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

ZSQD-青岛/胶东 QINGDAO/Jiaodong

# ZSQD 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	N36°21.9' E120°05.9'		
1	ARP coordinates and site at AD	Center of RWY16/34		
2	方向、距离	323° GEO, 42.5km from the May Fourth Square		
	Direction and distance from city			
3	标高/参考气温	9.2m/30.3°C(JUL)		
3	Elevation / Reference temperature	7.211500.5 C(102)		
4	机场标高位置/大地水准面波幅	1199m inward THR17/-		
4	AD ELEV PSN / geoid undulation	1199iii iliwatu 111K1//-		
5	磁差/年变率	7°17′W(2019)/-4′07″		
3	MAG VAR/ Annual change	7 17 W(2013)1-407		
		Qingdao International Airport Group CO. LTD.		
		Jiaodong Town, Jiaozhou City, Qingdao City, Shandong Province Post		
	机场管理部门、地址、电话、传真、AFS、	code:266300		
6	电子邮箱、网址	TEL:86-532-67897030		
	AD administration, address,	FAX:86-532-67896789		
	telephone,telefax, AFS, E - mail, website	AFS:ZSQDYDYX		
		Email:tao@qdairport.com		
		Website:www.qdairport.com		
7	允许飞行种类	IED AVED		
7	Types of traffic permitted(IFR / VFR)	IFR/VFR		
0	机场性质/飞行区指标	CIVIII (AF DWW) ( () A AF DWW) 7 () C		
8	Military or civil airport &Reference code	CIVIL/4F: RWY16/34, 4E: RWY17/35		
9	备注	Nil		
2	Remarks	IVII		

# ZSQD 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 Health and sanitation	H24
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	H24
12	备注 Remarks	Nil

# ZSQD 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 cargo loader, bulk cargo loader, luggage towing vehicle, bulk cargo trailer, bulk luggage trailer, container trailer, unit load device (ULD) trailer, overlength and overweight container trailer (20ft in length), forklift
2	燃油/滑油牌号 Fuel/oil types	Nr.3 jet fuel, Jet A-1/-
3	加油设施/能力 Fuelling facilities/capacity	Hydrant dispenser: 42 L/s; Refueling truck(4500L): 37L/s; Apron refueling well: 400L/s
4	除冰设施 De-icing facilities	De-icing apron(Stands Nr.523, 523A/523B, 524, 601-604, 602A/602B, 801-804, 801A/801B, 826-829, 827A/827B), 1 de-icing liquid filling station, de-icers, de-icing fluid(Qingdao Airport: SAE-I, SAE-II; Shangdong Airlines: CLEANSURFACE-I#1100kg, CLEANWING-II#1000kg; China Eastern Airlines:

		CLEANWING-I/CLEANWING-II)	
5	过站航空器机库 Hangar space for visiting aircraft	Shandong Airlines Hangar available for five narrow body aircrafts (eg: B737, A320), or two wide body aircrafts(eg: B787); China Eastern Airlines Hangar available for four A320, or one A330 and one A320.	
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Periodic detection available for various types of aircraft on request.  Engine and other aircraft component changement available for part of aircraft.	
7	备注 Remarks	Tractor, power truck, air supply truck, air conditioning truck, ground power unit, ground air conditioning unit, high lift platform truck.	

# ZSQD AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD and in the city
2	餐馆 Restaurants	At AD and in the city
3	交通工具 Transportation	Passenger's coaches, taxis, buses, metro
4	医疗设施 Medical facilities	First-aid equipment at AD, comprehensive hospital adjacent to AD (Ambulances on duty)
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

# ZSQD 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 10
2	援救设备 Rescue equipment	Fire fighting facilities: command car, rapid intervention vehicle, primary foam tender, heavy-duty water tank truck, heavy-duty foam tender, middle-duty foam tender, illumination truck, dry-chemical tender, medicament support vehicle, disassembly rescue truck.  Rescue equipments: cutting saw, chain saw, mobile generator, smoke exhauster, rescue air cushion, air respirator, combustible gas detector,

		non-contact infrared temperature measuring instrument, multi gas detector, descent control device, mechanical hydraulic clamp, manual hydraulic clamp, interphone.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747(exclusive) or A340(exclusive)
4	备注 Remarks	Nil

# ZSQD 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, snow ploughs, de-icing fluid spreader, snow pusher(tractor equipped with snowboard)
2	扫雪顺序 Clearance priorities	RWY, TWY, apron clearing simultaneously
3	备注 Remarks	Nil

# ZSQD 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 90/R/B/W/T(Stands Nr. 101, 102, 121-125(121A/B inclusive), 131-141(132A/B, 133A/B, 136A/B, 139A/B inclusive), 148-152(152A/B inclusive), 171, 172, 431-433(432A/B inclusive), 501-503, 507-509, 517, 518, 523-532(523A/B inclusive), 601-605(602A/B inclusive), 704-709, 801-804(801A/B inclusive), 826-829(827A/B inclusive))  PCN 67/R/B/W/T(Stands Nr. 103-120, 126-130, 142-147, 153-170, 173-180, 401-412, 425-430, 434-439, 504-506, 510-516, 519-522, 701-703, 805-816)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	25m: A, A1-A8, B, B1 (east of B ) , B2, B3 (east of B) , B5, B6, B8, C7 (east of B) , J3, J5, K1, L1 (north of C2) , L2, L3 (north of J5) , M1 (north of N2) , R1-R6;  23m: B1 (west of B) , B3 (west of B) , B4, C, C1, C2, C3-C6 (east of C) , C7 (west of B) , D, D1-D6, E, E1-E6, F, F1, F2, F3-F6 (west of F) , F7, J1 (west of stand Nr.525, east of L4) , J2, J4, K2, L3 (south of J5) , L4 (north of F2) , M1 (south of N2) , M2 (north of K2) , M3, M4, P, Q, S1-S6;  18m: C3-C6(west of C), F3-F6(east of F), J1(east of stand Nr.525, west of L4) , L1 (south of C2) , L4 (south of F2) , T1-T12;

			10.5m: M2 (south of K2), N1, N2
		Surface:	CONC
		Strength:	PCN 90/R/B/W/T(A, A1-A8, B, B1-B6, B8, C, C1, C2, C3-C6 (east of C), C7, D, D1-D6, E, E1-E6, F, F1, F2, F3-F6 (west of F), F7, J1 (west of stand Nr.525, east of L4), J2-J5, K1, K2, L1 (north of C2), L2, L3, L4 (north of F2), M1, M2 (north of K2), M3, M4, P, Q, R1-R6, S1-S6)  PCN 67/R/B/W/T(C3-C6 (west of C), F3-F6 (east of F), J1 (east of stand Nr.525, west of L4), L1 (south of C2), L4 (south of F2), M2 (south of K2), N1, N2, T1-T12)
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	INS checkpoints at all stands	
5	备注 Remarks	Nil	

# ZSQD 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 TWYs and aprons. Aircraft stand identification sign boards or ground markings at apron. Visual Docking Guidance System for aircraft stands at Nr.102-121(121A/B inclusive), 123-172(132A/B, 133A/B, 136A/B, 139A/B, 152A/B inclusive), other aircraft stands available for marshaller guidance.		
	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	Pre-threshold, THR, RWY designation, aiming point, TDZ, center line, edge line	
		RWY lights	Center line, edge line, THR, THR wing bar, TDZ(RWY16,17), simple TDZ(RWY34,35), RWY end	
2		TWY markings	Center line, edge line, shoulder marking, Enhanced TWY center line marking, RWY holding positions, intermediate holding positions, closing marking, compulsive instruction marking, information sign, NO ENTRY marking	
		TWY lights	Center line, edge line, rapid exit taxiway indicator, intermediate holding position, RWY guard lights, stop bar, NO ENTRY bar	

3	停止排灯 Stop bars	Set at RWY holding positions of TWY A1-A3, A7, A8, D1-D6
4	备注 Remarks	RWY16/34: RWY guard lights pattern A at TWY A1-A3, A7, A8. NO ENTRY bars at TWY J3, R1-R6(east of A). Red lights for closed TWY A4-A6(east of A, each side of RWY), A1(east of RWY), A3(east of RWY), J3(each side of RWY).  RWY17/35: RWY guard lights pattern A at TWY D1-D6. NO ENTRY bar at TWY S1-S6(west of TWY D). Red lights for closed TWY K2(west of TWY D, each side of RWY), D3(west of RWY).  Exit lights at deicing apron.  RWY holding positions markings pattern B established at RWY16/17.

# ZSQD AD 2.10 机场障碍物 Aerodrome obstacles

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	
1	*Power TWR	001	3313	34.7			
2	TWR	013	5711	50.6			
3	TWR	041	1303	49.7			
4	*TWR	059	4457	57.4			
5	TWR	063	3561	51.2			
6	TWR	092	1761	49.5			
7	*TWR	098	3884	56.0			
8	TWR	116	4901	46.2			
9	TWR	123	1131	42.4			
10	*Power TWR	137	5448	56.0			
11	TWR	154	5142	46.8			
12	BLDG	159	3839	41.2	RWY16 Take-off path		
13	TWR	162	3899	49.1	RWY16 Take-off path		
14	*GP Antenna	165	1504	24.5	RWY34 ILS/DME approach		

bstacles with	in a circle with a radius	of 15km centered or	n ARP		1	
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 Remark
15	BLDG	173	4850	52.8	RWY16 Take-off path	
16	TWR	174	5680	54.7	RWY16 Take-off path	
17	TWR	176	5022	56.9	RWY34 GP INOP final approach	
18	*BLDG	178	4697	55.3		
19	*Light Pole	181	5404	51.0		
20	*Light Pole	183	5229	52.4		
21	TWR	185	6933	66.1	RWY17 Take-off path; RWY35 GP INOP, VOR/DME final approach	
22	TWR	199	4925	35.6	RWY17 Take-off path	
23	*Power TWR	211	7555	67.5		
24	*Lightning Rod	211	7760	61.8		
25	*Microwave TWR	211	7932	79.3		
26	*Power TWR	212	7424	67.4		
27	*Power TWR	213	7224	66.1		
28	*Power TWR	215	7015	68.8		
29	*Power TWR	217	6864	72.8		
30	*Power TWR	218	6715	73.4		
31	*TWR	218	7174	73.4		
32	*GP Antenna	219	3046	24.7		
33	*Power TWR	220	6571	62.8		
34	*Power TWR	223	6398	65.6		
35	*Power TWR	226	6214	69.2		
36	*Power TWR	229	6051	69.2		

