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

ZSJN-济南/遥墙 JINAN/Yaoqiang

ZSJN 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 '51.5' E117 '12.9'	
	ARP coordinates and site at AD	Center of RWY	
2	方向、距离 Direction and distance from city	039 °GEO, 28.5km from city center	
3	标高/参考气温 Elevation / Reference temperature	23.1m/32.2 ℃(JUL)	
4	机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation	RWY01/-	
5	磁差/年变率 MAG VAR/ Annual change	6°19′W/-0 ′5′22"	
6	机场管理部门、地址、电话、传真、AFS、电子邮箱、网址 AD administration, address, telephone,telefax, AFS, E - mail, website	Jinan International Airport CO. LTD. Jinan Yaoqiang Airport, Jinan 250107, Shandong province, China Post code:250107 TEL:86-531-82086166/82086266 FAX:86-531-82086111 AFS:ZSJNYDYX Email:jinanaoc@163.com	
7	允许飞行种类 Types of traffic permitted(IFR / VFR)	IFR/VFR	
8	机场性质/飞行区指标 Military or civil airport &Reference code	CIVIL/4E	
9	备注 Remarks	Nil	

ZSJN 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	HS or O/R	
Customs and immigration	IIS OF O/K		
3	卫生健康部门	HS or O/R	

	Health and sanitation	
4	航行情报服务讲解室	HS or O/R
	AIS Briefing Office	
5	空中交通服务报告室	HS or O/R
3	ATS Reporting Office (ARO)	III of O/K
6	气象讲解室	HS or O/R
0	MET Briefing Office	HS OF O/R
7	空中交通服务	WG O.D
7	ATS	HS or O/R
0	加油	HG OD
8	Fuelling	HS or O/R
9	地勤服务	HS or O/R
9	Handling	HS 01 U/K
10	保安	HS or O/R
10	Security	H3 01 U/K
11	除冰	HS or O/R
11	De-icing	115 01 O/K
12	备注	Nei
12	Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Platform lift(7t, 15t, 30t), conveyor belt truck, tow-tractor
2	燃油/滑油牌号 Fuel/oil types	Nr.3 jet fuel
3	加油设施/能力 Fuelling facilities/capacity	Refueling truck(35000 / 47000 liters) , hydrant dispenser: 17 liters/ sec, apron refueling well
4	除冰设施 De-icing facilities	11 de-icers
5	过站航空器机库 Hangar space for visiting aircraft	Nil
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for aircraft on request. Other maintenance work by prior arrangement.

_	备注	
7	Remarks	Airport passenger buses and passenger boarding stairs

ZSJN AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD	
2	餐馆 Restaurants	At AD	
3	交通工具 Transportation	Passenger's coaches, taxis	
4	医疗设施 Medical facilities	First-aid and 2 ambulances at AD	
5	银行和邮局 Bank and Post Office	At AD(0100-0800 UTC)	
6	旅行社 Tourist Office	In the city TEL: 86-531-6011908	
7	备注 Remarks	Nil	

ZSJN 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 8
2	援救设备 Rescue equipment	Fire flighting facilities: ambulance, fire-fighting tender, primary fire-fighting engine, heavy-load foam tender, emergency-rescue rigid surface, emergency-rescue hanger
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTOW up to type E (included)
4	备注 Remarks	Emergency traction rope, emergency tow-tractor, towing movement surface, lifting equipment(90t,150t), hoisting gasbag(30t,40t), platform vehicle, etc.

ZSJN AD 2.7 可用季节- 扫雪 Seasonal availability-clearing

	可用季节及扫雪设备类型 1 Types of clearing equipment	All seasons
1		Snow blowers, snow ploughs, snow board, snow fluid truck, snow
Types of cicuming equipment	removal vehicles, small-sized snow ploughs	

2	扫雪顺序 Clearance priorities	RWY, TWY, apron
3	备注 Remarks	Nil

ZSJN 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 80/R/B/W/T: Apron Nr.2(stands Nr.29-31, 31L), Apron Nr.3(stands Nr.321-324, 322L/R, 323L/R, 324L/R); PCN 80/R/C/W/T: Apron Nr.2(stands Nr.1-13); PCN 79/R/C/W/T: Apron Nr.2(stands Nr.14-24, 201-203, 203L/R); PCN 75/R/B/W/T: Apron Nr.2(stands Nr.25-28, 31R, 32-36, 300); PCN 54/R/B/W/T: Apron Nr.3(stands Nr.301-309, 311-314, 311L/R, 312L/R, 313L/R, 314L/R)
		Width:	28.5m: A(north), A(south), C, D, E(east of main TWY A), F, G 23m: main TWY A, B, E(west of main TWY A), H, J, K, L, M, N, P, T1-T3 18m: T4- T6
		Surface:	CONC
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Strength:	PCN 82/R/B/W/T: B(south of TWY J) PCN 81/R/C/W/T: A(Main TWY north of TWY C) PCN 80/R/B/W/T: A(north), B(north of TWY J), M(earth of TWY B) PCN 80/R/C/W/T: A(Main TWY south of C), A(south), H PCN 79/R/B/W/T: J PCN 79/R/C/W/T: K, L, N, P, T1, T2 PCN 75/R/B/W/T: T5, T6 PCN 54/R/B/W/T: E, T3, T4 PCN 53/R/B/W/T: C, D, F PCN 53/R/C/W/T: G, M(west of TWY B)
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	
5	备注	Shoulder width	

Remarks	10.5m: B, H(east of TWY B), K-N(east of B), P(east of TWY B)
	7.5m: H(west of TWY B), M(west of TWY B)

ZSJN 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	positions. Guide lines at all TW Identification sign bo 311-314, 321-324, 31 311L/R, 312L/R, 313	Taxiing guidance signs at all intersections of TWY and RWY and at all holding positions. Guide lines at all TWYs and aprons. Identification sign boards for aircraft stands Nr.1-36, 201-203, 300-309, 311-314, 321-324, 31L/R; Identification signs for aircraft stands Nr.203L/R, 311L/R, 312L/R, 313L/R, 314L/R, 322L/R, 323L/R, 324L/R. Aircraft parking position identification markings for all aircraft stands.	
	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	THR, RWY designation, TDZ, center line, edge line, aiming point	
		RWY lights	Center line, edge line, THR, wing bar, RWY end	
2		TWY markings	Center line, edge line, taxi holding positions, taxiway edge retro-reflective marker, 'No-entry' taxiway(C,D,F,G)	
		TWY lights	Edge line, taxiway edge retro-reflective marker, center line(except TWY H, J, T4), RWY guard lights, intermediate holding position, 'No-entry' bar, rapid exit TWY indicator lights	
3	停止排灯	Nil		
3	Stop bars	INII		
4	备注	Blue apron edge line	lights, ID signs at all RWY and TWY, no center line lights	
7	Remarks	at TWY B(south of TWY K), H, J, K, T1, T3, T4		

