#### ZGSZ AD 2.1 机场地名代码和名称 Aerodrome location indicator and name

ZGSZ-深圳/宝安 SHENZHEN/Baoan

## ZGSZ 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	N22 38.3' E113 48.7'	
1	ARP coordinates and site at AD	Center of RWY15/33	
2	方向、距离		
2	Direction and distance from city	293 °GEO, 32.5km from city center(Shenzhen railway station)	
	标高/参考气温	4.0m/31.8 °C(JUL)	
3	Elevation / Reference temperature		
	机场标高位置/大地水准面波幅	TI SPANIA (O.4)	
4	AD ELEV PSN / geoid undulation	The center of RWY16/34/-	
5	磁差/年变率	2 (W/2011) /	
5	MAG VAR/ Annual change	2 W(2011)/-	
	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	Shenzhen Airport Co.,Ltd	
		Shenzhen Baoan Airport, Shenzhen, Guangdong province, China Post	
		code:518128	
6		TEL:86-755-23456789	
		FAX:86-755-23456043	
	coopniono, oceani, 12 s, 2 mini, 10 sine	AFS:ZGSZVN8X	
		Website:www.szairport.com	
7	允许飞行种类	IED AVED	
	Types of traffic permitted(IFR / VFR)	IFR/VFR	
0	机场性质/飞行区指标	CIVII /DWIV15/22. AE DWIV16/24 AE	
8	Military or civil airport &Reference code	CIVIL/RWY15/33: 4E, RWY16/34: 4F	
0	备注	Nei	
9	Remarks	Nil	

## ZGSZ 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	H24
3	卫生健康部门	H24

	Health and sanitation	
4	航行情报服务讲解室 AIS Briefing Office	H24
5	空中交通服务报告室 ATS Reporting Office (ARO)	H24
6	气象讲解室 MET Briefing Office	H24
7	空中交通服务 ATS	H24
8	加油 Fuelling	H24
9	地勤服务 Handling	H24
10	保安 Security	H24
11	除冰 De-icing	Nil
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Container lift truck (7-30 tons), conveyor truck, container trailer, container platform trailer, fork lift, tow tractor.
2	燃油/滑油牌号 Fuel/oil types	Nr.3 jet fuel, Jet A1
3	加油设施/能力 Fuelling facilities/capacity	Rufueling truck (20000 liters and 10000 liters): 40 liters/sec; hydrant cart: 63 liters/sec; pipe network of apron aircraft-refueling wells with 397 hoses
4	除冰设施 De-icing facilities	Nil
5	过站航空器机库 Hangar space for visiting aircraft	Available for three B737 aircraft.
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for various types of aircraft on request, spare parts changed available by prior arrangement.

7	备注	Mil
,	Remarks	Nil

## ZGSZ AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	Near 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 center at AD, hospitals near AD
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	At AD
7	备注 Remarks	Nil

## ZGSZ 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: primary foam tender, rapid intervention vehicle, medium-duty water tank truck, medium-duty foam tender, heavy-duty foam tender, demolition rescue truck, logistics truck, command car;  Rescue equipment: uplift air cushion, jack, towing platform truck, mobile surface operation devices, aircraft emergency pothook, etc.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTOW up to B747
4	备注 Remarks	Nil

## ZGSZ AD 2.7 可用季节- 扫雪 Seasonal availability-clearing

Ī	1	可用季节及扫雪设备类型	All seasons
	1	Types of clearing equipment	Not applicable

2	扫雪顺序 Clearance priorities	Not applicable
3	备注 Remarks	Nil

# ZGSZ AD 2.8 停机坪、滑行道及校正位置数据 Aprons, taxiways and check locations data

		Surface:	CONC
1	停机坪道面和强度 Apron surface and strength	Strength:	PCN 110/R/B/W/T(T3 north far apron, T3 cargo apron, T3 apron, Donghai airlines apron) PCN 89/R/B/W/T(Southeast apron) PCN 84/R/B/W/T(North apron, South apron, Shenzhen airlines apron) PCN 72/R/B/W/T(TML A apron, TML B apron, cargo apron, China southern airlines apron)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	50m: G5, G6, G8(BTN E & G), G9(BTN E & G), Y, Z  48m: C3, C10, D8-D11(BTN C & D), D12  44m: E2, E10  39m: C2, C11  34.5m: E1, E11, G1  34m: A2, B4, K1-K3, L2, T5  31m: C1, C12  29m: E3, E9  28.5m: A1, A12, L1  27m: A4, A5, A8, A9, E4-E7  25m: D, E, G, Q, R, S, W  24.5m: C4-C9  23m: A, B(BTN B3 & L3), C, D10(FM west of D to apron), G10, K4  18m: B(BTN L3 & L4), B3
		Surface:	CONC ASPH: L2(BTN A & B), A12(FM east of A to apron), S(0-75m inward west of RWY15/33), C1-C2(0-122m inward west of RWY15/33), C4-C9(0-104m inward west of RWY15/33), C11-C12(0-122m inward west of RWY15/33)
		Strength:	PCN 110/R/B/W/T (B3, C, C1-C2(122m outward west of RWY15/33), C3, C4-C9(104m outward west of RWY15/33), C10,

			C11-C12(122m outward west of RWY15/33), D, D8-D11(BTN C &
			D), D12, E, G, G1, G5, G6, G8-G9(BTN E & G), Q, R, S, W, Y, Z)
			PCN 90/F/B/W/T (L2(BTN A & B), A12(BTN A & B))
			PCN 84/R/B/W/T (B(BTN K4 & L2), L1)
			PCN 80/R/B/W/T (E1-E7, E9-E11)
			PCN 80/F/B/W/T (S(0-75m inward west of RWY15/33),
			C1-C2(0-122m inward west of RWY15/33), C11-C12(0-122m
			inward west of RWY15/33))
			PCN 78/F/B/W/T (C4-C9(0-104m inward west of RWY15/33))
			PCN 72/R/B/W/T (A, A1, A2, A4, A5, A8, A9, A12(west of A),
			B(FM north of B4 to apron), B4, K1-K4)
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	Nil	
	备注	Center line o	f L1 (FM east of B to apron) deviated, 17m to left side, 11.5m to right
5	Remarks	side.	

## ZGSZ 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 man taxiing holding positi Guide lines at all apro Signs at all stands. Marshaller is available	ons and TWYs.
	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	RWY designation, TDZ, THR, center line, edge line, aiming point
		RWY lights	Center line, edge line, THR, TDZ (for RWY15/33), RWY end
2		TWY markings	Center line, edge line, intermediate holding positions, RWY holding position, enhanced center line (for A1, A2, A12, E1, E2, E10, E11), No-entry marking (for A4, A5, A8, A9, C4-C9, E3-E7, E9)
		TWY lights	Center line, edge line(reflect sticks for E,G straight section), rapid exit TWY indicator (RWY16/34), taxi holding position, RWY guard light(vertical TWYs)
3	停止排灯	Nil	

	Stop bars		
4	备注		
4	Remarks	Reflect sticks for E, G straight section.	

## ZGSZ AD 2.10 机场障碍物 Aerodrome obstacles

	障碍物类型(*代表	磁方位	距离	海拔高度	影响的飞行程序及起飞	备注
Serial Nr.	有灯光) Obstacle type(*Lighted)	BRG (MAG)(degree)	DIST(m)	Elevation(m)	航径区 Flight procedure / take - off flight path area affected	Remark
1	*MT	002	4191	113.7		
2	*BLDG	019	4146	108.2		
3	*MT	040	2425	155.2		
4	MT	042	3824	256.5		
5	MT	043	2752	176.5		
6	*MT	044	3501	224.2		
7	MT	045	3279	214.5		
8	*Control TWR	046	888	68.8		
9	MT	046	6075	307.5		
10	MT	048	5658	294.3		
11	MT	049	5172	376.9		
12	MT	052	4897	375.0		
13	MT	054	4520	321.5		
14	MT	058	2728	129.9		
15	MT	059	4308	292.6		
16	MT	066	4030	268.2		
17	MT	069	3930	273		
18	*BLDG	078	3680	343.5		
19	*TWR	085	8587	391.7		
20	MT	088	3818	221.3		
21	MT	115	11400	204		

Obstacles with	in a circle with a radius of	of 15km centered or	n ARP			
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
22	MT	116	6901	236.7		
23	MT	119	6972	200.2		
24	MT	121	7430	200.3		
25	*MT	126	3790	107.1		
26	MT	136	6069	142.6		
27	*Iron TWR	137	6491	234.7	RWY15 precision path	
28	МТ	137	6924	125.3		
29	МТ	137	7442	116.2		
30	*BLDG	144	6219	126.0		
31	BLDG	149	4806	51.7	RWY15 take-off path	
32	*BLDG	149	5059	61.6	RWY15 take-off path	
33	*BLDG	151	5783	66.4		
34	BLDG	152	8459	111.2	RWY15 take-off path	
35	MT	153	7200	62.0		
36	*BLDG	154	8591	114.1	RWY33 GP INOP	
37	BLDG	156	5629	60.0		
38	*BLDG	158	5228	60.1		
39	*BLDG	158	5586	59.0		
40	Power TWR	164	6820	78.2	RWY16 take-off path	
41	MT	166	10350	79.0	RWY34 RNP AR+ILS intermediate approach	
42	MT	167	14610	118.0		
43	Iron TWR	167	14629	153.1	RWY34 RNP AR+ILS intermediate approach	
44	*BLDG	194	1236	51.7		

Obstacles within a circle with a radius of 15km centered on ARP								
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		
45	GP Antenna	221	1890	18.1				
46	*Control TWR	250	753	94.0	RWY34 precision path, GP INOP			
47	GP Antenna	300	2943	17.9	RWY16 precision path, GP INOP			
48	*BLDG	332	5626	55.3	RWY33 take-off path			
49	*BLDG	335	6333	64.7				
50	*BLDG	337	6216	64.7	RWY15 GP INOP, RWY33 take-off path			
51	Trees	345	6700	47.0				
Others:								

Obstacles between two circles with the radius of 15km and 50km centered on ARP									
序号	障碍物类型(*代表	海拔高度	影响的飞行程序及起飞	备注					
Serial Nr.	有灯光)	BRG	DIST(m)	Elevation(m)	航径区	Remarks			
	Obstacle	(MAG)(degree)			Flight procedure / take -				
	type(*Lighted)	_			off flight path area				
					affected				
1	MT	033	23000	510					
2	MT	047	26000	348					
3	MT	051	44000	797					
4	MT	084	15000	587					
5	MT	099	42000	943					
6	MT	113	19000	430					
7	*BLDG	117	27300	600					
8	Antenna	130	42000	999					
9	*BLDG	136	18977	400					

Obstacles between two circles with the radius of 15km and 50km centered on ARP								
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		
10	МТ	150	18226	336	RWY33/34 intermediate approach, RWY15 missed approach			
11	*Antenna	151	18406	347	RWY33/34 intermediate approach, RWY15 missed approach			
12	MT	159	17920	332				
13	MT	167	45000	935				
14	MT	182	26000	341				
15	MT	218	45000	436				
16	MT	238	44000	530				
17	MT	302	30000	295	RWY15/16 initial approach			
18	Chimney	312	18713	227				
19	Chimney	312	18872	226				
20	Chimney	313	18129	222				
21	Chimney	314	17947	253	RWY34 take-off path			
22	MT	341	28678	292	RWY15/16 intermediate approach			
23	MT	353	27838	543	Sector, RWY15/16 initial approah			
Others:								