Obstacles withi	in a circle with a radius	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 Remark
37	*Power TWR	231	5948	65.4		
38	*Power TWR	234	5863	60.4		
39	*Control TWR	237	1229	114.7	Circling CAT A/B/C/D	
40	TWR	237	2753	31.8	RWY35 ILS/DME approach	
41	*Power TWR	237	5760	60.9		
42	*Power TWR	241	5660	63.1		
43	TWR	247	4643	51.7		
44	*Power TWR	249	5559	62.7		
45	*Power TWR	251	5537	56.7		
46	*Power TWR	257	5443	58.4		
47	*Power TWR	261	5371	54.6		
48	*Power TWR	265	5310	56.9		
49	*Power TWR	269	5277	56.5		
50	*Power TWR	273	5261	57.0		
51	*Power TWR	277	5284	54.2		
52	*Power TWR	280	5329	53.7		
53	*GP Antenna	283	2449	25.3	RWY17 ILS/DME approach	
54	*Power TWR	284	5386	53.4		
55	*Power TWR	290	5535	56.8		
56	*Power TWR	293	5654	58.5		
57	*Power TWR	297	5692	57.3		
58	*Power TWR	297	5802	56.4		
59	*Power TWR	300	5966	59.3		

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		
60	*Power TWR	308	7237	80.7				
61	TWR	313	5114	50.4	RWY35 Take-off path			
62	*TWR	316	5435	61.6	RWY35 Take-off path			
63	TWR	327	6126	58.8	RWY17 GP INOP、 VOR/DME final approach			
64	TWR	349	6434	63.5	RWY16 GP INOP approach			
65	*GP Antenna	354	1495	24.9	RWY16 ILS/DME approach			
66	BLDG	355	3369	30.4				
67	*Power TWR	359	2952	28.4				
68	*Power TWR	359	3061	33.3				
69	*Power TWR	360	3143	35.3				

Others:

No significant obstacles in the take-off flight path area of RWY34.

Obstacles between two circles with the radius of 15km and 50km centered on ARP									
序号	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)	BRG	DIST(m)	Elevation(m)	航径区	Remark			
	Obstacle	(MAG)(degree)			Flight procedure / take -				
	type(*Lighted)				off flight path area				
					affected				
1	TWR	087	25276	245					
2	MT	097	42555	252					
3	MT	099	46296	311					
4	MT	107	43149	683					

Obstacles betw	een two circles with the	radius of 15km and	l 50km centered	l 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
5	MT	107	45296	400		
6	MT	109	43806	667		
7	MT	111	43152	535		
8	MT	112	43490	672		
9	MT	113	37852	427		
10	MT	113	42974	609		
11	MT	113	47193	759	I	
12	MT	113	49347	457		
13	MT	117	45212	593		
14	MT	120	45940	732		
15	MT	121	49851	902		
16	MT	121	51853	1133	MSA: 270°-330° Sector	
17	MT	122	37954	601		
18	MT	123	38016	500		
19	MT	124	44429	500		
20	MT	124	47131	633		
21	MT	126	45842	432		
22	MT	128	46173	382		
23	Power TWR	135	45239	408		
24	MT	136	45499	377		
25	BLDG	139	44067	180		
26	BLDG	141	44174	178		
27	MT	143	42919	368		
28	TWR	145	41039	221		
29	BLDG	153	41783	376	RWY34/35 initial	

Obstacles between	een two circles with the	radius of 15km and	l 50km centered	l 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
30	MT	182	36263	231	approach  RWY34/35 initial  approach	
31	MT	187	46632	439		
32	MT	188	35562	351	RWY35 Intermediate approach	
33	MT	188	44984	725	RWY34 initial approach; MSA: 330°-030° Sector	
34	MT	188	46149	557		
35	Other	189	35842	402		
36	MT	190	45501	393		
37	МТ	194	43497	413		
38	MT	197	44829	330		
39	Other	212	40777	298		
40	Power TWR	356	53142	411	MSA: 030°-270° Sector	
41	MT	359	49579	224		
Others:	_		•	•		

Nil

# ZSQD 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	Qingdao ATMB MET Observatory
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	Qingdao ATMB MET Observatory 24HR, 6HR

	Office responsible for TAF preparation,Periods of validity; Interval of issuance	
4	趋势预报发布间隔 Issuance interval of trend forecast	1h
5	所提供的讲解/咨询服务 Briefing/consultation provided	video briefing, telephone briefing, consultation
6	飞行文件及其使用语言 Flight documentation, Languages used	Chart, Table, International MET Codes, 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	METAR, TAF, SIGMET, AIRMET, significant weather charts, upper W/T charts, numerical forecast product, synoptic charts, satellite and radar material, AWOS real-time data, meteorological warning information(area and terminal warning, airport warning, low-level windshear warning)
8	提供信息的辅助设备 Supplementary equipment available for providing information	Meteorological service terminal, AWOS data display, Fax
9	提供气象情报的空中交通服务单位 ATS units provided with information	ACC, APP, TWR
10	观测类型与频率/自动观测设备 Type & frequency of observation/Automatic observation equipment	Hourly plus special observation/Yes
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: 110m E of RWY16/34 RCL, 325m inward THR16; B: 100m E of RWY16/34 RCL, 1800m inward THR34; C: 110m E of RWY16/34 RCL, 325m inward THR34; D: 110m W of RWY17/35 RCL, 325m inward THR17; E: 100m W of RWY17/35 RCL, 1800m inward THR35; F: 110m W of RWY17/35 RCL, 325m inward THR35. SFC wind sensors 16: 100m E of RWY16/34 RCL, 320m inward THR16; 16/34: 110m E of RWY16/34 RCL, 1800m inward THR34; 34: 100m E of RWY16/34 RCL, 320m inward THR34;

		17: 100m W of RWY17/35 RCL, 320m inward THR17;
		17/35: 110m W of RWY17/35 RCL, 1800m inward THR35;
		35: 100m W of RWY17/35 RCL, 320m inward THR35.
		Ceilometer
		16: On the RCL extension line, 915m outward THR16;
		34: On the RCL extension line, 915m outward THR34;
		17: On the RCL extension line, 915m outward THR17;
		35: On the RCL extension line, 915m outward THR35;
	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	Climatography AVBL
	其他信息	
15	Additional information	Nil
	Additional information	

# ZSQD 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 / SWY surface	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
16	162.36°GEO 170°MAG	3600×60	90/R/B/W/T CONC/-		THR8.3m TDZ8.7m
34	342.36°GEO 350°MAG	3600×60	90/R/B/W/T CONC/-		THR8.1m TDZ8.4m
17	162.36°GEO 170°MAG	3600×45	90/R/B/W/T CONC/-		THR8.9m TDZ9.1m
35	342.36°GEO 350°MAG	3600×45	90/R/B/W/T CONC/-		THR8.1m TDZ8.6m
跑道-停止道坡度 Slope of	停止道长宽 SWY	净空道长宽 CWY	升降带长宽 Strip	无障碍物区 OFZ	跑道端安全区长宽 RWY end safety area

RWY-SWY	dimensions(m)	dimensions(m)	dimensions(m)		dimensions(m)
7	8	9	10	11	12
See AOC	Nil	Nil	3720×300	Yes	240×150
See AOC	Nil	Nil	3720×300	Yes	240×150
See AOC	Nil	Nil	3720×300	Yes	240×150
See AOC	Nil	Nil	3720×300	Yes	240×150

#### Remark:

1. The effective gradient of RWY 16 is 0.2028‰, and the cross gradient is 1.3%.

The RWY shoulder is 7.5m, and the runway groove is  $6\text{mm} \times 6\text{mm} \times 32\text{mm}$ .

2. The effective gradient of RWY 17 is 0.2917‰, and the cross gradient is 1.3%.

The RWY shoulder is 7.5m, and the runway groove is  $6\text{mm} \times 6\text{mm} \times 32\text{mm}$ .

3. Distance between RCLs of RWY16/34 and RWY17/35 is 2184m; THR35 is 500m south of THR34; THR16 is 500m north of THR17.

## ZSQD 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
16	3600	3600	3600	3600	Nil
16	3525	3525	3525	3600	FM A2
16	3214	3214	3214	3600	FM A3
34	3600	3600	3600	3600	Nil
34	3330	3330	3330	3600	FM A7
17	3600	3600	3600	3600	Nil
17	3527	3527	3527	3600	FM D2
17	3200	3200	3200	3600	FM D3
35	3600	3600	3600	3600	Nil
35	3525	3525	3525	3600	FM D5
35	3325	3325	3325	3600	FM D4

ZSQD 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
16	PALS CAT III* 900m VRB LIH	GREEN Yes	PAPI LEFT 452m inward THR16 3° 21.2m	900m	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
34	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI LEFT 455m inward THR34 3° 21.2m	simple	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
17	PALS CAT III* 900m VRB LIH	GREEN Yes	PAPI LEFT 451.5m inward THR17 3° 21.2m	900m	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
35	PALS CAT I* 900m VRB LIH	GREEN Yes	PAPI LEFT 448.6m inward THR35 3° 21.2m	simple	3600m** spacing 15m	3600m*** spacing 60m	RED	Nil
Remark	KS:	1			ı	ı		

\*SFL

# ZSQD 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:  RWY16:115m E of RCL, 452.4m inward THR16, LGT;  RWY34:115m W of RCL, 465m inward THR34, LGT;  RWY17:107.5m E of RCL, 451.3m inward THR17, LGT;  RWY35:107.6m W of RCL, 448.6m inward THR35, LGT;
3	滑行道边灯和中线灯 TWY edge and center line lighting	Yellow and green TWY centerline lights are used between critical/ sensitive area boundary of ILS and RWY; Blue edgelines and green centerlines for all TWYs
4	备份电源/转换时间 Secondary power supply/switch-over time	Dual circuit electricity supply/1s  Diesel generator/<15s  UPS/<1s
5	备注 Remarks	Nil