ZSJN AD 2.10 机场障碍物 Aerodrome obstacles

Obstacles within	Obstacles within a circle with a radius of 15km centered on the center of RWY 01/19									
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	TWR	0	13277	105.3						
2	TV TWR	001	12176	126	RWY01 departure RWY19 ILS/DME, VOR/DME Intermediate					

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)	燃力ル BRG	距离 DIST(m)	 <i>两</i>极同及 Elevation(m)	影响的 c行程序及起 c 航径区	奋注 Remarl
Scriai IVI.	Obstacle	(MAG)(degree)	DIST(III)	Lic vation(in)	Flight procedure / take -	Keman
	type(*Lighted)	(WIT IG)(degree)			off flight path area	
					affected	
					approach	
3	Light Pole	006	2783	38.1	RWY01 Take-off path	
4	*Antenna	006	2785	35	RWY01 Take-off path	
5	*GP Antenna	011	1502	38.6		
					RWY19 GP INOP,	
6	Chimney	017	5666	67	VOR/DME Final	
					approach	
7	TWR	034	2679	67.3		
8	MT	177	13719	101.5		
9	Antenna	182	1499	39		
10	Power line	184	9114	65.7		
11	Antonno	186	3000	43	RWY19 Take-off path,	
11	Antenna	160	3000	45	departure	
12	Light Pole	186	3020	42.6	RWY19 Take-off path	
					RWY01 GP INOP,	
13	Power line	187	9219	66.2	VOR/DME Final	
					approach	
14	Power line	189	9304	60.2		
					RWY01 GP INOP,	
15	TWR	191	6017	70	VOR/DME Final	
					approach	
16	Power plant	191	14196	86		
17	*Chimney	209	6292	102.9	Circling CAT B	
18	TWR	220	5149	67.1		
19	*TWR	252	7574	228.9	Circling CAT C/D	
20	*Control TWR	261	783	95.6	Circling CAT A	
21	*BLDG	289	839	71.4		

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	
22	Power line	333	7071	110.1		
23	*Power line	338	6519	121.8		

Obstacles between	en two circles with the	radius of 15km and	1 50km centered	on the center of RV	WY 01/19	
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	TWR	001	51204	133		
2	TWR	029	26514	140		
3	TWR	031	25630	155		
4	TWR	033	24888	114		
5	MT	096	39452	592	sector	
6	MT	100	32812	393		
7	MT	103	35696	699		
8	TWR	105	24686	175		
9	BLDG	106	39272	827		
10	Chimney	130	30740	246		
11	MT	133	36143	374		
12	MT	135	39633	694		
13	MT	135	97865	1108	MVA	
14	MT	136	48574	762		
15	MT	139	49630	834		
16	MT	167	38124	796	RWY01 PBN Initial	

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	Remar
	Obstacle	(MAG)(degree)			Flight procedure / take -	
	type(*Lighted)				off flight path area	
					affected	
					approach	
17	BLDG	170	39624	853	MVA	
18	MT	177	20639	257	MVA	
19	MT	177	37962	746		
20	MT	177	44093	858		
21	MT	179	19550	254	I	
					RWY01 ILS/DME,	
22	MT	179	33897	757	VOR/DME Initial	
					approach	
23	MT	179	42558	857		
24	MT	181	26481	498		
25	MT	105	28613	507	RWY01 traditional, PBN	
25	MI	185	28013	527	Initial approach	
26	MT	185	49326	976	MVA	
27	TWR	195	22585	370	RWY0 Initial approach	
28	MT	195	67272	1545	MVA	
29	MT	196	17671	174		
30	MT	197	41763	567		
31	MT	198	44451	626		
32	Lightning Rod	199	15741	133		
33	MT	199	35873	755	RWY01 PBN Initial approach	
34	Contour line	201	30755	580	MVA	
35	BLDG	203	22901	482	RWY01 holding	
36	MT	230	19745	197		

ZSJN 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	Shandong ATMB MET Office of CAAC
1	Associated MET Office	Shandong ATMB MET Office of CAAC
2	气象服务时间;服务时间以外的责任气象 台 Hours of service, MET Office outside hours	H24
3	负责编发 TAF 的气象台;有效时段;发布间隔 Office responsible for TAF preparation,Periods of validity; Interval of issuance	Shandong ATMB MET Office of CAAC 9 HR, 24 HR; 3HR, 6HR
4	趋势预报发布间隔 Issuance interval of trend forecast	Trend 1 HR
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	FAX, internet
9	提供气象情报的空中交通服务单位 ATS units provided with information	TWR, APP, ACC, ARO
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: 100m E of RCL,309m inward THR01

		B: 100m E of RCL,1800m inward THR19		
		C: 100m E of RCL,336m inward THR19		
		SFC wind sensors		
		01: 110m E of RCL,319m inward THR		
		01/19: 110m E of RCL,1800m inward THR		
		19: 110m E of RCL,316m inward THR		
		Ceilometer		
		01: 110m E of RCL,309m inward THR		
		19: 110m E of RCL,306m inward THR		
	气象观测系统的工作时间			
13	Hours of operation for meteorological	H24		
	observation system			
1.4	气候资料	CII A I I I I I I I I I I I I I I I I I		
14	Climatological information	Climatological tables AVBL		
	其他信息			
15	Additional information	Nil		

ZSJN 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
01	360 GEO 006 MAG	3600×45	77/R/C/W/T CONC/-		THR23.1m
19	180 GEO 186 MAG	3600×45	77/R/C/W/T CONC/-		THR22.4m
跑道-停止道坡度 Slope of RWY-SWY	停止道长宽 SWY dimensions(m)	净空道长宽 CWY dimensions(m)	升降带长宽 Strip dimensions(m)	无障碍物区 OFZ	跑道端安全区长宽 RWY end safety area dimensions(m)
7	8	9	10	11	12
See AOC	Nil	Nil	3720×300	Nil	240×150

See AOC	Nil	Nil	3720×300	Nil	240×150			
Remark:								
RWY shoulder: 7.5m.								

