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

ZBTJ/TSN-天津/滨海 TIANJIN/Binhai

ZBTJ AD 2.2 机场地理位置和管理资料 Aerodrome geographical and administrative data

1	机场基准点坐标及其在机场的位置 ARP coordinates and site at AD	N39°07.4′ E117°20.7′ On RWY 16R/34L, 2000m inward THR16R
2	机场基准点与城市的位置关系 Direction and distance from city	095 °GEO, 13.3km from city center square
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	1.8 m/32.1°C(JUL)/-7.3°C(JAN)
4	机场标高位置的大地水准面波幅 Geoid undulation at AD ELEV PSN	
5	磁差（测量年份）及年变率 VAR(Year)/Annual change	7°W(2019)/4′27″
6	机场管理部门、地址、电话、传真、AFS 地址、电子邮箱、网址 AD administration/Address/Telephone/Telefax/ AFS/ E-mail/Website	Tianjin Binhai International Airport Limited Company Tianjin Binhai International Airport, Dongli District, Tianjin, China Post code:300300 TEL:86-22-24902015 FAX:86-22-24903355 AFS:ZBTJYFYX
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

ZBTJ AD 2.3 工作时间 Operational hours

1	机场开放时间 AD Operational hours	H24
2	海关和移民 Customs and immigration	H24
3	卫生健康部门 Health and sanitation	H24
4	航空情报服务讲解室 AIS Briefing Office	H24
5	空中交通服务报告室 ATS Reporting Office	H24

6	气象服务讲解室 MET Briefing Office	H24
7	空中交通服务 Air Traffic Service	H24
8	加油服务 Fuelling	H24
9	地勤服务 Handling	H24
10	安保服务 Security	H24
11	除冰服务 De-icing	H24
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Tow trucks, platform trucks, forks, conveyor belt trucks, file vehicle, roller trailer, bulk cargo baggage transporter, fence plate trailer, roller conveyor platform, weighbridge
2	燃油牌号 Fuel types	Jet Fuel No.3,Jet A-1
3	滑油牌号 Oil types	Nil
4	加油设施/能力 Fuelling facilities & Capacity	Aircraft refueling truck(20000 liters, 35000 liters, 45000 liters and 65000 liters), 20L/s; hydrant aircraft dispenser, 25L/s; piping system: apron refueling well, leak hunting well, valve well, high point vent valve/low point drain valve, cathode test well, 140L/s
5	除冰设施 De-icing facilities	11 De-icers, deicing fluid (FCY-1Bio+), anti-icing fluid (FCY-2); dedicated deicing apron
6	过站航空器机库 Hangar space for visiting aircraft	Air China airlines hangar, Tianjin Haite aircraft engineering Lt.Inc. hanger, Okay airways hanger
7	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for aircraft type below CAT F(inclusive) on request
8	备注 Remarks	Electrical power unit, air supply unit, potable water vehicle, sewage truck, passenger stairs, ferry vehicle, garbage truck, air-conditioned bus, the disabled boarding vehicle.

ZBTJ AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	Near AD

2	餐饮 Restaurants	At AD
3	交通工具 Transportation	Taxi, bus
4	医疗设施 Medical facilities	Near AD
5	银行和邮局 Bank and Post Office	Near AD
6	旅行社 Tourist Office	Near AD
7	备注 Remarks	Nil

ZBTJ AD 2.6 援救与消防服务 Rescue and fire fighting services

1	机场消防等级 AD category for fire fighting	CAT 9
2	援救设备 Rescue equipment	Fire fighting facilities: rapid intervention vehicle, primary foam tender, heavy-duty foam tender, demolition rescue truck, illumination truck, logistics truck, command car; Rescue equipment: uplift air cushion(30t, 40t, 60t), air pump, fork lift, mobile surface operation devices, compositive surface, aircraft landing gear hoist, traction rack, tethered hoisting equipment, six-axle moving trailer, four-axle moving trailer, four wheels landing gear trailer, two wheels landing gear trailer
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to A380 and below; Removal equipment: uplift air cushion(30t, 40t, 60t), air pump, fork lift, mobile surface operation devices, compositive surface, aircraft landing gear hoist, traction rack, tethered hoisting equipment, six-axle moving trailer, four-axle moving trailer, four wheels landing gear trailer, two wheels landing gear trailer
4	备注 Remarks	Crane and transporting equipment can be callable

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

1	可用季节及扫雪设备类型 Seasonal availability/Types of clearing equipment	All seasons multi-purpose sweepers, snow slingers, spreader vehicle
2	扫雪顺序 Clearance priorities	RWY, TWY and Apron
3	备注 Remarks	Nil

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

		道面 Surface	CONC
1	停机坪道面和强度 Apron surface and strength	强度 Strength	PCR 1200/R/B/W/T : Stands Nr.101-109, 409-419, 414L, 414R, 415L, 415R, 416L, 416R, 417L, 417R, 418L, 418R, 419L, 419R, 888-897 PCR 1080/R/B/W/T : Stands Nr.212, 213 PCR 1080/R/C/W/T : Stands Nr.884, 885 PCR 1070/R/B/W/T : Stands Nr.921-925 PCR 1020/R/B/W/T : Stands Nr.115-118, 201, 214-218 PCR 1000/R/A/W/T : Stands Nr.61, 62, 61L, 61R, 62L, 62R, 219-222 PCR 990/R/B/W/T : Stands Nr.202-211, ZA1L, ZA1R, ZA2L, ZA2R, ZA1-ZA6, ZB2L, ZB2R, ZB1-ZB7 PCR 940/R/B/W/T : Stands Nr.110-114, 501-504 PCR 930/R/A/W/T : Stands Nr.223-227 PCR 920/R/A/W/T : Stands Nr.228-230 PCR 900/R/A/W/T : Stands Nr.886, 887, 886L, 886R, 887L, 887R, 898, 899, 898L, 898R, 899L, 899R, 901-916, 910L, 910R, 911L, 911R, 912L, 912R PCR 840/R/B/W/T : Stands Nr.601-610 PCR 660/R/B/W/T : Stands Nr.874-879 PCR 610/R/B/W/T : Stands Nr.931-946
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	48m : C3-C5, C9 46m : C6 39m : B2, B7, C0, C2, T1 38m : W2 34.5m : A11, B1, B8, H 34m : J5, J6 32m : J8 31m : A3, C1, T2 30.5m : W1, W9 27m : B3-B6 25m : A1, A7, B, C10, D 24.5m : A5 24m : J7 23m : A, A2, A4, A10, A12, C, K, M, N, N1-N7, P, Q, S, T3-T6, T13-T16, W, W3, W5-W8, Y, Y9 18m : A6, J2, J3, K1, K2
		道面 Surface	CONC_ASPH
		强度 Strength	PCR 1200/R/B/W/T : A(FM N to S 450-3600m), A11, B, B1, B3, B5, B6, C0-C2, C4, D, K, K1(south of J2), M, N, N1, N2, N5, N6, P, Q, S, W1, W3, W7, W9 PCR 1180/R/B/W/T : H

			PCR 1170/R/B/W/T : T2 PCR 1130/R/B/W/T : C9, C10 PCR 1120/R/B/W/T : T1 PCR 1050/R/B/W/T : C PCR 1030/R/B/W/T : A4, A10 PCR 1010/R/B/W/T : A1 PCR 1000/R/A/W/T : A(FM N to S 0-450m), B2, B4, B7, B8, C3, C5, C6, J5-J8, K2, N3, T5, T6, W, W2, Y, Y9 PCR 980/R/A/W/T : N4, N7 PCR 970/R/A/W/T : K1(north of J2), T4 PCR 950/R/A/W/T : J2, J3, T3 PCR 940/R/B/W/T : A6 PCR 900/F/B/W/T : A7, W6, W8 PCR 900/R/B/W/T : A5 PCR 870/R/A/W/T : T13-T16 PCR 800/F/A/W/T : W5 PCR 790/R/B/W/T : A12 PCR 630/R/B/W/T : A2, A3
3	高度表校正点的位置及其标高 ACL location and elevation	Nil	
4	VOR 校正点 VOR checkpoints	Nil	
5	INS 校正点 INS checkpoints	Nil	
6	备注 Remarks	Nil	

ZBTJ 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. Taxiing guidance signs at all holding positions. Aircraft stand identification sign boards at stands Nr. 61, 62, 101-118, 201-230, 409-414, 415L, 415R, 416L, 416R, 417-419, 419L, 419R, 501-504, 601-604, 607-610, 886, 886L, 886R, 887, 887L, 887R, 888-891, 897, 898, 898L, 898R, 899, 899L, 899R, 931-946, ZA1L, ZA1R, ZA2L, ZA2R, ZA3-ZA6, ZB1, ZB2L, ZB2R, ZB3-ZB7. Guide lines at all TWYs. Guide lines at all aprons.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	跑道标志 RWY markings	THR, RWY designation, edge line, RWY center line, TDZ, aiming point, displaced THR(16R)