# ZSQD 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
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<sup>\*\*</sup>up to 2700m WHITE VRB LIH, 2700-3300m RED/WHITE VRB LIH, 3300-3600m RED VRB LIH

<sup>\*\*\*</sup>up to 3000m WHITE VRB LIH, 3000-3600m YELLOW VRB LIH

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

# ZSQD AD 2.17 空中交通服务空域 ATS airspace

名称 Designation	名称 Designation 水平范围 Lateral limits		备注 Remarks
Tower control area	A circuit, 4 arcs with radius 13km centered on center of 4 RWY THRs, and and tangent lines between adjacent arcs.	900m(QNH) or below	
Fuel Dumping Area	N3600E12110 - N3600E12245 - N3510E12145 - N3510E12110	Above 4000m	
Altimeter setting region and TL/TA	A circle with a radius of 30NM centered on Jiaodong VOR/DME(JDG).	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)	

# ZSQD 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		127.2	H24	D-ATIS available

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	Qingdao Approach	APP01:119.4(124.6)	H24	
APP	Qingdao Approach	APP02:121.15(124.6)	0000-1400	
APP	Qingdao Approach	APP03:119.775(124.6)	0000-1400	
APP	Qingdao Approach	APP04:119.475(124.225)	by ATC	
APP	Qingdao Approach	APP05:120.25(124.225)	by ATC	
TWR	Qingdao Tower	118.7(124.3)	H24	TWR (E)
TWR	Qingdao Tower	118.275(124.3)	By ATC	TWR (W)
GND	Qingdao Ground	121.65(121.55)	H24	GND (E)
GND	Qingdao Ground	121.75(121.55)	By ATC	GND (W)
GND	Qingdao Delivery	121.95(121.55)	H24	DCL available
APN	Qingdao Apron	121.6	H24	APN (E)
APN	Qingdao Apron	121.875	By ATC	APN (W)
OP-CTL	Operational Control	132.0	H24	
OP-CTL	Operational Control	128.85	H24	
EMG		121.5	H24	

# ZSQD 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
Xuejiadao VOR/DME	XDX	110.4MHz CH41X	N35°58.7′ E120°17.4′	110m	
Shangma VOR/DME	JDE	116.25MHz CH109Y	N36°17.4' E120°15.2' 128°MAG/16400m FM ARP	52m	Coverage 200NM
Jiaodong VOR/DME	JDG	114.45MHz CH91Y	N36°22.7' E120°04.0'	13m	Coverage 200NM

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
			308°MAG/3200m FM ARP		
Jiaobei VOR/DME	JDW	116.85MHz CH115Y	N36°19.8' E119°58.6' 256°MAG/11600m FM ARP	49m	Coverage 200NM
IM 16		75MHz	350°MAG/345m FM THR16		
LOC 16 ILS CAT III	IDA	111.9MHz	170°MAG/315m FM RWY16 end		In operation CAT II
GP 16		331.1MHz	120m E of RCL, 305m inward THR16		Angle 3° RDH16.5m
DME 16	IDA	CH56X (111.9MHz)		10m	Co-located with GP
IM 17		75MHz	350°MAG/345m FM THR17		
LOC 17 ILS CAT III	IQD	110.15MHz	170°MAG/315m FM RWY 17 end		In operation CAT II
GP 17		334.25MHz	120m W of RCL, 305m inward THR17		Angle 3° RDH16.5m
DME 17	IQD	CH38Y (110.15MHz)		11m	Co-located with GP
LOC 34 ILS CAT I	IIN	108.55MHz	350°MAG/315m FM RWY 34 end		
GP 34		329.75MHz	120m E of RCL, 305m inward THR34		Angle 3° RDH16.5m
DME 34	IIN	CH22Y (108.55MHz)		11m	Co-located with GP
LOC 35 ILS CAT I	IQX	109.75MHz	350°MAG/315m FM RWY35 end		

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
GP 35		333.05MHz	120m W of RCL, 305m inward THR35		Angle 3° RDH16.5m
DME 35	IQX	CH34Y (109.75MHz)		12m	Co-located with GP

## ZSQD AD 2.20 本场飞行规定

### **ZSQD AD 2.20 Local traffic regulations**

## 1. 机场使用规定

- 1.1 本场禁止未安装二次雷达应答机的航空器起降, 在特殊情况下,经华东管理局或空管局批准,可允 许无二次雷达应答机的航空器起降。
- 1.2 本场可供 A380 及其同类以下机型使用, 其中 A380 仅可在 16/34 号跑道使用。
- 1.3 所有技术试飞、表演飞行须事先申请,并在得到空中交通管制部门批准后方可进行。

# 2. 跑道和滑行道的使用

#### 2.1 跑道运行规定

2.1.1 16/34 跑道与 17/35 跑道具备平行跑道同时仪表运行条件。目前暂实施隔离平行运行,通常运行为东起西落,即 16/34 号跑道用于起飞,17/35 号跑道

#### 1. Airport operations regulations

- 1.1 Aircrafts without SSR transponder are forbidden to take-off/land. Take-off or landing are allowed if authorized by relative authorities in special circumstances.
- 1.2 Maximum aircraft to be available: A380 and equivalent. Only RWY16/34 is available for A380.
- 1.3 Each and every technical test flight and exhibition flight shall be filed in advance and shall be made only after clearance has been obtained from ATC.

#### 2. Use of runways and taxiways

- 2.1 Rules for the use of runways
- 2.1.1 The conditions of simultaneous instrument operations on parallel runways have been met. But, at present, segregated parallel operation is temporarily

用于落地。

implemented, RWY16/34 are mainly used for departure, RWY17/35 are mainly used for arrival.

2.1.2 航空器跑道转弯限制

2.1.2 Limits for turnaround on RWY

禁止航空器在跑道上做 180°转弯。

180° turnaround on RWY is strictly forbidden for all aircrafts.

2.1.3 跑道方向使用规定

2.1.3 Rules for the use of runway directions

2.1.3.1 原则上选择逆风方向。

2.1.3.1 Take-off and landing in the direction against the wind generally.

2.1.3.2 满足下列条件之一时,须转换跑道方向:

2.1.3.2 If one of the following conditions is met, the runway direction shall be changed:

1) 当气象自动观测系统显示跑道顺风分量达到 3.5m/s,且有继续增大趋势时;

1) When the automatic meteorological observation system shows that the downwind component of the runway reaches 3.5m/s and has a trend of increasing continuously;

2) 湿跑道或者污染跑道条件下,当气象自动观测系统显示跑道为顺风,且有继续增大趋势时。

2) Under the condition of wet or contaminated RWY, when the automatic meteorological observation system shows that the runway is downwind and has a trend of increasing continuously.

2.1.3.3 在转换使用跑道方向过程中,使用跑道顺风 分量大于 3.5m/s 但小于 5m/s 时,空管塔台管制员通 知航空器驾驶员地面风向、风速后,当航空器驾驶 员根据机型性能或者运行手册判断不能执行顺风跑 道起飞或者着陆时,应立即告知塔台管制员。 2.1.3.3 During changing the operation direction of RWY, when TWR informs crews downwind component exceeds 3.5m/s, but less than 5m/s, if this is not acceptable due to aircraft performance or operation handbook, crews shall inform TWR immediately.

2.1.4 跑道起飞、着陆使用规定

2.1.4.1 起飞航空器占用跑道时间

起飞的航空器从接到塔台管制员进跑道指令至对正 跑道不应超过 60s。如机组认为无法在上述要求的时 间内完成, 须在到达跑道外等待点之前向塔台管制 员说明。

- 2.1.4.2 落地航空器占用跑道时间
- 1) 中型机(含) 以下机型从飞越跑道入口至完全脱 离跑道不应超过 50s;
- 2) 重型机(含)以上机型从飞越跑道入口至完全脱 离跑道不应超过 60s;
- 3) 如机组认为无法在上述要求的时间内完成, 须在 联系五边频率时 (最晚不迟于三转弯或建立航向道 之前) 通知进近管制员。
- 2.1.4.3 航空器驾驶员在收到起飞指令后,应尽快开 始滑跑并保持常守塔台频率, 不允许自动脱波。
- 2.1.4.4 航空器起飞后首次联系进近时, 机组应向进 近管制员通报起飞跑道号和所执行的离场程序。

- 2.1.4 Rules for the use of departure and landing runway
- 2.1.4.1 Runway occupancy time of departure aircraft

Departure aircraft shall finish RWY alignment within 60s after receiving TWR instructions of entering runway. If flight crews consider that they can not fulfill the process within the required time, they shall inform TWR before reaching the RWY holding point.

- 2.1.4.2 Runway occupancy time of landing aircraft
- 1) Medium aircraft or below shall fully vacate RWY within 50s after flying over THR;
- 2) Heavy aircraft or above shall fully vacate RWY within 60s after flying over THR;
- 3) If flight crews consider that they cannot fulfill the process within the required time, flight crew shall inform APP when contact final approach frequency (no later than base-turn or established on the localizer).
- 2.1.4.3 Aircraft shall take off immediately after receiving take-off clearance by ATC, and keep watch on TWR frequency for further instructions.
- 2.1.4.4 Departure aircraft shall report the take-off RWY designator and the SID upon initial contact with APP.
- 2.1.4.5 发出着陆许可后, 塔台管制员观察到着陆许 2.1.4.5 After issuing the landing clearance, if TWR

可发布条件有变化时, 应立即通知航空器复飞, 并 简要说明复飞原因:着陆航空器驾驶员认为有必要 时, 应立即复飞, 并通知塔台管制员。

2.1.4.6 航空器结束着陆滑跑后, 由 ATC 给出脱离跑 道指令、滑行指令以及下一个管制频率, 机长应尽 可能使用第一或第二快速脱离道脱离跑道, 需要使 用最后一条快速脱离道及远道口脱离跑道时, 航空 器驾驶员应在与塔台管制员建立联系时通报说明。

#### 2.1.5 跑道等待位置及使用规定

2.1.5.1 航空器在进入跑道前应在指定的跑道等待位 置处等待塔台管制员指令(跑道等待位置详见机场 图)。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, 但不能超过此标志。航空器 未获得塔台管制员许可, 机头越过跑道等待位置标 志时, 应立即向塔台管制员报告。

2.1.5.2 当 I 类运行时, 航空器应停止在"A 型等待位 置标志"处: 当 II 类运行时,航空器应停止在"B 型 operation, pattern B for CAT II operation. 等待位置标志"处。

#### 2.2.1 滑行道转弯限制

ATC observes any change in the release conditions of the landing clearance, TWR ATC shall notify the pilot to go around immediately and explain the reason briefly. Under such situation, pilot shall make a missed approach at any moment if it is considered to be necessary and notify the controller immediately.