ZSJN 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
01	3600	3600	3600	3600	Nil
19	3600	3600	3600	3600	Nil
Remarks:					

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

进近灯		目视进近坡					
类型、	入口灯	度指示系统(跑道中心线灯	跑道边灯长		たしそん
长度、	颜色、	跑道入口最	tà bh bh 拱	长度、间隔、	度、间隔、颜	跑道末端	停止道灯 长度、颜
强度	翼排灯	低眼高), 精	·	颜色、强度	色、强度	灯颜色	本及、颜 色 SWY
APCH	THR	密进近航道		RWY Center	RWY edge	RWY end	LGT
LGT	LGT	指示器		line LGT LEN,	LGT LEN,	LGT	LEN,
type	colour	VASIS	LEN	spacing,	spacing,	colour	colour
LEN	WBAR	(MEHT)		colour, INTST	colour, INTST		Colour
INTST		PAPI					
2	3	4	5	6	7	8	9
PALS CAT I* 900m LIH	GREEN Yes	PAPI LEFT 456m inward THR01 3°	Nil	3600m** spacing 30m	3600m*** spacing 60m	RED	Nil
PALS CAT I* 900m LIH	GREEN Yes	PAPI LEFT 446m inward THR19 3°	Nil	3600m** spacing 30m	3600m*** spacing 60m	RED	Nil
	类型、 长度、 强度 APCH LGT type LEN INTST 2 PALS CAT I* 900m LIH	类型、 人口灯	类型、 入口灯 度指示系统(长度、 颜色、 跑道入口最 强度 翼排灯 低眼高),精 APCH THR 密进近航道 LGT LGT 指示器 type colour VASIS LEN WBAR (MEHT) INTST PAPI 2 3 4 PALS GREEN 456m inward THR01 3° PAPI LEFT 456m inward THR01 3° PAPI LEFT 446m inward THR19	类型、 入口灯 度指示系统(长度、 颜色、 跑道入口最 强度 翼排灯 低眼高),精 按大度 APCH THR 密进近航道 TDZ LGT LGT 指示器 LEN LEN USASIS LEN LEN LEN PAPI A 5 PAPI PALS CAT I* GREEN 456m inward THR01 3° Nil PALS CAT I* GREEN PAPI 446m inward THR19 Nil	类型、	类型、	类型、 入口灯 度指示系统(跑道入口最 (放眼高), 精 对长度 跑道中心线灯 长度、间隔、 预色、强度 跑道边灯长 度、间隔、颜 预色、强度 应道末端 对颜色 APCH THR 密进近航道 上GT LGT LEN 指示器 LEN TDZ LGT LEN RWY Center line LGT LEN, spacing, colour, INTST LGT LEN, LGT LGT LEN, spacing, colour, INTST LGT LEN, colour, INTST LGT LEN, spacing, colour, INTST LGT LEN, colour, INTST LGT LEN, spacing, colour, INTST RED PALS CAT I* 900m LIH PAPI LEFT 456m inward THR01 3° Nil A600m** spacing 30m 3600m*** spacing 60m RED PALS CAT I* 900m LIH GREEN Yes PAPI LEFT 446m inward THR19 Nil 3600m*** spacing 30m 3600m*** spacing 60m RED

Remarks: * SFL

**0-2700m White VRB LIH, 2700-3300m Red/White VRB LIH, 3300m-3600m Red VRB LIH

ZSJN 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: 01:59.4m E of RCL, 590m inward THR 19:59m E of RCL, 590m inward THR
3	滑行道边灯和中线灯 TWY edge and center line lighting	TWY edge line lights available for all TWYs; TWY edge retroreflective markings; Intermediate holding position
4	备份电源/转换时间 Secondary power supply/switch-over time	Standby power supply available/ <15 sec
5	备注 Remarks	Nil

ZSJN 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,	Nil

	strength, marking	
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

ZSJN 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
Jinan tower control area	A circuit, 2 arcs with radius 15km centered at ARP and 2 parallel lines of 10km from RCL.	GND-600m	
Fuel Dumping Area	N3718.0E11710.0 - N3724.5E11730.0- N3702.5E11730.0 - N3700.0E11715.0- N3718.0E11710.0	Above 4000m	
Altimeter setting region and TL/TA	A circle with a radium of 55km centered on Jinan VOR/DME.	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)	

ZSJN 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		127.05	НО	
APP	Jinan Approach	AP01:119.05(121.4)	H24	
APP	Jinan Approach	AP02:119.225(121.4)	2300-1500(next day)	Contact ZSJNAP01 when ZSJNAP02 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	Ji'nan Tower	118.55(123.6)	H24	
GND	Ji'nan Ground	121.85	0000-1200	
APN	Ji'nan Apron	121.725(129.675)	H24	
Delivery	Ji'nan Delivery	121.65(123.6)	0000-1200	DCL available, repeat departure runway and initial climb altitude
EMG		121.5	H24	

ZSJN 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
Jinan VOR/DME	YQG	113.7MHz CH84X	N36°50.0′ E117°12.9′	31m	
LOC 01 ILS CAT I	IFF	108.9MHz	006 °MAG/ 280m FM end RWY 01		Beyond 13NM rightside of front, below 1200m U/S
GP 01		329.3MHz	120m E of RCL, 306m FM THR 01		Angle 3 ° RDH 15m
DME 01	IFF	CH26X (108.9MHz)	123m E of RCL, 306m FM THR 01	28m	Co-located with GP
LOC 19 ILS CAT I	IGO	110.5MHz	186 °MAG/ 280m FM end RWY 19		
GP 19		329.6MHz	120m E of RCL, 303m FM THR 19		Angle 3 ° RDH 15m
DME 19	IGO	CH42X (110.5MHz)	123m E of RCL, 303m FM THR 19	28m	Co-located with GP