		跑道灯光 RWY lights	RTHL, WBAR, REDL, RCLL, RTZL, RENL
		滑行道标志 TWY markings	Edge line, center line, No-entry, RWY holding position, intermediate holding position
		滑行道灯光 TWY lights	Edge line lights, center line lights(A, A1, A4-A7, A10, A11, B, B1-B8, C(south of C1, north of C6), C0, C1(BTN N1&N3), C9, C10, H, J2, J3, J5, J6, K, K1(north of J2), K2, M, N, N1-N7, P, Q, S, T13-T16, W, W1-W3, W5-W9, Y9), No-entry bar(A4-A7, B3-B6, W5, W6, W8) , RETILs(A5、A7、B3-B6、W3、W5-W8), intermediate holding position lights(A, M, N, N1-N3, N5-N7, P, Q, S, W, Y, Y9)
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Runway guard lights: A1, A10, A11, B1, B2, B7, B8, W1-W3, W7, W9, Y9	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	RWY guard lights: the two yellow lights alternating flashing SWY light	

ZBTJ AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
1	2	3	4	5	6
BLDG 001	BLDG	010/4380	43.4		RWY34R Take-off path
BLDG 002	BLDG	010/4678	42.8		
BLDG 003	BLDG	013/4774	45.3		
WINDMILL 004	WINDMILL	018/12906	220.0		Surveillance Vectoring Sector Nr.2, temporary obstacle
STACK 005	STACK	100/9501	170.0	LGT	Surveillance Vectoring Sector Nr.3
STACK 006	STACK	100/9530	154	LGT	

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(º)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
WATER_TOWER 007	WATER_TOWER	150/10114	136.6		RWY16L Take-off path
WATER_TOWER 008	WATER_TOWER	150/10148	138.4		RWY16L Take-off path
WATER_TOWER 009	WATER_TOWER	151/10097	113.2		
WATER_TOWER 010	WATER_TOWER	151/10273	138.4		
WATER_TOWER 011	WATER_TOWER	153/9396	108.2		RWY16L Take-off path
WATER_TOWER 012	WATER_TOWER	153/10023	113.2		
Antenna 013	Antenna	161/2700	14	LGT	
Antenna 014	Antenna	161/5600	39	LGT	
ELECTRICAL_EXIT_LIGHT 015	ELECTRICAL_EXIT_LIGHT	165/2280	11.6		RWY16R Take-off path
BLDG 016	BLDG	165/3097	25.9		
GP Antenna 017	GP Antenna	167/1300	14	LGT	
BLDG 018	BLDG	169/6134	56		RWY 34L VOR/DME final approach
BLDG 019	BLDG	174/4445	44.4	LGT	
Antenna 020	Antenna	198/2100	36	LGT	
Radar 021	Radar	215/1082	44.9		

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(º)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
BLDG 022	BLDG	239/10000	214		
Antenna 023	Antenna	246/520	37	LGT	
BLDG 024	BLDG	248/10161	297.7		Surveillance Vectoring Sector Nr.6
Iron TWR 025	Iron TWR	253/13334	258	LGT	
BLDG 026	BLDG	273/13363	257		
BLDG 027	BLDG	276/11586	344.0		Surveillance Vectoring Sector Nr.9
TOWER 028	TOWER	279/12966	330	LGT	
BLDG 029	BLDG	282/11624	246		
ELECTRICAL_EXIT_LIGHT 030	ELECTRICAL_EXIT_LIGHT	339/4276	29.9		RWY34L Take-off path
Antenna 031	Antenna	341/2700	14	LGT	
Antenna 032	Antenna	341/5700	39	LGT	
BLDG 033	BLDG	346/6536	52.5		

半径 15 千米-50 千米内主要障碍物 (相对机场 ARP)
Obstacles between two circles with the radius of 15km and 50km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(º)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志、灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
WINDMILL 034	WINDMILL	001/30159	250		Surveillance Vectoring Sector Nr.11
STACK 035	STACK	080/40000	118		
STACK 036	STACK	082/39270	83		
WATER_TOWER 037	WATER_TOWER	083/50571	200	LGT	
STACK 038	STACK	083/51077	240	LGT	
STACK 039	STACK	104/25621	131		
BLDG 040	BLDG	117/32436	530	LGT	Surveillance Vectoring Sector Nr.4
STACK 041	STACK	118/37318	158		
BLDG 042	BLDG	123/30508	470		Surveillance Vectoring Sector Nr.5
STACK 043	STACK	168/44995	156	LGT	
STACK 044	STACK	169/40662	218	LGT	
STACK 045	STACK	169/40865	218	LGT	
TV TWR 046	TV TWR	263/15210	420	LGT	Surveillance Vectoring Sector Nr.7
BLDG 047	BLDG	264/17276	116	LGT	
BLDG 048	BLDG	267/23241	625	LGT	Sector, Surveillance Vectoring Sector Nr.8(obstacle altitude include temporary tower crane altitude on the top of building)

半径 15 千米-50 千米内主要障碍物 (相对机场 ARP)
Obstacles between two circles with the radius of 15km and 50km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(º)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志、灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
Antenna 049	Antenna	279/29500	130		
WINDMILL 050	WINDMILL	289/37422	250		Surveillance Vectoring Sector Nr.10

Remarks:

ZBTJ AD 2.11 提供的气象情报、气象观测和报告
Meteorological information provided & meteorological observations and reports

提供的气象情报
Meteorological information provided

1	相关气象台的名称 Associated MET Office	Tianjin 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	Tianjin ATMB MET office of CAAC;9h(If necessary), 30h;3h(If necessary), 6h
4	趋势预报及发布间隔 Trend forecast/Interval of issuance	trend 30min
5	所提供的讲解或咨询服务 Briefing/Consultation provided	Briefing provided: P, T
6	飞行文件及其使用语言 Flight documentation/Language(s) used	Chart, International MET Codes, Abbreviated Plain Language Text;Ch, En
7	讲解或咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation	Synoptic charts, significant weather charts, upper W/T charts, satellite and weather radar material, AWOS real-time data
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	MET Service Terminal, FAX
9	提供气象情报的空中交通服务单位 ATS units provided with information	Tianjin APP, Tianjin TWR

10	其他信息 Additional information	Nil
气象观测和报告 Meteorological observations and reports		
1	机场观测类型与频率、自动观测设备 Type & frequency of observation /Automatic observation equipment	Half hourly plus special observation/Yes
2	气象报告类型及所包含的补充资料 Type of MET Report/Supplementary information included	METAR, SPECI
3	观测系统及安装位置 Observation system/Site(s)	RVR EQPT A: 110m W of RCL, 370m inward THR16R; B: 110m W of RCL(16R/34L), 1570m inward THR34L; C: 110m W of RCL, 370m inward THR34L; D: 110m E of RCL, 360m inward THR16L; E: 110m E of RCL(16L/34R), 1570m inward THR34R; F: 110m E of RCL, 340m inward THR34R. SFC wind sensors： 16R: 115m W of RCL, 390m inward THR16R; 34L：115m W of RCL, 420m inward THR34L; 16R/34L Center: 115m W of RCL(16R/34L), 1560m inward THR34L; 16L: 115m E of RCL, 370m inward THR16L; 34R: 115m E of RCL, 380m inward THR34R; 16L/34R Center: 115m E of RCL(16L/34R), 1560m inward THR34R. Ceilometer: 16R: near RCL,1000m outward THR16R; 34L: near RCL,1000m outward THR34L; 16L: near RCL,300m outward THR16L; 34R:near RCL,300m outward THR34R.
4	观测系统的工作时间 Hours of operation for meteorological observation system	H24
5	气候资料 Climatological information	Climatological tables AVBL
6	其他信息 Additional information	Nil

ZBTJ AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 RWY Designator	真方位和磁方位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度、跑道和停止道道面 RWY strength/ Surface of RWY /SWY	跑道入口坐标、跑道末端坐标、跑道入口大地水准面波幅 THR coordinates & RWY end coordinates & THR geoid undulation	跑道入口标高和精密进近跑道接地带最高标高 THR elevation & highest elevation of TDZ of precision APP RWY	跑道和停止道坡度 Slope of RWY/SWY
1	2	3	4	5	6	7
16L	154.45 °GEO 161 °MAG	3200×45	PCR 1000/R/A/W/T CONC/-	Nil	THR 1.3m	0%
34R	334.45 °GEO 341 °MAG	3200×45	PCR 1000/R/A/W/T CONC/-	Nil	THR 1.4m	0%
16R	154.45 °GEO 161 °MAG	3600×60	(0-160m) PCR 1200/R/B/W/T (160-400m) PCR 900/F/B/W/T (400-3600m) PCR 870/R/A/W/T ASPH/ASPH	Nil	THR 1.6m DTHR 1.6m	0%
34L	334.45 °GEO 341 °MAG	3600×60	(0-3200m) PCR 870/R/A/W/T (3200-3440m) PCR 900/F/B/W/T (3440-3600m) PCR 1200/R/B/W/T ASPH/ASPH	Nil	THR 1.8m	0%

跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区长宽 RESA dimensions (m)	拦阻系统的位置及描述 Location& Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
16L	Nil	Nil	3320×280	240×120	Nil	-
34R	Nil	Nil	3320×280	240×120	Nil	-
16R	60×60	200×190	3840×280	240×120	Nil	-
34L	60×60	200×190	3840×280	240×120	Nil	-

跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区长宽 RESA dimensions (m)	拦阻系统的位置及描述 Location& Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
Remarks: 16L/34R:RWY shoulder:7.5m on each side Distance between RCL of RWY16R/34L and RCL of RWY16L/34R is 2100m; RWY34R THR is 500m south of RWY34L THR; RWY16L/34R grooved: 6mm×6mm×32mm. 16R/34L:RWY shoulder:7.5m on each side						

ZBTJ AD 2.13 公布距离 Declared distances

跑道号码 RWY Designator	可用起飞滑跑距离 TORA(m)	可用起飞距离 TODA(m)	可用加速停止距离 ASDA(m)	可用着陆距离 LDA(m)	备注 Remarks
1	2	3	4	5	6
16L	3200	3200	3200	3200	Nil
34R	3200	3200	3200	3200	Nil
34R	3038	3038	3038	3200	FM W2
16R	3600	3800	3660	3200	THR displaced 400m inwards
16R	3200	3400	3260	3200	FM A10,FM B7,THR displaced 400m inwards
34L	3600	3800	3660	3600	Nil
34L	3400	3600	3460	3600	FM B2

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

跑道号码 RWY Designator	进近灯类型、长度、强度 APCH LGT type/ LEN/ /INTST	入口灯颜色、翼排灯 THR LGT colour/ WBAR	目视进近坡度指示系统类型、位置、仰角、跑道入口最低眼高 Type of VASIS/Position /Angle/MEHT	接地带灯长度 TDZ LGT LEN	跑道中线灯长度、间隔、颜色、强度 RWY center line LGT LEN/Spacing /Colour/INTST	跑道边灯长度、间隔、颜色、强度 RWY edge LGT LEN/Spacing /Colour/INTST	跑道末端灯颜色 RWY end LGT colour	停止道灯长度、颜色 SWY LGT LEN /Colour
1	2	3	4	5	6	7	8	9
16L	PALS CAT II SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 450m inward THR16L 3 ° 19m	900 m	3200 m spacing 15m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3200 m spacing 60m 0-2600m, WHITE 2600-3200m, YELLOW VRB LIH	RED	Nil
34R	PALS CAT II SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 450m inward THR34R 3 ° 19m	900 m	3200 m spacing 15m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3200 m spacing 60m 0-2600m, WHITE 2600-3200m, YELLOW VRB LIH	RED	Nil
16R	PALS CAT II SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 372m inward DTHR16R 3 ° 19.6m	900 m	3200 m spacing 15m 0-2300m, WHITE 2300-2900m, RED/WHITE 2900-3200m, RED VRB LIH	3600 m spacing 60m 0-400m, RED 400-3000m, WHITE 3000-3600m, YELLOW VRB LIH	RED	60 m RED
34L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 345m inward THR34L 3 ° 18.0m	900 m	3600 m spacing 15m 0-2700m, WHITE 2700-3300m, RED/WHITE 3300-3600m, RED VRB LIH	3600 m spacing 60m 0-3000m, WHITE 3000-3600m, YELLOW VRB LIH	RED	60 m RED
Remarks: FM THR16R-DTHR16R: APCH LGT.								

ZBTJ AD 2.15 其它灯光,备份电源 Other lighting, secondary power supply

1	机场灯标或识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation	Nil
2	着陆方向标和风向标位置和灯光 LDI/ WDI location and LGT	WDI: 16R: 107m E of RCL, 799m inward THR16R, with lights; 34L: 89m W of RCL, 355m inward THR34L, with lights; 16L: 80m E of RCL, 422m inward THR16L, with lights; 34R: 100m W of RCL, 345m inward THR34R, with lights.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: blue edge line lights TWYs A, A1, A4-A7, A10, A11, B, B1-B8, C(south of C1, north of C6), C0, C1(BTN N1&N3), C9, C10, H, J2, J3, J5, J6, K, K1(north of J2), K2, M, N, N1-N7, P, Q, S, T13-T16, W, W1-W3, W5-W9, Y9: green center line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	Standby power supply available/ less than 15s for CAT I , less than 1s for CAT II or HUD CAT II APCH LGT.
5	备注 Remarks	Nil

ZBTJ AD 2.16 直升机着陆区域 Helicopter landing area

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

ZBTJ AD 2.17 空中交通服务空域 ATS airspace

空域名称和水平范围 Designation and lateral limits		垂直范围 Vertical limits	空域分类 Airspace class	空中交通服务单位呼号和使用语言 ATS unit callsign Language	工作时间 Hours of applicability	备注 Remarks
1	2	3	4	5	6	7
Tianjin tower control area	N390900E1171400-N391600E1171400-N391800E1172200-N385800E1174000-N385800E1172000-N390900E1171400	600m and below				
Fuel dumping area	N38 58.0E117 58.0-N38 35.0E119 24.0-N38 24.0E119 19.0-N38 49.0E117 55.0-N38 58.0E117 58.0	Above 4000m				
Prohibited Fly Over Area	N394900E1162830-N395900E1162830-N395900E1161500-N394900E1161500-N394900E1162830					No aircraft is permitted to maneuver or circumnavigate CB in Prohibited Fly Over Area
Altimeter setting region and TL/TA	Same as Tianjin APP area	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)				

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

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星话音通信号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
ATIS		126.4			H24	
APP	Tianjin Approach	APP01:127.9 (120.9)			by ATC	
		APP02:125.25 (120.9)			by ATC	

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星话音通信号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
		APP03:119.275 (120.9)			H24	
TWR	Tianjin Tower	118.2 (130.0)			H24	
		118.875 (118.425)			HO	
GND	Tianjin Ground	121.95 (121.65)			HO	
	Tianjin Delivery	121.8			HO	DCL available
APN	Tianjin Apron	APN01:121.725			H24	
		APN02:121.7			by ATC	Contact ZBTJ APN01 when APN02 U/S
EMG		121.5			H24	

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

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
1	2	3	4	5	6	7
Tianjin VOR/DME	TAJ	112.1 MHz CH 58X	H24	N39°06.6′ E117°21.5′ 206m E of RCL(16R/ 34L);106m S of THR34L	11 m	
Donglihu VOR/DME	TJK	113.4 MHz CH 81X		N39°09.4′ E117°31.2′		U/S
IM 16L		75 MHz		341 °MAG/320m FM THR16L		
LOC 16L ILS CAT I	ICU	109.7 MHz		161 °MAG/310m FM RWY16L end		
GP 16L		333.2 MHz		120m E of RCL 315m inward THR16L		Angle 3 °, RDH 16m Coverage 25km
DME 16L	ICU	CH 34X (109.7 MHz)		120m E of RCL 315m inward THR16L		Co-located with GP 16L

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
IM 34R		75 MHz		161 °MAG/340m FM THR34R		U/S
LOC 34R ILS CAT I	IKD	111.5 MHz		341 °MAG/284m FM RWY34R end		
GP 34R		332.9 MHz		120m E of RCL 314.4m inward THR34R		Angle 3 °, RDH 16.4m, Coverage 25km
DME 34R	IKD	CH 52X (111.5 MHz)		120m E of RCL 314.4m inward THR34R	7m	Co-located with GP 34R
LOC 16R ILS CAT I	IJS	110.9 MHz		161 °MAG/385m FM RWY16R end		
GP 16R		330.8 MHz		132m W of RCL 332m inward DTHR16R		Angle 3 °, RDH 15.6m Coverage 25km
DME 16R	IJS	CH 46X (110.9 MHz)		132m W of RCL 332m inward DTHR16R	7m	Co-located with GP 16R
LOC 34L ILS CAT I	ICG	110.5 MHz		341 °MAG/319m FM RWY34L end		
GP 34L		329.6 MHz		132m W of RCL 330m inward THR34L		Angle 3 °, RDH 16.6m Coverage 25km
DME 34L	ICG	CH 42X (110.5 MHz)		132m W of RCL 330m inward THR34L	8m	Co-located with GP 34L

ZBTJ AD 2.20 本场规定

1. 机场使用规定

1.1 航空器滑行规定：航空器滑行速度不得大于50km/h，在障碍物附近滑行时，速度应减到 15km/h 以下。

1.2 天津机场塔台数字化放行（DCL）服务正式运行，机组应在预计起飞时间（ETD）前 40min 内申请数字化放行。

ZBTJ AD 2.20 Local aerodrome regulations

1.Airport operations regulations

1.1 Taxiing routes: taxiing speed shall no more than 50km/h, and reduce speed to 15km/h and below nearby obstacles.

1.2 DCL service provided by TWR will be put into use. Flight crew shall request DCL within 40 minutes before ETD.

1.3 进、出港航空器在本场地面滑行时，将应答机设置在 S 模式。

1.3 Arrival/departure aircraft shall set transponder on mode Sierra while taxiing.

1.4 出港航空器首次联系进近时，报告通过高度和离场方式。

1.4 Departure aircraft shall report altitude and departure mode on initial contact with APP.

2. 跑道和滑行道的使用

2. Use of runways and taxiways

2.1 可以通过地面指挥中心申请引导车和拖车服务。

2.1 Follow-me vehicle service and towing service are available via ground control center.

2.2 禁止航空器在滑行道上做 180°转弯。

2.2 180°turnaround on TWY is forbidden for all aircraft.

