DME transmitting antenna	备注 Remarks
			183 °MAG/8400m FM ARP		
Nanxiang NDB	PK	208kHz	N31°17.0' E121°19.8' 003 °MAG/9630m FM ARP		Beyond 4NM on BRG 002 °U/S; beyond 7NM on BRG 243 ° U/S; BTN 7-12NM on BRG 264 °U/S; BTN 14-19NM on BRG 292 °U/S; beyond 3.5NM on BRG 350 °U/S.
LOC 18L ILS CAT I	IPK	111.3MHz	183 °MAG/300m FM end RWY18L		Beyond 27 °rightside of front course U/S
GP 18L		332.3MHz	125m E of RCL18L, 305m inward DTHR18L		Angle 3 °, RDH 15m
DME 18L	IPK	CH50X (111.3MHz)		10m	Co-located with GP 18L
LOC 18R ILS CAT I	IHQ	110.9MHz	183 °MAG/287m FM end RWY18R		
GP 18R		330.8MHz	120m E of RCL18R, 311m inward DTHR18R		Angle 3 °, RDH 15m
DME 18R	IHQ	CH46X (110.9MHz)		10m	Co-located with GP 18R
LOC 36L ILS CAT I	ISH	111.7MHz	003 °MAG/290m FM end RWY36L		
GP 36L		333.5MHz	120m E of RCL36L, 311m inward DTHR36L		Angle 3 °, RDH 15m
DME 36L	ISH	CH54X (111.7MHz)		10m	Co-located with GP 36L

设施名称和类型 Name and type of aid	识别 ID	频率 Frequency	发射天线位置、坐标 Antenna site coordinates	DME 发射天线标 高 Elevation of DME transmitting antenna	备注 Remarks
LOC 36R ILS CAT I	IWB	110.3MHz	003 °MAG/251m FM end RWY36R		
GP 36R		335.0MHz	115m E of RCL36R, 305m inward DTHR36R		Angle 3 °, RDH 15m
DME 36R	IWB	CH40X (110.3MHz)		10m	Co-located with GP 36R

**ZSSS AD 2.20 本场飞行规定****ZSSS AD 2.20 Local traffic regulations****1. 机场使用规定****1. Airport operations regulations**

1.1 禁止未安装二次雷达应答机的航空器起降;

1.1 Take-off/landing aircraft without SSR transponder are forbidden;

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;

1.2 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 可使用最大机型: B747-8 及同类机型。

1.3 Maximum aircraft to be available: B747-8 and equivalent.

1.4 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。

1.4 Due to airspace restriction, unless ATC special permission, aircraft should strictly turn at 200m when operate ILS departure on RWY36L/36R.

**2. 跑道和滑行道的使用****2. Use of runways and taxiways**

- 2.1 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;

2.1 Follow-me vehicle service are available via ground service channel or ATC;
- 2.2 禁止任何航空器在跑道和滑行道上做大于 90 度的转弯;

2.2 Turn around exceeding 90 °on RWY or TWY is forbidden;
- 2.3 B747-8 航空器本场运行规则

2.3 Operation rules for B747-8
- 2.3.1 运行跑道: 18R/36L(离场主用); 18L/36R(进场主用);

2.3.1 RWY: 18R/36L(Mainly used for departure); 18L/36R(Mainly used for arrival);
- 2.3.2 B747-8 可在除 A1, A2, A3, A4, K0, K5, K6, K7, H4(RWY18L/36R 至 A 滑之间), H7(A 滑至 L01 滑行道之间), N, S, BN, BS 之外的滑行道滑行, 具体滑行路线须听从 ATC 指挥;

2.3.2 Following TWYs not available for B747-8: A1, A2, A3, A4, K0, K5, K6, K7, H4(BTN A and RWY18L/36R), H7(BTN A and L01), N, S, BN, BS, and pilot shall follow ATC instructions for taxi routes;
- 2.3.3 B747-8 航空器正常使用 248 号停机位, 或限制条件下使用 250 和 411 停机位。

2.3.3 B747-8 can normally use stand Nr.248 or use stand Nr. 250, 411 with restrictions.

2.3.4 B747-8 机位使用限制/Stand using limit when parking B747-8:

B747-8 使用机位/The stand in use for B747-8	限制使用的机位或车道/Using limit for stand or lane nearby
411	410 U/S, service vehicle lane BTN stands Nr.411 and Nr.412 U/S
250	256 only available for aircraft with wingspan less than 61m

- 2.3.5 为保证航空器主起落架外轮胎边缘与承重道面边线间保持至少 4m 的净距且航空器外侧发动机

2.3.5 At the corner section of following TWYs, when nose gear of B747-8 follows those TWY centerline, a



的中心轴落在道肩边线之内，B747-8 航空器在如下滑行转弯口进行任一方向转弯滑行时将不能沿滑行道中线滑行，而须飞行员自行判断采用偏置转弯：H1 与 A，H7 与 A，T1 与 A，T6 与 A，H1 与 RWY18L/36R，T1 与 RWY18L/36R，H7 与 RWY18L/36R，T6 与 RWY18L/36R，B2 与 B，B3 与 B，B4 与 B，B5 与 B，B7 与 B，B8 与 B，C1 与 C，C2 与 C，C3 与 C，C4 与 C，B 与 H1，B 与 H2，B 与 H3，B 与 H5，B 与 H6，B 与 H7，H1 与 C，H2 与 C，H7 与 C，H1 与 D，D9 与 D，D13 与 D。所有 C 滑行道与 D 滑行道间的 180°连续转弯须飞行员自行判断采用偏置转弯。

2.3.6 B747-8 航空器须由 Follow-me 引导入位。

## 2.4 跑道运行规则

2.4.1 RWY18R/36L 主要用于离场；RWY18L/36R 主要用于进场，经管制员同意可用于离场。

2.4.2 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；

clearance between the wheel of wing gear and the edge of TWY is no less than 4m, so pilots of B747-8 are requested to use offset-centerline steering at the following TWYs: H1 and A, H7 and A, T1 and A, T6 and A, H1 and RWY18L/36R, T1 and RWY18L/36R, H7 and RWY18L/36R, T6 and RWY18L/36R, B2 and B, B3 and B, B4 and B, B5 and B, B7 and B, B8 and B, C1 and C, C2 and C, C3 and C, C4 and C, B and H1, B and H2, B and H3, B and H5, B and H6, B and H7, H1 and C, H2 and C, H7 and C, H1 and D, D9 and D, D13 and D. Pilots of B747-8 are requested to use 180° offset-centerline steering BTN TWY C and D.