ZSJN AD 2.20 本场飞行规定

ZSJN 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 Takeoff/landing of aircraft without SSR transponder are forbidden;
- 1.2 所有技术试飞需事先申请,并在得到空中交通管制部门批准后方可进行。
- 1.2 Each and every technical test flight shall be filed in advance and shall be made only after clearance has been obtained from ATC.
- 1.3 可使用最大机型: B747-400 及同类机型。
- 1.3 Maximum aircraft to be available: B747-400 and equivalent.
- 1.4 如需 DCL 服务, 机组应在预计起飞前 20min 内提出申请。
- 1.4 Pilot can request DCL 20 minutes in prior before ETD.
- 1.5 本场 A 滑行道(以西)各 A 滑行道外等待点连 线西侧的机场活动区实施机坪运行管制。
- 1.5 Apron operation control area: aerodrome movement area west of the line connect each holding point west of TWY A.
- 1.5.1 机坪管制负责该区域航空器推出、开车、滑行 和其他涉及航空器运行的指挥工作,具体管制移交 点及移交方式听从管制员指令执行。
- 1.5.1 Apron control is responsible for aircraft push back, engine on, taxi and other operations in the area. Details for control transfer position and control transfer way follow ATC instructions.
- 1.5.2 航空器获得塔台发布的放行许可后,联系济南机坪。
- 1.5.2 Aircraft shall contact with APN after obtaining delivery clearance.
- 1.5.2.1 航空器准备完毕, 经济南塔台同意后, 向机坪管制申请推出开车许可。
- 1.5.2.1 Departure aircraft shall contact apron control for push back and engine on clearance after getting delivery clearance.

1.5.2.2 离港航空器首次联系济南机坪管制时, 机组 1.5.2.2 Aircraft shall inform parking stand number to 应向济南机坪管制通报停机位编号。

controller at first contact with apron control.

1.5.2.3 航空器取得推出开车许可后方可推出开车, 济南机坪管制发布许可指令后, 机组应在 3min 之内 执行;超过3min仍未推出开车视为指令失效,机组 需要重新申请推出开车。

1.5.2.3 Aircraft shall push back and engine on after getting push back and engine on clearance, and conduct within 3 minutes. Otherwise, apply for the clearance again.

1.5.2.4 航空器推出开车后,向机坪管制申请滑行许 可。

1.5.2.4 After push back and engine on, aircraft shall contact apron control for taxi clearance.

1.5.3 进港航空器进入机坪管制区域前: 联系济南机 坪管制申请进一步滑行许可。

1.5.3 Landing aircraft shall contact apron control for further taxiing clearance before entering apron operation control area.

2. 跑道和滑行道的使用

2. Use of runways and taxiways

2.1 进港航空器一律实行引导车引导,见引导车后须 向塔台报告, 按塔台指令转频联系机坪。

- 2.1 Landing aircraft shall be guided by follow-me vehicle. Aircraft shall inform TWR when follow-me vehicle visible and contact APN following TWR instructions.
- 2.2 航空器的具体滑行路线以管制员指令为准。
- 2.2 Aircraft taxiing route shall follow ATC instructions.

2.3 滑行道的滑行限制/Taxiing limits:

)男 仁 -	航空器翼展限制/
滑行道/TWYs	Wing span limits for aircraft
T4-T6	<36m
E(west of T4), H(west of B), K-M(west of B), T1, T3	≤52m
E(east of T4), H(east of B), J, K-M(east of B), N, P, T2	≤65m

Note: The operation direction of T6 is from west to east

- 180 °转弯;
- 2.5 起飞航空器从等待位置到对正跑道时间应控制 在 60s 以内:落地航空器从接地到滑出跑道时间应控 制在 50s 以内。如航空器驾驶员不能满足跑道占用时 间要求的,应当及时通知塔台管制员;
- 2.6 更换跑道运行方向过程中, 当跑道顺风分量大于 3.5m/s, 但小于 5m/s 时, 管制员向航空器驾驶员通 报实时风向风速, 可以短时指挥航空器顺风起飞或 着陆, 航空器驾驶员如不能执行, 应及时报告管制 员。

- 2.4 无地面引导航空器禁止在滑行线、滑行道上做 2.4 180° turn around on TWY is forbidden without guidance in gound;
 - 2.5 Departure aircraft shall finish RWY alignment within 60s from holding position. Landing aircraft shall fully vacate RWY within 50s after touchdown. If flight crew cannot fullfill the process within the required time, pilot shall inform TWR ATC in time;
 - 2.6 During changing operation direction of RWY, when downwind speed is more than 3.5m/s but less than ATC could 5m/s, ATC shall inform flight crew. conduct aircraft for downwind take-off or landing for a short time. If aircraft unable to execute, pilot shall inform ATC in time.

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 机位使用限制/Limits for aircraft parking on the following stands:

停机位/Stands	机身长度限制/ Fuselage limits(m)	航空器翼展限制/ Wing span limits for aircraft(m)	滑入、滑出方式/Enter or exit
Nr.322-324	76.4	68.5	
Nr.29、31	76	65	
Nr.30	76	64	Taxi in/Push back
Nr.14	75.36	65	
Nr.7、8	73.9	65	

Nr.203	70.6	65	Taxi in/out		
Nr.23、32	56	48	Taxi in/Push back		
Nr.202	55	48	Taxi in/out		
Nr.309、311-314	55	48			
Nr.2、3、15	54.94	47.57	Taxi in/Push back		
Nr.25-28、31L/R、33-36、	15	36	Taxi in/Push back		
300-308	45				
Nr.201, 203L/R, 311L/R,					
312L/R、313L/R、314L/R、	15	36	Taxi in/out		
321、322L/R、323L/R、	45				
324L/R					
Nr.1、4-6、9-13	44.51	36			
Nr.16-22	44.5	36	Taxi in/Push back		
Nr.24	42.11	36			
Notes: Stands Nr.1-36, 31L/R are bridge stands, and Nr.7, 8, 14, 29-31 are double bridge stands					

3.2 不能同时使用的机位/Stands forbidden to use simultaneously:

使用机位/The stand in use	不能同时使用的机位/The stands forbidden to be used
14(wing span>52m)	11-13,15,16
23(wing span>36m)	21,22,24-26

3.3 未经管制员同意, 严禁航空器利用自身动力倒 3.3 Push-back of aircraft on its own power is strictly 滑。

- forbidden without ATC clearance.
- 3.4 发动机试车, 需经塔台许可, 并在指定的地点进 3.4 Engine run-ups are subject to Tower Control 行。禁止在客机坪和廊桥附近试大车。发动机试慢 clearance, and may only be carried out at a designated 车,需经机场 AOC 许可,在指定停机位进行,禁止 location. Fast engine run-ups near boarding bridges or

在1-36号停机位试车。

on apron are strictly forbidden. Engine idle are subject to AOC clearance, and may only be carried out at designated stands, it is forbidden to be carried out at stands Nr.1-36.