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

I THE CASE WAS TO SHEIZHEIT AT WILL TO SHEIZHEIT WILL TO SHEIZHEIT AT WILL TO SHEIZHEIT AT WI	1	相关气象台的名称	Shenzhen ATMB MET Office
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	Associated 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	Shenzhen ATMB MET Office 9HR, 24HR; 3HR, 6HR
4	趋势预报发布间隔 Issuance interval of trend forecast	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, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data
8	提供信息的辅助设备 Supplementary equipment available for providing information	Local area network, TEL, FAX
9	提供气象情报的空中交通服务单位 ATS units provided with information	TWR, Flight Service Office
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 E of RWY15/33 RCL, 382m inward THR15 B: 120m E of RWY15/33 RCL, 355m inward THR33 C: 120m E of RWY15/33 RCL, 1684m inward THR33 D: 120m W of RWY16/34 RCL, 390m inward THR16 E: 120m W of RWY16/34 RCL, 360m inward THR34

		F: 120m W of RWY16/34 RCL, 1840m inward THR16
		H: 120m E of RWY15/33 RCL, 366m inward THR15
		SFC wind sensors
		RWY15: 120m E of RCL, 358m inward THR15
		RWY15: 120m E of RCL, 374m inward THR15
		RWY33: 120m E of RCL, 365m inward THR33
		RWY33: 120m E of RCL, 345m inward THR33
		RWY15/33 Center: 120m E of RCL, 1695m inward THR33
		RWY16: 120m W of RCL, 350m inward THR16
		RWY34: 120m W of RCL, 350m inward THR34
		RWY34: 120m W of RCL, 404m inward THR34
		RWY16/34 Center: 120m W of RCL, 1790m inward THR16
		Ceilometer
		RWY15: 118m E of RCL, 370m inward THR15
		RWY33: 118m E of RCL, 340m inward THR33
		RWY16: 110m W of RCL, 350m inward THR16
		RWY34: 110m W of RCL, 350m inward THR34
	气象观测系统的工作时间	
13	Hours of operation for meteorological	H24
	observation system	
	气候资料	
14	Climatological information	Climatological tables AVBL
	w.11.15.45	MET Forecast Office
15	其他信息	TEL: 86-755-23718928
	Additional information	FAX: 86-755-23718927

## ZGSZ AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 Designations RWY NR	真方位和磁方 位 TRUE &MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度(PCN), 跑道道面/停止 道道面 RWY strength (PCN), RWY surface / SWYsurface	着陆入口坐标及 高程异常 THR coordinates and geoid undulation	跑道入口标高,精密进近 跑道接地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
15	153.44 GEO	3400×45	72/R/B/W/T		THR3.7m

	T.		1	I	T
	155 MAG		CONC/-		TDZ3.7m
33	333.44 GEO	3400×45	72/R/B/W/T		THR3.7m
33	335 MAG	3400 ×43	CONC/-		TDZ3.7m
			110/R/B/W/T		
			(0-1000m inward		
			THRs)		
			CONC		
16	153.44 GEO	3800×60	89/R/B/W/T		THR4.0m
10	155 MAG	3800×00	(other part)		TDZ4.0m
			CONC		
			110/R/B/W/T		
			(2800-3800m)		
			CONC/-		
			110/R/B/W/T		
			(0-1000m inward		
		3800×60	THRs)		
			CONC		
34	333.44 GEO 335 MAG		89/R/B/W/T		THR4.0m
J-			(other part)		TDZ4.0m
			CONC		
			110/R/B/W/T		
			(0-1000m)		
			CONC/-		
跑道-停止道坡度	停止道长宽	净空道长宽	升降带长宽	无障碍物区	跑道端安全区长宽
Slope of	SWY	CWY	Strip	OFZ	RWY end safety area
RWY-SWY	dimensions(m)	dimensions(m)	dimensions(m)	Ol Z	dimensions(m)
7	8	9	10	11	12
0%	Nil	Nil	3520×300	Nil	140×150
0%	Nil	Nil	3520×300	Nil	140×150
0%	Nil	Nil	3920×300	Nil	240×150
0%	Nil	Nil	3920×300	Nil	240×150
1					

#### Remark:

Forced landing area is 3800m, parallel to RWY16/34, located at west of RWY16/34 and surface is soil; distance between RCL of RWY16/34 and RCL of RWY15/33 is 1600m; RWY16 THR is 1000m north of RWY15 THR; RWY34 THR is 600m north of

RWY33 THR; RWY shoulder: 7.5m on each side; RWY16/34 grooved: 6mm×6mm.

## ZGSZ AD 2.13 公布距离 Declared distances

跑道号码	可用起飞滑跑距离	可用起飞距离	可用加速停止距离	可用着陆距离	备注
RWY Designator	TORA(m)	TODA(m)	ASDA(m)	LDA(m)	Remarks
1	2	3	4	5	6
15	3400	3400	3400	3400	Nil
15	3275	3275	3275	3400	FM A2, C2
33	3400	3400	3400	3400	Nil
33	3269	3269	3269	3400	FM C11
16	3800	3800	3800	3800	Nil
16	3568	3568	3568	3800	FM E2
34	3800	3800	3800	3800	Nil
34	3568	3568	3568	3800	FM E10

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

跑道 代号 RWY Desig nator	进近灯 类型、 长度、 强度 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进 度指示系( 跑道服 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。	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
15	PALS CAT II* 900m LIH	GREEN Yes	PAPI LEFT 432.5m inward THR15 3°	900m	3400m** spacing 30m	3400m**** spacing 60m	RED	Nil
33	PALS CAT II*	GREEN Yes	PAPI LEFT	900m	3400m** spacing 30m	3400m**** spacing 60m	RED	Nil

跑道 代号 RWY Desig nator	进近灯 类型、 长度、 强度 APCH LGT type LEN INTST 900m LIH	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 432.5m inward THR33 3°	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
16	PALS CAT I* 900m LIH	GREEN Yes	PAPI LEFT 446.8m inward THR16 3°	Nil	3800m*** spacing 30m	3800m**** spacing 60m	RED	Nil
34	PALS CAT I* 900m LIH	GREEN Yes	PAPI LEFT 446.8m inward THR34 3°	Nil	3800m*** spacing 30m	3800m**** spacing 60m	RED	Nil

#### Remarks:

## ZGSZ 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: 15:131m E of RWY15/33 RCL, 346m inward THR15 33:123m E of RWY15/33 RCL, 427m inward THR33

<sup>\*</sup>SFL( RWY15/33 SFL: 300-900m)

<sup>\*\*</sup>up to 2500m WHITE VRB LIH, 2500-3100m RED/WHITE VRB LIH, 3100-3400m RED VRB LIH

<sup>\*\*\*</sup>up to 2900m WHITE VRB LIH, 2900-3500m RED/WHITE VRB LIH, 3500-3800m RED VRB LIH

<sup>\*\*\*\*</sup>up to 2800m WHITE VRB LIH, 2800-3400m YELLOW VRB LIH

<sup>\*\*\*\*\*</sup>up to 3200m WHITE VRB LIH, 3200-3800m YELLOW VRB LIH

		16:90m E of RWY16/34 RCL, 447m inward THR16		
		34:90m W of RWY16/34 RCL, 447m inward THR34		
3	滑行道边灯和中线灯	For all TWVs: blue edge line light and green center line light		
3	TWY edge and center line lighting	For all TWYs: blue edge line light and green center line light		
4	备份电源/转换时间	Secondam mayon ayanly ayailahla diagal gananatan//15		
4	Secondary power supply/switch-over time	Secondary power supply available, diesel generator/≤15sec		
5	备注	Nil		
3	Remarks	INII		

## ZGSZ AD 2.16 直升机着陆区域 Helicopter landing area

1	TLOF坐标或 FATO 入口坐标及大地水准面 波幅 Coordinates TLOF or THR of FATO Geoid undulation	Nil
2	TLOF 和/或 FATO 标高(m/ft) TLOF and/or FATO elevation (m/ft)	Nil
3	TLOF 和 FATO 区域范围、道面、强度和标志 TLOF and FATO area dimensions, surface, strength, marking	Nil
4	FATO 的真方位和磁方位 True and MAG BRG of FATO	Nil
5	公布距离 Declared distance available	Nil
6	进近灯光和 FATO 灯光 APP and FATO lighting	Nil
7	备注 Remarks	Nil

## ZGSZ 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
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名称 Designation	水平范围 Lateral limits	垂直范围 Vertical limits	备注 Remarks
Shenzhen tower control area	N223602E1134118- N223157E1134333- N222917E1135125- N223345E1140100- arc centered at N223346E1135510, radius 10km- N223711E1135941- N224340E1135356- arc centered at THR15, radius 13km - N223602E1134118	SFC-600m(QNH)	
Altimeter setting region and TL/TA	Same as Zhuhai Terminal Control Area (QNH for Zhuhai Terminal Control Area is same as QNH for airport)	TL 3300(QNH≥980hPa) 3600(QNH<980hPa) TA 2700	

## ZGSZ AD 2.18 空中交通服务通信设施 ATS communication facilities

服务名称 Service Designation	먁号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5
ATIS		127.45(departure)	H24	D-ATIS available
ATIS		126.85(arrival)	H24	D-ATIS available
APP	Zhuhai Approach	APP01:120.35(125.525)	0030-1700	Contact APP04 when APP01 U/S.
APP	Zhuhai Approach	APP02:119.55(119.775)	H24	
APP	Zhuhai Approach	APP03:123.85(119.775)	0000-1800	Contact APP02 when APP03 U/S.
APP	Zhuhai Approach	APP04:119.025(125.525)	0030-1400	Contact APP02 when APP04 U/S.
APP	Zhuhai Approach	APP05:127.95(119.775)	0030-1400	Contact APP03 when APP05 U/S.

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
TWR	Baoan Tower	(east):130.35(118.05)	НО	RWY15/33
TWR	Baoan Tower	(west):118.45(130.35)	H24	RWY16/34
GND	Baoan Ground	(east):121.65(121.85)	0000-1500	Nil
GND	Baoan Ground	(west):121.8(121.85)	0000-1500	Nil
GND	Baoan Delivery	121.95(121.85)	2300-1500	DCL available
APN	Baoan Apron	APN01:122.7	H24	Nil
APN	Baoan Apron	APN02:121.625	H24	
APN	Baoan Apron	APN03:122.825	H24	
EMG		121.5	H24	Nil

# ZGSZ 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
Shekou VOR/DME	SHK	115.9MHz CH106X	N22 '29.8' E113 '54.2'	11m	Coverage more than 74km
Nanlang VOR/DME	NLG	117.7MHz CH124X	N22°31.9′ E113°33.7′	9m	Coverage more than 60km
Lianshengwei VOR/DME	ZUH	116.7MHz CH114X	N22 °13.3' E113 °28.0'	68m	
Guanlan VOR/DME	GLN	112.0MHz CH57X	N22°42.5′ E114°02.0′	9m	Coverage more than 100km; R0 °R030 °clockwise for VOR/DME U/S; Initial approach procedure: beyond 14NM on R309 °for VOR U/S; R145 °R180 ° clockwise for VOR

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
					U/S.
NDB	QJ	253kHz	N22 47.7' E113 43.8'		Coverage 80km; For NDB departure procedure:beyond 4NM on bearing 245° and beyond 8NM on bearing 271°U/S
Gaolan NDB	UJ	204kHz	N21°55.2′ E113°17.6′		
LMM 15	Q	416kHz	335 °MAG/1028m FM THR15		Coverage 70km; Beyond 2NM on bearing 155 °U/S
LOC 15 ILS CAT I	IQJ	111.3MHz	155 °MAG/ 263m FM end RWY 15		Coverage 46km
GP 15		332.3MHz	120m E of RWY15 RCL, 306m inward THR15		Angle3° RDH 15.5m
DME 15	IQJ	CH50X (111.3MHz)		7m	Co-located with GP15
LOC 16 ILS CAT I	ISZ	108.1MHz	155 °MAG/250m FM end RWY 16		Beyond +28 °of front course U/S
GP 16		334.7MHz	120m W of RWY16 RCL, 312m inward THR16		Angle 3 ° RDH 16.4m
DME 16	ISZ	CH18X (108.1MHz)		7m	Co-located with GP 16; Beyond 14NM U/S for DME
LMM 33	М	195kHz	155 °MAG/1070m FM THR33		Coverage 70km; 2-3NM on bearing 335 °U/S
LOC 33	IMH	110.7MHz	335 °MAG/263m FM		Coverage 46km;

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
ILS CAT I			end RWY 33		Beyond 12NM of front course U/S
GP 33		330.2MHz	120m E of RWY33 RCL, 306m inward THR33		Angle 3° RDH 16.6m Below 1.6 U/S
DME 33	IMH	CH44X (110.7MHz)		7m	Co-located with GP33
LOC 34 ILS CAT I	IBA	109.1MHz	335 °MAG/ 250m FM end RWY34		Beyond 13NM U/S
GP 34		331.4MHz	120m W of RWY34 RCL, 313m inward THR34		Angle 3 ° RDH 16.7m Below 1.7 U/S
DME 34	IBA	CH28X (109.1MHz)		7m	Co-located with GP

#### ZGSZ AD 2.20 本场飞行规定

### **ZGSZ 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 of aircraft without SSR transponder are forbidden;
- 1.2 所有技术试飞、表演飞行需事先申请,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 or exhibition flight shall be filed in advance and conducted only after clearance has been obtained from ATC;
- 1.3 可使用最大机型: A380 及同类机型。
- 1.3 Maximum aircraft to be available: A380 and equivalent.