2.3 当出港航空器准备使用 16R 或 34L 非全跑道起飞时，请航空器驾驶员在抄收 ATC 放行许可时向 ATC 塔台管制席提出申请，塔台将依据跑道实际运行情况，来决定航空器使用非全跑道起飞。

2.3 If departure aircraft need use RWY16R or 34L for intersection departure, aircrew shall contact TWR and apply for clearance upon receiving delivery clearance, and TWR shall arrange non full-length taking-off procedures for aircraft in accordance with the RWY actual operation situation.

2.4 A380 本场滑行路线

2.4 Taxiing routes of A380

2.4.1 A380 起降使用跑道：使用 16R/34L 跑道。

2.4.1 RWY for A380 aircraft: 16R/34L.

2.4.2 A380 的进港滑行路线：经 B1 或 B8 联络道，经 B 滑行道由 C6 滑行道进入 414-416 号停机位；经 A1 或 A11 联络道，经 A 滑行道进入 61、62、886、887、898、899 号停机位。

2.4.2 Arrival aircraft taxiing route for A380: TWY B1/B8-TWY B-TWY C6-stands Nr.414-416; TWY A1/A11-TWY A-stands Nr.61, 62, 886, 887, 898, 899.

2.4.3 A380 的离港滑行路线：出港航空器由 414-416 号停机位推出经 C6 滑行道至 B 滑行道，至 B1 或 B8 联络道进入跑道；出港航空器由 61、62、886、887、898、899 号停机位推出，经 A 滑行道至 A1 或 A11 联络道进入跑道。

2.4.3 Departure aircraft taxiing route for A380: stands Nr.414-416-TWY C6-TWYB-TWYB1/B8-RWY; stands Nr.61, 62, 886, 887, 898, 899-TWYA-TWYA1/A11-RWY.

2.5 滑行道限制：J2、J3、Q（601 与 610 机位之间）

2.5 TWY J2, J3 and Q(BTN Stand Nr.601 &610) is only

滑行道仅允许翼展小于 36m 的航空器使用。

2.6 天津滨海国际机场每日按需实施双跑道隔离平行运行模式：

2.6.1 双跑道隔离平行运行期间，RWY16R/34L 用于起飞，RWY16L/34R 用于着陆，机组注意收听机场情况通播。

2.6.2 RWY16L/34R 跑道可起降的最大机型为 AN-124，B747-8 机型客运航班除外。

2.6.3 RWY16R/34L 跑道可起降的最大机型为 AN-124，B747-8 机型客运航班除外。

2.7 航空器进入跑道和落地后的跑道占用时间，做如下要求（湿跑道或污染跑道除外）：

2.7.1 起飞航空器：在等待位置从接到管制员进跑道指令至对正跑道的时间应不超过 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。

2.7.2 落地航空器：航空器应尽快脱离跑道，从接地到脱离跑道的时间应不超过 50s。如机组认为无法在上述要求的时间内完成，航空器驾驶员应在与塔台管制员建立联系时进行通报说明。

2.7.3 起飞航空器：如因执行暖车、甩冰等程序的航空器在对正跑道后无法立即起飞的，航空器驾驶员应在到达跑道外等待点之前向塔台管制员说明。

available for aircraft with wing span less than 36m.

2.6 Implement segregated parallel approaches/departures daily on demand :

2.6.1 When segregated parallel approaches/departures implemented, RWY16R/34L is used for departure, RWY16L/34R is used for landing, please pay attention to the ATIS information.

2.6.2 RWY16L/34R is used for aircraft type AN-124 and below (except for B747-8).

2.6.3 RWY16R/34L is used for aircraft type AN-124 and below (except for B747-8).

2.7 Except for wet RWY or contaminated RWY, requirement as follows：

2.7.1 Departure aircraft shall finish RWY alignment within 60 seconds after receiving ATC instructions of entering RWY from RWY holding position. If flight crew consider that they can not fulfill the process within the required time, pilot shall inform TWR before reaching the RWY holding position.

2.7.2 Landing aircraft shall fully vacate RWY within 50 seconds after touching the ground. If flight crew consider that they can not fulfill the process within the required time, pilot shall inform TWR when establishing contact.

2.7.3 Departure aircraft: if aircraft cannot departure immediately after finishing RWY alignment due to implementation of engine warm-up procedure or ice shedding procedure , pilot shall inform ATC before

reaching the RWY holding point.

2.8 C1 滑至 C6 滑之间的 C 滑行道不提供滑行道中线灯服务。

2.8 TWY center line light is not available for TWY C(BTN C1 and C6).

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 停机位对航空器翼展的限制

3.1 Wingspan limits for aircraft parking on the stands

停机位/Stands	航空器翼展限制/ Wing span limits for aircraft (m)
Nr.887	88.4
Nr.61, 62, 414-416, 886, 898, 899, ZB7	80
Nr. 101, 102, 105, 109, 212, 219-222, 228, 417-419, 874-876, 895-897, 910-912, ZA1, ZA2, ZB1, ZB2	65
Nr.103, 104, 106, 107, 117, 890-894	52
Nr.878, 879	51
Nr.229, 230	48
Nr.877	42
Nr.61R, 62L	38.1
Nr.61L, 62R, 108, 110-116, 118, 201-211, 213-218, 223-227, 409-413, 414L, 414R, 415L, 415R, 416L, 416R, 417R, 418R, 419R, 501-504, 601-610, 886L, 886R, 887L, 887R, 888, 889, 898L, 898R, 899L, 899R, 901-909, 910R, 911R, 912R, 913-916, 921-925, ZA1L, ZA1R, ZA2L, ZA2R, ZA3, ZA4, ZA5, ZA6, ZB2L, ZB2R, ZB3, ZB4, ZB5, ZB6	36
Nr.884, 885	29(fuselage length≤32.8)
Nr.417L, 418L, 419L	24.9
Nr.910L, 911L, 912L, 931-946	24

3.2 天津机场地面服务保障频率为 128.85MHz，除冰指挥频率为 121.825MHz。

3.2 Contact 128.85MHz for Tianjin airport ground service, contact 121.825MHz for deicing control.

3.3 相邻机位的运行限制

3.3 Adjacent stands operation limits

3.3.1 航空器不能同时使用的机位

3.3.1 Pair of stands forbidden to use simultaneously

使用机位 The stand in use	禁用机位 The stands forbidden to be used	使用机位 The stand in use	禁用机位 The stands forbidden to be used
61	61L, 61R	61L or 61R	61
62	62L, 62R	62L or 62R	62
414	414L, 414R	414L or 414R	414
415	415L, 415R	415L or 415R	415
416	416L, 416R	416L or 416R	416
417	417L, 417R	417L or 417R	417
418	418L, 418R	418L or 418R	418
419	419L, 419R	419L or 419R	419
886	886L, 886R	886L or 886R	886
887	887L, 887R	887L or 887R	887
898	898L, 898R	898L or 898R	898
899	899L, 899R	899L or 899R	899
910	910L, 910R	910L or 910R	910
911	911L, 911R	911L or 911R	911
912	912L, 912R	912L or 912R	912
ZA1	ZA1L, ZA1R	ZA2	ZA2L, ZA2R
ZB2	ZB1L, ZB1R	ZB7	ZB5, ZB6
109	108		

3.3.2 航空器推出影响机位 3.3.2 Stands affected by aircraft push-back

序号 Nr.	机位 Stands Nr.	受影响机位 Affected stands	序号 Nr.	机位 Stands Nr.	受影响机位 Affected stands
1	501	502, 503	24	211	210
2	502	501, 503, 504	25	212	213
3	503	502, 504, 110	26	213	212
4	504	503, 110, 111	27	214	215
5	110	504, 111, 112	28	215	214, 216
6	111	110, 112, 113	29	216	214, 215, 217
7	112	111, 113, 114	30	217	215, 216, 218
8	113	112,114-116	31	218	216, 217
9	114	113,115-117	32	219	220 (aircraft with wingspan＞36m on stand Nr.219)
10	115	113, 114, 116, 117	33	220	219 (aircraft with wingspan ＞36m on stand Nr.220) , 221
11	116	114, 115, 117, 118, 201, 202	34	221	220, 222
12	117	116, 118, 201, 202, 203, 204	35	222	221,223,224; 225-226(aircraft with wingspan＞36m on stand Nr.222)

13	118	117, 201-205	36	223	222, 224, 225
14	201	115-118, 202	37	224	222, 223, 225
15	202	115-118, 201, 203	38	225	224, 226
16	203	116-118, 201, 202, 204	39	226	225, 227-229
17	204	117, 118, 201, 202, 203, 205	40	227	226, 228-230
18	205	118, 203, 204, 206	41	228	226, 227, 229, 230
19	206	204, 205, 207	42	229	226-228, 230
20	207	205, 206, 208	43	230	227-229
21	208	206, 207, 209	44	ZB7	ZB3, ZB4, ZB5, ZB6
22	209	207, 208, 210	45	109	107, 108
23	210	208, 209, 211			

3.3.3 航空器推出时，若后方有航空器滑入，引导车和机务都需暂停引导和推出，分别立即向机场机坪管制室或通过机组向机场机坪管制室进行确认，根据指令进行后续操作。

3.3.3 If aircraft taxiing in the rear of the aircraft which was pushed-out, follow-me vehicle and maintenance shall stop and confirming with Apron control.