3.5 为降低碳排放及噪音,停靠航站楼停机位的航空器(除 A380 机型外)关闭 APU,接驳地面电源及空调系统。地面电源 400Hz 电源与飞机地面空调具体详见下表:

3.5 To reduce carbon emissions and noise, aircrafts (ecpect A380) parking at the terminal apron should close APU, and connect to the ground power and air conditioning system. The 400Hz ground power and ground air conditioning see the table below:

机位/Stands	400Hz 电源功率 /400Hz power supply(KVA)	400Hz 电源台数/ Number of 400Hz power	飞机外接空调功率/ Aircraft external air conditioning power(KW)	飞机外接空调台数/ Number of external air conditioners
Nr.1, 4-6, 9-13,16-22,24	90	1	equipment power 106 cool capacity 210	1
Nr.2, 3,15, 23	90	1	equipment power140 cool capacity320	1
Nr.7, 8, 14	90	2	equipment power106 cool capacity210	2
Nr.25-28,33-36	90	1	equipment power121 cool capacity169	1
Nr.29,30	90	2	equipment power192.2	2

			cool capacity248	
			equipment	
Nr.31	90	3	power192.2	2
			cool capacity248	
			equipment	
Nr.32	90	1	power192.2	1
			cool capacity248	

3.6 进港航空器和引导车应在滑行道上转入机位引 3.6 Landing aircraft and follow-me vehicle shall 入线之前观察确认无安全运行风险的情况下, 减速 慢行入位, 否则应在滑行通道上停止并报告。

observe and comfirm that no risk of safe operation before entering stand lead-in line at taxiway. Enter stands slowly, otherwise stop and report at taxiway.

3.7 324 号停机位为隔离机位。

3.7 Stand Nr.324 is isolated stand.

4. 进、离场管制规定

4. Air traffic control regulations

无 Nil

5. 机场的 II/III 类运行

5. CAT II/III operations at AD

5.1 使用 HUD 实施特殊批准的低能见度运行

5.1 LVP based on HUD SA CAT I/II

5.1.1 可使用 HUD 在本场 RWY01/19 实施特殊批准 的Ⅱ类精密进近和RVR150m低能见度起飞。

5.1.1 Low visibility takeoff with RVR 150m and CAT II operation based on HUD for RWY01/19.

5.1.2 低能见度运行的准备、实施和终止

5.1.2 Preparation, implement and closure of Low Visibility Operation

Procedures

5.1.2.1 准备阶段

- (1) 当跑道视程下降至 550m 且预计 30min 内下降 至 450m 以下,或者云高(或垂直能见度)下降至 60m 且预计 30min 内将下降至 45m 以下时, 由空管 塔台通知机场指挥中心启动 HUD 低能见度运行准 备。
- (2) 机场指挥中心通报各保障单位做好 HUD 低能 见度运行准备工作。
- (3) 各保障单位完成 HUD 低能见度运行准备工作 后报告机场指挥中心。
- (4) 机场指挥中心将 HUD 低能见度运行准备情况 报告空管塔台。

5.1.2.2 实施阶段

- (1) 当跑道视程预计低于 450m, 不低于 150m, 云 高(或垂直能见度)不低于 30m 时, 且经确认机场 具备保障条件后, 由空管塔台通知机场指挥中心启 动 HUD 低能见度运行。
- 见度运行。

5.1.2.1 Preparation

- (1) When RVR decrease to 550m and expected to decrease to 450m or below in 30min, or ceiling(or vertical visibility) decrease to 60m and expected to 45m or below in 30min, TWR notify the airport control operate HUD Low Visibility Operation center Procedures preparation.
- (2) The airport control center notify TWR and other related units prepare HUD Low Visibility Operation Procedures.
- (3) After complete the preparation of HUD Low Visibility Operation, relevant units report to the airport control center.
- (4) The airport control center report the preparation of HUD Low Visibility Operation to TWR.

5.1.2.2 Implement

- (1) When RVR expected below 450m and not below 150m, ceiling(or vertical visibility)exceed 30m, and confirm aerodrome have the capability of LVP, TWR notify airport control center operate HUD Low Visibility Procedures.
- (2) 机场指挥中心通知各保障单位启动 HUD 低能 (2) The airport control center notify other related units operate HUD Low Visibility Procedures.

5.1.2.3 终止阶段

- (1) 当 RVR 持续高于 550m 或低于 150m 或经检查确认机场不具备保障条件时,空管塔台通知机场指挥中心终止 HUD 低能见度运行。
- (2) 机场指挥中心通知各保障单位终止 HUD 低能见度运行。
- 5.2 航空器引导
- 5.2.1 使用 HUD 实施特殊批准 II 类运行时, 机组应 严格按照管制指令给出的线路跟随引导车滑行。
- 5.2.2 使用 HUD 实施低能见度起飞时, 机组应严格按照引导车的引导路线滑行, 经塔台许可后方可进入 A 滑行道。
- 5.3 其他
- 5.3.1 准备使用 HUD 实施低能见度运行的航空器机组应主动向管制员报告。
- 5.3.2 低能见度运行时,飞机滑行过程中如需中止,机组应立即报告空管塔台,按管制员同意的处置方式退出低能见度运行。

6. 除冰规则

无

5.1.2.3 Closure

- (1) When RVR exceed 550m or below 150m or the airport condition hasn't got qualified for LVP, tower control shall inform airport control center to terminate LVP.
- (2) The airport control center shall inform relative department to terminate LVP.
- 5.2 Aircraft guidance
- 5.2.1 When operating LVP based on HUD SA CAT I/II, aircrew must follow the follow-me vehicle.
- 5.2.2 Aircraft operating LVP to departure, aircrew shall acquire TWR clearance, before taxi in TWY A.