2.3.6 B747-8 shall be guided by Follow-me vehicle into stands.

## 2.4 General rules for the use of runways

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

2.4.2 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;

2.4.3 着陆航空器落地许可的最晚发布时机可以在  
着陆航空器飞越跑道入口前。

2.4.3 The latest time to issue landing clearance is  
available before aircrafts flying over THR.

2.4.4 穿越跑道规定/RWY crossing rules:

穿越跑道时使用的滑行道	RWY18R/36L:	TWYs H1-H7
TWYs used for crossing	RWY18L/36R:	TWYs H1, H4, H7
穿越程序 Procedures for crossing	<p>按照管制员指挥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 AD2.20.2.4.5);</p> <p>Taxi following the instructions of controller to the holding position and hold short of RWY(Crossing rules during ROUTE-NORTH/SOUTH operation for arrival aircrafts refer AD2.20.2.4.5);</p> <p>收到穿越指令后, 需尽快实施穿越;</p> <p>Cross the RWY immediately upon receiving the crossing clearance;</p> <p>机组应完整复诵管制员有关穿越跑道和跑道外等待的指令, 如有疑问, 请在穿越前证实;</p> <p>Repeat all the ATC instructions concerning "hold short of RWY or cross the RWY"; Any questions shall be clarified before crossing RWY;</p> <p>穿越跑道时, 机组应注意监听其他有关跑道的指令或信息通报, 并注意观察跑道及附近的活动;</p> <p>When crossing RWY, pilots shall monitor the ATC instructions or information about RWY and observe the activities on and around RWY;</p> <p>穿越结束后, 机组需报告“已脱离跑道”。</p> <p>When crossing is completed, report to controller "RWY vacated".</p> <p>紧跟在起飞航空器后穿越跑道时, 机组自行负责其与起飞航空器之间的距离以免受起飞航空器喷流的影响。</p> <p>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.</p>	

穿越限制 Limits for crossing	每天 2200-1600 之间禁止拖曳航空器穿越跑道。 Towing aircraft to cross RWYs is strictly forbidden during UTC 2200-1600(next day).
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## 2.4.5 绕行滑行道使用限制

## 2.4.5 Using limit for ROUTE-NORTH/SOUTH

滑行道编号/TWY	航空器翼展限制(m)/Wing span limits for aircraft(m)
N, S, BN, BS	<36
Note: N, S, BN, BS only available for aircraft height(include vertical tail)<13m.	

Pay attention to aircraft on TWY N, BN, S, BS when using RWY18R/36L for departure.

## 2.4.5.1 机场绕滑组成

## 2.4.5.1 Constitution of ROUTE-NORTH/SOUTH

## 2.4.5.1.1 绕滑

## 2.4.5.1.1 ROUTE-NORTH/SOUTH

名称/Name	组成/Constitution
ROUTE-NORTH	TWY BN→TWY N
ROUTE-SOUTH	TWY BS→TWY S

2.4.5.1.2 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。

2.4.5.1.2 Aircraft using ROUTE-NORTH/SOUTH may influence the aircraft on RWY18R/36L judging for take-off; In order to avoid that, visual shelter with Red/White diagonal stripe has been set 388m outside SWY END on each side extended RCL18R/36L.

2.4.5.1.3 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。

2.4.5.1.3 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.

#### 2.4.5.2 机场绕滑运行程序

#### 2.4.5.2 ROUTE-NORTH/SOUTH operation

2.4.5.2.1 绕滑正常情况下提供给停靠西机坪的进港航空器使用。

2.4.5.2.1 ROUTE-NORTH/SOUTH is normally used for arrival aircraft parking on west apron.

2.4.5.2.2 绕滑可以供翼展 $<36\text{m}$ 的机型无限制使用； $36\text{m}\leq$ 翼展 $<52\text{m}$ 的机型限制使用；翼展 $\geq 52\text{m}$ 的机型禁止使用。

2.4.5.2.2 Aircraft with wing span  $<36\text{m}$  is available to use ROUTE-NORTH/SOUTH; Aircraft with  $36\text{m}\leq$  wing span  $<52\text{m}$  is limited to use ROUTE-NORTH/SOUTH; Aircraft with wing span  $\geq 52\text{m}$  is forbidden to use ROUTE-NORTH/SOUTH.

2.4.5.2.3 运行中翼展 $<36\text{m}$ 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。

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

#### 2.4.5.3 机场绕滑使用时间

#### 2.4.5.3 ROUTE-NORTH/SOUTH operational hours

2.4.5.3.1 原则上虹桥机场 24 小时使用绕滑；

2.4.5.3.1 Normally H24;

2.4.5.3.2 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；

2.4.5.3.2 When all departure flight finish take-off in the evening, RWY crossing mode can be implemented.

2.4.5.3.3 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；

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

2.4.5.3.4 虹桥机场处于低能见度运行时，使用穿越跑道模式。

2.4.5.3.4 During low visibility operation, RWY crossing mode is implemented.

## 2.4.5.4 机场绕滑使用注意事项

## 2.4.5.4 Notice for ROUTE-NORTH/SOUTH

2.4.5.4.1 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。

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

2.4.5.4.2 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。

2.4.5.4.2 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.

2.4.5.4.3 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。

2.4.5.4.3 ROUTE-NORTH/SOUTH shall only use for one-way; No-entry light and marking are set at the connection part of TWY D and ROUTE-NORTH/SOUTH; Pilot shall pay attention and avoid entering by mistake.

2.4.5.4.4 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。

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

## 2.4.5.5 机场绕滑应急处置

## 2.4.5.5 Contingency plan for ROUTE-NORTH/SOUTH

2.4.5.5.1  $36\text{m} \leq \text{翼展} < 52\text{m}$  的航空器误入绕滑后，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。

2.4.5.5.1 When aircraft with  $36\text{m} \leq \text{wing span} < 52\text{m}$  entering ROUTE-NORTH/SOUTH by mistake, stop using RWY18R/36L for take-off and follow ATC

instruction to continue taxiing.

2.4.5.5.2 52m≤翼展<65m 的航空器误入绕滑后，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。

2.4.5.5.2 When aircraft with 52m≤wing span < 65m entering ROUTE-NORTH/SOUTH by mistake, stop using RWY18R/36L for take-off; 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.

2.4.5.5.3 翼展≥65m 的航空器误入绕滑后，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。

2.4.5.5.3 When aircraft with wing span≥65m entering ROUTE-NORTH/SOUTH by mistake, stop using RWY18R/36L for take-off; The stray aircraft shall shut down engine and wait for towing tractor, after towing back to TWY B, start-up to taxi.

2.4.6 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。

2.4.6 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.

2.4.7 为防止航空器落错跑道，航空器驾驶员应通过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。

2.4.7 In order to prevent aircraft landing on the wrong 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.

2.5 虹桥机场 HOT SPOT

2.5 ZSSS AD HOT SPOT

2.5.1 HS1-HS4 的范围/ Area of HS1-HS4:

HS1	TWY H4 connected area of TWY L01 and
-----	--------------------------------------

	RWY18L/36R
HS2	TWY H4 connected area of RWY18L/36R and RWY18R/36L
HS3	Connected area of TWY H3 and TWY D
HS4	Connected area of TWY H5 and TWY D

2.5.2 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。

2.5.2 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.