2.1.4.6 After the aircraft finishes landing, TWR shall give the instructions of vacating RWY, taxiing and next frequency, crew shall fully vacate RWY via the first or second rapid exit TWY as far as possible. If need to vacate RWY via further TWY or the last rapid exit TWY, the crew shall inform TWR on the first contact.

#### 2.1.5 RWY holding positions and requirements

2.1.5.1 Aircrafts shall stop and wait for the instruction of TWR at the designated runway holding positions(refer to airport chart). The nose of aircraft shall get close to the runway holding position marking without exceeding it when aircraft is waiting at the RWY holding position. Aircraft shall report to TWR when the nose of aircraft exceeds holding position without clearance:

2.1.5.2 RWY holding position Pattern A for CAT I

#### 2.2.1 Limits for turnaround on TWY

禁止航空器在滑行道上做 180°转弯。

180° turnaround on TWY is strictly forbidden for all aircrafts.

#### 2.2.2 引导车和拖车服务

2.2.2 Follow-me vehicle and towing service

航空器可通过 APN (121.6MHz) 申请引导车服务; 通过 OP-CTL (132.0MHz) 申请牵引车服务。 Follow-me vehicle service is available via APN (121.6MHz), and towing service is available via OP-CTL(132.0MHz).

### 2.2.3 航空器滑行要求

2.2.3 Requirements for aircraft taxiing

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,应向地面管制报告脱离的跑道和所使用的滑行道等具体位置。

After vacating RWY, flight crew shall report the RWY vacated and the TWY in use on initial contact with GND, especially under condition of low visibility.

#### 2.2.4 滑行道使用限制

#### 2.2.4 Limits for the use of TWY

滑行道编号/TWY Nr.	翼展限制/ Wingspan limits(m)	
A, A1-A8, B, B1(east of B), B2, B3(east of B), B5, B6,	80	
B8, C7(east of B), J3, J5, K1, L1(north of C2), L2,		
L3(north of J5), M1(north of N2), R1-R6		
B1(west of B), B3(west of B), B4, C, C1, C2,		
C3-C6(east of C), C7(west of B), D, D1-D6, E, E1-E6,		
F, F1, F2, F3-F6(west of F), F7, J1(west of stand	(5	
Nr.525, east of L4), J2, J4, K2, L3(south of J5),	65	
L4(north of F2), M1(south of N2), M2(north of K2),		
M3, M4, P, Q, S1-S6		
C3-C6(west of C), F3-F6(east of F), J1(east of stand	36	

Nr.525, west of L4), L1(south of C2), L4(south of F2),	
T1-T12	
M2(south of K2), N1, N2	24

2.3 A380 航空器本场运行规则

2.3 Operational rules for A380

2.3.1 A380 运行区域

2.3.1 Operational areas for A380

- 2.3.1.1 A380 运行跑道: 16/34 跑道。
- 2.3.1.1 Runway for A380: RWY16/34.
- 2.3.1.2 A380 运行滑行道: A、A1-A8、B、B1(B以 东)、B2、B3(B 以东)、B5、B6、B8、C7(B 以东)、 以北)、R1-R6。
- 2.3.1.2 Taxiways for A380: A, A1-A8, B, B1(east of B), B2, B3(east of B), B5, B6, B8, C7(east of B), J3, J3、J5、K1、L1(C2 以北)、L2、L3(J5 以北)、M1(N2 J5, K1, L1(north of C2), L2, L3(north of J5), M1(north of N2), R1-R6.
- 2.3.1.3 A380 运行停机位: 133、136、432、605(试 车机位, 仅可沿滑行道 B1 (B 以西) 经 P 滑进入 605 机位, 滑入航空器时, P滑东侧服务车道停止使用)、 801 (801 机位作为 F 类机位滑入时, 其北侧服务车 道靠近机位半幅停止使用)。
- 2.3.1.3 Stands for A380: Stands Nr.133, 136, 432, 605(engine run-ups stand, A380 shall taxi into stand Nr.605 via TWY B1(west of B) and P only. The service lane in the east of TWY P shall be closed when A380 is taxiing into stand Nr.605), 801(when the aircraft (65m≤wingspan<80m) is taxiing into stand Nr.801, the south half of service lane in the north of stand Nr.801 shall be closed).
- 2.3.1.4 除上述区域外, 其他区域禁止 A380 航空器 运行。
- 2.3.1.4 Other areas is forbidden for A380, except for the above operational areas.

2.3.2 A380 运行规则

- 2.3.2 Operational rules for A380
- 2.3.2.1 A380 在满足运行条件的区域运行, 按管制员 2.3.2.1 A380 shall taxi by ATC instructions in

指令滑行, 无特殊要求。

2.3.2.2 A380 航空器进港由引导车引导滑行, 出港按管制员指令执行。

2.3.3 本场仅满足同时接收不超过 3 架 A380 停场的 需要, 1小时内接收不超过 1 架 A380。

2.4 仪表着陆系统敏感区保护程序

2.4.1 当启用仪表着陆系统Ⅱ类程序时, 航空器驾驶 员必须严格按塔台管制员指令在 B 型等待位置等 待。

2.4.2 当天气条件符合运行标准时,为加速飞行流量,将不启用仪表着陆系统敏感区保护程序,此时起飞航空器在跑道外 A 型等待位置等待,落地航空器进近方式改变为仪表着陆系统下滑台不工作即航向道进近方式或使用目视进近,但不表示设备故障。

2.5 机动区冲突多发地带位置见机场图, 途经这些区域的航空器需注意如下事项:

2.5.1 HS1: 位于 D 与 J4、D3 滑行道交叉区域。航空器使用 J4 向西滑行时容易经 D3 误入 17 号跑道。

operational area.

2.3.2.2 The arrival aircraft A380 shall taxi by follow-me vehicle, the departure one shall taxi by ATC instructions.

2.3.3 Aerodome can accomodate 3 sorties of A380 at most, and no more than 1 sorties an hour.

2.4 Protection Procedures for ILS Sensitive Area

2.4.1 When the protection procedures for ILS CAT II are implemented, the crew shall follow the TWR instructions and hold of the holding position pattern B.

2.4.2 In order to accelerate the traffic flows, the protection procedures needn't be implemented upon the weather condition meets the operational standard. Under this condition, the departure aircraft shall hold short of RWY at holding position Pattern A, and the landing aircraft shall adopt LOC approach (which does not mean GP failure) or visual approach.

2.5 Hot spot positions refer to Aerodrome Chart, and aircraft shall be aware of following instructions when taxi through these areas.

2.5.1 HS1: Intersection of TWY D and TWYs J4/D3. Aircraft taxiing west via TWY J4 shall pay attention to avoid taxiing into RWY17 via TWY D3 by mistake.

2.5.2 HS2: 位于 A 与 K1、A7 滑行道交叉区域。航空器使用 K1 向东滑行时容易经 A7 误入 34 号跑道。

2.5.2 HS2: Intersection of TWY A and TWYs K1/A7. Aircraft taxiing east via TWY K1 shall pay attention to avoid taxiing into RWY 34 from TWY A7 by mistake.

2.5.3 HS3: 位于 R1 和 R5 之间的 A 滑行道区域。16 号跑道使用 R1 脱离的航空器和使用 R3、R5、A7、A8 脱离的航空器在滑向移交点 C7/B 时是对头趋势,脱离跑道的航空器不要在此区域停留,否则容易与后续落地航空器产生冲突。

2.5.3 HS3: TWY A between TWY R1 and R5. Landing aircrafts vacating RWY16 by TWY R1 and the ones vacating RWY16 by R3, R5, A7, A8 are in opposite trend when taxiing towards the handover point C7/B. Vacating aircraft shall leave this area as quickly as possible, otherwise a conflict with later landing aircrafts may occur.

2.5.4 HS4: 位于 R2 和 R6 之间的 A 滑行道区域。34 号跑道使用 R2 脱离的航空器和使用 R4、R6、A1-A3 脱离的航空器在滑向移交点 C1/B 时是对头趋势,脱离跑道的航空器不要在此区域停留,否则容易与后续落地航空器产生冲突。

2.5.4 HS4: TWY A between TWY R2 and R6. Landing aircrafts between vacating RWY 34 by TWY R2 and the ones vacating RWY34 by R4, R6, A1- A3 are in opposite trend when taxing towards the handover point C1/B. Vacating aircraft shall leave this area as quickly as possible, otherwise a conflict with later landing aircrafts may occur.

2.5.5 HS5: 位于 J5 和 S4 之间的 D 滑行道区域。35 号跑道使用 S2、S4、S6 脱离的航空器和使用 D1、D2、D3 脱离的航空器在滑向移交点 F1/E 时是对头趋势,脱离跑道的航空器不要在此区域停留,否则容易与后续落地航空器产生冲突。

2.5.5 HS5: TWY D between TWY J5 and S4. Landing aircrafts vacating RWY 35 by TWY S2, S4, S6 and the ones vacating RWY35 by D1, D2, D3 are in opposite trend when taxing towards the handover point F1/E. Vacating aircraft shall leave this area as quickly as possible, otherwise a conflict with later landing aircrafts may occur.