3.3.4 停放 ZB7 机位的航空器，滑入时仅能从 C 滑滑入，推出时需向 C 滑推出（机头朝南）。

3.3.4 Aircraft parking at stand Nr.ZB7 shall only taxi in from TWY C and be pushed back to TWY C (nose to south).

3.4 航空器除冰/防冰作业

3.4 Rules for deicing

3.4.1 一般要求：根据不同的天气情况，天津机场采用机位除冰和定点除冰两种除冰模式，机组如需确认

3.4.1 General rules: Two ways of deicing depending on different weather conditions: deicing at designated

除冰模式可联系本公司运控或地面除冰代理。

location and deicing at parking stands. The flight crew shall contact AOC or ground deicing agency to confirm deicing ways.

3.4.2 机位除冰：在无降雪天气情况下，天津机场对始发航班统一进行预除霜。如机组需要关舱后进行再次除霜，由机组或航空公司运控提前向航班地面除冰代理通报除冰需求，在舱门关闭后，进行机位除冰，除冰结束后，机组联络塔台并取得开车许可后，按照指令前往使用跑道准备起飞。

3.4.2 Deicing at parking stands: All flights originated from Tianjin airport shall take pre-deicing in any weather condition without snowing. If the flight crew need deicing again after closing the hatch, flight crew or AOC shall report the requirement to the ground deicing agency in advance. After closing the hatch, deicing at parking stands would be carried out. After deicing, the flight crew shall contact TWR and apply for start-up clearance, then follow the instructions to RWY for take-off.

3.4.3 定点除冰：

3.4.3 Deicing at designated location:

3.4.3.1 在降雪情况下，天津机场视情启动定点除冰模式，可提供关车除冰服务。

3.4.3.1 During snowing, deicing at designated location would be carried out. Engine off deicing service would be provided.

3.4.3.2 关车除冰：机组按管制单位指令滑行至对应的除冰坪等待点后，按照管制单位指令或跟随引导车，进入指定除冰机位，将一部 VHF 设备转频至除冰指挥频率（121.825MHz）。呼叫“除冰指挥塔”开始进行关车除冰。除冰结束后，机组联系机坪管制。

3.4.3.2 Engine off deicing: The flight crew taxi to designated holding position of deicing apron following the instructions of ATC. Then taxi to designated deicing stand following the instructions of ATC or guiding by follow-me vehicle. Change VHF equipment to deicing control frequency(121.825MHz) and call “Deicing Control Tower” to start engine off deicing. After deicing, the flight crew shall contact APN.

3.4.3.3 慢车除冰

3.4.3.3 Engine idle deicing

（1） 机组按管制单位指令滑行至对应的除冰坪等待点后，按照除冰指挥塔指令或跟随引导车，进入指定

（1） Aircrew shall taxi-in deicing holding position follow ATC instructions, then follow 121.825MHz or

除冰机位。

（2）慢车除冰机位无引导人员，除冰航空器入位后，机组注意观察左侧地面的“STOP”停止标志(位于中线左侧 10m 处)，当“STOP”标志位于左座机组 9 点钟方向时，可刹停航空器，保持慢车状态，将一部 VHF 设备转频至除冰指挥频率（121.825MHz），呼叫“除冰指挥塔”（在此之前的任何呼叫，除冰坪指挥人员不做应答）。

（3） 航空器入位停好后，设置停留刹车，做好除冰准备，向除冰指挥塔确认除/防冰需求。

（4） 慢车除冰作业期间，机组应保持发动机慢车，禁止移动航空器，并长守除冰频率。如遇紧急情况，机組应立即与除冰指挥塔确取得联系。

（5） 慢车除冰结束后，除冰指挥塔向机组通报除冰信息，包括除冰液液型、使用液量、除冰起止时间等信息，机组按需记录并联系机坪管制。

（6） 慢车除冰注意事项：航空器进入除冰位时，请机组注意观察机头方向保障人员；航空器离位时，请机组注意控制发动机油门，防止尾流对附近保障人员和设备造成伤害。慢车除冰过程中，机组发现无法通过甚高频通信工具与除冰指挥塔联系时，应立即关闭航空器发动机，并开启机上全部灯光作为信号，提示除冰指挥塔。慢车除冰过程中，若机组关闭了航空器发动机，则按除冰指挥塔指令进行关车除冰作业。

follow-me vehicle to the deicing stands.

（2） No marshaller guidance, aircraft shall follow the guidance to the deicing stands. After that, aircrew shall observe the “STOP” sign on the ground at left side(10m left to RCL). When “STOP” sign at the 9 o'clock direction of left pilot, pilot shall brake and keep the engine idle. Aircrew shall change one VHF equipment to 121.825MHz (deicing guide no reply required before this).

（3） When aircraft parked already, keep idle, set parking break and do deicing preparations.

（4） During the engine idle deicing period, aircrew shall keep the engine idle, aircraft is prohibited to get moved, and keep the engine idle deicing frequency on. If any emergency, contact engine idle deicing guide immediately.

（5） When engine idle deicing completed, deicing guide will inform aircrew the deicing starting and ending time, aircrew record it on demand and contact APN.

（6） Notes for engine idle deicing: aircrew shall control the throttle carefully, avoiding the exhausted gas causing damage to support personnel and equipment, when aircraft exit the deicing stands. During the engine idle deicing period, if aircrew fail to contact with the personnel via VHF, aircrew shall turn off engine and turn on all the lights on the aircraft to inform the de-icing guide. If engine turned off during the engine

idle deicing period, engine off deicing shall be implemented with the instructions of de-icing guide.

3.5 航空器依靠引导车引导时,应按照引导路线滑行,到达指定机位后根据机务人员指挥准确停机,不得利用航空器自身动力进入机库。发动机推油门运转的大功率试车必须限制试车时间,并向管制单位申请。

3.5 Aircraft guided by follow-me vehicle shall follow the taxi-circuit to designated stand and stop. It is strictly forbidden for aircraft get into hangar on its own power. Big power engine run-ups are subject to ATC clearance, and limit the time for test.

3.6 101-107、112-118、201-230、409-419、501-504、886-899、901-905 号停机位配有 APU 替代设施(静变电源和航空器地面专用空调)。

3.6 Stands Nr.101-107, 112-118, 201-230, 409-419, 501-504, 886-899, 901-905 are equipped with APU replacement equipment(ground power unit and ground air conditioning system).

3.7 为降低碳排放及噪音,天津机场过站的航空器,应使用 APU 替代设施。以下特殊情况除外:

3.7 Aircraft parking at stands shall use APU replacement equipment. Aircraft can use APU as the following situations:

3.7.1 无设备或设备故障;

3.7.1 Equipment is unserviceable;

3.7.2 国际中转航班;

3.7.2 International connecting flight;

3.7.3 航空器过站时间短;

3.7.3 Insufficient flight transtion time;

3.7.4 天气原因;

3.7.4 Extreme weather;

3.7.5 航空器 APU 故障;

3.7.5 APU is malfunctional;

3.7.6 其他不满足设备运行要求的情况。

3.7.6 Other circumstances which are not satisfy the requirements.

3.8 机坪管制运行管理规定

3.8 Apron operation rules

3.8.1 机坪管制范围

3.8.1 Apron Control Area

3.8.1.1 A 滑行道(不含)以西的机坪、滑行道;

3.8.1.1 Apron and TWYs: west of TWY A(excluded));

3.8.1.2 C 滑行道(不含)以东、P 滑行道(不含)以北、N7 滑行道(不含)以西之间的机坪、滑行道;

3.8.1.2 Apron and TWYs: east of TWY C(excluded), north of TWY P(excluded) and west of TWY N7(excluded);

3.8.1.3 C 滑行道（不含）以东、T15 滑行道（含）以南、T16 滑行道（含）以西之间的机坪、滑行道；

3.8.1.3 Apron and TWYs: east of TWY C(excluded), south of TWY T15(included) and west of TWY T16(included);

3.8.1.4 具体管制移交点及移交方式听从管制员指令执行。

3.8.1.4 The specific hand-over point and mode shall be instructed by ATC.

3.8.2 扇区划分

3.8.2 Sector partition

机坪管制 01 扇区：停机位包括 16R/34L 跑道以东的全部公布的停机位。滑行道包括 16R/34L 跑道以东的机坪管制范围内的滑行道；

APN01: All the parking stands in use at east of RWY16R/34L, All the TWYs at east of RWY16R/34L within apron control area;

机坪管制 02 扇区：停机位包括 16R/34L 跑道以西的全部公布的停机位。滑行道包括 16R/34L 跑道以西的机坪管制范围内的滑行道。

APN02: All the parking stands in use at west of RWY16R/34L, All the TWYs at west of RWY16R/34L within apron control area.