2.5.3 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。

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

2.5.4 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。

2.5.4 HS3, HS4: Taxiing busy area. Follow ATC instructions strictly when vacated RWY18R/36L and pay more attention.

2.5.5 HS5-HS7 的内容参见 3.14

2.5.5 HS5-HS7 refer to 3.14

2.5.6 HS8-HS11 的范围/Area of HS8-HS11:

HS8	TWY H2 connected area of TWY B and RWY 18R/36L
HS9	TWY H3 connected area of TWY B and RWY 18R/36L
HS10	TWY H5 connected area of TWY B and RWY 18R/36L
HS11	TWY H6 connected area of TWY B and RWY 18R/36L

2.5.7 HS8-HS11: 航空器穿越 18R/36L 跑道频繁区域。

2.5.7 HS8-HS11: RWY18R/36L busy crossing area.

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。

Pilot must be careful when crossing the RWY. Any doubts about crossing clearance should be clarified in time with ATC.

## 2.6 仪表着陆系统敏感区保护程序

## 2.6 Protection procedures for ILS sensitive area

2.6.1 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照管制员的指令在 B 型等待位置等待；

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

2.6.2 当天气条件符合运行标准时，为加速飞行流量，18L/36R 跑道可不启用仪表着陆系统敏感区保护程序。起飞航空器在跑道外等待，着陆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目视进近，但不表示设备故障。参见 ZSSS AD2.24-1A;

2.6.2 In order to accelerate the traffic flows, the protection procedures needn't be implemented upon the weather condition meets the operational standard for RWY18L/36R. Under 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 is failure) or visual approach. Refer to ZSSS AD2.24-1A;

## 2.7 着陆航空器快速脱离跑道路序

## 2.7 Procedure for rapidly vacating RWY

2.7.1 落地航空器应根据 ATC 给出的脱离方向，就近选择快速出口滑行道，并及时报告塔台管制员；

2.7.1 Landing aircraft shall vacate RWY rapidly using the appropriate rapid exit TWY by ATC, and report to TWR immediately after vacating RWY;

2.7.2 落地航空器从接地到脱离跑道的的时间应控制在 50s 以内，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

2.7.2 All landing aircraft shall fully vacate RWY within 50s after touchdown via the first or second rapid exit TWY. If can't fulfill the above requirments and need vacate RWY via the last rapid exit TWY or further TWY, the pilot shall inform TWR on the first contact.



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）；

TWR will instruct aircraft to continue approaching, landing, stopping approach or missed approach according to air and ground traffic conditions(except for wet or contaminated RWY).

2.8 起飞航空器从等待位置到对正跑道的时间应控制在 60s 以内,如不能满足要求应在进跑道前报告塔台管制员（湿跑道或污染跑道除外）。

2.8 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.

2.9 18R/36L 跑道每日 1600-2300 (UTC) 不接收航空器降落（紧急备降除外）。

2.9 Aircraft is forbidden to land on RWY18R/36L from UTC 1600 to 2300 daily(except emergency alternate).

2.10 ILS 开启模式

2.10 ILS operations mode

2.10.1 CAT-I/HUD-I 运行时：

2.10.1 CAT-I/HUD-I operations:

2.10.1.1 RWY18L 落地时：开启 18L 和 36L, 关闭 18R 和 36R。

2.10.1.1 RWY18L landing: 18L and 36L opened, 18R and 36R closed.

2.10.1.2 RWY36R 落地时：开启 36R 和 18R, 关闭 18L 和 36L。

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

2.10.1.3 RWY18R 落地时：开启 18R 和 36R, 关闭 18L 和 36L。

2.10.1.3 RWY18R landing: 18R and 36R opened, 18L and 36L closed.

2.10.1.4 RWY36L 落地时：开启 36L 和 18L, 关闭 18R 和 36R。

2.10.1.4 RWY36L landing: 36L and 18L opened, 18R and 36R closed.

2.10.2 HUD-II 运行时：

2.10.2 HUD-II operations:

2.10.2.1 RWY36R 落地时：开启 36R 和 18R，关闭 18L 和 36L。  
2.10.2.1 RWY36R landing: 36R and 18R opened, 18L and 36L closed.

2.10.2.2 其他跑道不具备 HUD-II 类运行能力。  
2.10.2.2 Other RWYs are incompetent at HUD-II operation.

### 3. 机坪和机位的使用

### 3. Use of aprons and parking stands

#### 3.1 地面管制要求

#### 3.1 Ground control requirements

3.1.1 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。虹桥机场运行指挥中心(AOC)联系频率：130.75MHz，呼号：浦江。  
3.1.1 Stands distribution for arrival aircraft is arranged by AOC. The Aerodrome Operation Center (AOC): contact frequency is 130.75MHz, call sign for AOC is Pujiang.

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 地面管制向塔台管制移交航空器或东西塔台之间移交航空器时，管制员将使用“守听”或“联系”两种管制指令。  
3.1.3 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 未经 AOC 同意，严禁航空器利用自身动力倒滑；  
3.2 Aircraft is strictly forbidden to taxi backward on its own power without AOC permission;

3.3 在远机位，专机位停靠的航空器由地面人员指挥其进出机位；  
3.3 Aircraft parking/docking on stand-off stand or VIP flight parking stand will be guided by marshaller for entry/exit;

#### 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 申请。

3.4.1.1 Engine run-ups are subject to AOC permission.

3.4.1.2 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。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。

3.4.1.2 During engine run-ups, people and vehicles are forbidden to pass through engine danger area. 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.

3.4.1.3 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),并按照指令执行;

3.4.1.3 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.

3.4.1.4 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 AOC and APN(if on the RWY, aircraft operator or agent shall also report to TWR).

## 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

3.4.2.2.1 401-413, 413E, 286-290, 601-603, 604A, 604B, 605-608, 501, 502, 504, 506, 508, 510, 511, 517-525, 313-327, 338-342 机位可供航空器慢

3.4.2.2.1 Parking stands Nr. 401-413, 413E, 286-290, 601-603, 604A, 604B, 605-608, 501, 502, 504, 506, 508, 510, 511, 517-525, 313-327, 338-342 are available