#### 2. 跑道和滑行道的使用

#### 2. Use of runways and taxiways

- 2.1 可以通过地面管制申请引导车和拖车服务;
- 2.1 Follow-me vehicle service and towing service are available via Ground Control;
- 2.2 未经允许, 禁止航空器在滑行道上做 180 、转弯;
- 2.2 Unless obtain ATC clearance, 180 furn around on TWY is forbidden for all aircraft;

2.3 穿越 15/33 跑道规定:

2.3 Rules for crossing RWY15/33

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, 应在穿越前证实:

Readback ATC instructions concerning holding and crossing, verify any questions before crossing:

- a、按照管制员指挥滑行至指定的跑道等待点外等 待;
- a. Taxi to the designated holding position and hold short of RWY15/33;
- b、收到管制员穿越指令后, 需尽快实施穿越;
- b. Upon receiving the crossing clearance from ATC, conduct crossing as soon as possible;
- c、穿越跑道时, 注意监听塔台频率其他有关跑道的 指令或信息通报,并注意观察跑道及附近的活动;
- c. Monitor the TWR FREQ for other information of runway and observe the activities on the runway and around carefully;
- d、在起飞航空器后穿越跑道时,穿越航空器应自行负 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;
- d. While crossing RWY15/33 following the taking-off aircraft, aircraft shall be responsible for the safety speration with the taking-off aircraft to avoid the effect of wake turbulence;
- e、穿越结束后, 机组需向塔台报告"已脱离跑道";
- e. Report to TWR Control 'RWY vacated' after crossing;
- f、航空器由西向东穿越跑道后应在 A 滑行道前等待 f. Aircraft shall hold short of TWY A after crossing

地面管制频率的滑行指令, 由东向西穿越跑道后应 在 C 滑行道前等待地面管制频率的进一步滑行指 令。

RWY15/33 from west to east, or short of TWY C after crossing RWY15/33 from east to west, and then wait for the instruction of GND control.

#### 2.4 跑道等待位置及使用规定

2.4 RWY holding positions and requirements

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

2.4.1 Aircraft shall stop and wait for the instruction of ATC at the relative runway-holding positions;

2.4.2 航空器在跑道等待位置等待时, 机头应尽量靠 近跑道等待位置标志, 但不能超过此标识;

2.4.2 The nose of A/C shall get close to the runway holding position marking without exceeding it when A/C is waiting at the RWY holding position;

置时, 立即向管制员报告;

2.4.3 航空器未获管制员许可, 机头越过跑道等待位 2.4.3 A/C shall report to ATC when the nose of A/C exceeding holding position without instruction.

跑道等待位置所在滑行道及类型/ TWY of RWY holding position/pattern		与跑道中心线的距离 (m)/ DIST of RCL	与平行滑行道的距离 (m)/ DIST to the parallel TWY center line
A(north)	Pattern B	200	321( FM TWY A1)
A(south)	Pattern B	200	321( FM TWY A12)
A1	Pattern A	90	110( FM TWY A)
A2	Pattern A	90	110( FM TWY A)
A12(west)	Pattern A	90	110( FM TWY A)
A12(east)	Pattern B	240	40( FM TWY A)
S	Pattern A	90	110( FM TWY C)
E1	Pattern A	107.5	92.5( FM TWY E)
E2	Pattern A	107.5	92.5( FM TWY E)
E10	Pattern A	107.5	92.5( FM TWY E)

E11	Pattern A	107.5	92.5( FM TWY E)
A8	Pattern A	90	110( FM TWY A)
A5	Pattern A	90	110( FM TWY A)
C1	Pattern A	90	110( FM TWY C)
C2	Pattern A	90	110( FM TWY C)
C11	Pattern A	90	110( FM TWY C)
C12	Pattern A	90	110( FM TWY C)

据实际情况批准并提供管制服务。管制员在征得航 flight crew get permission from ATC. In accordance 空器同意后, 可实施非全跑道起飞管制程序。

2.5 在航空器提出非全跑道起飞申请后, 管制员可根 2.5 It is available to use partial runway to take-off when with the runway actual operation situation, it is available to use partial runway to take-off when ATC get permission from the flight crew.

#### 2.6 滑行道翼展限制

#### 2.6 Wing span limits for TWYs

滑行道/TWYs	翼展限制(米)/Span limit(m)
A12,B(BTN B3 & B4,BTN K4 & A12), D9(FM west	
of D to apron), D10(FM west of D to apron), D11(FM	
west of D to apron),G9(FM east of G to apron), G10,	65
G11, K(BTN K2 & K4), K1(BTN A & K), K2, K3,	
K4(BTN A & K), L(south of L2), L2, L3, L4	
D7,D8(FM west of D to apron), G7, G8(FM east of G	
to apron), Y(FM south of W to apron), Z(FM south of	52
W to apron)	
B(BTN K2 & K4)	47.6
B(BTN L3 & L4)	42
B(BTN K2 & B4), B3, K(BTN K1 & K2),	36

K1(east of K), K4(east of K), L(BTN L1 & L2),	
L1(FM east of B to apron)	
B5,B6	31

#### Remark:

Two aircrafts taxiing parallelly on D7 and D8 at the same time is strictly forbidden.

Two aircrafts taxiing parallelly on G7 and G8 at the same time is strictly forbidden.

2.7 滑行道 R 供进港航空器使用,在上面设置一个强 制等待点 R1。滑行道 S 供出港航空器使用, 在上面 设置一个强制等待点 S1。机组通过 R1 和 S1 前必须 得到管制员许可,具体位置参见 ZGSZ AD2.24-1A、  $2A_{\circ}$ 

2.7 TWY R is used for arrival aircraft, and compulsory holding point R1 is established on TWY R. TWY S is used for departure aircraft, and compulsory holding point S1 is established on TWY S. Before aircraft taxi to cross R1 and S1, pilot shall receive ATC clearance. Locations of R1 and S1 refer to ZGSZ AD2.24-1A, 2A.

2.8 机场冲突多发地带运行要求

2A;

- 2.8 Hot spot procedure
- 2.8.1 机动区冲突多发地带位置见 ZGSZ AD2.24-1A, 2.8.1 Refer to ZGSZ AD2.24-1A, 2A;
- 2.8.2 为减少运行差错,降低地面冲突和跑道入侵事 件的发生概率, 在机场活动区内运行的航空器需严 格按照下述的要求运行:
- 2.8.2 For the purpose of reducing errors that lead to ground conflicts and runway incursions, aircraft operating within the maneuvering area must follow the requirements below:

HS1: 滑行道 G 与 R 的交叉区域: 航空器在此区域 运行时需仔细观察, 按照管制员指令和避让规则运 行。

HS1: INTERSECTIONS OF TAXIWAYS G, R: Aircraft in this area shall observe cautiously, then operate according to ATC clearance and "see and avoidance" rules.

HS2: 滑行道 D 与 R 的交叉区域: 航空器在此区域 HS2: INTERSECTIONS OF TAXIWAYS D, R: 运行时需仔细观察,按照管制员指令和避让规则运 行。

Aircraft in this area shall observe cautiously, then operate according to ATC clearance and "see and avoidance" rules.

RWY15/33。

HS3: 滑行道 C 与 C6 的交叉区域: 航空器在自 S 或 HS3: INTERSECTIONS OF TAXIWAYS C, C6: When R 向东滑行转向 C 时, 注意避免从 C6 误入 aircraft taxiing to TWY C from TWY S or R, pilot shall avoid taxiing into RWY15/33 via TWY C6 by mistake.

HS4: 滑行道 E11 与 E, 34 号跑道交叉区域: 航空 器自G经由E11 右转滑行转向E时,注意避免从E11 误入34号跑道。

HS4: INTERSECTIONS OF TAXIWAYS E11, E AND RWY34: When aircraft taxiing from TWY G to TWY E via TWY E11, pilot shall avoid taxiing into RWY34 via E11 by mistake.

HS5: 滑行道 C1, C2 与滑行道 C, 15 号跑道交叉区 域: 航空器自 D 经由 C1 或 C2 滑行道至 15 号跑道 时,注意避免误将滑行道 C 当作 15 号跑道。

HS5: INTERSECTIONS OF TAXIWAYS C1, C2 AND TAXIWAY C, RWY15: When aircraft taxiing from TWY D to RWY15 via TWY C1 or C2, pilot shall avoid mistaking TWY C as RWY 15.

HS6: 317(317L/317R)号停机位进位区域: 航空器在 此区域运行时需仔细观察,注意跟随引导车引导运 行。

HS6: Area for taxiing into stand Nr.317(317L/317R): Pilotshallpay attention and operate by follow-me vehicle.

HS7: 350(350L/350R)号停机位进位区域: 航空器在 此区域运行时需仔细观察,注意跟随引导车引导运 行。

HS7: Area for taxiing into stand Nr.350(350L/350R): Pilot shall pay attention and operate by follow-me vehicle.

HS8: 361(361L/361R)号停机位进位区域: 航空器在 此区域运行时需仔细观察,注意跟随引导车引导运 Pilot shall pay attention and operate by follow-me 行。

HS8: Area for taxiing into stand Nr.361(361L/361R): vehicle.

HS9: 362(362L/362R)号停机位进位区域: 航空器在 HS9: Area for taxiing into stand Nr.362(362L/362R): 行。

此区域运行时需仔细观察,注意跟随引导车引导运 Pilot shall pay attention and operate by follow-me vehicle.

#### 2.9 跑道关闭维护计划

#### 2.9 Plan of runway closed and maintenance

RWY designator	Closing time in every week	Closing time in every day (UTC)
RWY15/33	Monday, Wednesday, Friday,	18:00-22:00(available for taxiing
KW 113/33	Saturday	during closure period)
RWY16/34	Tuesday, Thursday, Sunday	18:00-22:00

#### Note:

1. If airlines want to use runway in the closing time, they shall contact airport management department 60 minutes early.

Tel: 86-755-23456111/23456222 Fax:86-755-23458415

2. Changes of plan of runway closed and maintenance will be published by NOTAM.

区的本场运行规则

2.10 B747-8 系列航空器在 RWY15/33 及 01 机坪管制 2.10 General rules for B747-8 within RWY15/33 and

2.10.1 B747-8 系列航空器在 RWY15/33 及 01 机坪管 制区的运行区域

2.10.1 B747-8 aircraft shall operate within RWY15/33 and APN01:

a. 跑道: RWY15/33;

a. RWY15/33;

b. 滑行道: A、A1、A2、A4、A5、A8、A9、A12、 b. TWY A, A1, A2, A4, A5, A8, A9, A12, D, K2(BTN

D、K2 (A 与 K 之间);

A and K);

APN01

c. 停机位: 51、113、115。

c. Parking stands Nr.51, 113, 115.