#### 3. 机坪和机位的使用

## 3. Use of aprons and parking stands

#### 3.1 机坪管制

3.1.1 空管塔台责任区范围为:在本场有飞行活动期间,B(不含)以东的跑道、滑行道、联络道和E(不含)以西的跑道、滑行道、联络道部分。

3.1.2 机坪塔台责任区范围为:在本场有飞行活动期间,B(含)以西的滑行道、联络道、停机坪和E(含)以东的滑行道、联络道、停机坪部分。

3.1.3 机坪管制扇区分为东、西两个扇区:青岛 01 东机坪扇区、青岛 02 西机坪扇区,代号分别为东机坪 APRE、西机坪 APRW。青岛东机坪扇区与青岛西机坪扇区,移交点共7个,分别为 J1、J2、J3、J4、J5、K1、K2 与扇区分界线交接点。

3.1.4 航空器驾驶员应听清并重复机坪管制员的滑行指令,尤其是界限性指令,发现疑问及时证实。如在移交时联系不畅,应在交接点停止滑行,并向原先联系的扇区询问。滑行期间,航空器驾驶员应密切关注管制相关活动,及时依照机坪管制员的活动通报观察或将观察到的不明活动情况通报给机坪管制员。

#### 3.2 机坪使用及滑行限制

#### 3.1 Apron Control

3.1.1 Tower Control Area: the area of RWY16/34, RWY17/35, taxiways in the east of TWY B(exclusive), taxiways in the west of TWY E(exclusive) during airport operational period.

3.1.2 Apron Control Area: the area of taxiways and aprons in the west of TWY B(inclusive), taxiways and aprons which are located in the east of TWY E(inclusive) during airport operational period.

3.1.3 The Apron control area is divided into east and west sectors: Qingdao East Apron 01 sector, Qingdao West Apron 02 sector, whose codes are APRE and APRW. There are 7 hand-over points in east apron sector and west apron sector, which are the junctions of the sector boundaries and J1, J2, J3, J4, J5, K1 and K2.

3.1.4 The crew shall hear clearly and repeat the whole taxiing instructions issued by APN, especially boundary instructions and make them clear when there is a doubt. The crew shall stop taxiing at the handover point if the contact malfunction occurs, and ask to the last control sector. During taxiing, the crew shall pay close attention to the related activities, and report the unknown activities to APN.

#### 3.2 Use of aprons and taxiing limition

- 3.2.1 未经机坪管制同意,严禁航空器利用自身动力滑行。
- 3.2.2 航空器地面滑行时,若对人员、设备、设施可能构成威胁时,使用牵引车牵引。
- 3.2.3 进入停机坪的航空器均由引导车引导。
- 3.2.4 停靠102-121(含121A/B)、123-172(含132A/B、133A/B、136A/B、139A/B、152A/B) 停机位的航空器须由目视停靠引导系统引导滑进停机位, 其他机位航空器则由人工指挥滑进机位。当上述停机位目视停靠引导系统故障或停用时转为人工指挥滑进机位。
- 3.2.5 101-172(含 121A/B、132A/B、133A/B、136A/B、139A/B、152A/B)、431-439(含 432A/B)、525-532、701-709 机位停靠的航空器须由牵引车推出,605号机位作为试车机位使用时,飞机推入机位(头朝西),试车完毕后使用牵引车拉出机位。其他情况下使用605 机位时航空器自行滑入机位,推出机位;其他机位停靠的航空器自行滑出。

3.3 机位使用规定

- 3.2.1 Aircraft is strictly forbidden to taxi on its own power without APN permission.
- 3.2.2 If taxiing aircraft may possibly cause injury or constitute a hazard to personnel or equipment around, a tow tractor shall be used.
- 3.2.3 All aircrafts entering apron shall be guided by Follow-me vehicle.
- 3.2.4 Aircraft parking on stands Nr.102-121 (121A/B inclusive), 123-172 (132A/B, 133A/B, 136A/B, 139A/B, 152A/B inclusive) shall be guided by Visual Docking Guidance Systems(AGS) for entry, others shall be guided by marshalling assistance. When AGS fails, enter stands by marshalling assistance.
- 3.2.5 Aircrafts parking on stands Nr.101-172 (121A/B, 132A/B, 133A/B, 136A/B, 139A/B, 152A/B inclusive), 431-439 (432A/B inclusive), 525-532, 701-709 shall be push back by the tow tractors, when stand Nr.605 is used as a run-up stand, the aircraft shall be pushed into the stand (head to west), and be pulled out by the tow tractors after the run-ups done. In other cases, when using stand Nr.605, the aircraft will taxi in and be pushed back, but the aircrafts parking in other stands will taxi out by themselves.
- 3.3 Use of parking stands regulations

### 3.3.1 机位使用限制

### 3.3.1 Limits for aircraft parking on the following stands

停机位编号/Stands Nr.	翼展限制/Wing span limits(m)	机身长度限制/Fuselage limits(m)	
Nr.133, 136, 432, 605, 801	80	80	
Nr.523, 525-532, 602-604, 803,	(5	76	
804, 827-829	65		
Nr.101, 102, 121-125, 131, 132,			
134, 135, 137-141, 148-152, 171,	65	75.5	
172, 431, 433, 704-709			
Nr.103-120, 121A/B, 126-130,			
132A/B, 133A/B, 136A/B, 139A/B,		46.5	
142-147, 152A/B, 153-170,			
173-180, 401-412, 425-430,	36		
432A/B, 434-439, 501-507,			
510-516, 519-522, 523A/B, 524,			
601, 602A/B, 701-703, 801A/B,			
802, 826, 827A/B			
Nr.508, 509, 517, 518	36	40	
Nr.805-816	24	27.5	

### 3.3.2 机位同时使用限制(复合机位)

3.3.2 Limits for simultaneous operations on parking stand (combined stand)

121、132、133、136、139、152、432、523、602、801、827 为复合机位,具体使用方法如下:当"使用机位"开放时,对应的"受影响机位"必须关闭;当"受影响机位"任何一个机位开放时,对应"使用机位"必须关闭。

Stands Nr.121, 132, 133, 136, 139, 152, 432, 523, 602, 801, 827 are combined stands, the specific requirements are as follows: when the stand is in use, the corresponding affected stands must be closed. When any one of the affected stands is in use, the

corresponding stand in use must be closed.

(本 国 <del>                                    </del>	受影响机位/affected	(古 田 do /2 /_41 :	受影响机位/affected
使用机位/stand in use	stand	使用机位/stand in use	stand
Nr.121	Nr.121A, 121B	Nr.132	Nr.132A, 132B
Nr.133	Nr.133A, 133B	Nr.136	Nr.136A, 136B
Nr.139	Nr.139A, 139B	Nr.152	Nr.152A, 152B
Nr.432	Nr.432A, 432B	Nr.523	Nr.523A, 523B
Nr.602	Nr.602A, 602B	Nr.801	Nr.801A, 801B
Nr.827	Nr.827A, 827B		

## 3.4 机场地面设备代替 APU 管理规定

3.4 Ground equipment replace APU

3.4.1 为降低碳排放及噪音, 所有停靠具有地面电源 或地面空调设备机位的航空器必须关闭 APU, 使用 400Hz 地面电源及地面空调设备。以下特殊情况除 外:

3.4.1 All aircrafts parking on stands with ground power or ground air conditioning equipment shall turn off APU, and use ground power(400Hz) and ground air conditioning equipment. Except for the following circumstances:

- 1) 相应机位桥载设备故障, 不能提供服务;
- 1) Bridge equipment is unavailable;
- 2) 航空器因启动发动机需要开启 APU:
- 2) Aircraft needs APU to start up engine;
- 3) 航空器进行 APU 的维修检测活动;
- 3) APU is under maintenance;
- 4) 遇到影响航班安全、正常运行的特殊情形,例如 极端天气、专机保障、航班过站时间不足等有关情 况。
- 4) In case of exceptional circumstances influencing the operation safety, such as extreme weather, special plane support, insufficient flight transition time.
- 3.4.2 如航空器公司希望使用 APU, 须在航班落地青 3.4.2 If the aircraft requires to use APU, airlines shall

岛机场前至少 2 小时致电青岛国际机场集团有限公 司机务维修公司申请, 批准后方可使用 APU。

apply to the aircraft maintenance company of Qingdao International Airport Group Co. Ltd. at least 2 hours before landing for the pemission.

- 3.5 航空器试车规定
- 3.5.1 严禁未经机场 AOC、机坪管制员批准进行任何 类型的试车。
- 3.5.1 Any type of engine run-ups is strictly forbidden without the clearance of AOC and APN.

3.5 Regulations on Engine run-ups.

- 3.5.2 翼展限制>65m 的航空器需要推油门的试车 应在B、J3、J5、K1滑行道指定位置进行。
- 3.5.2 Engine run-ups of aircrafts with wing span> 65m which require to push thrust should be carried out at the designated location of TWY B, J3, J5, K1.
- 3.5.3 翼展限制<65m 的航空器需要推油门的试车应 在 605 号机位进行, 试车时发动机尾喷应对准导流 墙(机尾朝东)。
- 3.5.3 Engine run-ups of aircraft with wing span≤65m which require to push thrust should be carried out at the stand Nr.605. During the engine run-ups, the engine tail should be aligned with the diversion wall (tail facing east).
- 3.5.4 不推油门的慢车测试、冷转测试、以电机带动 发动机旋转的试车, 可在原机位进行。
- 3.5.4 Engine idle test, cool running test, motor drive engine rotation test can be carried out at the local stand.
- 3.5.5 试车时发现任何影响安全的问题, 应立即终止 3.5.5 Engine run-ups must be terminated immediately if 试车,并向AOC、机坪管制员通报。
  - therecomes out any safety problem, and the AOC and APN shall be informed.

### 4. 进、离场管制规定

#### 4. Air traffic control regulations

无

5. CAT II/III operations at AD

### 5. 机场的 II/III 类运行

Nil

5.1 实施标准 Ⅱ 类运行/使用 HUD 实施特殊批准的 Ⅲ 类运行

5.1 Standard CAT II operation and special CAT II operation based on HUD

胶东机场 16、17 跑道可实施标准 II 类运行。16、17、34、35 跑道可使用 HUD 实施特殊批准的 II 类运行。

Standard CAT II operation is available for RWY16,17. Special CAT II operation based on HUD is available for RWY16,17,34,35.

- 5.2 低能见度运行程序的准备、实施和结束
- 5.2 Preparation, implementation and termination of Low Visibility Operation Procedures
- 5.2.1 下列情形将进入低能见度运行程序准备阶段, 塔台管制宣布启动低能见度运行准备程序
- 5.2.1 Under the following circumstances, TWR will declare start-up preparation for Low Visibility Operation Procedures
- 1) 当 RVR 降至 800m, 并且预计能见度继续下降, 或云高为 90m, 并且预计继续下降;
- 1) When RVR is forecast to descend to 800m and forecast shows a decrease trend, or the ceiling is 90m and forecast shows a decrease trend.