- 车测试，测试期间：相邻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机位尾部通过。
- 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.
- 3.4.2.2.2 101, 102, 109-115, 120, 121, 126, 127, 212-237, 238E, 239-285, 301-312, 328-337, 512-514 机位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。
- 3.4.2.2.2 Aircraft parking on stands Nr. 101, 102, 109-115, 120, 121, 126, 127, 212-237, 238E, 239-285, 301-312, 328-337, 512-514 shall be pushed back to the corresponding holding point for engine idle test.
- 3.4.2.2.3 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。
- 3.4.2.2.3 Aircraft with engine on the tail part shall be pushed back to the corresponding holding point for engine idle test.
- 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, 402 与 405 机位之间，使用限制如下：
- 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.
- 3.4.2.3.1 401-407 机位之间的 L11 机坪滑行道禁止使用期间，方可启用 4 号机坪试车位；
- 3.4.2.3.1 Engine run-ups stand on apron Nr.4 can be used only while TWY L11 between stands Nr.401 and Nr.407 is not in use.
- 3.4.2.3.2 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；
- 3.4.2.3.2 Only a B747-8 or an aircraft with wing span < 65m on engine run-ups stand can carry out, aircraft nose to south.
- 3.4.2.3.3 B747-8 使用 4 号机坪试车位前，还必须清空 401-406 机位的航空器。
- 3.4.2.3.3 Stands Nr.401-406 must be empty before B747-8 operates engine run-ups on apron Nr.4.
- 3.4.2.4 当因天气或机位安排等因素时，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
- 3.4.2.4 If weather or stands not permit, fast engine run-ups could be operated on RWY. Fast engine run-ups

小时之间)。

on RWY must be implemented between finishing the last flight and 1 hour before the first flight(next day).

### 3.5 机场桥载设备代替 APU 管理规定

### 3.5 Bridge equipment replace APU

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。b.航空器因启动发动机而需要开启 APU。c.航空器进行 APU 的维修检测活动。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。e.航空器使用廊桥桥载设备后机舱温度超过 26°C。f.廊桥桥载静变电源无法满足特殊机型用电要求。

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. Aircraft needs APU to start up engine; c. APU is under maintenance; d. In case of exceptional circumstances influencing the operation safety, such as extreme weather, special plane support, insufficient flight transition time. e. The temperature of cabin exceed 26 °C after using bridge equipment. 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:8621-22381500)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 相邻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。

3.6 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.

3.7 进港航空器和引导车应在机位滑行道上转入机位引入线之前停止,观察确认安全的情况下减速慢

3.7 Arrival aircraft and follow-me vehicle shall stop on TWYs before turning into stands lead-in lines, then

行入位。

observe and slow speed to enter stand.

### 3.8 滑行限制/Taxiing limits:

滑行道/TWY	航空器翼展限制 (m) / Wing span limits for aircraft(m)	相关机位限制/Relative stands limits
Y1-Y3, M1-M6, L16, D	≤68.4	
L01, L10, L18, L19	<65	
L11	<52	<p>1. Stands Nr.401-413: aircraft with wing span&lt;52m shall be pushed back to holding point on TWY L11, then start-up and taxi to TWY D.</p> <p>2. Stands Nr.406, Nr.411, Nr.413E: aircraft with wing span≥52m shall be pushed back to TWY D directly;</p> <p>3. Engine run-up stands on apron Nr.4 can only be used while TWY L11 between stands Nr.401 and Nr.407 is not in use.</p> <p>4. Aircraft exit stands Nr.412 and Nr.413 shall with nose to south and be pushed back to TWY L11 holding point. If aircraft need change direction after be pushed back shall get ATC clearance and be pushed to TWY D by ATC instructions.</p>
L15, L17, L20	<36	
L12	<36	1. Stands Nr.232-235: push back to

		<p>holding point on TWY L12, then start-up and taxi to TWY D.</p> <p>2. In order to prevent aircraft wake turbulence:</p> <p>If aircraft nose to south operating on TWY L12, stand Nr.232 is forbidden to enter or exit.</p> <p>If aircraft nose to north operating on TWY L12, stand Nr.235 is forbidden to enter or exit.</p>
L13	<36	<p>1. Stands Nr.262-265: push back to holding point on TWY L13, then start-up and taxi to TWY D.</p> <p>2. If aircraft nose to south operating on TWY L13, stand Nr.262 is forbidden to enter or exit.</p> <p>If aircraft nose to north operating on TWY L13, stand Nr.265 is forbidden to enter or exit.</p>
L14	<36	<p>1. Stands Nr.286-290: push back to holding point on TWY L14, then start-up and taxi to TWY D.</p> <p>2. Stands Nr. 601-603, 604A, 605-608: aircraft with wing span &lt; 36m shall be pushed back to holding point on TWY L14, then start-up and taxi to TWY D.</p> <p>3. Stands Nr. 602, 603, 605, 606:</p>

		<p>aircraft with wing span<math>\geq</math>36m shall be pushed back to TWY D directly.</p> <p>4. Stands Nr.604B: aircraft shall be pushed back to the holding point on TWY D.</p>
L08, L09	<24	<p>1. Stands Nr.301-312: push back to holding point on TWY L08.</p> <p>2. Stand Nr.301:taxi in from TWY K0 is forbidden.</p>
Note: It is prohibited to operate two or more aircrafts simultaneously on TWY Y1-Y3, M1-M6, L09, L15-L17.		

## 3.9 组合机位的使用模式/Use of combined stands:

组合机位群/ combined stands	组合模式/ combined mode	停机位/ stands	翼展限制(m)/ Wing span limits(m)	进出方式/ entry/exit
238E, 239, 240, 240E	238E(CAT C), 239, 240	238E	<36	taxi in and push back
		239	≤35.79	
		240		
	238E(CAT E), 240E	238E	≤60.96	
		240E		
	257, 258, 259, 259E	257(CAT E), 259E	257	
259E			≤64.92	
257(CAT C), 258, 259		257	≤35.79	
		258		
		259		
412, 413, 413E		412, 413	412	
	413			
	413E	413E	<65	



## 3.10 机位限制/ Limits for aircraft parking on the following stands:

停机位/Stand	航空器翼展限制 (m) / Wing span limits(m)	进出方式/ entry/exit
248	≤68.4	taxi in and push back
102, 111, 112, 126, 127, 250, 283, 284, 313-315, 406, 411, 501, 502, 603, 606	<65	
246, 256	≤64.92	
212	≤64.8	
511	≤64.75	
504, 506, 508, 510	<64.5	
109	≤64	
110, 113, 121	≤61	
213, 214, 229, 230, 237, 260, 267, 268	≤60.96	
120	≤60.4	
231, 266, 402, 403, 407-409, 602, 605	<52	
101, 115	≤47.6	
114	≤45	
226-228, 232-236, 261-265, 272, 273, 285-290, 401, 404, 405, 410, 601, 604A, 604B, 607, 608, 316-342, 518-525	<36	
215-217, 219-225, 269-271, 274-279, 281, 282	≤35.80	

218, 280	≤35.79	
517	≤28.5	
301-312, 512-514	<24	
<p>Note:</p> <p>1. When towing aircraft taxi in/out hanger of China Eastern Airlines on apron Nr.6, aircraft on stand Nr.604A are forbidden to push back nose to north, aircraft on stand Nr. 604B, 605-608 are forbidden to push back.</p> <p>2. Aircraft shall be guided by follow-me vehicle to taxi into stand on apron Nr.2 except stand Nr. 232-235, 262-265 and 286-290.</p> <p>3. Business jet on stand Nr.301-312,512-514 shall park on corresponding stop lines firstly, on similar stop lines secondly. Parking on other stands shall satisfy the requirements of apron safety lines.</p> <p>4. B747-8 instruction refer AD2.20 2.3.5.</p>		

3.11 301-342 机位航空器出港推出后机头朝向要求如下表。特殊情况下，301-314 机位需要改变航空器推出后机头朝向时，应听从机坪管制指令。

3.11 Nose direction of aircraft on stand Nr.301-342 after push out as follow. When it is necessary to change the direction of aircraft on stand Nr.301-314 after push out, the instruction of APN shall be followed.