2.10.2 B747-8 系列航空器在 RWY15/33 及 01 机坪管 2.10.2 Ground taxiing rules for B747-8 within

制区的地面滑行规则

RWY15/33 and APN01

2.10.2.1 B747-8 系列航空器进港航班先由宝安地面 指挥滑行至移交点, 再由宝安机坪指挥滑行至停机 位;

2.10.2.1 Arrival aircraft shall taxiing to hand-over point with GND instructions, then continue taxiing with APN instructions to stand:

2.10.2.2 B747-8 系列航空器出港航班先由宝安机坪 指挥滑行至移交点, 再由宝安地面指挥滑行;

2.10.2.2 Departure aircraft shall taxiing to hand-over point with APN instructions, then continue taxiing with GND instructions;

2.10.2.3 停放在51号停机位的B747-8系列航空器必 须经由 K2 滑行道进出机坪:停放在 113、115 号停 机位的B747-8系列航空器必须经由A12滑行道进出 机坪;

2.10.2.3 Aircraft shall enter or exit from stand Nr.51 via TWY K2; aircraft shall enter or exit from stands Nr.113 or 115 via TWY A12.

2.10.2.4 B747-8 系列机型在 A1、A2、A4、A5、K2、 A8、A9、A12 滑行道与 A 滑交叉道口转弯时, 须执 行偏置转弯,建议在外侧发动机关闭或慢车推力下 滑行, 放慢滑行速度, 同时提供滑行摄像系统(如 有)辅助引导。

2.10.2.4 The aircraft shall conduct offset turn when B747-8 turn on the intersection between TWY A and TWYs A1/A2/A4/A5/K2/A8/A9/A12. It is suggested that taxi with the outer engine closedor the idle thrust, slowing speed and providing a gliding camera system (if available) for assisted guidance.

2.10.3 B747-8 系列机型在 RWY15/33 及 01 机坪管制 2.10.3 Technical indicators and operating limits for 区停机位技术指标及运行限制

aircraft B747-8 within RWY15/33 and APN01

2.10.3.1 本场 01 机坪管制区保障 B747-8 系列机型的 停机位为51、113、115号机位,以上停机位须推出 开车:

2.10.3.1 Parking stands Nr.51, 113, 115 are available for aircraft B747-8 within APN01. Which need push back and start-up.

2.10.3.2 51 号停机位停放 B747-8 系列机型时,需临时关闭机位后方对应 K 滑行道,临时关闭 53 号停机位;可提供加油,不提供系留;其他机位无影响。滑行道关闭期间,摆放禁滑牌。推出 B747-8 系列机型时,只能执行蓝色推出程序;

2.10.3.2 When aircraft B747-8 parking on stand Nr.51, Nr.53, TWY K behind stand Nr.51, shall be closed. Refueling service can be provided on stand Nr.51, no mooring. Other stands have no effect on stand Nr.51. During TWY K behind stand Nr.51 closure period, taxiing is forbidden.B747-8 shall carry out BLUE push-back procedure on stands Nr.51.

2.10.3.3 113、115 号停机位停放 B747-8 系列机型时,需临时关闭 113-115 机位后方对应的 L 滑行道、以及 B 滑与 L 滑之间的 A12 滑行道,临时关闭 111、117 号停机位;可提供加油,不提供系留;其他机位无影响。滑行道关闭期间,摆放禁滑牌。推出 B747-8 系列机型时,113 号停机位只能执行蓝色推出程序,115 号停机位只能执行绿色推出程序。

2.10.3.3 When aircraft B747-8 parking on stand Nr.113 and 115, TWY L behind stand Nr.113-115, TWY A12 between TWY B and TWY L and stands Nr.111 and 117 shall be closed. Refueling service can be provided in stand Nr.113 and 115, no mooring. Other stands have no effect on stand Nr.113 and 115. During TWY L behind stand Nr.113-115, TWY A12 between TWY B and TWY L closure period, taxiing is forbidden. B747-8 shall carry out BLUE push-back procedure on stands Nr.113, and carry out GREEN push-back procedure on stands Nr.115.

#### 3. 机坪和机位的使用

# 3.1 进港航空器除特殊保障任务、开航首航的航班以及提前申请的航班外,均不提供引导车服务,需引导提前30分钟向机场运行指挥中心申请;出港航空器不提供引导车服务。

#### 3. Use of aprons and parking stands

3.1 Follow-me vehicle is not available for landing aircraft except special flight. If required, landing aircraft shall file for follow-me vehicle service to airport operation control center(AOC) in 30min advance; follow-me vehicle is not available for

departure aircraft.

3.2 26-30、27L/R、29L/R、30R、52、54、56、58、60、62、64、66、68、70、72、74、76、78、89、102、102L/R、104、104L/R、106、106L/R、108、108L/R、110、110L/R、112、112L/R、114、114L/R、116、116L/R、118、118L/R、120、120R、Z01、Z02为自滑机位,其余机位为自滑进顶推出机位。未经地面管制同意,严禁航空器利用自身动力滑行或者使用拖车拖行。

3.2 Aircraft taxi in or out stands Nr.26-30, 27L/R, 29L/R, 30R, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 89, 102, 102L/R, 104, 104L/R, 106, 106L/R, 108, 108L/R, 110, 110L/R, 112, 112L/R, 114, 114L/R, 116, 116L/R, 118, 118L/R, 120, 120R, Z01, Z02 shall on own power, exit the other stands shall pushed by tow truck. Taxiing on own power or being dragged by tow truck is strictly forbidden without ATC clearance.

3.3 发动机试车,需经宝安地面、宝安机坪管制许可, 并在指定的地点进行。严禁在廊桥附近和客机坪试 大车。 3.3 Engine run-ups are subject to GND or APN clearance, and shall be carried out at a designated location. Fast engine run-ups in the vicinity of boarding bridges or on apron are strictly forbidden.

3.4 为降低碳排放和噪音,停靠 T3 候机楼廊桥机位的航空器应关闭 APU,接驳地面 400HZ 电源和空调系统。

3.4 For reducing carbon emission and noise, aircraft parking on T3 TML bridge stands shall close APU, and use 400HZ ground power unit and air conditioning system.

#### 3.5 机位限制

3.5 Limits for aircraft parking on the following stands:

停机位/Stands	航空器翼展限制(米)/Wing span limits for aircraft(m)
Nr.317, 350, 361, 362, 391	80
Nr.51, 113, 115	68.4
Nr.31, 53, 55, 57, 59, 61, 63, 65, 67, 69, 103, 105, 107,	
109, 111, 117, 119, 121, 123, 125, 127, 301, 303, 309,	65
314, 315, 318, 320-324, 337, 338, 367-369, 374-376,	
380-390, Z01, Z02	

Nr.302, 304, 316, 319, 326, 336, 348, 360, 361R, 362L, 364-366, 371-373, 501-504,513-516	52
Nr.325	48
Nr.32-34, 101, 102, 104, 106, 108, 110, 112, 114, 116,	47.6
118, 120, 122, 124, 126, 128, 129, 130-135, 137, 139	47.6
Nr.22-25, L1-L14, L16-L20, 26-30, 35, 36, 38, 52, 54,	
56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 86-96,	
98-100, 125L/R, 127L/R, 220-223, 236-239, 305-308,	36
317L/R, 327-335, 339-347, 349, 350L/R, 351-359,	
361L, 362R, 363, 370, 380L/R, 381L, 382L/R, 383L,	
384L/R, 385L, 387L/R, 388L, 389L/R,390L, 505-512	
Nr.244-261, 263, 265, 267, 269, 271-280, 282	30.36
Nr.31L/R, 225	29
Nr.27L/R, 29L/R, 30R, 32L/R, 33L/R, 34L/R, 102L/R,	
104R, 106L, 108L/R, 110L/R, 112L/R, 114L/R,	24
116L/R, 118L/R, 120R, 227, 229, 231, 233, 235, 281,	24
283, 285	
104L, 106R	22
36L/R, 37, 38L/R, 39	21.5
•	

#### Notes:

- 1. When stand Nr.27L is used, stand Nr.26 is only available for aircraft with wing span not exceeding 24m.
- 2.When stands Nr.27R or 29L is used, stand Nr.28 is only available for aircraft with wing span not exceeding 24m.

#### 3.6 航空器不能同时使用的机位

3.6 Pair of stands forbidden to use simultaneously:

The stand in use	The stands forbidden to be	The stand in use	The stands forbidden to be
	used		used
27	27L and 27R	120	120R
29	29L and 29R	125	125L and 125R
30	29R and 30R	127	127L and 127R
31	31L and 31R	317	317L and 317R
32	32L and 32R	350	350L and 350R
33	33L and 33R	361	361L and 361R
34	34L and 34R	362	362L and 362R
36	36L and 36R	380	380L and 380R
38	38L and 38R	381	380L and 381L
102	102L and 102R	382	382L and 382R
104	104L and 104R	383	382L and 383L
106	106L and 106R	384	384L and 384R
108	108L and 108R	385	384L and 385L
110	110L and 110R	387	387L and 387R
112	112L and 112R	388	387L and 388L
114	114L and 114R	389	389L and 389R
116	116L and 116R	390	389L and 390L
118	118L and 118R	Z01	26-30, 27L, 27R, 29L,
			29R, 30R, Z02
		Z02	26-30, 27L, 27R, 29L,
		202	29R, 30R, 238, 239, Z01

Note: TWY B(BTN TWY K1 and TWY K2) is not available when parking stand Z01 is in use, TWY K(BTN TWY K1 and TWY K2) is not available when parking stand Z02 is in use.

3.7 15/33 号跑道东侧机坪自滑进顶推出机位、T3 航 3.7 Aircraft standard push back procedure are

站楼的所有廊桥机位、380-391 号机位(含组合机位)、 501-516 号机位设有航空器地面标准推出程序。航空 器地面标准推出程序分为绿色和蓝色推出程序,可 参照 ZGSZ AD2.24-2B/2C, 有关工作要求如下:

- a、在设有航空器地面标准推出程序的停机位上, 航 空器驾驶员应听从管制员指挥使用相应的航空器地 面标准推出程序;
- b、管制员在发布指令给机组后, 机组应复诵并转告 地面人员:
- c、地面人员在接到机组转达的推出指令后, 应复诵 确认。飞机推出前,地面人员应再次确认推出程序。

3.8 机场机坪运行管理规定

3.8.1 宝安机坪(APN)负责该机坪管制区域内航空 器推出开车、滑行和其他涉及航空器运行的指挥工 作。

3.8.2 机坪管制范围

a.B 滑行道(含)以东机坪;

b.O 滑行道(D滑与G滑之间)(含)以北机坪;

c.D 滑行道(不含)以西、G 滑行道(不含)以东和

W 滑行道(含)以南机坪; 其中停机位 301-303、317 c. Apron(west of TWY D(exclusive), east of TWY

established at the east apron stands (taxi-in and pushed-back stands) of RWY15/33, all T3 TML bridge stands, Nr.380-391(including combined stands), 501-516 stands. Aircraft standard push back procedure includes Green/Blue standard push back procedure. Refer to ZGSZ AD2.24-2B/2C, the operation rules are published as follows:

- a. On assigned stands, pilot shall obey ATC clearance to use aircraft standard push back procedure;
- b. After receiving ATC clearance for push-back, pilot shall repeat and tell ground worker;
- c. After receiving push-back instruction from pilot, ground worker shall repeat and recognize. Before aircraft is pushed back out of the stand, ground worker shall ensure the aircraft standard push back procedure again.

3.8 Apron operations regulations

3.8.1 Aircraft push-back, start-up, taxiing and other operations in the APN control areas shall follow the instructions of APN.