2) 当 150m < RVR 测报值 < 600m。

- 2) When 150m≤RVR forecast < 600m.
- 5.2.2 当 300m≤RVR < 550m 时,或云高(或垂直能见度)降至 60m 且≥30m,经确认机场、空管等保障单位具备低能见度保障条件时,塔台管制宣布实施低能见度运行;
- 5.2.2 When 300m≤RVR < 550m or 30m≤ceiling(or vertical VIS)<60m, the airport and ATC confirmed to have operation capability of Low Visibility Operation, TWR will instruct the implementation of Low Visibility Operation Procedures.
- 5.2.3 当 RVR>550m 且云高>60m, 并呈上升趋势, 或机场、空管等保障单位不具备低能见度保障条件 时, 塔台管制宣布结束低能见度运行。
- 5.2.3 When RVR > 550m and ceiling > 60m and forecast shows a increasing trend, or when the airport and ATC confirmed to have no operation capability of Low Visibility Operation, TWR will instruct the termination of Low Visibility Operation Procedures.

图》。

5.3 航空器低能见度运行详见《低能见度滑行路线 5.3 Aircraft taxiing route under low visibility operation refer to Low Visibility Operation Taxiing Route Chart.

#### 6. 除冰规则

## 6.1 航空器除冰规则

6.1.1 本场航空器除冰采用机位除冰和集中除冰两 种模式。

#### 6.1.2 集中除冰程序

6.1.2.1 申请: 需除冰的航空器, 机组在航班登机前 通过 OP-CTL (132.0MHz) 向机场 AOC 提出申请。

6.1.2.2 除冰准备: 机组设置停留刹车后通知机坪管 制员已进入除冰机位,并将航空器设置为慢车除冰 状态。机务指挥员使用内话耳机与机组建立联系, 按照机组要求实施除冰工作。

6.1.2.3 完成除冰: 完成除冰作业后, 除冰指挥员使 用内话耳机通知机组,并告知相关除冰信息。

#### 7. 平行跑道同时仪表运行

无

#### 6. Rules for deicing

6.1 Aircraft deicing rules

6.1.1 There are two ways for aircraft deicing service: deicing at parking stands and deicing at designated location.

6.1.2 Procedures of deicing at designated location

6.1.2.1 Deicing demand: Aircraft deicing demand shall apply to AOC by OP-CTL(132.0MHz) in advance before boarding.

6.1.2.2 Preparation for de-icing: After setting parking brake on, the crew informs APN that the aircraft has entered the de-icing stand, and keeps aircraft engine idle. The maintenance personnel uses the interphone headset to contact with the crew and implement de-icing according to the requirements of the crew.

6.1.2.3 Complete de-icing: After completing de-icing, the maintenance personnel uses the interphone headset to inform the crew relevant de-icing information.

## 7. Simultaneous operations on parallel runways

Nil

8. 警告

Nil

8. Warning

无

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

## ZSQD AD 2.21 噪音限制规定及减噪程序

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

无

Nil

## ZSQD AD 2.22 飞行程序

## **ZSQD AD 2.22 Flight procedures**

#### 1. 总则

# 除经青岛进近或青岛塔台特殊许可外,在青岛进近 管制区和塔台管制区内的飞行,均须按照仪表飞行 规则进行。

#### 1. General

Flights within Qingdao Approach Control Area and Tower Control Area shall operate under IFR unless special clearance has been obtained from Qingdao Approach Control or Tower Control.

### 2. 起落航线

# 2. Traffic circuits

RWY17/35 起落航线在跑道西侧进行, RWY16/34 起 (QNH), A、B 类航空器高度 300m (QNH)。

Traffic circuits shall be made to the west of RWY17/35 落航线在跑道东侧进行; C、D 类航空器高度 450m or to the east of RWY16/34, at the altitude of 450m(QNH) for aircrafts CAT C/D, and 300m(QNH) for aircrafts CAT A/B.

### 3. 仪表飞行程序

### 3. IFR flight procedures

严格按照航图中公布的进、离场程序和进近程序飞行。当 ATC 指令高度与进离场程序中各类限制高度不一致时,以 ATC 部门的指令高度为准。

Strict adherence is required to the relevant arrival/departure/approach procedures published in the aeronautical charts. Follow ATC instructions when the instructions have a conflict with the height limits in the charts.

#### 4. 雷达程序和/或 ADS-B 程序

4.1 在青岛进近管制区管制范围内, 航空器间雷达管制最小水平间隔标准为 6km。

## 5. 无线电通信失效程序

#### 5.1 航空器单向通信失效

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

5.1.2 航空器如果只具备信号发送能力,航空器驾驶员应当立即将飞行意图告知管制员,并及时报告位置和高度信息,管制员根据航空器驾驶员报告的意图迅速调配其他的飞机避让。如有可能,管制员将通知航空器运营人使用其内部通信方式(如卫星电话)与该航空器联系。

#### 5.2 航空器双向通信失效

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

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

#### 5. Radio communication failure procedures

5.1 Aircraft communication partly failure

5.1.1 If the radio receiver is available, the radio transmitter is not available, continue flying in accordance with ATC instructions. At the same time, ATC shall send information to the relevant control unit about communication failure.

5.1.2 If the radio transmitter available, the radio receiver is not available, the aircraft shall inform the flight intention to ATC immediately and report position and altitude in time, then ATC command other aircrafts to avoid the conflicts. If possible, ATC will inform aircraft operator to contact with aircraft by internal communication(eg: satellite telephone).

### 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 fails, If possible, ATC will inform aircraft operator to contact with aircraft by internal communication(eg: satellite telephone).

### 5.2.1 航空器进场

5.2.1.1 如果通信失效发生在起始进近定位点之前, 并已接收到空中交通管制许可的进港航线时, 应按 照许可的进港航线和仪表进近图进近着陆。

5.2.1.2 如果已经过起始进近定位点且未获得落地许 可,则应当按照仪表进近图进近至决断高度(或保 持最低下降高度至复飞点):

- 1) 若使用 35 号跑道落地, 按照复飞程序飞向 JDW 台(或 JD800), 过 JDW 台(或 JD800)高度 900m, 过 台后加入等待程序上升至 1200m, 然后按仪表进近 图进近着陆:
- 2) 若使用 34 号跑道落地, 按照复飞程序飞向 JDE 台(或 JD900), 过 JDE 台(或 JD900)高度 900m, 过台 后按仪表进近图进近着陆;
- 3) 若使用 17 号跑道落地,按照复飞程序飞向 JDW

#### 5.2.1 Arrival

5.2.1.1 If communication failure happened before IAF, and the aircraft has received the ATC permission of STAR, pilot shall follow the permitted STAR and IAC to approach and land.

5.2.1.2 If the aircraft has passed IAF but has not received the permission of landing, it shall fly to DA(or remain MDA to MAPt) in accordance with instrument approach chart:

- 1) If RWY35 in use, aircrafts shall follow the missed approach procedure, fly to JDW(or JD800), pass JDW(or JD800) at 900m, join the holding partern, climb to 1200m, then approach and land in accordance with instrument approach chart.
- 2) If RWY34 in use, aircrafts shall follow the missed approach procedure, fly to JDE(or JD900), pass JDE(or JD900) at 900m, then approach and land in accordance with instrument approach chart.
- 3) If RWY17 in use, aircrafts shall follow the missed 台(或 JD800), 过 JDW 台(或 JD800)高度 900m, 过 approach procedure, fly to JDW(or JD800), pass

台后加入等待程序上升至 1500m, 然后按仪表进近图进近着陆;

4) 若使用 16 号跑道落地,按照复飞程序飞向 JD305 (具有 RNAV 能力的航班)或 R350°/D23.5JDE(不 具有 RNAV 能力的航班),过 JD305 或 R350°/D23.5JDE高度 900m,过点后按仪表进近图进 近着陆。

5.2.1.3 如果航空器正在接受雷达引导或未接收到空中交通管制许可的进港航路时:按照最后接收到管制指令高度(如果指令高度低于 1800m 则立即上升至 1800m,如果指令高度高于 1800m 则保持指令高度):

- 1) 使用 35 号跑道落地, 飞向 JDW 台(或 JD800), 加入等待程序, 下降至 1200m, 按照仪表进近图进近着陆:
- 2) 使用 34 号跑道落地,飞向 JDE 台(或 JD900),加入等待程序,下降至 900m,按照仪表进近图进近着陆;
- 3) 使用 17 号跑道落地,飞向 JDW 台(或 JD800),加入等待程序,下降至 1500m,按照仪表进近图进

JDW(or JD800) at 900m, join the holding partern, climb to 1500m, then approach and land in accordance with instrument approach chart.

4) If RWY16 in use, aircrafts shall follow the missed approach procedure to fly to JD305(aircraft with RNAV capability) or R350°/D23.5JDE(aircraft without RNAV capability), pass JD305 or R350°/D23.5JDE at 900m, then approach and land in accordance with instrument approach chart.

5.2.1.3 If the aircraft is under radar vector or has not received the STAR from ATC, it shall fly in accordance with the last designated altitude(if the designated altitude is lower than 1800m, climb to 1800m immediately; if the designated altitude is higher than 1800m, maintain it):

- 1) If RWY35 in use, aircrafts shall fly to JDW(or JD800), join the holding partern, descend to 1200m, then approach and land in accordance with instrument approach chart.
- 2) If RWY34 in use, aircrafts shall fly to JDE(or JD900), join the holding partern, descend to 900m, then approach and land in accordance with instrument approach chart.
- 3) If RWY17 in use, aircrafts shall fly to JDW(or JD800), join the holding partern, descend to 1500m,

近着陆;

4) 使用 16 号跑道落地,飞向 JDE 台(或 JD900),加入等待程序,下降至 900m,按照仪表进近图进近着陆。

### 5.2.2 航空器离场

航空器应按照最后接收到的管制指令(程序)继续 离场;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,并根据当时的运行 方向参照进场航空器通信失效程序选择进近着陆方 法,如不能从其他渠道如 ATIS、卫星电话等获得落 地跑道信息,原则上优先选择起飞跑道实施着陆。 如超重可以加入 XDX 台(或 JD700)等待程序耗油或 高度 1800m(含)以上直飞 UGOMO 进入放油区放 油,管制员将迅速组织其它航空器进行避让。

### 5.3 本场通信失效

本场无线电收发功能失效, 航空器无法与管制单位 建立有效的通信联系时, 航空器应联系上一管制单 位, 并按照管制单位的管制指令继续飞行。 then approach and land in accordance with instrument approach chart.