524、525 机位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。

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, the instruction of APN shall be followed.

Stands Nr.	Nose direction of Aircraft
301, 306, 307, 313, 314	North
302-305, 308-312	South
315, 339-341	North or South
316-320, 323-337	East or West

321, 322, 338	East or North
342	South or East

## 3.12 公务机位的使用限制/Limits for business stands:

停机位/Stands	机身长度限制 (m) /Fuselage limits (m)	航空器翼展限制 (m) /Wing span limits for aircraft (m)
Nr.301-312	<32.6	<24
Nr.512-514	<28	<24

3.13 2 号机坪设有航空器进港等待位置 AH01-AH07 和航空器推出等待点 EOP01-EOP06, 详见 ZSSS AD2.24-2.

3.13 Arrival holding positions AH01-AH07 and end of push points EOP01-EOP06 established on Apron Nr.2, details refer ZSSS AD2.24-2.

3.14 2 号机坪设 HOT SPOT(HS5-HS7)

3.14 HS(HS5-HS7)established on apron Nr.2

## 3.14.1 HS5-HS7 的范围/Area of HS5-HS7:

HS5	The area of stands Nr.216-228
HS6	The area of stands Nr.238E-259
HS7	The area of stands Nr.269-281
Remark: 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.	

## 3.14.2 HS 或 HS 与其相邻机位运行限制/HS or HS&amp;adjacent stand operation limit:

HS5	Two or more aircrafts are forbidden to operate simultaneously
HS5, 215	
HS5, 229	

HS6	Two or more aircrafts are forbidden to operate simultaneously
HS6, 237	
HS6, 260	
HS7	Two or more aircrafts are forbidden to operate simultaneously
HS7, 268	
HS7, 282	

## 3.15 停机位推出鼻轮等待点/ End of push points to be used for stands

Stands	End of push points
212-216	Tangency point BTN push-back line and TWY M1
217-221	EOP01
222-227	EOP02
228-231	Tangency point BTN push-back line and TWY M2
236-238E	Tangency point BTN push-back line and TWY M3
239-248	EOP03
250-257	EOP04
258-261	Tangency point BTN push-back line and TWY M4
266-270	Tangency point BTN push-back line and TWY M5
271-275	EOP05
276-280	EOP06
281-285	Tangency point BTN push-back line and TWY M6

3.16 TP01-TP08 为临时机位, 其中 TP01-TP05 最大翼展限制<36m, TP06-TP08 最大翼展限制<65m, 停放时 TP01, TP02 机头朝北; TP03-TP08 机头朝南。航空器使用临时机位时须严格遵从机坪管制和机务

3.16 TP01-TP08 are temporary stands, TP01-TP05 wing span limits<36m, TP06-TP08 wing span limits<65m, nose direction of aircraft: TP01, TP02: North; TP03-TP08: South. Aircraft shall follow the

指令。

instruction of APN or maintenance crew when using temporary stands.

### 3.17 本场机坪运行管理规定

### 3.17 Apron operation rules

3.17.1 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。

3.17.1 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.

3.17.2 机场机坪管制负责区范围：详见 ZSSS-2A/2B，具体管制移交点及移交方式听从管制员指令执行。

3.17.2 Apron operation control area is depicted in ZSSS-2A/2B. The specific transfer of control points and transfer modes refer to ATC instruction.

3.17.3 机坪运行管理范围内的离港航空器推出开车滑行流程：

3.17.3 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；

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)取得放行许可，待塔台放行席位指挥脱波后，向机坪管制申请推出开车；

b) Aircraft shall apply to APN for push-back and start-up after getting delivery clearance and issuing the

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；

frequency of next control unit;

c) Departure aircraft shall report parking stands 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.

#### 3.17.4 机坪运行管理范围内航空器进港:

- a)航空器进入机坪前,联系机坪管制申请进一步滑行许可;
- 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。

#### 3.17.4 Arrial aircraft in apron operation control Areas:

- a) Aircraft shall contact with APN for further taxiing clearance before entering apron.
- 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. 进、离场管制规定

无

### 4. Air traffic control regulations

Nil

### 5. 机场的 II/III 类运行

#### 5.1 HUD 特殊 I/II 类运行程序:

5.1.1 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 I 类运行和 RVR200m 起飞程序; 36R 跑道可实施特殊 II 类运行。

#### 5.1.2 准备阶段天气条件

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 I 类运行的准备工作。

### 5. CAT II/III operations at AD

#### 5.1 HUD Special CAT I/II operation:

5.1.1 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.

#### 5.1.2 Preparation of HUD Special CAT I operation

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.

### 5.1.3 实施阶段天气条件

### 5.1.3 Implementation of HUD Special CAT I/II operation

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

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

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

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

### 5.1.4 结束阶段天气条件

### 5.1.4 Termination of HUD Special CAT I/II operation

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 I/II 类运行。

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

5.1.5 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。

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

5.1.6 实施特殊 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。

5.1.6 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.

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

5.1.7 Aircraft using HUD Special CAT I/II operation procedure shall report to ATC at first.

**6. 除冰规则****6. Rules for deicing**

除冰规则

De-icing rules

除冰位置/De-icing position	滑入/Entry	滑出/Exit	备注/Remarks
①	TWY D	TWY D — TWY H7	De-icing position ①②④⑤⑥ can be used independently; Aircraft de-icing on ③ can only taxi out until ① without any aircraft; Aircraft de-icing on ③④: Stands Nr. 601-603, 604A, 604B, 605-608 are forbidden to use; Aircraft entering or exiting from China Eastern Airlines hangar are forbidden; TWY L14(S of stand Nr.601) is forbidden to use.
②	(nose to South)	TWY D — TWY H6	
③	TWY D — de-icing guide line(blue) (nose to South)	De-icing guide line—TWY H7	
④		De-icing guide line—TWY H6 or TWY H7	
⑤	TWY D (nose to North)	TWY D — TWY H1	
⑥		TWY D — TWY H2	
⑦	TWY L01 (nose to South)	TWY L01—TWY H7	
⑧	TWY L01 (nose to North)	TWY L01—TWY K1	
Remark: Refer to ZSSS AD2.24-2 for the specific location of ①-⑧.			