3.8.2 APN Control Area

- a. Apron(east of TWY B(inclusive));
- b. Apron(north of TWY Q(BTN TWY D and G) (inclusive));

(317L、317R)、318、319、338、361 (361L、361R)、362 (362L、362R)、380 (380L、380R)、381 (381L)、382 (382L、382R)、383 (383L)、384 (384L、384R)、385 (385L)、386、387 (387L、387R)、388 (388L)、389 (389L、389R)、390 (390L)、391 为宝安地面管制范围。

3.8.3 机坪管制范围内离港航空器推出开车滑行: a. 航空器向宝安放行 (DEL) 申请放行许可; b.航空器准备完毕,向宝安放行 (DEL) 申请推出开 车许可:

c.经宝安放行(DEL)同意后,向宝安机坪(APN) 申请推出开车许可;

d.离港航空器首次联系宝安机坪(APN)时, 机组应 向机坪管制员通报停机位编号;

e. 航空器取得宝安机坪(APN)许可后方可推出开车, 推出时需向机坪管制员证实推出方向或程序。机坪 管制员发布许可指令后,机组应在 5min 之内执行; 超过 5min 仍未推出开车视为指令失效,机组需要重 新申请推出开车;

f.航空器推出开车后,向宝安机坪(APN)申请滑行 许可。

3.8.4 机坪管制范围内进港航空器滑行: 航空器进入 机坪管制范围前, 联系宝安机坪 (APN) 获取滑行 许可和停机位信息。 G(exclusive) and south of TWY W(inclusive)), except stands Nr.301-303, 317 (317L, 317R), 318, 319, 338, 361 (361L, 361R), 362 (362L, 362R), 380 (380L, 380R), 381 (381L), 382 (382L, 382R), 383 (383L), 384(384L, 384R), 385(385L), 386, 387(387L, 387R), 388 (388L), 389 (389L, 389R), 390 (390L), 391.

- 3.8.3 Within APN control area, departure aircraft push-back shall:
- a. Obtain delivery clearance from DEL;
- b. Obtain push-back and start-up clearance from DEL when aircraft standby;
- c. Obtain push-back and start-up clearance from APN after DEL's agreement;
- d. Report parking stand number to APN controller at the first contact with APN;
- e. Aircraft shall push-back and start-up after obtained APN clearance. When push back, verify pushing-back direction and/or pushing-back procedures with APN controller. Aircraft shall follow the APN controller instructions within 5 minutes or re-apply the clearance if not fulfill in time;
- f. Obtain taxiing clearance from APN after pushing back.

3.8.4 Within APN areas, arrival aircraft shall contact APN for stands information and taxiing clearance before entry APN areas.

3.9 公务机密集停放区运行规则

3.9 Operation rules for dense parking stand area for business aircraft :

3.9.1 密集停放区停机位: 244-261、263、265、267、269、271-283、285:

3.9.1 Dense parking stands: 244-261, 263, 265, 267, 269, 271-283, 285;

3.9.2 220-223 机位作为密集停放区的中转机位,中转机位可进行上下客、装卸货物、加油、维修、试车、清洗、补给等勤务保障作业,密集停放区停机位不得进行任何勤务保障作业。公务机在中转机位或其他标准机位与密集停放区之间移动、密集停放区与公务机库之间移动及密集停放区内部移动时,必须以拖曳方式进行,不得自滑。拖曳公务机进出密集停放机位时,拖曳速度控制在 3km/h 以内;

3.9.2 Parking stands Nr.220-223 are used as the transfer stands in the dense parking area. The transfer stands can be used for loading and unloading (passengers and cargo), refueling, maintenance, run-ups, cleaning, supply and other services. Other stands in dense parking areas are not allowed to provide any services. Business aircraft shall taxi by towing tractor if taxiing between the transfer stands/other standard stands and the dense parking area, taxiing between the dense parking area and the business hangar, or taxiing inside the dense parking area. When business aircraft taxi into/out the dense parking area, the towing speed within 3km/h is required;

3.9.3 密集停放区出口处设置了专用等待位置(等待点),所有离开密集停放区(不含进入公务机库)前往中转机位或其他标准机位保障的航空器在此处等待,得到宝安机坪许可后,方可拖离密集停放区。

3.9.3 A designed holding position is set at the exit of the dense parking area. All aircraft leaving the dense parking area (excluding entering the business hangar) to transfer stands or other standard stands shall wait here to obtain the APN permit. After that, aircraft can be towed from the dense parking area.

## 4. 进、离场管制规定

#### 4. Air traffic control regulations

#### 4.1 离场管制规定

- 4.1.1 离港航空器可通过两种方式取得放行许可:数字放行 DCL 和放行频率人工播发放行:
- 4.1.2 DCL 放行许可在 23:00-1500(UTC)可用。离港 航空器收到 DCL 数字放行许可后,在报告"准备开车"前5分钟向放行管制席复诵呼号、跑道号和起始高度;
- 4.1.3 离港航空器准备好推出及开车时通报放行席 位并保持长守,在得到通知转频后方可转换频率;
- 4.1.4 离港航空器取得宝安地面、宝安机坪管制许可 后推出开车:
- 4.1.5 航空器起飞离地后自动与管制席位脱波(不需要通话脱波),塔台将在 ATC 许可中发布脱波后应该联系的离场管制频率;
- 4.1.6 离港航空器起飞离地后首次与进近联系时,需 通报起飞跑道号;
- 4.1.7 正常情况下,离港航空器从等待位置到对正跑 道时间应当控制在 60s 以内,如需要占用更长时间, 航空器驾驶员应在进跑道前通知管制员。

- 4.1 Air traffic control regulations for departure aircraft
- 4.1.1 Obtain delivery clearance by DCL or delivery frequency;
- 4.1.2 DCL is available in 23:00-15:00(UTC). After receiving DCL delivery clearance, pilot shall repeat "call sign, runway designation and initial altitude" to delivery controller 5 minutes earlier than reporting "ready to push back and start-up";
- 4.1.3 Pliot shall inform delivery controller "ready to push back and start-up", then keep on the frequency until receive the instruction of changing frequency;
- 4.1.4 Aircraft shall be Pushed back and start up after receiving the clearance from GND or APN;
- 4.1.5 Pilot shall leave TWR frequency without instruction when aircraft is in air, and assigned APP frequency will be informed in ATC clearance from TWR controller:
- 4.1.6 When aircraft contact APP controller at the first time, pilot shall inform runway designation used to takeoff.
- 4.1.7 Under norml conditions, aircraft shall finish RWY alignment within 60 seconds after leaving holding positions. If flight crew need more time, pilot shall

inform ATC controller befor taxiing into runway.

#### 4.2 进场管制规定

4.2.1 航空器在着陆后应尽快脱离跑道,并在脱离后报告塔台管制员,飞越跑道入口端至完全脱离跑道应在 50s 内。在确保能安全脱离跑道的前提下,机组应当沿最近的或管制员建议的脱离道脱离跑道。如需使用更长的时间占用跑道,或不能使用管制员建议的脱离道脱离跑道,应在着陆前通知塔台管制员;

4.2.2 着陆航空器脱离跑道前须在塔台频率保持长守;在脱离跑道首次与地面管制联系时,尤其在低能见度情况下,必须向地面管制报告脱离的跑道和

#### 4.3 地面风与跑道转换程序

所使用的滑行道。

4.3.1 当转换使用跑道方向的过程中,短时使用跑道 顺风分量超过 3m/s 但不大于 5m/s 时,管制员应通知 航空器驾驶员,航空器驾驶员应根据机型性能或者 运行手册,决定是否使用管制员安排的顺风跑道起 飞或者着陆,并通知管制员。

#### 5. 机场的 II/III 类运行

无

#### 4.2 Air traffic control regulations for arrival aircraft

4.2.1 Landing aircraft shall vacate the runway as soon as possible (within 50 seconds from flying over RWY THR to vacating the RWY) and report TWR ATC after fully vacated. Flight crew shall vacate runway via the nearest TWY or by ATC, otherwise inform TWR ATC before landing;

4.2.2 Landing aircraft shall keep listening TWR frequency before vacating the runway; Under low visibility condition, landing aircraft must report the vacated runway designation and the taxiway in use during initial contact with GND control.

#### 4.3 Procedure for ground wind and RWY changed

4.3.1 when aircraft change direction of runway in use, if downwind speed is more than 3m/s and not exceeding 5m/s for short time, ATC controller shall inform pilot. According to aircraft performance or operation handbook, pilot shall decide whether aircraft will take off or land on downwind runway allocated, then inform ATC controller.

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

Nil

#### 6. 除冰规则

无

#### 7. 平行跑道同时仪表运行

7.1 航空器驾驶员得到仪表进近的指令后,尽可能根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能见;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能见。

7.2 当出现风切变、颠簸、下降气流或强侧风等情况时, 航空器驾驶员应立即向管制员报告。管制员根据收到的机组报告和气象信息, 采取相应的处置方法。

7.3 平行跑道同时仪表运行的主用模式为隔离平行运行。实施独立平行离场时,起飞跑道分配原则如下: IDUMA, SULAS, OVGOT 方向离场的航空器使用 15/33 号跑道; MIPAG, SIERA, TOMUD, LKC方向离场的航空器使用 16/34 号跑道。RWY15 与RWY16 实施平行跑道相关平行仪表进近模式运行。

#### 8. 警告

#### 6. Rules for deicing

Nil

#### 7. Simultaneous operations on parallel runways

7.1 Upon receipt of approaching clearance, the pilot shall monitor the operating status of other aircraft in the vicinity by airborne equipment and establish the visual separation as practicable, then report 'visual separation established' when the controller notifies the relative position with other aircraft.

7.2 Under certain adverse weather conditions (e.g. wind-shear, turbulence, downdrafts or crosswind) report the situation to controller immediately. According to the reports and weather information, ATC will take the appropriate methods to deal with it.

7.3 The parallel runway operation mode: segregated parallel approaches/departures are mainly used. When independent parallel departures are applied, departures to IDUMA, SULAS or OVGOT will be carried out via RWY15/33; and departures to MIPAG, SIERA, TOMUD or LKC will be carried out via RWY16/34. Dependent parallel approaches are implemented in RWY15 and RWY16.

#### 8. Warning

- 8.1 严禁向东南方向偏航, 防止误入香港管制空域。
- 8.1 In order to avoid entering into airspace controlled by Hong Kong, deviation to the southeast is forbidden.
- 8.2 深圳机场西侧有沿江高速公路, 防止误认为跑道。
- 8.2 Do not mistake Yanjiang Highway (located at west of ShenZhen airport) for runway.
- 8.3 深圳机场为平行宽距双跑道, 跑道编号未按左右划分, 机组和管制员在使用跑道时注意辨别、提醒。
- 8.3 Two runways are parallel and wide-distance, the runway designator is not supplemented with "L" or "R", pilots and controller shall pay attention to identify.
- 8.4 航空器一旦发现滑错路线或误入跑道, 应立即向管制员报告。
- 8.4 Aircraft shall report to ATC immediately when realize taxiing on the wrong way or an incursion of RWY.

# 9. 直升机飞行限制, 直升机停靠区

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

- 9.1 直升机滑行为地面滑行, 只有取得管制员许可方可实施空中滑行。
- 9.1 Helicopter shall taxi on the ground, and air-taxi when pilot receive ATC clearance.
- 9.2 直升机停靠区域设在375和376机位上。
- 9.2 Stands Nr.375 and 376 are used for helicopter parking.
- 9.3 直升机穿越跑道是直升机按照目视或特殊目视 飞行规则飞行,与其他航空器保持目视间隔,对地 面障碍物自行保持安全间隔,所采取的利用穿越走 廊,或目视机动飞越跑道上空,或飞越 RWY16/34 的南/北端外跑道延长线上的机动飞行。通常情况下, 直升机不允许从机场上空穿越跑道。
- 9.3 Helicopter crossing runway flight is a maneuver that is under VFR or special VFR rules, pilot is responsible for visual separation with the other aircrafts and safety separation with ground obstacles. Helicopter can cross runway via one of the two Runway Crossing Corridors(refer AD2.24-2A), or visual maneuvering, or flying over RWYs extension cord of South/North end of RWY16/34. Helicopter normally are not permitted to

cross runway over the airport.