5.3 Other informations

- 5.3.1 Aircraft prepare to implement LVP shall report to ATC.
- 5.3.2 Aircraft should stop taxiing, and report to Tower control if teminate LVP, then follow ATC instructions.

6. Rules for deicing

Nil

7. 平行跑道同时仪表运行

7. Simultaneous operations on parallel runways

无

Nil

8. 警告

8. Warning

机场跑道西侧有平行滑行道, 不要将其误认为跑道。

Do not mistake the main TWY at west of RWY for RWY.

9. 直升机飞行限制, 直升机停靠区

9. Helicopter operation restrictions and helicopter parking / docking area

直升机离场方式须听从塔台管制员指挥, 机位的停 靠须听从机坪管制员指挥。

Departure helicopter shall follow ATC instructions, aircraft parking on stands shall follow APN instructions.

ZSJN AD 2.21 噪音限制规定及减噪程序

ZSJN AD 2.21 Noise restrictions and Noise abatement procedures

无

Nil

ZSJN AD 2.22 飞行程序

ZSJN AD 2.22 Flight procedures

1. 总则

1. General

除经塔台特殊许可外, 在塔台管制区内的飞行, 必 须按照仪表飞行规则进行。

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

2. 起落航线

2. Traffic circuits

起落航线在跑道两侧均可进行, A、B 类航空器高度 Traffic circuits shall be made to both sides of runway, 为 350m, C、D 类航空器高度为 500m。

at the altitude of 350m for aircraft CAT A/B, and 500m

for aircraft CAT C/D.

3. 仪表飞行程序

严格按照航图中公布的进、离场程序飞行。如果需

要, 航空器可在空中交通管制部门指定的航路、导

航台或定位点上空等待或做机动飞行。

3. IFR flight procedures

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

4. 雷达程序和/或 ADS-B 程序

4.1 济南进近管制区域内实施雷达管制。航空器最小水平间隔为 6km。

4. Radar procedures and/or ADS-B procedures

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

4.2 最低监视引导高度扇区

4.2 Surveillance Minimum Altitude Sectors

SECTOR 1	ALT limit: 600m or above							
N372912 E1173000-N372930 E1173057-N373417 E117	N372912 E1173000-N372930 E1173057-N373417 E1174630-N370412 E1174630-N365619 E1173208-N365330							
E1172700-N364407 E1172700-N364407 E1170417	-N365330 E1170414-N370934 E1163935-N372912							
E117	3000							
SECTOR 2	ALT limit: 900m or above							
N370934 E1163935-N365330 E1170414-N364407 E117	0417-N364407 E1172700-N365330 E1172700-N365619							
E1173208-N364205 E1173208-N364205 E1172700	-N363812 E1172700-N363814 E1171158-N363906							
E1170806-N363904 E116	3930-N370934 E1163935							
SECTOR 3	ALT limit: 1200m or above							
N363904 E1163930-N363906 E1170806-N363814 E117	1158-N363812 E1172700-N364205 E1172700-N364205							
E1173208-N365619 E1173208-N370412 E1174630	E1173208-N365619 E1173208-N370412 E1174630-N363400 E1174630-N363400 E1163932-N363904							
E116	3930							

SECTOR 4	ALT limit: 1500m or above					
N364000 E1152400-N370934 E1163935-N363904 E1163930-N363400 E1163932-N363400 E1174630-N370						
E1174630-N373417 E1174630-N374241 E1181300	-N363800 E1181300-N362433 E1174630-N362436					
E1165500-N360002 E1165500-N36	0002 E1152530-N364000 E1152400					
SECTOR 5	ALT limit: 2100m or above					
N362436 E1165500-N362433 E1174630-N363800 E118	1300-N360002 E1181300-N360002 E1165500-N362436					
E116	5500					
SECTOR 6	ALT limit: 2200m or above					
A circle with radius of 13KM c	entered at N361542 E1170610.					

5. 无线电通信失效程序

5.1 航空器通信失效

- 5.1.1 如果航空器具备信号接收能力,根据接收到的 管制指令继续飞行;
- 5.1.2 如果航空器不具备信号接收能力,航空器应按 照下列特定的进近程序继续进近并尽快落地;如果 本场不具备落地条件,飞行员可自行决定返航或者 备降;

a 01 号跑道着陆

航空器按照最后接收到的管制员指令高度:如果未过起始进近定位点,则保持指令高度飞向YQG(遥墙VOR)进入标准等待程序,下降至起始进近高度1200m,然后按照01号跑道仪表进近图着陆。如果已经过起始进近定位点且未获得落地许可,则应该按01号跑道仪表进近图进近至决断高度(或保持最

5. Radio communication failure procedures

- 5.1 Aircraft communication failure
- 5.1.1 If the radio receiver available, aircraft shall follow the instruction to fly;
- 5.1.2 If the radio receiver not available, aircraft shall continue to approach according to the following specific procedures as soon as possible; If condition of airport is not available for landing, the aircraft can decide to return or alternate by themselves;

a Landing to North

According to the last command ALT: Aircraft should maintain command ALT fly to YQG(Yaoqiang VOR) and join the standard holding procedure if it has not over IAF, then descend to the initial approach altitude 1200m, approach and land according to RWY 01 instrument approach procedure; If aircraft has already

低下降高度至复飞点)复飞,然后上升至 1200m 飞向 YQG(遥墙 VOR),再按 01 号跑道仪表进近图着陆。

fly over IAF without receiving landing clearance, it should approach to decision altitude (or maintain minima descend altitude to missed approach point) and go around, then climb to 1200m to YQG(Yaoqiang VOR) and land according to RWY01 instrument approach procedure;

b 19 号跑道着陆

航空器按照最后接收到的管制员指令高度:如果未过起始进近定位点,则保持指令高度飞向YQG(遥墙VOR)进入标准等待程序,下降至起始进近高度1500m,然后按照19号跑道仪表进近图着陆;如果已经过起始进近定位点且未获得落地许可,则应该按19号跑道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)复飞,然后上升至加入1500m飞向YQG(遥墙VOR),再按19号跑道仪表进近图着陆。

b Landing to South

According to the last command ALT: Aircraft should maintain command ALT fly to YQG(Yaoqiang VOR) and join the standard holding procedure if it has not over IAF, then descend to the initial approach altitude 1500m, approach and land according to RWY 19 instrument approach procedure; If aircraft has already over IAF without receiving landing clearance, it should approach to decision altitude (or maintain minima descend altitude to missed approach point) and go around, then climb to 1500m to YQG(Yaoqiang VOR) and land according to RWY19 instrument approach procedure;

- 5.2 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讯联系时, 航空器应 联系上一管制单位, 并按照接收管制单位的管制指 令继续飞行;
- 5.3 无线电通信恢复失去通信联络的航空器已经着陆,或者已经恢复联络的,可恢复正常的管制运行,并立即通知相关管制单位。
- 5.2 Aerodrome communication failureIf aircraft cannot establish communication with the aerodrome control unit, aircraft shall contact the previous control unit, and follow the instruction to continue;
- 5.3 Radio communication return to normalIt is available to resume activities when the aircraft that lose touch via Communication Channel has landed or get in

touch again. Inform the ATC office immediately.