**7. 平行跑道同时仪表运行****7. Simultaneous operations on parallel runways**

无

Nil

**8. 警告****8. Warning**



所有飞行切勿误入虹桥机场东面的 ZS(R)559（上海市区）限制区。

All aircraft shall by no means fly into the Restricted Area ZS(R)559(urban area) by mistake, which is to the east of Hongqiao Airport.

## 9. 直升机飞行限制，直升机停靠区

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

无

Nil

## ZSSS AD 2.21 噪音限制规定及减噪程序

## ZSSS AD 2.21 Noise restrictions and 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音离场程序 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 在航空器起飞性能运行允许的情况下，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 在高度 450m(1500ft)时, 调整并保持发动机爬升功率/推力, 保持爬升速度  $V_2+20\text{km/h}$  (10 海里/小时), 保持起飞襟翼和缝翼继续爬升;

2.1.3 高度 910m(3000ft)以上时, 转为正常航路爬升速度并按规定收襟翼/缝翼。

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)。

2.1.2 At altitude 450m(1500ft), adjust engine power/thrust to climb power/thrust and maintain it, maintain climbing speed at  $V_2+20\text{km/h}$ (10kt) with flaps and slats in the take-off configuration;

2.1.3 At altitude 910m(3000ft), maintain a positive rate of climb, accelerate to normal en-route climb speed and retract flaps/slats on schedule.

2.2 If the procedures can not be implemented due to any 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 飞程序

## ZSSS AD 2.22 Flight procedures

### 1. 总则

### 1. General

除经上海进近或虹桥塔台特殊许可外, 在上海进近管制区和虹桥塔台管制区内的飞行, 必须按照仪表飞行规则进行。

Flights within Shanghai APP Control Area and Hongqiao TWR Control Area shall operate under IFR unless special clearance has been obtained from Shanghai APP or TWR.

### 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 450m(QNH); 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。如果需要，航空器可在空中交通管制部门指定的航路、导航台或定位点上空等待或做机动飞行。

3.2 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 上海进近管制区域内实施雷达管制。航空器最小水平间隔为 6km。

4.2 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)。

4.3 雷达引导与排序：通常，航空器从庵东 VOR (AND)，SASAN，横沙 VOR (HSH) 等导航台得到雷达引导和排序，直至最后进近航迹 (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

3.1 Strict adherence is required to the relevant arrival/departure procedures and approach procedures published in the aeronautical charts. Aircraft may, if necessary, hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.

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 Radar control within Shanghai APP has been implemented. The minimum horizontal radar separation is 6km.

4.2 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).

4.3 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

陆间隔。

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.

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。

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 最低监视引导高度图

#### 4.4 Surveillance Minimum Altitude Sectors

Sector 1	ALT limit: 450m or above
N312900E1205141- N313021E1211316- N312344E1212327- N311730E1212357- N311535E1205250- N312900E1205141	
Sector 2	ALT limit: 500m or above
A circle with a radius of 7km centered on N312236E1211422	
Sector 3	ALT limit: 600m or above
N311717E1212021- N311730E1212357- N310821E1212441- N310808E1212106- N311717E1212021	
Sector 4	ALT limit: 950m or above
N311730E1212357- N311937E1213324- N311527E1213731- N310907E1213215- N310821E1212441- N311730E1212357	
Sector 5	ALT limit: 550m or above
N313021E1211316- N313558E1214759- N313309E1221316- N310603E1222313- N304247E1220917- N304219E1205541- N311535E1205250- N311730E1212357- N312344E1212327- N313021E1211316	
Sector 6	ALT limit: 900 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. Radio communication failure procedures

### 5.1 航空器单向通信失效

### 5.1 Aircraft communication partly failure

5.1.1 如果航空器只具备信号接收能力，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。

5.1.1 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 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。

5.1.2 If the radio transmitter is available, pilot shall notify her/his flight intention to ATC and report aircraft 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 航空器双向通信失效

### 5.2 Aircraft communication totally failure

航空器双向通信失效时，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。

When aircraft communication totally failure, If possible, ATC shall inform aircraft operator to contact with aircraft by internal communication(such as satellite phone).

#### 5.2.1 航空器进场

#### 5.2.1 Aircraft arrival

航空器应按下下列特定的进近程序继续进近并尽快落地；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。

Aircraft continue approach shall according to the following specific procedures as soon as possible; If airport condition is not available for landing, pilot

should decide to return or alternate by herself/himself.

#### 5.2.1.1 向北着陆

#### 5.2.1.1 Landing to North

航空器按照最后接收到的管制员指令高度(如果低于 1500m 则上升至 1500m)飞向重固台 (CGT), 如果过 CGT 高度高于 1500m, 则进入等待程序, 下降至起始进近高度 1500m, 然后按 36R 跑道 ILS/DME y 仪表进近图着陆。

Aircraft fly to CGT according to the last command ALT by ATC(climb to 1500m if lower). If the ALT over CGT is higher than 1500m, join the holding procedure, and descend to the initial approach ALT 1500m, then approach according to ILS/DME y RWY36R Instrument Approach Chart.

#### 5.2.1.2 向南着陆

#### 5.2.1.2 Landing to South

航空器按照最后接收到的管制员指令高度(如果低于 1500m 则上升至 1500m)飞向重固台 (CGT), 如果过 CGT 高度高于 1500m, 则进入等待程序, 下降至起始进近高度 1500m, 然后按 18L 跑道 ILS/DME y 仪表进近图着陆。

Aircraft fly to CGT according to the last command ALT by ATC(climb to 1500m if lower). If the ALT over CGT is higher than 1500m, join the holding procedure, and descend to the initial approach ALT 1500m, then approach according to ILS/DME y RWY18L Instrument Approach Chart.

#### 5.2.2 航空器离场

#### 5.2.2 Aircraft departure

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; 如果航空器驾驶员判断无法继续实施离场飞行, 可自行决定返航进近着陆或至放油区放油, 并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。

Aircraft continue departure according to the last command(procedure) by ATC. ATC will conduct the traffic accordingly. If can't continue departure, pilot can decide to return or dump fuel over fuel dumping area by herself/himself, landing according to operation direction. ATC will conduct the traffic accordingly.

#### 5.3 本场通信失效

#### 5.3 Aerodrome communication failure

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讯联系时，航空器应联系上一管制单位，并按照接收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 目视飞行规定：

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。

6.3 航空器驾驶员得到仪表进近的指令后，尽可能根

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 Visual flight rules:

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 Upon receipt of approaching clearance, the pilot

据机载设备监控周边航空器的运行状态，并尽最大可能建立目视间隔；同时在管制员通报其它航空器的相对位置时，向管制员报告已建立目视间隔。若不能目视相关航空器，管制员将视情况指挥该航空器中止进近或复飞。

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 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 airport, aircraft shall obey flight rules of visual separation.