4) If RWY16 in use, aircrafts shall fly to JDE(or JD900), join the holding partern, descend to 900m, then approach and land in accordance with instrument approach chart.

#### 5.2.2 Departure

The aircraft shall continue to depart according to the last command(procedure) by ATC. If it cannot continue to depart, the flight crew can decide to return and select a appropriate method to land according to the operation direction and the arrival aircraft communication failure procedures. If the landing runway information can not be obtained through other ways such as ATIS, satellite phone, the flight crew shall give preference to land in the runway which is used for departure in principle. If the aircraft is overweight, the flight crew can decide to join the XDX(or JD700) holding partern to consume fuel or fly to UGOMO directly at the altitude of 1800m or above to dump fuel in the fuel dumping area. ATC shall command other aircraft to avoid the conflicts.

### 5.3 Local control unit communication failure

If local control unit communication fails, when unable to establish effective contact with the control unit, the aircraft should contact the last control unit, and

continue flying in accordance with its instructions.

### 5.4 无线电通信恢复

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

管制单位。

无

## 5.4 Regaining radio communication

6. Procedures for VFR flights

Once the aircraft experiencing communication failure landed, or regained contact, the control unit shall resume normal operation and inform the concerned units immediately.

# 6. 目视飞行程序

Nil

7. 目视飞行航线

7. VFR route

无

Nil

### 8. 目视参考点

8. Visual reference point

9. Other regulations

无

无

Nil

9. 其它规定

Nil

# 10. 区域导航飞行程序相关数据

# 10. Data for RNAV flight procedures

### 1. Waypoint list

JD104	N363739.9 E1195812.9	JD612	N363331.7 E1201527.3
JD105	N364305.4 E1195603.8	JD613	N363512.6 E1202203.8
JD110	N365032.3 E1195306.0	JD614	N365054 E1195430
JD113	N364216.7 E1192100.0	JD700	N355838 E1201728

	1	
N360356.1 E1201129.0	JD800	N361953.1 E1195840.1
N360224.2 E1200532.4	JD900	N361719.1 E1201515.4
N363801.4 E1195936.7	YO	N3626.3 E11941.3
N363946.6 E1200626.4	DYN	N3731.7 E11847.2
N365238.1 E1200121.1	НСН	N3739.3 E12032.7
N360417.5 E1201252.2	WFG	N3638.8 E11907.2
N360601.9 E1201939.2	AVLOK	N3527.6 E12032.6
N361513.0 E1200704.1	DOVIV	N3806.7 E11932.0
N361209.7 E1195514.5	GUTVO	N3649.0 E11947.1
N362242.1 E1195104.2	IDVEL	N3522.9 E12034.9
N363727.7 E1194511.7	IPMIN	N3557.6 E12029.5
N361602.2 E1201015.6	LAROP	N3543.9 E12036.9
N361850.1 E1202111.6	LATUX	N3529.0 E12047.0
N362548.1 E1201828.6	LUPSA	N3651.4 E12028.3
N365408.8 E1200720.1	NOKUD	N3656.5 E12016.5
N362914.7 E1195845.3	TEKAM	N3735.2 E12045.3
N363842.9 E1195112.3	UPDAD	N3735.3 E11937.8
N363015.4 E1200241.0		
	N360224.2 E1200532.4 N363801.4 E1195936.7 N363946.6 E1200626.4 N365238.1 E1200121.1 N360417.5 E1201252.2 N360601.9 E1201939.2 N361513.0 E1200704.1 N361209.7 E1195514.5 N362242.1 E1195104.2 N363727.7 E1194511.7 N361602.2 E1201015.6 N361850.1 E1202111.6 N362548.1 E1201828.6 N365408.8 E1200720.1 N362914.7 E1195845.3 N363842.9 E1195112.3	N360224.2 E1200532.4 JD900  N363801.4 E1195936.7 YO  N363946.6 E1200626.4 DYN  N365238.1 E1200121.1 HCH  N360417.5 E1201252.2 WFG  N360601.9 E1201939.2 AVLOK  N361513.0 E1200704.1 DOVIV  N361209.7 E1195514.5 GUTVO  N362242.1 E1195104.2 IDVEL  N363727.7 E1194511.7 IPMIN  N361602.2 E1201015.6 LAROP  N361850.1 E1202111.6 LATUX  N362548.1 E1201828.6 LUPSA  N365408.8 E1200720.1 NOKUD  N362914.7 E1195845.3 TEKAM  N363842.9 E1195112.3 UPDAD

# 2. Database coding table

Path Terminator	Waypoint ID	Fly over	Magnetic Course	Turn Direction	Altitude (m)	IAS (kt)	VPA/ TCH	Navigation Specification
		RW	Y16 DEPAR	TURE TRAN	NSITION (JI	<b>D</b> 512)		
CA			170		150			RNAV1
CF	JD511		155					RNAV1
TF	JD512				↑1200	MAX 250		RNAV1

		RWY17 DEPARTUR	E TRANSITION (JE	<b>9</b> 512)	
CF	JD501	170			RNAV1
TF	JD512		↑1200	MAX 250	RNAV1
	,	RWY16/17	SID TEK-81D	,	,
IF	JD512		↑1200	MAX 250	RNAV1
TF	JD513				RNAV1
TF	LUPSA		↑3600 or by ATC		RNAV1
TF	TEKAM				RNAV1
		RWY16/17	SID LAT-81D	1	1
IF	JD512		↑1200	MAX 250	RNAV1
TF	IPMIN				RNAV1
TF	LAROP				RNAV1
TF	LATUX				RNAV1
		RWY16/17 SID	DYN-82D (by ATC)	<u>,                                      </u>	
IF	JD512		↑1200	MAX 250	RNAV1
TF	JD514		↑3900		RNAV1
TF	GUTVO				RNAV1
TF	UPDAD		↑6000		RNAV1
TF	DYN				RNAV1
	<u>.</u>	RWY16/17 SID	DOV-82D (by ATC)	·	•
IF	JD512		↑1200	MAX 250	RNAV1
TF	JD514		↑3900		RNAV1

TF	GUTVO					RNAV1	
TF	UPDAD			↑6000		RNAV1	
TF	DOVIV					RNAV1	
		RWY16 DEPA	RTURE TRA	ANSITION (JD	0502)		
CA		170		1500		RNAV1	
DE	ID502		D	↑3000 or	MAX	DNIANI	
DF	JD502		R	by ATC	250	RNAV1	
		RWY17 DEPA	RTURE TRA	ANSITION (JD	0502)		
CA		170		1500		RNAV1	
DE	ID502		D	↑3000 or	MAX	DMANA	
DF	JD502		R	by ATC	250	RNAV1	
		RWY	716/17 SID V	WFG-81D			
IE	10500			↑3000 or	MAX	DN 43/1	
IF	JD502	F JD502			by ATC	250	RNAV1
TF	JD503					RNAV1	
T.C.	WO			↑3900 or		DN14341	
TF	YO			by ATC		RNAV1	
TF	WFG					RNAV1	
		RWY16/1	7 SID DYN-	-81D (by ATC)		1	
II.	ID 500			↑3000 or	MAX	DMANA	
IF	JD502			by ATC	250	RNAV1	
TF	JD504					RNAV1	
TF	GUTVO					RNAV1	
TF	UPDAD			↑6000		RNAV1	
TF	DYN					RNAV1	
	ı	RWY16/1	7 SID DOV	-81D (by ATC)	<u> </u>	ı	
	ID 500			↑3000 or	MAX	D31.177	
IF	JD502			by ATC	250	RNAV1	

TF	JD504						RNAV1
TF	GUTVO						RNAV1
TF	UPDAD				↑6000		RNAV1
TF	DOVIV						RNAV1
		RW	Y34 DEPAR	TURE TRA	NSITION (JI	D612)	
CF	JD611		350				RNAV1
TF	JD612				↑1200	MAX	RNAV1
						250	
		RW	Y35 DEPAR	TURE TRAI	NSITION (JI	D612)	
CF	JD601		335				RNAV1
TF	JD612				↑1200	MAX	RNAV1
11	30012				1200	250	KIVAV I
			RWY	34/35 SID TI	EK-91D		
IF	JD612				↑1200	MAX	RNAV1
	35012				11200	250	IGVIVI
TF	JD613						RNAV1
TF	LUPSA				↑3600 or		RNAV1
11	LOISA				by ATC		KIVAVI
TF	TEKAM						RNAV1
			RWY	34/35 SID L	AT-91D		
IF	JD612				↑1200	MAX	RNAV1
11	JD012				1200	250	KNAVI
TF	IPMIN				↑3000		RNAV1
TF	LAROP						RNAV1
TF	LATUX						RNAV1
		RWY	734 DEPAR	ΓURE TRAN	SITION (GU	JTVO)	
CF	JD614		350				RNAV1
TF	GUTVO				↑3000 or		RNAV1
		<u></u>					

			by ATC	
		RWY35 DEPARTUR	E TRANSITION (GUTVO)	1
CF	JD602	335	↑1500	RNAV1
The state of the s	CLUTTURO		↑3000 or	DATA
TF	GUTVO		by ATC	RNAV1
		RWY34/35	S SID WFG-91D	
IF	GUTVO		↑3000 or	RNAV1
II	dorvo		by ATC	RIVAVI
TF	JD113		↑3900 or	RNAV1
11	3D113		by ATC	KIVIVI
TF	WFG			RNAV1
		RWY34/35 SID	DYN-91D (by ATC)	
IF	GUTVO		↑3000 or	RNAV1
II .	GCTVO		by ATC	KIVIVI
TF	UPDAD		↑6000	RNAV1
TF	DYN			RNAV1
		RWY34/35 SID	DOV-91D (by ATC)	
IF	GUTVO		↑3000 or	RNAV1
11	GCTVO		by ATC	KIVIVI
TF	UPDAD		↑6000	RNAV1
TF	DOVIV			RNAV1
		RWY16 S	TAR HCH-82A	
IF	НСН			RNAV1
TF	NOKUD		↑3600 or   MAX	RNAV1
11	NOROD		by ATC 230	KIVIVI
TF	JD306			RNAV1
TF	JD305		@900 MAX	RNAV1
			210	