3.8.3 机坪管制运行规则

3.8.3 Apron Control operation rules

天津机坪负责机坪管制范围内航空器推出、开车、滑行和其他涉及航空器运行的指挥工作。

Tianjin APN is responsible for aircraft push-back, start-up, taxiing and other control issues related to aircraft operation.

3.8.3.1 离港航空器

3.8.3.1 Departure aircraft

a.向空管塔台申请放行许可；

a. Obtain delivery clearance from TWR ATC;

b.取得放行许可后，按塔台放行的指令转频到天津机坪管制频率，向机坪管制申请推出开车许可；

b. When obtain delivery clearance, aircraft shall change frequency to Tianjin APN as instructed by TWR ATC, apply to Tianjin APN for push-back and start-up clearance;

c.离港航空器首次联系天津机坪时，应向机坪管制员通报停机位编号；

c. Flight crew shall inform parking stands number to Tianjin APN on the initial contact with Tianjin APN;

d.离港航空器取得天津机坪许可后方可推出开车，天津机坪发布许可指令后，机组应在 5min 之内执行；超过 5min 仍未推出开车视为指令失效，机组需要重

d. Departure aircraft shall push-back and start-up with Tianjin APN clearance. Flight crew shall follow the instructions within 5min after obtaining clearance from

新申请推出开车；

Tianjin APN. Clearance will be invalid if exceeds 5min, flight crew shall re-apply for clearance;

e.离港航空器推出开车后，向天津机坪申请滑行许可。

e. Aircraft shall apply for taxiing clearance to Tianjin APN after push-back and start-up.

3.8.3.2 进港航空器

3.8.3.2 Arrival aircraft

进港航空器运行按空管塔台指令转频至机坪后，听从机坪管制指挥。

Upon changing frequency to Tianjin APN as instructed by TWR ATC，arrival aircraft shall followTianjinAPN instructions.

3.8.3.3 航空器无法与天津机坪建立有效的通信联系时，航空器应联系上一级管制单位，并听从管制单位的管制指令。

3.8.3.3 If aircraft cannot establish communication with Tianjin APN, aircraft shall contact previous control unit and follow the instruction.

4. 低能见度运行

4. Low visibility operation

4.1 使用 HUD 可在本场 16L 跑道实施特殊批准 I 类运行。

4.1 Aircraft equiped with HUD can carry out special CAT I on RWY16L.

4.2 使用 HUD 可在本场 16L 跑道实施特殊批准 II 类运行。

4.2 Aircraft equiped with HUD can carry out special CAT II on RWY16L.

4.3 使用 HUD 可在本场 16L 及 34R 跑道实施 RVR 不低于 150m 低能见度起飞。

4.3 Aircraft equiped with HUD can carry out LVO (RVR no less than 150m) on RWY16L/34R.

4.4 A、B、C 类航空器可在本场 16R、34L、16L、34R 跑道实施 RVR 不低于 150m 低能见度起飞。

4.4 Aircraft CAT A/B/C can carry out LVO (RVR no less than 150m) on RWY16L/34R and RWY16R/34L.

4.5 D 类航空器可在本场 16R、34L、16L、34R 跑道实施 RVR 不低于 200m 低能见度起飞。

4.5 Aircraft CAT D can carry out LVO (RVR no less than 200m) on RWY16L/34R and RWY16R/34L.

4.6 天津机场启动低能见度运行程序期间注意事项：

4.6 Notes during implementing LVO：

4.6.1 航空器营运人负责确认航空器装备的 HUD 设备工作正常且执飞的飞行机组具备 HUD 运行资格，一般至少提前 30min 向空管提出运行申请及报告。

4.6.1 The operator shall get the authorization from the applicable foreign regulatory authority, and shall file an application at least 30min in advance to ATC.

4.6.2 机组须注意收听自动情报服务广播（ATIS），并

4.6.2 Flight crew shall pay attention to ATIS and check

审核自身 HUD 能力和天气标准。

4.6.3 引导车依据塔台指令，对提出引导需求的进出港航空器实施引导。引导车在引导航空器时，车辆行驶速度不得超过 20km/h，引导车脱离后应关闭顶灯以示意航空器脱离引导，机组按塔台指令滑行。当因局部地区能见度极低，引导车存在引导困难时，机组可按塔台指挥自滑或采取其他替代措施。

5. 直升机飞行限制，直升机停靠区

无

6. 警告

无

ZBTJ AD 2.21 减噪程序

无

ZBTJ AD 2.22 飞行程序

1. 总则

除经天津进近或塔台特殊许可外，在天津进近管制区和塔台管制区内的飞行，必须按照仪表飞行规则进行。

2. 起落航线

目视起落航线通常在跑道东侧进行，高度 300-500m（QNH）。

3. 仪表飞行程序

3.1 仪表进近：见仪表进近图。

own HUD capabilities and weather conditions.

4.6.3 According to TWR instructions, follow-me vehicle will guide landing and departure A/C if necessary. The speed of follow-me vehicle should be less than 20km/h, the follow-me vehicle lights off means end guiding and flight crew shall taxi by ATC. When VIS in local area is too low and follow-me vehicle is difficult to guide, flight crew shall taxi by TWR instructions or take other measures instead.

5. Helicopter operation restrictions and helicopter parking/docking area

Nil

6. Warning

Nil

ZBTJ AD 2.21 Noise abatement procedures

Nil

ZBTJ AD 2.22 Flight procedures

1. General

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

2. Traffic circuits

Visual traffic circuits shall be made to the east of RWY, at the altitude of 300-500m(QNH).

3. IFR flight procedures

3.1 Instrument approach: Refer to IAC.

3.2 等待：等待程序见标准仪表进场图。

3.2 Holding: Refer to STAR.

3.3 目视飞行：目视飞行在机场上空按起落航线进行等待，高度 1200m 以上，第一等待高度层 1200m，向上每隔 300m 为一等待高度层。

3.3 Visual flight: Holding above the airport following the taffic circuits with altitude above 1200m, and the altitude separation is 300m.

3.4 优先着陆：根据具体情况，由 ATC 调配和紧急处置。

3.4 Aircraft shall take prior landing after ATC clearance and follow the ATC instructions.

3.5 当 ATIS 中播报的飞行程序与 ATC 指令的飞行程序不符时，以 ATC 部门通报的飞行程序为准。

3.5 Follow ATC instructions when the instructions have a conflict with the flight procedures via ATIS.

3.6 严格按照航图中公布的进、离场程序、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符时，以 ATC 部门的指令高度为准。

3.6 Strict adherence is required to the relevant SID/STAR published in the charts. Follow ATC instructions when the instructions have a conflict with the altitude limits in the charts.

3.7 凡不能执行公布的 RNAV 进、离场程序、进近程序以及复飞程序的航空器驾驶员应在首次联系时告知管制员。

3.7 If aircraft cannot fulfill the requirements of the RNAV procedures operation, pilot shall inform the controller on the initial contact.

3.8 进港航空器如落地后需要从指定跑道的末端脱离，应尽早向进近管制员报告。

3.8 If arrival aircraft need vacate from designated RWY end, pilot shall inform APP as soon as possible.

3.9 五边进近时，航空器应保持 IAS160kt 至距接地点 6NM。如果不能执行，机组应在 IAF 前通知 ATC 可用的速度。

3.9 When approaching on final course, aircraft shall keep IAS 160kt until 6NM from the touch down point. If it can not be implemented, report to ATC the available speed before reaching IAF.

4. 雷达程序和/或 ADS-B 程序

4. Radar procedures and/or ADS-B procedures

4.1 在天津进近管制区范围内，航空器最小水平间隔为 5.6km，最小垂直间隔为 300m。

4.1 The minimum horizontal radar separation is 5.6km and the minimum vertical radar separation is 300m for aircraft within Tianjin APP.