7. 目视飞行航线

7. VFR route

无

Nil

8. 目视参考点

8. Visual reference point

无

Nil

9. 其它规定

9. Other regulations

本场 RNAV 飞行程序为主用程序，无特殊原因机组应该执行这些程序。

RNAV flight procedures are primary procedures, pilot shall execute these procedures without special reasons.

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

Waypoint list

ID	COORDINATES(WGS-84)	ID	COORDINATES(WGS-84)
PD024	N304753E1215521	SS406	N311902E1211315
PD304	N305157E1220957	SS407	N305100E1211809



PD409	N305117E1214005	SS409	N305110E1212208
PD503	N313258E1213800	SS420	N312401E1205701
		SS501	N311705E1211939
SF1	N312700E1211921	SS502	N312405E1211044
SF2	N305809E1212055	SS503	N311650E1211322
SH1	N313227E1204809	SS504	N311254E1210704
SH2	N312213E1204356		
SH3	N303456E1205926	AND	N3015.4E12113.3
		JTN	N3107.4E12120.5
SS013	N312258E1211935	NXD	N3053.8E12025.8
SS023	N310057E1212046	PUD	N3110.3E12147.0
SS033	N312256E1211921		
SS043	N310057E1212032	AKARA	N3130.0E12330.0
SS201	N312700E1211248	ALDAP	N3137.5E12222.2
SS204	N312256E1211303	BOLEX	N3100.0E12300.0
SS205	N311213E1211338	BONGI	N3100.0E12238.9
SS206	N305549E1211850	DADAT	N3027.0E12114.8
SS207	N304240E1211659	EKIMU	N3121.1E12106.6
SS208	N305048E1211307	EKVUT	N3145.4E12218.6
SS210	N302659E1210239	EMSAN	N3140.7E12246.5
SS211	N305519E1212142	IBEGI	N3149.4E12216.6
SS213	N302208E1212509	LAMEN	N3136.6E12400.0
SS301	N310152E1212029	LASAN	N3100.0E12225.5
SS302	N310301E1211408	MATNU	N3139.6E12238.0
SS303	N310413E1210733	MIGOL	N3045.8E12341.7
SS304	N310924E1210716	PIKAS	N3210.0E12044.0
SS305	N311646E1210651	PINOT	N3127.0E12227.0

SS306	N313056E1210455	POMOK	N3127.0E12107.0
SS320	N315700E1205100	PONAB	N3035.3E12224.1
SS401	N305824E1212712	SASAN	N3135.4E12019.2
SS402	N310112E1212703	SUPAR	N3001.4E12051.5
SS403	N311128E1212630	SURAK	N3146.4E12329.5
SS405	N310041E1211416	TONIX	N3119.9E12332.6

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY18L DEPARTURE TRANSITION SS301								
CF	SS301		184					RNAV1
RWY18R DEPARTURE TRANSITION SS301								
CF	SS301		183					RNAV1
RWY18L/18R SID IBE-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX 250		RNAV1
TF	PD024				↓1800			RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	PINOT							RNAV1
TF	ALDAP							RNAV1
TF	IBEGI							RNAV1
RWY18L/18R SID SUR-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX		RNAV1

						250		
TF	PD024				↓1800			RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY18L/18R SID LAM-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX 250		RNAV1
TF	PD024				↓1800			RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1
RWY18L/18R SID MIG-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX 250		RNAV1
TF	PD024				↓1800			RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1

TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY18L/18R SID PON-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX 250		RNAV1
TF	PD024				↓1800			RNAV1
TF	PD304							RNAV1
TF	PONAB							RNAV1
RWY18L/18R SID AND-61D								
IF	SS301							RNAV1
TF	SS211				↑900	MAX 250		RNAV1
TF	SS213							RNAV1
TF	AND							RNAV1
RWY18L/18R SID NXD-61D								
IF	SS301							RNAV1
TF	SS302				↓1500 ↑900	MAX 250		RNAV1
TF	SS303							RNAV1
TF	NXD				↑3900			RNAV1
RWY18L/18R SID SAS-61D								
IF	SS301							RNAV1
TF	SS302				↓1500 ↑900	MAX 250		RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1

TF	SS305				↑2700			RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY18L/18R SID PIK-61D								
IF	SS301							RNAV1
TF	SS302				↓1500 ↑900	MAX 250		RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1
TF	SS305				↑2700			RNAV1
TF	EKIMU							RNAV1
TF	POMOK							RNAV1
TF	SS306				↓3600			RNAV1
TF	SS320				↑6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY36R/36L SID IBE-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	PD409				↓4500 ↑3600			RNAV1
TF	PD024							RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1

TF	PINOT							RNAV1
TF	ALDAP							RNAV1
TF	IBEGI							RNAV1
RWY36R/36L SID SUR-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	PD409				↓4500 ↑3600			RNAV1
TF	PD024							RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY36R/36L SID LAM-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	PD409				↓4500			RNAV1

					↑3600			
TF	PD024							RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1
RWY36R/36L SID MIG-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	PD409				↓4500 ↑3600			RNAV1
TF	PD024							RNAV1
TF	PD304							RNAV1
TF	LASAN							RNAV1
TF	BONGI							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY36R/36L SID PON-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1

TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	PD409				↓4500 ↑3600			RNAV1
TF	PD024							RNAV1
TF	PD304							RNAV1
TF	PONAB							RNAV1
RWY36R/36L SID AND-71D								
VA			003		200			RNAV1
DF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	SS211							RNAV1
TF	SS213							RNAV1
TF	AND							RNAV1
RWY36R/36L SID NXD-71D								
VA			003		200			RNAV1
TF	SS503				↓1500 ↑600	MAX 220		RNAV1
TF	SS504							RNAV1
TF	SS303				↑2100			RNAV1
TF	NXD				↑3900			RNAV1
RWY36R/36L SID SAS-71D								
VA			003		200			RNAV1
DF	EKIMU				↓1500 ↑900	MAX 220		RNAV1
TF	SS420				↑1500			RNAV1



TF	SASAN							RNAV1
RWY36R/36L SID PIK-71D								
VA			003		200			RNAV1
DF	SS502				↓1500 ↑900	MAX 250		RNAV1
TF	POMOK							RNAV1
TF	SS320				↑6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY36L DEPARTURE TRANSITION SS501								
CF	SS501		003					RNAV1
RWY36R DEPARTURE TRANSITION SS501								
CF	SS501		360					RNAV1
RWY36R/36L SID SAS-72D								
IF	SS501							RNAV1
TF	EKIMU				↓1500 ↑900	MAX 220		RNAV1
TF	SS420				↑1500			RNAV1
TF	SASAN							RNAV1
RWY36R/36L SID PIK-72D								
IF	SS501							RNAV1
TF	SS502				↓1500 ↑900	MAX 250		RNAV1
TF	POMOK							RNAV1
TF	SS320				↑6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY36L DEPARTURE TRANSITION SF1								