		RWY17 ST	ΓAR HCH-81A		
IF	НСН				RNAV1
TF	NOKUD		†3600 or by ATC	MAX 230	RNAV1
TF	JD110		†2400 or by ATC	MAX 210	RNAV1
		RWY16/17	STAR LAT-81A	I	L
IF	LATUX				RNAV1
TF	AVLOK				RNAV1
TF	JD700				RNAV1
TF	JD900				RNAV1
TE	ID205		@900 or	MAX	DNIAVI
TF	JD305		↑1200	210	RNAV1
		RWY16/17	STAR IDV-81A	1	
IF	IDVEL				RNAV1
TF	JD700				RNAV1
TF	JD900				RNAV1
TE	TE 1000		@900 or	MAX	RNAV1
TF	JD305		↑1200	210	KNAVI
		RWY17 ST	TAR WFG-81A		
IF	WFG				RNAV1
TF	JD113		†3900 or		RNAV1
11	3D113		by ATC		KNAV I
TF	GUTVO		†3000 or		RNAV1
11	30110		by ATC		MINAVI
TF	JD110		†2400 or	MAX	RNAV1
11	32110		by ATC	210	101/11/1
		RWY17 STAR	DYN-81A (by ATC)		

IF	DYN						RNAV1
TF	UPDAD				↑6000		RNAV1
TF	GUTVO				†3000 or by ATC		RNAV1
					↑2400 or	MAX	
TF	JD110				by ATC	210	RNAV1
		RV	VY16/17 HOI	LDING (out	bound time: 1	min)	1
110.4	ID 700	*7	244		1000	MAX	DALAM
НМ	JD700	Y	344	R	1800	230	RNAV1
1111/4	CUTVO	V	090	T	las ATC	MAX	DNI AV/1
НМ	GUTVO	Y	080	L	by ATC	230	RNAV1
НМ	NOKUD	Y	204	R	hv. ATC	MAX	RNAV1
ПМ	NOKUD	I	204	K	by ATC	230	KNAVI
НМ	JD305	Y	350	R	1200	MAX	RNAV1
111V1	3D303	1	330	K	1200	230	MVAVI
			RWY3	4/35 STAR	НСН-91А		
IF	НСН						RNAV1
TF	NOKUD				↑3600 or		RNAV1
	NOROD				by ATC		TC VIVI
TF	JD306						RNAV1
TF	JD900				↑1800		RNAV1
TF	JD405				@900 or	MAX	RNAV1
11	3D 103				↑1200	210	10.714.1
	·		RWY3	4/35 STAR	LAT-91A		
IF	LATUX						RNAV1
TF	AVLOK						RNAV1
TF	JD700				↑1500 or	MAX	RNAV1
11	35700				by ATC	210	10.7717 1

		RWY34/35 STAR IDV-91A	Λ	
IF	IDVEL			RNAV1
TF	AVLOK			RNAV1
TE	ID700	↑1500	or MAX	DNI AV/1
TF	JD700	by AT	ГС 210	RNAV1
		RWY34 STAR WFG-92A		
IF	WFG			RNAV1
TF	YO	↑3900	) or	RNAV1
117	10	by A	ГС	IXIVAV I
TF	JD800	↑3000	or MAX	RNAV1
117	3D000	by A	ГС 230	RIVAVI
TF	JD900	↑180	00	RNAV1
TF	JD405	@90	MAX	RNAV1
117	3D403	(W)FL	210	RIVAVI
		RWY35 STAR WFG-91A		
IF	WFG			RNAV1
TF	yo Yo	↑3900	) or	RNAV1
	10	by A	ГС	10771
TF	JD800	↑3000	or MAX	RNAV1
	35000	by A	TC 230	10.714.1
TF	JD205	120	MAX	RNAV1
		1,22	210	10.012.1
		RWY35 STAR DYN-91A (by A	ATC)	
IF	DYN			RNAV1
TF	UPDAD	↑600	00	RNAV1
TF	GUTVO			RNAV1
TF	JD602	↑3600	) or	RNAV1
11	35002	by A7	ГС	IXIVIV I

						MAX		
TF	JD205				↑1200	210		RNAV1
		RW	/Y34/35 HO	LDING (outl	oound time: 1	min)	l l	
			150	_		MAX		
HM	JD800	Y	170	R	3000	230		RNAV1
II) (	IDOOO	37	170	T	2100	MAX		DNI 4371
НМ	JD900	Y	170	L	2100	230		RNAV1
IIM	ID700	Y	225	R	by ATC	MAX		RNAV1
НМ	JD700	Y	325	K	by AIC	230		KNAVI
НМ	GUTVO	Y	170	L	by ATC	MAX		RNAV1
HIVI	GUIVO	Ĭ	1/0	L	by ATC	230		KNAVI
НМ	NOKUD	Y	204	R	by ATC	MAX		RNAV1
THVI	NOROD	1	204	K	by ATC	230		KNAVI
		RWY	16 IAP APP	ROACH TR	ANSITION(J	JD305)		
IF	JD305				@900	MAX		RNAV1
"	310303				(1),700	210		KWW
TF	JD304				@900			RNAV1
		R	WY16 RNAV	+ILS MISS	ED APPROA	СН		
CA			170		150			RNAV1
CA			140		600			RNAV1
DF	JD305			L	900	MAX		RNAV1
Dr	JD303			L	900	210		KNAVI
		RWY	17 IAP APP	ROACH TR	ANSITION(.	JD110)		
IF	JD110				↑2400 or	MAX		RNAV1
11.	3D110				by ATC	210		MINAV I
TF	JD105							RNAV1
TF	JD104				↑1200			RNAV1
		RWY	17 IAP APP	ROACH TR	ANSITION(J	JD305)		

	T T		Γ				
IF	JD305				↑1200	MAX	RNAV1
117	JD303				1200	210	KNAVI
TF	JD104				↑1200		RNAV1
		R	WY17 RNAV	+ILS MISS	SED APPROA	СН	<u> </u>
CA			170		150		RNAV1
CA			200		600		RNAV1
D.F.		10000	D	11200	MAX	D.1.41/1	
DF	JD800			R	↑1200	210	RNAV1
	R	WY17 MIS	SED APPRO	ACH HOL	DING (outbou	nd time: 1min)	
TD 4	HM JD800	37	250	т	1 4770	MAX	DNIANA
HM	JD800	Y	350	L	by ATC	230	RNAV1
		RWY	34 IAP APPI	ROACH TH	RANSITION(J	D405)	•
IF	ID 405				G000	MAX	DNIANI
IF	JD405				@900	210	RNAV1
TF	JD404				@900		RNAV1
		RWY	/34 IAP APPI	ROACH TH	RANSITION(J	D700)	
IE	JD700				↑1500 or	MAX	DNI ANTI
IF	JD/00				by ATC	210	RNAV1
TF	JD404				@900		RNAV1
		R	WY34 RNAV	+ILS MISS	SED APPROA	СН	
CA			350		150		RNAV1
CA			020		600		RNAV1
DE	IDOOO			n	000	MAX	DATATA
DF	JD900			R	900	210	RNAV1
	R	WY34 MIS	SED APPRO	ACH HOL	DING (outbou	nd time: 1min)	
шм	IDOOO	V	170	т	hy ATC	MAX	DATAS71
HM	JD900	Y	170	L	by ATC	230	RNAV1
<del></del>		RWY	735 IAP APPI	ROACH TH	RANSITION(J	D405)	

IF	JD405				↑1200	MAX 210	RNAV1
TF	JD204				↑1200		RNAV1
		RWY	735 IAP APP	ROACH TR	ANSITION(J	D700)	,
IF	JD700				↑1500 or	MAX	RNAV1
					by ATC	210	KNAVI
TF	JD204				↑1200		RNAV1
		RWY	735 IAP APP	ROACH TR	ANSITION(J	D205)	
IF	JD205			<b>↑12</b> (	↑1200	MAX	RNAV1
IF					1200	210	KNAVI
TF	JD204				↑1200		RNAV1
		R'	WY35 RNAV	/+ILS MISS	ED APPROA	СН	
CA			350		150		RNAV1
CA			320		600		RNAV1
DF	JD800			L	↑1200	MAX	RNAV1
						210	KNAV I
	R	WY35 MIS	SED APPRO	ACH HOLI	OING (outbou	nd time: 1mi	n)
НМ	JD800	Y 170	R	by ATC	MAX	RNAV1	
			170	IX.	oy me	230	MVAVI

# ZSQD AD 2.23 其它资料

# **ZSQD AD 2.23 Other information**

少鸟群活动。

全年有鸟类活动。机场当局采取了驱赶措施,以减 Activities of bird flocks are found in the whole year, Aerodrome Authority resorts to dispersal methods to reduce bird activities.

Nr.	Type of bird	Time of activity	Flight altitude(m)
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1	Phasianus colchicus	The whole year	0-50
2	Streptopelia orientalis	The whole year	0-100
3	Tachybaptus ruficollis	The whole year	0-40
4	Anas platyrhynchos	Nov. to Mar.(next year)	0-200
5	Anas poecilorhyncha	The whole year	0-150
6	Larus saundersi	Nov. to Apr.(next year)	0-300
7	Ixobrychus sinensis	Summer	0-50
8	Nycticorax nycticorax	Summer	0-90
9	Egretta garzetta	The whole year	0-100
10	Fulica atra	The whole year	0-50
11	Gallinula chloropus	The whole year	0-50
12	Falco tinnunculus	The whole year	0-300
13	Alauda arvensis	Nov. to Mar.(next year)	0-200
14	14 Hirundo rustica		0-500
15 Pica pica		The whole year	0-100