9.4 直升机穿越跑道时,直升机驾驶员应对避开起降 航空器的尾流和相关航空器的安全间隔负责。 9.4 While helicopter crossing the runway, helicopter pilot shall be responsible for avoiding arrival/departure aircraft wake turbulence and keeping safety distance with the other aircrafts.

9.5 穿越走廊使用规则(见停机位置图 AD2.24-2A) RWY16 直升机穿越走廊: 落地直升机保持目视穿越沿江高速,在 16 号跑道入口北端上空向东飞越 16 跑道后,在平行滑行道 E 东侧空中滑行至指定的着陆区域着陆;

9.5 Rules for Crossing Runway Corridors(refer AD2.24-2A).

RWY34 直升机穿越走廊:落地直升机保持目视穿越沿江高速,在34 号跑道入口南端上空向东飞越34 跑道后,在平行滑行道 E 东侧空中滑行至指定的着陆区域着陆。

RWY16 Crossing Corridor: Landing helicopter shall cross YANJIANG Highway, pass over the north of RWY16 threshold, then airtaxi along the east side of taxiway E, finally land at the designated landing area; RWY34 Crossing Corridor: Landing helicopter shall cross YANJIANG Highway, pass over the south of RWY34 threshold, then airtaxi along the east side of taxiway E, finally land at the designated landing area.

9.6 直升机穿越 RWY16/34 跑道不得影响 RWY15/33 跑道上航空器的运行。

9.6 While helicopter crossing RWY16/34, aircraft operation on the RWY15/33 shall not be affected.

9.7 通常情况下,ATC会发布一个特定的条件性的穿越指令,指挥直升机从两架落地航空器之间穿越跑道,直升机驾驶员应清楚落地航空器的间隔一般为12km,一旦能见第一架航空器,直升机驾驶员应调整速度和航迹,保证第一架航空器不会对其造成影响后尽快穿越跑道。

9.7 ATC will normally issue a conditional crossing clearance with specific instructions to cross behind landing traffic. Helicopter pilot should be aware that there is normally a 12km spacing between arrivals. Once the relevant traffic has been visually identified, pilot should adjust speed and track to ensure the crossing is completed with the minimum of delay and avoiding the wake turbulence after the landing aircraft. Holding between the two runways is strictly forbidden.

9.8 直升机驾驶员应按照 ATC 指令执行等待程序,等 待区控制在等待点以西,等待为右盘旋,速度不大 于 185km/h。

9.8 Helicopter pilot shall execute holding procedure with ATC clearance, holding area shall be west of holding points, right turns holding pattern, MAX speed 185km/h.

直升机目视飞行等待	夫点 helicopter holding p	points for VFR/SVFR fl	ights	
定位点	飞行规则	高度	位置	备注
Fix	Flight rules	Altitude	Location	Remark
				距 15/33 跑道西侧
V	VFR/SVFR	150m	N22 '37.9'	至少 4km。
V	VFR/SVFR	130111	E113 46.2'	At least 4km west of
				RWY15/33.
				距 15/33 跑道西侧
X	VFR/SVFR	150m	N22 36.9'	至少 4km。
A	VFR/SVFR	13011	E113 46.5'	At least 4km west of
				RWY15/33.
				距 15/33 跑道西侧
URBOR	VFR/SVFR	150 /200	N22 35.9'	至少 10km。
UKBOK	VINSVIK	150m/300m	E113 '43.2'	At least 10km west
				of RWY15/33.
				距 15/33 跑道西侧
ATADA	VFR/SVFR	150m	N22 '37.1'	至少 6km。
AIADA	VINSVIK	130111	E113 '45.6'	At least 6km west of
				RWY15/33.
				16号跑道入口与33
Yanjiang Highway	VFR/SVFR	150m		号跑道入口之间的
Tanjiang Ingnway	VINSVIK	130111		沿江高速公路以西
				区域,直升机应在

		沿江高速公路以
		西,距沿江高速至
		少 200m 外等待。
		Helicopter shall hold
		at West of Yanjiang
		Highway(between
		THR16 and THR33)
		and keep at least
		200m from it.

# ZGSZ AD 2.21 噪音限制规定及减噪程序

# **ZGSZ AD 2.21 Noise restrictions and Noise abatement procedures**

在保证安全超障和飞行程序最低爬升梯度的条件下,执行如下起飞减噪程序。由于非管制原因不执行减噪程序的,须在起飞前告知空管并说明理由(特殊飞行除外):

Upon condition of complying with the requirements of obstacle clearance and climb gradient required by flight procedure, the following operating procedures for the take-off climb shall be implemented. If the procedures can not be implemented due to any reason, pilot shall inform the ATC before take-off (except for special flight):

- 1.1 在飞机性能允许情况下,尽可能使用减推力起飞。
- 1.1 Under the condition that aircraft performance allows, use the reduced thrust to take-off.
- 1.2 在高度 450m (1500ft) 时,起始爬升速度 V2+20km/h (10kt),减小功率至爬升功率,保持原有襟翼/缝翼和速度继续爬升;
- 1.2 At altitude 450m (1500ft), with a climb speed of V2 plus 20km/h(10kt), reduce engine power/thrust to climb power/thrust and maintain a speed with flaps and slats in the take-off configuration;

1.3 高度 900m (3000ft) 以上时, 转为正常航路爬升速度并按规定收襟翼/缝翼。

1.3 Above altitude 900m (3000ft), accelerate and retract flaps/slats on schedule while maintaining a positive rate of climb, and complete the transition to normal en-route climb speed.

# ZGSZ AD 2.22 飞行程序

# **ZGSZ AD 2.22 Flight procedures**

# 1. 总则

# 除经珠海进近或深圳塔台特殊许可外,在珠海终端 管制区和深圳塔台管制区内的飞行,必须按照仪表 飞行规则进行。

# 2. 起落航线

东西跑道起落航线在相应跑道西侧进行。起落航线高度: A、B 类航空器高度 300m, C、D 类航空器高度 400-600m。

# 3. 仪表飞行程序

严格按照航图中公布的进、离场程序和 ENR2.2.2 中公布的有关规定飞行。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。

#### 4. 雷达程序和/或 ADS-B 程序

### 1. General

Flights within Zhuhai Terminal Control Area or Shenzhen Tower Control Area shall operate under IFR unless special clearance has been obtained from Zhuhai Approach Control or Shenzhen Tower Control.

#### 2. Traffic circuits

Traffic circuits shall be made to the west of the relevent runway, at the altitude of 300m for aircraft CAT A/B, and at the altitude 400-600m for aircraft CAT C/D.

### 3. IFR flight procedures

Strict adherence is required to the relevant arrival/departure procedures published in the aeronautical charts and the relevant regulations published in subsection ENR2.2.2. Aircraft may, if necessary, hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.

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

4.1 珠海终端管制区内实施雷达管制,对经雷达识别 4.1 Radar control within Zhuhai TMA has been 的航空器在珠海终端管制区范围内提供雷达管制服 务。

implemented, and provide such services as radar separating, radar surveillance and radar vectoring to radar-identified aircraft.

4.2 当航空器得到目视进近许可或进近管制已指示 4.2 Radar control is end when aircraft obtain visual 航空器与宝安塔台建立通讯联络时, 雷达管制终止。

approach clearance or APP indicate aircraft to contact TWR.

5. Radio communication failure procedures

# 5. 无线电通信失效程序

Nil

无

# 6. 目视飞行程序

# 6. Procedures for VFR flights

航空器目视飞行需经 ATC 同意, 直升机目视飞行航 VFR flights is available with ATC clearance, helicopter 线的飞行高度均为300m(含)以下。

VFR flights MAX altitude is 300m.

# 7. 目视飞行航线

7. VFR route

无

Nil

# 8. 目视参考点

8. Visual reference point

无

Nil

# 9. 其它规定

9. Other regulations

无

Nil

# 10. 区域导航飞行程序相关数据

# 10. Data for RNAV flight procedures

ID	COORDINATES(WGS-84)	ID	COORDINATES(WGS-84)
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CF 15	N2252.9 E11340.5	SZ308	N222329 E1130605
CF 16	N2252.5 E11339.6	SZ309	N221804 E1130843
CF 33	N2229.5E11353.4	SZ310	N221318 E1131233
CF 34	N2229.2 E11352.6	SZ312	N220649 E1130636
RSZ41	N223104 E1134902	SZ313	N220953 E1131403
SZ001	N2245.8 E11344.4	SZ314	N223233 E1133926
SZ002	N2247.8 E11343.3	SZ413	N2234.7 E11342.8
SZ003	N2247.8 E11352.0	SZ414	N2228.8 E11344.1
SZ004	N2249.7 E11359.3	SZ415	N2229.2 E11350.0
SZ005	N2250.4 E11347.1	SZ461	N223632 E1132828
SZ011	N2247.6 E11338.8	SZ462	N224404 E1133412
SZ012	N224603 E1134022	SZ920	N223202 E1135103
SZ013	N224258 E1133513	SZ921	N222911 E1135004
SZ021	N2241.3 E11345.1	SZ923	N222844 E1134906
SZ051	N2235.6 E11406.2	SZ924	N222806 E1134746
SZ052	N2232.0 E11358.6	SZ925	N222448 E1134126
SZ061	N2244.8 E11330.8	SZA34	N222631 E1134424
SZ062	N2219.9 E11333.0		
SZ063	N2226.7 E11347.4		
SZ101	N2229.6 E11353.4	ADBIN	N2158.1 E11249.3
SZ102	N2233.2 E11401.1	BEKOL	N2232.6 E11408.0
SZ103	N2245.1 E11426.6	BOKAT	N2202.3 E11300.0
SZ111	N2228.0 E11350.2	LOVTA	N2144.9 E11234.2
SZ112	N2228.1 E11335.3	MIPAG	N2255.3 E11344.5
SZ113	N2222.7 E11330.3	GLN	N2242.5 E11402.0
SZ151	N2244.4 E11419.5	GURIN	N2151.1 E11300.0
SZ152	N2241.6 E11353.3	IDUMA	N2253.8 E11357.1

SZ153	N2250.5 E11348.4	KIBAS	N2208.3 E11314.5
SZ154	N2255.3 E11345.7	LANDA	N2136.8 E11302.7
SZ161	N222725 E1132306	LKC	N2222.7 E11353.0
SZ163	N223622 E1133357	TOMUD	N2151.5 E11232.8
SZ166	N2250.0 E11334.4	NLG	N2231.9 E11333.7
SZ301	N221333 E1131720	SAREX	N2252.9 E11329.0
SZ302	N221755 E1131259	SIERA	N2159.1 E11333.2
SZ303	N222309 E1130955	SULAS	N2255.0 E11413.3
SZ304	N222856 E1130821	UJ	N2155.2 E11317.6
SZ305	N224413 E1132845	VIPAP	N2245.7 E11431.9
SZ306	N223444 E1130450	ZUH	N2213.3 E11328.0
SZ307	N222919 E1130447	OVGOT	N2247.0 E11445.0

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°) RW	Turn Direction VY15 SID ID	Altitude(ft)	IAS(kt)	VPA/TCH	Navigation Specification
CA			155		120			RNAV1
CF	SZ101		155		↑900 or by	MAX 230		RNAV1
TF	SZ102				↑1500 or by ATC			RNAV1
TF	GLN				↑2100 or by ATC			RNAV1
TF	IDUMA							RNAV1
	RWY15 SID SLS-9WD(by ATC)							
CA			155		120			RNAV1
CF	SZ101		155		↑900 or by	MAX		RNAV1