4.2 最低监视引导高度扇区

4.2 Surveillance Minimum Altitude Sectors

Sector Nr.1	ALT limit: 450m or above
N392151E1170046-N391209E1170534-N391321E1171328-a clockwise circle with radius of 5.6km centered on N391022E1171413-N390827E1171713-a clockwise circle with radius of 5.6km centered on N390746E1171326-N390707E1171713-a clockwise circle with radius of 5.6km centered on N390452E1171438-N390609E1171809-a clockwise circle with radius of 5.6km centered on N390409E1171514-N390133E1171713-N385047E1172523-N385146E1173148-N385638E1173158-N390828E1173511-N390915E1173014-a clockwise circle with radius of 5.698km centered on N390710E1172719-N390932E1172951-N391256E1172731-N391138E1172424-a clockwise circle with radius of 5.6km centered on N391418E1172234-N391218E1171939-N391251E1171901-a clockwise circle with radius of 5.6km centered on N391452E1172155-N391647E1171855-N391813E1172026-N391920E1172307-a clockwise circle with radius of 5.666km centered on N392217E1172202-N392008E1171914-a clockwise circle with radius of 7.09km centered on N392358E1171905-N392439E1171414-N392151E1170046	
Sector Nr.2	ALT limit: 550m or above
N391256E1172731-N391138E1172424-a clockwise circle with a radius of 5.6km centered on N391418E1172234-N391218E1171939-N391251E1171901-a clockwise circle with a radius of 5.6km centered on N391452E1172155-N391647E1171855-N391813E1172026-N391920E1172307-N391256E1172731	
Sector Nr.3	ALT limit: 500m or above
N390915E1173014-a clockwise circle with a radius of 5.698km centered on N390710E1172719-N390932E1172951-N390917E1173001-N390915E1173014	
Sector Nr.4	ALT limit: 850m or above
N385904E1174426-a clockwise circle with a radius of 5.6km centered on N390117E1174149-N390316E1173853-a clockwise circle with a radius of 5.6km centered on N390117E1174149-N385904E1174426	
Sector Nr.5	ALT limit: 800m or above
N385904E1174426-a clockwise circle with a radius of 6.433km centered on N385956E1174008-N390316E1173853-a counterclockwise circle with a radius of 5.6km centered on N390117E1174149-N385904E1174426	

Sector Nr.6	ALT limit: 600m or above
N390609E1171809-a clockwise circle with a radius of 5.6km centered on N390409E1171514-N390133E1171713-a clockwise circle with a radius of 5.6km centered on N390409E1171514-N390110E1171434-N390217E1170617-a counterclockwise circle with a radius of 5.986km centered on N390517E1170444-N390234E1170700-N390229E1171023-a counterclockwise circle with a radius of 5.6km centered on N390530E1171031-N390339E1171336-a counterclockwise circle with a radius of 6.964km centered on N390714E1171206-N390718E1171656-a clockwise circle with a radius of 5.6km centered on N390452E1171438-N390707E1171713-a clockwise circle with a radius of 5.6km centered on N390452E1171438-N390609E1171809	
Sector Nr.7	ALT limit: 750m or above
N390734E1170740-a clockwise circle with a radius of 5.6km centered on N390530E1171031-N390339E1171336-a clockwise circle with a radius of 5.6km centered on N390530E1171031-N390229E1171023-N390234E1170700-a counterclockwise circle with a radius of 5.986km centered on N390517E1170444-N390734E1170740	
Sector Nr.8	ALT limit: 950m or above
N390748E1170720-a clockwise circle with a radius of 5.986km centered on N390517E1170444-N390734E1170740-a clockwise circle with a radius of 5.986km centered on N390517E1170444-N390234E1170700-a clockwise circle with a radius of 5.986km centered on N390517E1170444-N390217E1170617-a clockwise circle with a radius of 5.986km centered on N390517E1170444-N390748E1170720	
Sector Nr.9	ALT limit: 650m or above
N390748E1170720-a clockwise circle with a radius of 6.964km centered on N390714E1171206-N390718E1171656-a clockwise circle with a radius of 6.964km centered on N390714E1171206-N390339E1171336-a counterclockwise circle with a radius of 5.6km centered on N390530E1171031-N390734E1170740-a counterclockwise circle with a radius of 5.986km centered on N390517E1170444-N390748E1170720	
Sector Nr.10	ALT limit: 550m or above
N392151E1170046-N391209E1170534-N391321E1171328-a clockwise circle with a radius of 5.6km centered on	

N391022E1171413-N390827E1171713-a clockwise circle with a radius of 5.6km centered on N390746E1171326-N390707E1171713-a counterclockwise circle with a radius of 5.6km centered on N390452E1171438-N390718E1171656-a counterclockwise circle with a radius of 6.964km centered on N390714E1171206-N390748E1170720-a counterclockwise circle with a radius of 5.986km centered on N390517E1170444-N390217E1170617-N390110E1171434-a counterclockwise circle with a radius of 5.6km centered on N390409E1171514-N390133E1171713-N385047E1172523-N385146E1173148-N385638E1173158-N390828E1173511-N390413E1180204-N383529E1180145-N383852E1162241-N390122E1164625-N391815E1164346-N392151E1170046(scope of sector Nr.4 and sector Nr.5 are excluded)	
Sector Nr.11	ALT limit: 550m or above
N391920E1172307-a clockwise circle with a radius of 5.666km centered on N392217E1172202-N392008E1171914-a clockwise circle with a radius of 7.09km centered on N392358E1171905-N392439E1171414-N392536E1171847-N391920E1172307	

5. 无线电通信失效程序

5.1 无线电通信失效后在天津着陆的航空器

5.1.1 进场航空器

5.1.1.1 机组设置应答机编码为 7600，直至着陆。

5.1.1.2 AVBOX

1) 向南运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 AVBOX-2R（16L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

5. Radio communication failure procedures

5.1 Radio communication failure aircraft which intent to landing at TIANJIN/binhai airport

5.1.1 Arrival aircraft

5.1.1.1 The crew shall set the transponder code 7600 until landing.

5.1.1.2 AVBOX

1) While operating to south, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join AVBOX-2R (landing on RWY16L/R) if not receive arrival procedure. When reaching the top of descent, descent as

recommended altitude and execute the issued standard approach procedure for landing, if not receive approach procedure, follow the relevant approach procedure of RWY according to the latest ATIS.

2) 向北运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 AVBOX-1W（34L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

2) While operating to north, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join AVBOX-1W (landing on RWY34L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, if not receive approach procedure, follow the relevant approach procedure of RWY according to the latest ATIS.

5.1.1.3 OMDEK

1) 向南运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 OMDEK-5R（16L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

5.1.1.3 OMDEK

1) While operating to south, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join OMDEK-5R (landing on RWY16L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

2) 向北运行时，保持原指令高度（若无线电通信失

2) While operating to north, aircraft shall maintain the

效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 OMDEK-1T（34L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join OMDEK-1T (landing on RWY34L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

5.1.1.4 DUMAP

1) 向南运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 DUMAP-8R（16L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

5.1.1.4 DUMAP

1) While operating to south, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join DUMAP-8R (landing on RWY16L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

2) 向北运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 DUMAP-1Q（34L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的

2) While operating to north, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join DUMAP-1Q (landing on RWY34L/R) if not receive arrival

相应跑道进近程序执行。

procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

5.1.1.5 GUVBA

1) 向南运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 GUVBA-2R（16L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

5.1.1.5 GUVBA

1) While operating to south, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join GUVBA-2R (landing on RWY16L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

2) 向北运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 GUVBA-1W（34L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

2) While operating to north, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join GUVBA-1W (landing on RWY34L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

5.1.1.6 BUMDU

1) 向南运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 BUMDU-2R（16L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

2) 向北运行时，保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）和最后指令速度沿发布的 RNAV 进场程序飞行，未收到进场程序按 BUMDU-4T（34L/R 跑道着陆）执行。当到达下降顶点时参考建议高度下降，执行发布的标准进近程序着陆，未收到进近程序按最新通播公布的相应跑道进近程序执行。

5.1.1.7 无 RNAV 能力的航空器直飞 TAJ，保持 1200m，在 TAJ 上空盘旋等待 10min 后，加入 RWYI6R 或 RWY34L VOR/DME 程序着陆。

5.1.1.6 BUMDU

1) While operating to south, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join BUMDU-2R (landing on RWY16L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

2) While operating to north, aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m) and the last command speed, follow the issued RNAV arrival procedure to fly, join BUMDU-4T (landing on RWY34L/R) if not receive arrival procedure. When reaching the top of descent, descent as recommended altitude and execute the issued standard approach procedure for landing, follow the relevant approach procedure of RWY according to the latest ATIS if not receive approach procedure.

5.1.1.7 Aircraft without RNAV ability shall directly fly to TAJ and maintain 1200m, then join the holding pattern, after holding for 10min, join the VOR/DME approach procedure of RWY16R or RWY34L for landing.

5.1.2 离场航空器

5.1.2.1 机组设置应答机编码在 7600 和 7601 间以 30s 间隔重复调整 2 次并最终设置为 7600，直至着陆。

5.1.2.2 ELKUR/OMDEK/PEGSO

保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）沿 RNAV 离场程序飞行至 SID 终点 ELKUR，右转飞向 AVBOX，根据最新通播公布的跑道和进近程序选择相应的 AVBOX-2R（16L/R 跑道着陆）、AVBOX-1W（34L/R 跑道着陆）进场程序。

5.1.2.3 IDKEX/BOTPU

保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）沿 RNAV 离场程序飞行至 SID 终点 TJ837，右转飞向 TJ867，根据最新通播公布的跑道和进近程序选择相应的 GUVBA-2R（16L/R 跑道着陆）、GUVBA-1W（34L/R 跑道着陆）进场程序。

5.1.2.4 IGMOR

保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）沿 RNAV 离场程序飞行至 SID 终点 IGMOR，右转飞向 DUMAP，根据最新通播公布的跑道和进近程序选择相应的 DUMAP-8R（16L/R 跑道着陆）、DUMAP-1Q（34L/R

5.1.2 Departure aircraft

5.1.2.1 The crew shall set the transponder code to be adjusted twice between 7600 and 7601 at intervals of 30s and finally set to 7600 until landing.