6. 目视飞行程序

6. Procedures for VFR flights

无

Nil

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

9.1 对机组的要求:

- 9.1 Requirements for pilots:
- 9.1.1 复诵塔台管制员滑行指令,尤其是界限性指令,发现疑问及时证实;
- 9.1.1 Repeat the taxiing instructions issued by TWR, especially those contain boundary limitation. Make it clear when there is a doubt;
- 9.1.2 在低能见度情况下,必须向塔台管制员报告脱离的跑道和所使用的滑行道等具体位置;
- 9.1.2 After vacating RWY, especially under conditions of low visibility, report the RWY designation and TWY designation on initial contact with TWR;
- 9.1.3 专机滑行路线以管制员通知为准。
- 9.1.3 Taxiing routes of special flight will be instructed by ATC.

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

Waypoint ID	COORDINATES	Waypoint ID	COORDINATES
JN102	N365813 E1171258	JN210	N363840 E1170208

JN103	N370231 E1171258	JN211	N361626 E1172208
JN104	N370708 E1171258	JN213	N364926 E1165446
JN105	N371633 E1171258	DYN	N3731.7 E11847.2
JN106	N372206 E1173107	YQG	N3650.0 E11712.9
JN107	N370708 E1170204	WFG	N3638.8 E11907.2
JN109	N370708 E1172209	ABTUB	N3600.0 E11722.1
JN110	N370232 E1172208	BASOV	N3727.4 E11813.0
JN111	N364906 E1172207	DALIM	N3625.1 E11712.8
JN112	N364821 E1173017	GULEK	N3633.4 E11524.3
JN201	N364746 E1171258	NOBUP	N3721.3 E11725.0
JN203	N364155 E1171258	OLRED	N3707.1 E11649.2
JN204	N363841 E1171258	PANKI	N3717.8 E11700.0
JN205	N363609 E1171258	TUMLO	N3713.0 E11647.7
JN206	N363254 E1171258	MUMUN	N3647.6 E11600.0
JN207	N363254 E1172205	METOG	N3649.6 E11702.1
JN208	N363840 E1172205	OKALI	N3644.1 E11813.0
JN209	N363253 E1170208		

Path Terminator	Waypoint ID	Fly over	Magnetic Course	Turn Direction	Altitude (m)	IAS (kt)	VPA/ TCH	Navigation Specification
RWY01 Dej	parture DYN-	-91D						
CF	JN104		006					RNAV1
TF	JN105				↑1500			RNAV1
TF	NOBUP							RNAV1
TF	JN106				↑2400 or by			RNAV1

					ATC		
TF	BASOV						RNAV1
TF	DYN						RNAV1
RWY01 De	parture WFG	-91D	•			,	1
CF	JN102	Y	006				RNAV1
DF	JN111			R		MAX230	RNAV1
					↑2100		
TF	JN112				or by		RNAV1
					ATC		
TF	OKALI						RNAV1
TF	WFG						RNAV1
RWY01 De	parture ABT-	91D		_			
CF	JN102	Y	006				RNAV1
DF	JN111			R		MAX230	RNAV1
					2400		
TF	JN207				or by		RNAV1
					ATC		
TF	ABTUB						RNAV1
RWY01 De	parture GUL-	-91D					
CF	JN104		006				RNAV1
					↑2700		
TF	OLRED				or by	MAX230	RNAV1
					ATC		
TF	MUMUN						RNAV1
TF	GULEK						RNAV1
RWY01 De	parture TUM	-91D	1		1		
CF	JN104		006				RNAV1
TF	OLRED				↑2700	MAX230	RNAV1

	1	1	1	1	1	1	T	
					or by			
					ATC			
TF	TUMLO							RNAV1
RWY19 De	parture DYN	-81D						
CA			186		500			RNAV1
DF	JN111			L		MAX230		RNAV1
TF	NOBUP							RNAV1
					↑2400			
TF	JN106				or by			RNAV1
					ATC			
TF	BASOV							RNAV1
TF	DYN							RNAV1
RWY19 De	parture WFG	-81D						
CA			186		500			RNAV1
DF	JN111			L		MAX230		RNAV1
					↑2100			
TF	JN112				or by			RNAV1
					ATC			
TF	OKALI							RNAV1
TF	WFG							RNAV1
RWY19 De	parture ABT-	81D		•				
CA			186		500			RNAV1
DF	DALIM				↑2100		4.5%	RNAV1
TF	JN211				↑2400			RNAV1
TF	ABTUB							RNAV1
RWY19 De	parture GUL-	-81D		•	•	•	•	
CA			186		500			RNAV1
DF	METOG			R		MAX230		RNAV1

	T	T	1			
				↑2700		
TF	JN213			or by		RNAV1
				ATC		
TF	MUMUN					RNAV1
TF	GULEK					RNAV1
RWY19	Departure GUL-82D					
CA		186		500		RNAV1
DF	METOG		R		MAX230	RNAV1
				†2700		
TF	OLRED			or by		RNAV1
				ATC		
TF	MUMUN					RNAV1
TF	GULEK					RNAV1
RWY19	Departure TUM-81D					
CA		186		500		RNAV1
DF	METOG		R		MAX230	RNAV1
				↑2700		
TF	OLRED			or by		RNAV1
				ATC		
TF	TUMLO					RNAV1
RWY01	Arrival WFG-91A					
IF	WFG					RNAV1
TF	OKALI					RNAV1
				2400		
TF	JN112			or by		RNAV1
				ATC		
TF	JN111			↑2100		RNAV1
TF	JN208					RNAV1