				ATC	230		
				↑1500 or			
TF	SZ102			by ATC			RNAV1
				↑2100 or			
TF	GLN			by ATC			RNAV1
TF	SULAS						RNAV1
		RW	Y15 SID OVG	i-9WD		,	
CA		155		120			RNAV1
CE	67101	155	1	↑900 or by	MAX		DN 4371
CF	SZ101	155		ATC	230		RNAV1
TF	SZ102			↑1500 or			RNAV1
117	SZ102			by ATC			KNAVI
TF	SZ103						RNAV1
TF	VIPAP						RNAV1
TF	OVGOT						RNAV1
		RWY15	SID LKC-9W	D(by ATC)			
CA		155		120			RNAV1
CF	SZ101	07101	1	↑900 or by	MAX		RNAV1
Cr	32101	155		ATC	230		KNAVI
TF	LKC						RNAV1
	_	RV	VY15 SID SIE-	-9WD			
CA		155		120			RNAV1
CF	SZ101	155	1	†900 or by	MAX		RNAV1
	52101	133		ATC	230		KINAV I
TF	SZ112		1	1200 or by			RNAV1
11.	52112			ATC			IXI WIYI
TF	SZ113						RNAV1
TF	ZUH						RNAV1

TF	SIERA				RNAV1
		RWY15 S	ID TOM-9WD		
CA		155	120		RNAV1
CF	SZ101	155	↑900 or by	MAX 230	RNAV1
TF	SZ112		1200 or by ATC		RNAV1
TF	SZ113				RNAV1
TF	ZUH				RNAV1
TF	KIBAS				RNAV1
TF	BOKAT				RNAV1
TF	ADBIN				RNAV1
TF	TOMUD				RNAV1
		RWY15 S	SID MIP-9WD		
CA		155	120		RNAV1
CF	SZ101	155	↑900 or by ATC	MAX 230	RNAV1
TF	SZ102		↑1500 or by ATC		RNAV1
TF	GLN		†2100 or by ATC		RNAV1
TF	MIPAG				RNAV1
	- '	RWY16	SID IDU-9XD	,	
CA		155	120		RNAV1
CF	SZ111	170	†1200 or by ATC	MAX 230	RNAV1
TF	SZ102		↑1800 or by ATC		RNAV1

TF	GLN		†2100 or		RNAV1			
			by ATC					
TF	IDUMA				RNAV1			
	RWY16 SID SLS-9XD(by ATC)							
CA		155	120		RNAV1			
ar.	07111	150	↑1200 or	MAX	511111			
CF	SZ111	170	by ATC	230	RNAV1			
The state of the s	07102		↑1800 or		DYAVI			
TF	SZ102		by ATC		RNAV1			
The state of the s	GLV.		†2100 or		DYAVI			
TF	GLN		by ATC		RNAV1			
TF	SULAS				RNAV1			
		RWY	/16 SID OVG-9XD					
CA		155	120		RNAV1			
CE	F SZ111	67111 170	↑1200 or	MAX	DNIANI			
CF		170	by ATC	230	RNAV1			
TIC			↑1800 or		DNIAV1			
TF	SZ102		by ATC		RNAV1			
TF	SZ103				RNAV1			
TF	VIPAP				RNAV1			
TF	OVGOT				RNAV1			
	· ·	RWY16 S	SID LKC-9XD(by ATC)	<u>l</u>	<u>,                                      </u>			
CA		155	120		RNAV1			
- CE	077111	170	↑1200 or	MAX				
CF	SZ111 170	170	by ATC	230	RNAV1			
TF	LKC				RNAV1			
	<u>, , , , , , , , , , , , , , , , , , , </u>	RW	Y16 SID SIE-9XD	1	<u>,</u>			
CA		155	120		RNAV1			
·	•		ı		<u> </u>			

1200 or by	RNAV1
1200 or by	
TF SZ112 ATC	RNAV1
TF SZ113	RNAV1
TF ZUH	RNAV1
TF SIERA F	RNAV1
RWY16 SID TOM-9XD	
CA 155 120 F	RNAV1
CF SZ415 170 MAX 230	RNAV1
TF SZ112 1200 or by ATC	RNAV1
TF SZ113	RNAV1
TF ZUH	RNAV1
TF KIBAS F	RNAV1
TF BOKAT F	RNAV1
TF ADBIN	RNAV1
TF TOMUD	RNAV1
RWY16 SID MIP-8XD(by ATC)	
CA 155 120 F	RNAV1
CF SZ415 170 F	RNAV1
TF SZ414 MAX 230 F	RNAV1
TF SZ413	RNAV1
TF MIPAG F	RNAV1
RWY16 SID MIP-9XD	

CA		155	120		RNAV1
CF	SZ111	170	↑1200 or	MAX	RNAV1
CF	SZIII	170	by ATC	230	RNAVI
TF	SZ102		↑1800 or		RNAV1
11	32.102		by ATC		RIVAVI
TF	MIPAG				RNAV1
		RWY33 S	SID IDU-9YD		
CA		335	120		RNAV1
CF	SZ001	335		MAX	RNAV1
Cr	32001	333		230	KNAV I
TF	SZ003				RNAV1
TF	SZ004			MAX	RNAV1
11	32004			250	KIVAV I
TF	IDUMA				RNAV1
		RWY33 SID S	SLS-9YD(by ATC)		
CA		335	120		RNAV1
CF	SZ001	335		MAX	RNAV1
	52001	333		230	IXIVIV I
TF	SZ003				RNAV1
TF	SZ004				RNAV1
TF	SULAS				RNAV1
		RWY33 SID O	OVG-8YD(by ATC)		
CA		335	120		RNAV1
CF	SZ001	335		MAX	RNAV1
CI,	52001	333		230	INIVAV I
TF	SZ003				RNAV1
TF	SZ004				RNAV1
TF	VIPAP				RNAV1

TF	OVGOT			RNAV1
	· ·	RWY33	SID OVG-9YD	
CA		335	120	RNAV1
CF	SZ001	335	MAX 230	RNAV1
TF	SZ003			RNAV1
TF	GLN		†2100 or by ATC	RNAV1
TF	VIPAP			RNAV1
TF	OVGOT			RNAV1
		RWY33 SID	LKC-9YD(by ATC)	
CA		335	120	RNAV1
CF	SZ001	335		RNAV1
TF	SZ003		MAX 205	RNAV1
TF	LKC			RNAV1
		RWY33	SID SIE-9YD	
CA		335	120	RNAV1
CF	SZ002	335		RNAV1
TF	SZ013		1800 MAX 230	RNAV1
TF	SZ314		↑2700 or by ATC	RNAV1
TF	SZ113			RNAV1
TF	ZUH			RNAV1
TF	SIERA			RNAV1
	<u>.</u>	RWY33	SID TOM-9YD	<u> </u>
CA		335	120	RNAV1

CF	SZ002	335			RNAV1
TF	SZ013		1800	MAX 230	RNAV1
TF	SZ314		↑2700 or by ATC		RNAV1
TF	SZ113				RNAV1
TF	ZUH				RNAV1
TF	KIBAS				RNAV1
TF	BOKAT				RNAV1
TF	ADBIN				RNAV1
TF	TOMUD				RNAV1
		RWY33 SI	ID MIP-9YD	·	
CA		335	120		RNAV1
CF	SZ001	335		MAX 230	RNAV1
TF	MIPAG				RNAV1
		RWY34 SI	ID IDU-9ZD		1
CA		335	120		RNAV1
CF	SZ011	320	↑900	MAX 230	RNAV1
TF	SZ005		↑1500		RNAV1
TF	IDUMA				RNAV1
		RWY34 SID SI	LS-9ZD(by ATC)		<u>.</u>
CA		335	120		RNAV1
CF	SZ011	320	↑900	MAX 230	RNAV1
TF	SZ005		↑1500		RNAV1
TF	SZ004				RNAV1

TF	SULAS						RNAV1
			RWY34	4 SID OVG-	8ZD(by ATC)		
CA			335		120		RNAV1
CF	SZ011		320		↑900	MAX 230	RNAV1
TF	SZ005				↑1500		RNAV1
TF	SZ004						RNAV1
TF	VIPAP						RNAV1
TF	OVGOT						RNAV1
			RV	VY34 SID O	VG-9ZD		
CA			335		120		RNAV1
CF	SZ011		320		↑900	MAX 230	RNAV1
TF	SZ005				↑1500		RNAV1
TF	SZ003				↑1800 or by ATC		RNAV1
TF	GLN						RNAV1
TF	VIPAP						RNAV1
TF	OVGOT						RNAV1
			RWY3	4 SID LKC-	9ZD(by ATC)		·
CA			335		120		RNAV1
CF	SZ021	Y	320			MAX 230	RNAV1
DF	LKC			L			RNAV1
			R	WY34 SID S	SIE-9ZD		
CA			335		120		RNAV1
CF	SZ012		320				RNAV1
TF	SZ013				1800	MAX	RNAV1

				230	
			42700 c :-	250	
TF	SZ314		†2700 or		RNAV1
			by ATC		
TF	SZ113				RNAV1
TF	ZUH				RNAV1
TF	SIERA				RNAV1
		RW	VY34 SID TOM-9ZD		
CA		335	120		RNAV1
CF	SZ012	320			RNAV1
	ggo.io			MAX	
TF	SZ013		1800	230	RNAV1
			†2700 or		
TF	SZ314		by ATC		RNAV1
TF	SZ113				RNAV1
TF	ZUH				RNAV1
TF	KIBAS				RNAV1
TF	BOKAT				RNAV1
TF	ADBIN				RNAV1
TF	TOMUD				RNAV1
	1	RV	WY34 SID MIP-9ZD		1
CA		335	120		RNAV1
				MAX	
CF	SZ011	320	↑900	230	RNAV1
TF	MIPAG				RNAV1
		RWY	15/16 STAR OVG-9XA	<u> </u>	L
IF	OVGOT				RNAV1
TF	VIPAP				RNAV1
TF	SZ151				RNAV1

TF	GLN	1500	MAX	RNAV1	
	GLIV	1500	205	IXIVIV I	
		RWY15/16 STAR BEK-9XA			
IF	BEKOL			RNAV1	
TF	GLN	1500	MAX	RNAV1	
I I I	GLN	1300	205	KNAVI	
		RWY15/16 STAR LAN-9XA			
IF	LANDA			RNAV1	
TF	UJ			RNAV1	
TF	ZUH			RNAV1	
TF	SZ161	2100 or by		DNI AV/1	
1F	52101	ATC		RNAV1	
TF	NLG	NI G	1500	MAX	RNAV1
IF		1500	205	KNAVI	
TF	SZ462	1200		RNAV1	
		RWY15/16 STAR LOV-9XA			
IF	LOVTA			RNAV1	
TF	GURIN			RNAV1	
TF	UJ			RNAV1	
TF	ZUH			RNAV1	
TF	SZ161	2100 or by		RNAV1	
11,	52101	ATC		MINAVI	
TF	NLG	1500	MAX	RNAV1	
11.	TILO	1500	205	IMATA 1	
TF	SZ462	1200		RNAV1	
		RWY15/16 STAR SAR-9XA	,		
IF	SAREX			RNAV1	
TF	SZ461			RNAV1	

				-	<del></del>
TF	SZ163		1500	MAX	RNAV1
TE	57460		1200	205	DNAV1
TF	SZ462	DWW45/46 GT4 D V	1200		RNAV1
	1	RWY15/16 STAR I	LAN-8XA(by ATC	2)	I
IF	LANDA				RNAV1
TF	GURIN		2700		RNAV1
TF	SZ312				RNAV1
TF	SZ313				RNAV1
TF	SZ301		@2700 or by ATC	AT 230	RNAV1
TF	SZ302				RNAV1
TF	SZ303				RNAV1
TF	SZ304		@2700 or by ATC	AT 230	RNAV1
TF	NLG		1500 or by	AT 205	RNAV1
TF	SZ462		1200		RNAV1
		RWY15/16 STAR I	OV-8XA(by ATC	C)	
IF	LOVTA				RNAV1
TF	GURIN		2700		RNAV1
TF	SZ312				RNAV1
TF	SZ313				RNAV1
TF	SZ301		@2700 or by ATC	AT 230	RNAV1
TF	SZ302				RNAV1
TF	SZ303				RNAV1
TF	SZ304		@2700 or by ATC	AT 230	RNAV1