5.1.2.2 ELKUR/OMDEK/PEGSO

Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m), follow the issued RNAV departure procedure and fly to the end of SID ELKUR, turn right to AVBOX, choose AVBOX-2R (landing on RWY16L/R), AVBOX-1W (landing on RWY34L/R) arrival procedure according to RWY and approach procedure issued by the latest ATIS.

5.1.2.3 IDKEX/BOTPU

Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m), follow the issued RNAV departure procedure and fly to the end of SID TJ837, turn right to TJ867, choose GUVBA-2R (landing on RWY16L/R), GUVBA-1W (landing on RWY34L/R) arrival procedure according to RWY and approach procedure issued by the latest ATIS.

5.1.2.4 IGMOR

Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m), follow the issued RNAV departure procedure and fly to the end of SID IGMOR, turn right to DUMAP, choose DUMAP-8R (landing on

跑道着陆）进场程序。

RWY16L/R), DUMAP-1Q (landing on RWY34L/R) arrival procedure according to RWY and approach procedure issued by the latest ATIS.

5.1.2.5 MUGLO

保持原指令高度（若无线电通信失效时航空器高度低于 1200m 须上升到 1200m 保持）沿 RNAV 离场程序飞行至 SID 终点 MUGLO，右转飞向 DUMAP，根据最新通播公布的跑道和进近程序选择相应的 DUMAP-8R（16L/R 跑道着陆）、DUMAP-1Q（34L/R 跑道着陆）进场程序。

5.1.2.5 MUGLO

Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 1200m and maintain if it is below 1200m), follow the issued RNAV departure procedure and fly to the end of SID MUGLO, turn right to DUMAP, choose DUMAP-8R (landing on RWY16L/R), DUMAP-1Q (landing on RWY34L/R) arrival procedure according to RWY and approach procedure issued by the latest ATIS.

5.1.2.6 无 RNAV 能力的航空器直飞 TAJ，保持 1200m，在 TAJ 上空盘旋等待 10min 后，加入 RWYI6R 或 RWY34L VOR/DME 程序着陆。

5.1.2.6 Aircraft without RNAV ability shall directly fly to TAJ and maintain 1200m, then join the holding pattern, after holding for 10min, join the VOR/DME approach procedure of RWY16R or RWY34L for landing.

5.2 无线电通信失效后飞往其他机场的航空器

5.2 Radio communication failure aircraft which intent to landing at the other airport

5.2.1 飞往起飞备降场的航空器

5.2.1 Fly to departure alternate airport

5.2.1.1 机组设置应答机编码在 7600 和 7602 间以 30s 间隔重复调整 2 次并最终设置为 7600，直至着陆。

5.2.1.1 The crew shall set the transponder code to be adjusted twice between 7600 and 7602 at intervals of 30s and finally set to 7600 until landing.

5.2.1.2 保持原指令高度（若无线电通信失效时航空器高度低于 3600m 须上升到 3600m 保持），沿 RNAV 离场程序飞至程序终点，加入计划航路后高度参考航线最低飞行高度。

5.2.1.2 Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 3600m and maintain if it is below 3600m), follow the issued RNAV departure procedure and fly to the end of it, join the FPL route and refer to the en-route minimum

flight altitude.

5.2.1.3 若起飞备降场与目的地机场的程序终点不一致，改变飞行意图前，机组应当在 119.275MHz、120.9MHz 和应急频率 121.5MHz 分别盲发包含后续飞行意图等的关键飞行信息两遍，并应答机识别（IDENT）一次。直飞最近的程序点加入 RNAV 离场程序飞至程序终点，加入计划航路后高度参考航线最低飞行高度。

5.2.1.3 If the procedure end point of the departure alternate airport is inconsistent with the destination airport, before changing the flight intention, the crew shall blindly send key flight information including subsequent flight intention twice at 119.275MHz, 120.9MHz and emergency frequency 121.5MHz respectively, and recognize the transponder (IDENT) once. Fly to the nearest waypoint and join the issued RNAV departure procedure to the end, join the FPL route and refer to the en-route minimum flight altitude.

5.2.1.4 无 RNAV 能力的航空器直飞最近的计划航路点，加入计划航路，高度参考上述要求。

5.2.1.4 Aircraft without RNAV ability shall directly fly to the nearest FPL waypoint, join the FPL route, altitude refer to the above requirements.

5.2.2 继续飞往目的地机场的航空器

5.2.2 Continue to the destination airport

5.2.2.1 机组设置应答机编码为 7600。

5.2.2.1 The crew shall set the transponder code to 7600.

5.2.2.2 保持原指令高度(若无线电通信失效时航空器高度低于 3600m 须上升到 3600m 保持)，沿 RNAV 离场程序飞至程序终点，加入计划航路后高度参考航线最低飞行高度。

5.2.2.2 Aircraft shall maintain the last command ALT (the radio communication failure aircraft shall climb to 3600m and maintain if it is below 3600m), follow the issued RNAV departure procedure and fly to the end of it, join the FPL route and refer to the en-route minimum flight altitude.

5.2.2.3 无 RNAV 能力的航空器直飞最近的计划航路点，加入计划航路，高度参考上述要求。

5.2.2.3 Aircraft without RNAV ability shall directly fly to the nearest FPL waypoint, join the FPL route, altitude refer to the above requirements.

5.3 复飞航空器

5.3 Missed approach aircraft

5.3.1 机组设置应答机为 7600。

5.3.1 The crew shall set the transponder code to 7600.

5.3.2 RNAV ILS/DME 进近的航空器沿标准复飞程序

5.3.2 Approach aircraft implementing RNAV ILS/DME

执行，保持高度 600m，过 TJ896/TJ970 后上升到 1200m，加入 TJ864/TJ963 等待程序，等待 10min 后，根据驾驶员意图，按照 5.1 或 5.2 执行。

shall follow the standard missed approach procedures, maintain 600m and climb to 1200m after TJ896/TJ970, then join the holding pattern at TJ864/TJ963. 10 minutes later, conduct item 5.1 or 5.2 according to the pilot intention.

5.4 无线电通信失效后，机组可通过卫星电话联系进近管制室，电话号码：022-24905807, 022-59098257。

5.4 Flight crew shall use the satellite phone to contact APP in case of communication failure, TEL:86-22-24905807/86-22-59098257.

6. 目视飞行程序

6. Procedures for VFR flights

6.1 目视飞行按 ATC 指令进行。

6.1 VFR flights by ATC.

6.2 天津/滨海机场实施目视间隔。在仪表进近程序的最后进近阶段使用目视间隔时，航空器驾驶员应按照仪表程序进近，并保持目视判断与其他相关航空器的安全间隔。当航空器进近至决断高度时，可能会遇到在同一跑道上前面着陆的航空器正在脱离，或者正在起飞的航空器即将离地的情况。当航空器驾驶员认为必要时，随时可以复飞并立即通报管制员。

6.2 Visual separation implemented in Tianjin/Binhai airport. When visual separation is applied during the final approach of instrument approach procedure, the pilot should follow the procedure and maintain visual judgement about the safety separation with other relevant aircrafts. When the aircraft descends to DA, some situations may be observed, such as the preceding aircraft is rolling out the same RWY, or the departure aircraft is lifting off. Under such situation, pilot can make a missed approach at any moment if it is considered to be necessary and notify the controller immediately.

6.3 航空器驾驶员能见另外一架相关航空器并接受目视间隔时，航空器驾驶员应当担负以下责任：

6.3 When pilot indicate that another aircraft is in sight and accept the visual separation, the pilot shall take the following responsibilities:

6.3.1 航空器驾驶员应当始终保持目视相关航空器，为保持间隔做必要的速度调整或者机动飞行，并视情将有关操作及时通报管制员。

6.3.1 Pilot shall maintain visual the relevant aircrafts, make the necessary speed adjustment or maneuvering, and report flight operations to ATC if needed.

6.3.2 航空器驾驶员应当操纵航空器避开前机尾流影响区域。

6.3.3 当航空器驾驶员不能看到另外一架相关航空器时，应当及时通报管制员，以便重新配备其他允许的间隔。

7. 目视飞行航线

无

8. 其它规定

无

6.3.2 Pilot shall keep aircraft away from wake turbulence affected area of preceding aircraft.

6.3.3 When pilot cannot visual the relevant aircraft, pilot shall report to ATC in order to get another available separation.

7. VFR route

Nil

8. Other regulations

Nil

ZBTJ AD 2.23 其它资料

鸟情资料

机场全年有鸟类活动，季节性强，并以机场东跑道周边区域鸟类活动更为频繁。鸟类多在日间活动，亦有部分鸟类（例如鸮及迁徙鸟类等）在夜间或者黄昏的时候活动。机场当局采取了驱赶措施，以减少鸟群活动。春季迁徙期主要集中在 3-5 月，秋季迁徙期主要集中在 9-11 月。

ZBTJ AD 2.23 Other information

Bird’s information

Activities of bird flocks are found all the year round, especially RWY16L/34R and surrounding areas. The main activity time of birds is daytime, the activity time of some birds are at night or at dusk. Aerodrome Authority resorts to dispersal methods to reduce bird activities. The spring migration period is mainly from March to May, the autumn migration period is mainly from September to November.