CF	SF1		004		↑1200	MAX 250		RNAV1
RWY36R DEPARTURE TRANSITION SF1								
CF	SF1		003		↑1200	MAX 250		RNAV1
RWY36R/36L SID IBE-73D (BY ATC)								
IF	SF1				↑1200	MAX 250		RNAV1
TF	PD503							RNAV1
TF	EKVUT							RNAV1
TF	IBEGI							RNAV1
RWY36R/36L SID SUR-73D (BY ATC)								
IF	SF1				↑1200	MAX 250		RNAV1
TF	PD503							RNAV1
TF	EKVUT							RNAV1
TF	MATNU							RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
RWY36R/36L SID LAM-73D (BY ATC)								
IF	SF1				↑1200	MAX 250		RNAV1
TF	PD503							RNAV1
TF	EKVUT							RNAV1
TF	MATNU							RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
TF	LAMEN							RNAV1

RWY18L/18R STAR PUD-61A								
IF	PUD							RNAV1
TF	JTN				↑1800			RNAV1
TF	SS205				↑1500			RNAV1
TF	SS204				↑600	MAX 210		RNAV1
RWY18L/18R STAR AND-61A								
IF	AND							RNAV1
TF	DADAT							RNAV1
TF	SS207							RNAV1
TF	SS206				↓2400			RNAV1
TF	JTN				↑1800			RNAV1
TF	SS205				↑1500			RNAV1
TF	SS204				↑600	MAX 210		RNAV1
RWY18L/18R STAR AND-62A (BY ATC)								
IF	AND							RNAV1
TF	SS213							RNAV1
TF	SS211				↓2400			RNAV1
TF	JTN				↑1800			RNAV1
TF	SS205				↑1500			RNAV1
TF	SS204				↑600	MAX 210		RNAV1
RWY18L/18R STAR SUP-61A (BY ATC)								
IF	SUPAR							RNAV1
TF	SS210							RNAV1
TF	SS208							RNAV1
TF	SS206				↓2400			RNAV1

TF	JTN				↑1800			RNAV1
TF	SS205				↑1500			RNAV1
TF	SS204				↑600	MAX 210		RNAV1
RWY18L/18R STAR SAS-61A								
IF	SASAN				↓5000			RNAV1
TF	SS420				↓2400 or by ATC			RNAV1
TF	SS204				↑600	MAX 210		RNAV1
RWY18L/18R STAR SAS-62A (BY ATC)								
IF	SASAN				↓5000			RNAV1
TF	SS420				↓2400 or by ATC			RNAV1
TF	POMOK							RNAV1
TF	SS201				↑600	MAX 210		RNAV1
RWY18L APPROACH TRANSITION SS201								
IF	SS201				↑600	MAX 210		RNAV1
TF	SF1							RNAV1
TF	SS013				↑550	AT 180		RNAV1
RWY18L APPROACH TRANSITION SS204								
IF	SS204				↑600	MAX 210		RNAV1
TF	SS013				↑550	AT 180		RNAV1
RWY18R APPROACH TRANSITION SS201								
IF	SS201				↑600	MAX		RNAV1

						210		
TF	SF1							RNAV1
TF	SS033				↑550	AT 180		RNAV1
RWY18R APPROACH TRANSITION SS204								
IF	SS204				↑600	MAX 210		RNAV1
TF	SS033				↑550	AT 180		RNAV1
RWY36R/36L STAR PUD-71A								
IF	PUD							RNAV1
TF	SS205				↑1800			RNAV1
TF	SS405				↑600	MAX 210		RNAV1
RWY36R/36L STAR PUD-72A								
IF	PUD							RNAV1
TF	SS403				↑1800			RNAV1
TF	SS402							RNAV1
TF	SS401							RNAV1
TF	SF2				↑600	MAX 210		RNAV1
RWY36R/36L STAR AND-71A								
IF	AND							RNAV1
TF	DADAT							RNAV1
TF	SS207				↓2700			RNAV1
TF	SS407							RNAV1
TF	SF2				↑600	MAX 210		RNAV1
RWY36R/36L STAR AND-72A (BY ATC)								
IF	AND							RNAV1

TF	SS213							RNAV1
TF	SS409							RNAV1
TF	SF2				↑600	MAX 210		RNAV1
RWY36R/36L STAR SUP-71A (BY ATC)								
IF	SUPAR							RNAV1
TF	SS210							RNAV1
TF	SS208							RNAV1
TF	SF2				↑600	MAX 210		RNAV1
RWY36R/36L STAR SAS-71A								
IF	SASAN				↓5000			RNAV1
TF	SS420				↓2700			RNAV1
TF	EKIMU							RNAV1
TF	SS406							RNAV1
TF	SS205				↑1800			RNAV1
TF	SS405				↑600	MAX 210		RNAV1
RWY36L APPROACH TRANSITION SS405								
IF	SS405				↑600	MAX 210		RNAV1
TF	SS043				↑600	AT 180		RNAV1
RWY36L APPROACH TRANSITION SF2								
IF	SF2				↑600	MAX 210		RNAV1
TF	SS043				↑600	AT 180		RNAV1
RWY36R APPROACH TRANSITION SS405								
IF	SS405				↑600	MAX		RNAV1

						210		
TF	SS023				↑600	AT 180		RNAV1
RWY36R APPROACH TRANSITION SF2								
IF	SF2				↑600	MAX 210		RNAV1
TF	SS023				↑600	AT 180		RNAV1
RWY18L/18R HOLDING (OUTBOUND TIME: 1MIN)								
HM	SS205	Y	003	R	by ATC	MAX 230		RNAV1
HM	SH1	Y	115	L	by ATC	MAX 230		RNAV1
HM	SH2	Y	115	R	by ATC	MAX 230		RNAV1
HM	SH3	Y	026	L	by ATC	MAX 230		RNAV1
RWY18L/18R HOLDING (OUTBOUND TIME: 1.5MIN)								
HM	SS207	Y	012	R	↓5100 ↑3000	MAX 230		RNAV1
RWY36R/36L HOLDING (OUTBOUND TIME: 1MIN)								
HM	SS205	Y	183	L	by ATC	MAX 230		RNAV1
HM	SH1	Y	115	L	by ATC	MAX 230		RNAV1
HM	SH2	Y	115	R	by ATC	MAX 230		RNAV1
HM	SH3	Y	026	L	by ATC	MAX 230		RNAV1
RWY36R/36L HOLDING (OUTBOUND TIME: 1.5MIN)								

HM	SS207	Y	012	R	↓5100 ↑3000	MAX 230		RNAV1
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ZSSS AD 2.23 其它资料

ZSSS AD 2.23 Other 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.

Type of bird	Activity	Flight altitude(m)
Pigeon	The whole year	2-20
Ringdove	The whole year	5-7
Night heron	May-December	50-80
Cattle egret	April-October	30-50
Hawk	January, August-December	30-50
Barn swallow	March-September	2-10