TF	NLG				1500 or by	AT 205	RNAV1
TF	SZ462				ATC 1200		RNAV1
11	32402		DWW15/1	CTAD CA		7)	KIVAVI
			KW 113/10	O STAK SA	AR-8XA(by ATC	-)	
IF	SAREX						RNAV1
TF	SZ305				2700		RNAV1
TF	SZ306				@2400 or by ATC	AT 230	RNAV1
TF	SZ307				2,722		RNAV1
TF	SZ308						RNAV1
TF	SZ309						RNAV1
TF	SZ310				@2400 or by ATC	AT 230	RNAV1
TF	NLG				1500 or by ATC	AT 205	RNAV1
TF	SZ462				1200		RNAV1
		RV	VY15/16 STA	AR Holding	g (outbound time	1min)	
НМ	NLG	Y	068	L	1500	MAX 205	RNAV1
			RWY	33/34 STA	R OVG-9ZA		·
IF	OVGOT						RNAV1
TF	VIPAP						RNAV1
TF	SZ151						RNAV1
TF	GLN				1500	MAX 205	RNAV1
			RWY	33/34 STA	R BEK-9ZA		
IF	BEKOL						RNAV1
TF	SZ051				1500	MAX	RNAV1

				205	
		RWY3	3/34 STAR LAN-9ZA		
IF	LANDA				RNAV1
TF	UJ				RNAV1
TF	ZUH				RNAV1
TF	SZ062		1500	MAX 205	RNAV1
		RWY3	3/34 STAR LOV-9ZA		
IF	LOVTA				RNAV1
TF	GURIN				RNAV1
TF	UJ				RNAV1
TF	ZUH				RNAV1
TF	SZ062		1500	MAX 205	RNAV1
		RWY3	3/34 STAR SAR-9ZA		
IF	SAREX				RNAV1
TF	SZ305		2700		RNAV1
TF	NLG		1500	MAX 205	RNAV1
		RWY33/34	STAR LAN-8ZA(by AT	C)	
IF	LANDA				RNAV1
TF	GURIN		2700		RNAV1
TF	SZ312				RNAV1
TF	SZ313				RNAV1
TF	SZ301		@2700 or by ATC	AT 230	RNAV1
TF	SZ302				RNAV1
TF	SZ303				RNAV1

	<del></del>	<del> </del>			Ţ	<del></del>						
TF	SZ304				@2700 or	AT 230	RNAV1					
					by ATC							
TF	NLG				1500	AT 205	RNAV1					
	RWY33/34 STAR LOV-8ZA(by ATC)											
IF	LOVTA						RNAV1					
TF	GURIN				2700		RNAV1					
TF	SZ312						RNAV1					
TF	SZ313						RNAV1					
TF	SZ301				@2700 or by ATC	AT 230	RNAV1					
TF	SZ302						RNAV1					
TF	SZ303						RNAV1					
TF	SZ304				@2700 or	AT 230	RNAV1					
11	SZ3U4		<u> </u>		by ATC	A1 230	KINAVI					
TF	NLG				1500	AT 205	RNAV1					
L			RWY33/3	4 STAR SAF	R-8ZA(by ATC	 []						
IF	SAREX						RNAV1					
TF	SZ305				2700		RNAV1					
TF	SZ306				@2400 or	AT 230	RNAV1					
11	3Z3U0		<u> </u>		by ATC	A1 23U	KINAVI					
TF	SZ307						RNAV1					
TF	SZ308						RNAV1					
TF	SZ309						RNAV1					
TE	\$7210				@2400 or	AT 220	DN1 4371					
TF	SZ310				by ATC	AT 230	RNAV1					
TF	NLG				1500	AT 205	RNAV1					
		RW	Y33/34 STA	AR Holding (	outbound time	nin)						
HM	NLG	Y	114	R	1500	MAX	RNAV1					
							1					

						205	
		RWY	/15/33/16/34 S	STAR Holdi	ng (outbound	time 1min)	<u> </u>
НМ	GURIN	Y	077	R	2700		RNAV1
TIM	CLN	V	266	D	1500	MAX	DNIAVI
НМ	GLN	Y	266	R	1500	205	RNAV1
			RWY15 IA	AP Transitio	on(FROM GL	N)	
117	CLN				1500	MAX	DNI ANI
IF	GLN				1500	205	RNAV1
TF	SZ152						RNAV1
TF	SZ153						RNAV1
TF	SZ154						RNAV1
TF	CF 15				1000		RNAV1
			RWY15 IA	AP Transition	n(FROM SZ4	62)	
IF	SZ462				1200		RNAV1
TF	SZ166						RNAV1
TF	CF 15				1000		RNAV1
			RWY16 IA	AP Transitio	on(FROM GL	N)	
IF	GLN				1500	MAX	RNAV1
11.	GLIV				1300	205	KIVAVI
TF	SZ152						RNAV1
TF	SZ153						RNAV1
TF	SZ154				900		RNAV1
TF	CF 16				700		RNAV1
	<u>,                                      </u>		RWY16 IA	AP Transition	n(FROM SZ4	52)	
IF	SZ462				1200		RNAV1
TF	SZ166				700		RNAV1
TF	CF 16				700		RNAV1
		RWY	16 Missed App	oroach Hold	ling (outbound	l time 1min)	

	1									
НМ	NLG	Y	068	L	1200	MAX	RNAV1			
						205				
			RWY33 L	AP Transition	n(FROM GL1	N)				
IE	CLN				1500	MAX	DNIANI			
IF	GLN				1500	205	RNAV1			
TF	SZ052				900		RNAV1			
TF	CF 33				700		RNAV1			
			RWY33 IA	AP Transition	(FROM SZ05	51)				
-	950.54				4.500	MAX				
IF	SZ051				1500	205	RNAV1			
TF	SZ052				900		RNAV1			
TF	CF 33				700		RNAV1			
	RWY33 IAP Transition(FROM SZ062)									
-	GE70.42		GE 62	950.60	970.6	070.0		MAX		
IF	SZ062				1500	205	RNAV1			
TF	SZ063						RNAV1			
TF	CF 33				700		RNAV1			
			RWY33 L	AP Transitio	n(FROM NLO	G)				
	) II G					MAX				
IF	NLG				1500	205	RNAV1			
TF	SZ063						RNAV1			
TF	CF 33				700		RNAV1			
			RWY34 L	AP Transition	n(FROM GLI	N)	•			
	CITY				1500	MAX	DAYIYY			
IF	GLN				1500	205	RNAV1			
TF	SZ052				900		RNAV1			
TF	CF 34				700		RNAV1			
			RWY34 IA	AP Transition	(FROM SZ05	51)				

IF	SZ051				1500	MAX 205	RNAV1			
TF	SZ052				900		RNAV1			
TF	CF 34				700		RNAV1			
RWY34 IAP Transition(FROM SZ062)										
IF	SZ062				1500	MAX	RNAV1			
IF IF	SZ062					205	RNAVI			
TF	SZ063						RNAV1			
TF	CF 34				700		RNAV1			
			RWY34 L	AP Transition	n(FROM NLO	G)	·			
IF	NLG				1500	MAX 205	RNAV1			
TF	SZ063						RNAV1			
TF	CF 34				700		RNAV1			
RWY34 Missed Approach Holding (outbound time 1min)										
НМ	NLG	Y	170	L	1200	MAX 205	RNAV1			

PT [ARC CTR,Radius NM]	Waypoint ID	Fly over	Magnetic Course( °)	Turn Direction	Altitude(ft)	IAS(kt)	Navigation Specification			
	RWY34 AR Transition(From SZ062)									
IF	SZ062				4900	MAX205	RNP0.3			
TF	SZ925				3000		RNP0.3			
TF	SZA34				@2300		RNP0.3			
TF	SZ924				1300		RNP0.3			
TF	SZ923				@1100		RNP0.3			
TF	SZ921					MAX180	RNP0.3			

RF[RSZ41,2.1]	SZ920			L	@1100	MAX180	RNP0.3
RWY34 AR Transition(From NLG)							
IF	NLG				4900	MAX205	RNP0.3
TF	SZA34				@2300		RNP0.3
TF	SZ924				1300		RNP0.3
TF	SZ923				@1100		RNP0.3
TF	SZ921					MAX180	RNP0.3
RF[RSZ41,2.1]	SZ920			L	@1100	MAX180	RNP0.3

# ZGSZ AD 2.23 其它资料

# **ZGSZ AD 2.23 Other information**

全年有鸟类活动,季节性强,在机场南北下滑处、两条跑道之间的 S 穿越道以北区域,16/34 跑道西侧等处鸟类活动最频繁。机场采取了驱赶措施。每年 4 月至 6 月、9 月至次年 2 月分别有大批夏候鸟及冬候鸟经机场空域迁徙。

Activities of bird flocks are found in the whole year, seasonal activities within the area of south/north glide path, north of S and west of RWY16/34 are frequent. Aerodrome Authority resorts to dispersal methods to reduce bird activities.Birds migration take place from April to June and from September to February around airport.

Type of bird	Time of activity	Flight height	Threat level	Activity rule
Equatto gargatta	All seasons	0-80m	_	Alone or
Egretta garzetta	All seasons	0-80111	A	microcommunity
Ardeola bacchus	All seasons	0-80m	A	Alone, nest together
Recurvirostra	Ion Man Oot Doo	0-70m	D	Mianagamanaity
avosetta	Jan-Mar, Oct-Dec	0-70111	В	Microcommunity
Llimontonus	Feb-Dec	0-60m	С	Feed together, fly
Himantopus				alone
Hirundo rustica	Mar-Dec	0-30m	В	Together

	_		
All seasons	0-60m	В	Alone or
			microcommunity
All seasons	0-20m	A	Alone or
			microcommunity
All seesens	0-50m	В	Couple or
All seasons			microcommunity
All sansons	0-20m	В	Microcommunity
All seasons			
All seasons	0-30m		Alone or
		A	microcommunity
All seasons	0-20m	A	Together
All seasons	0-20m	В	Together
All seasons	0-40m	В	Alone or couple
Apr-Oct	0-50m	В	Microcommunity
All seasons	0-30m	A	Alone or couple
All seasons	0-40m	В	Together
All sassons	0-200m	В	Together
All seasons			Together
All seasons	0-30m	В	Couple or
			microcommunity
All seasons	0-10m	R	Couple or together
All scasolis	0-10111	D	Couple of together
Nov-Dec, Jan-Mar	0-300m	С	Together
All seasons	0-30m	В	Couple or
			microcommunity
All seasons	0-20m	A	Couple or together
7 XII 5C45OII5			Couple of together
All seasons	0-30m	A	Alone
	All seasons  All seasons	All seasons       0-20m         All seasons       0-50m         All seasons       0-20m         All seasons       0-20m         All seasons       0-20m         All seasons       0-40m         Apr-Oct       0-50m         All seasons       0-30m         All seasons       0-200m         All seasons       0-30m         All seasons       0-10m         Nov-Dec, Jan-Mar       0-300m         All seasons       0-30m         All seasons       0-30m         All seasons       0-30m	All seasons       0-20m       A         All seasons       0-50m       B         All seasons       0-20m       B         All seasons       0-30m       A         All seasons       0-20m       A         All seasons       0-20m       B         All seasons       0-40m       B         All seasons       0-30m       A         All seasons       0-40m       B         All seasons       0-200m       B         All seasons       0-30m       B         All seasons       0-30m       B         Nov-Dec, Jan-Mar       0-300m       C         All seasons       0-30m       B         All seasons       0-30m       A

Prinia flaviventris	All seasons	0-20m	В	Microcommunity in autumn or winter
Note:				
A: most dangerous				
B: more dangerous				
C: dangerous				
D: less dangerous				