TF	JN207		1800	MAX210	RNAV1
RWY01 A	rrival DYN-91A		T		
IF	DYN				RNAV1
TF	BASOV				RNAV1
			↑2400		
TF	JN106		or by		RNAV1
			ATC		
TF	NOBUP				RNAV1
TF	JN111		↑2100		RNAV1
TF	JN208				RNAV1
TF	JN207		1800	MAX210	RNAV1
RWY01 A	rrival ABT-91A				
IF	ABTUB				RNAV1
TF	DALIM		2100	MAX210	RNAV1
RWY01 A	rrival GUL-91A				
IF	GULEK				RNAV1
TF	MUMUN				RNAV1
			↑2700		
TF	JN213		or by		RNAV1
			ATC		
TF	METOG		2100		RNAV1
TF	JN210				RNAV1
TF	JN209		1800	MAX210	RNAV1
RWY01 A	rrival GUL-92A	•	•		
IF	GULEK				RNAV1
TF	MUMUN				RNAV1
TE	OLDED		↑2700		D314374
TF	OLRED		or by		RNAV1

				ATC		
TF	METOG			2100		RNAV1
TF	JN210					RNAV1
TF	JN209			1800	MAX210	RNAV1
RWY01 Ar	rival PAN-91	A		•		
IF	PANKI					RNAV1
TF	METOG			2100		RNAV1
TF	JN210					RNAV1
TF	JN209			1800	MAX210	RNAV1
RWY01 Ap	proach VIA J	N207				
IF	JN207			1800	MAX210	RNAV1
TF	JN206			1500		RNAV1
TF	JN205			1200		RNAV1
TF	JN204			1000		RNAV1
TF	JN203			700		RNAV1
RWY01 Ap	proach VIA D	OALIM				
IF	DALIM			2100	MAX210	RNAV1
TF	JN206			1500		RNAV1
TF	JN205			1200		RNAV1
TF	JN204			1000		RNAV1
TF	JN203			700		RNAV1
RWY01 Ap	proach VIA J	N209				
IF	JN209			1800	MAX210	RNAV1
TF	JN206			1500		RNAV1
TF	JN205			1200		RNAV1
TF	JN204			1000		RNAV1
TF	JN203			700		RNAV1

RWY01 N	Missed approac	h					
CA			006		500		RNP1
DF	JN111			R	↑1200	MAX210	RNP1
НМ	JN111	Y	186	L	Alt by	MAX230	RNP1
RWY01 I	Holding (outbo	und time:	1min)	l	1		1
НМ	NOBUP	Y	267	L	2700	MAX230	RNAV1
НМ	JN111	Y	186	L	2400	MAX230	RNAV1
НМ	JN206	Y	006	R	1800	MAX210	RNAV1
HM	METOG	Y	186	L	2400	MAX230	RNAV1
RWY19 A	Arrival DYN-8	1A	•	T T			<u>'</u>
IF	DYN						RNAV1
TF	BASOV						RNAV1
TF	JN106				†2400 or by ATC		RNAV1
TF	NOBUP						RNAV1
TF	JN105				1500	MAX210	RNAV1
RWY19 A	Arrival WFG-8	1A		I			
IF	WFG						RNAV1
TF	OKALI						RNAV1
TF	JN112				2400 or by ATC		RNAV1
TF	JN111				1800		RNAV1
TF	JN110						RNAV1
TF	JN109				1200	MAX210	RNAV1
RWY19 A	Arrival ABT-81	A	I	I			

	Ī			T	l	Т		I
IF	ABTUB							RNAV1
TF	JN207							RNAV1
TF	JN111				1800			RNAV1
TF	JN110							RNAV1
TF	JN109				1200	MAX210		RNAV1
RWY19 Arrival GUL-81A								
IF	GULEK							RNAV1
TF	MUMUN							RNAV1
					↑2700			
TF	OLRED				or by			RNAV1
					ATC			
TF	JN107				1800	MAX210		RNAV1
RWY19 Arrival PAN-81A								
IF	PANKI							RNAV1
TF	JN105				1500	MAX210		RNAV1
RWY19 App	proach VIA J	N105						
IF	JN105				1500	MAX210		RNAV1
TF	JN104				900			RNAV1
TF	JN103				600			RNAV1
RWY19 Approach VIA JN107								
IF	JN107				1800	MAX210		RNAV1
TF	JN104				900			RNAV1
TF	JN103				600			RNAV1
RWY19 Approach VIA JN109								
IF	JN109				1200	MAX210		RNAV1
TF	JN104				900			RNAV1
TF	JN103				600			RNAV1

RWY19 Missed approach							
CA			186		500		RNP1
DF	JN111			L	↑1200	MAX210	RNP1
НМ	JN111	Y	006	R	Alt by	MAX230	RNP1
					ATC		KNF1
RWY19 Holding (outbound time:1min)							
НМ	JN105	Y	249	L	1800	MAX230	RNAV1
НМ	JN111	Y	006	R	2100	MAX230	RNAV1
НМ	JN107	Y	096	R	2100	MAX230	RNAV1

ZSJN AD 2.23 其它资料

ZSJN AD 2.23 Other information

1.1 全年有鸟类活动。机场当局采取了驱赶措施,以 1.1 Activities of bird flocks are found all the year 减少鸟群活动。

round. Aerodrome Authority resorts to dispersal methods to reduce bird activities.

1.2 主要危害鸟类活动规律和特征/The details of bird activities as follows:

鸟种名/Type of bird	主要活动时间/Activity	飞行高度(m)/Flight altitude(m)	活动习性/Characteristic
麻雀	全年	0-10	集群活动
sparrow	The whole year		Group
家燕	4-9 月	0-20	单独或小群活动
swallow	April-September		Single or Group
红隼	全年	15-50	单独活动
mynah	The whole year		Single
白鹭	6-9 月	0-50	单独或集群活动
aigret	June-September		Single or Group

池鹭	6-9 月	0-50	单独或集群活动
pheasant	June-September		Single or Group
家鸽	全年	2-20	小群活动
pigeon	The whole year		Group
环颈雉	全年	0-10	单独或小群活动
pheasant	The whole year		Single or Group
珠颈斑鸠	全年	5-30	成对或集小群活动
ringdove	The whole year		Rank or Group