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

ZSNB/NGB-宁波/栎社 NINGBO/Lishe

ZSNB 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	N29°49.6′ E121°27.8′ 1250m FM THR 31
2	机场基准点与城市的位置关系 Direction and distance from city	239 °GEO, 10.5km FM city center
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	3.7 m/31.4℃(JUL)/4.9℃(FEB)
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	6°2′W/-05′06″
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	NINGBO AIRPORT GROUP CO.,LTD. NINGBO LISHE INTERNATIONAL AIRPORT, Haishu district, Ningbo, Zhejiang province, China TEL:86-574-89005012 FAX:86-574-87427089 AFS:ZSNBYDYX Website:www.ningbo-airport.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

ZSNB 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	HS or O/R
3	卫生健康部门 Health and sanitation	HS or O/R
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

ZSNB 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 tractor, fork-lift, baggage transporter, dolly, container dolly
2	燃油牌号 Fuel types	Jet Fuel No.3,100LL
3	滑油牌号 Oil types	Nil
4	加油设施/能力 Fuelling facilities & Capacity	tank vehicle (65000 litres, 45000 litres, 22000 litres , 20 litres/ sec); hydrant dispenser (20 litres/ sec)
5	除冰设施 De-icing facilities	4 de-icer, deicing fluid(KHF-1, cleanwing-I, cleanwing-II)
6	过站航空器机库 Hangar space for visiting aircraft	Nil
7	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available on request for A319, A320, A321, B737-300/500/700/800, B757-200; A319/320/321 APU change.
8	备注 Remarks	Ground power unit, ground air supply unit, ground air preconditioning unit, towing truck, maintenance platform truck

ZSNB AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD
2	餐饮 Restaurants	At AD
3	交通工具 Transportation	Passenger's coaches, taxis, subway

4	医疗设施 Medical facilities	At AD
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	Nil
7	备注 Remarks	Nil

ZSNB 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 fighting facilities: foam tender, foam and dry powder combination fire truck, demolition rescue truck, emergency support vechicle, illumination truck.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747-400 Rescue equipments: rescue lifting equipment, steel plate, tightwire, mobile surface operation devices, rescue sleeper, board, towing truck for B757,B767,A300,A319,A320,A321,A330,A340,MD82,MD90,EMB145,EMB190,CRJ200,ARJ21,G450,CRJ700/900, universal landing gear towing harness, business jet rescue strap,towing cable,uplift air cushion.
4	备注 Remarks	Mobile surface operation devices, towing vehicle and uplift air cushion can be callable.

ZSNB 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 Spreading vehicle, snow blower, snow pusher, snow removaling plate
2	扫雪顺序 Clearance priorities	RWY→TWY→Apron
3	备注 Remarks	Nil

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

1	停机坪道面和强度 Apron surface and strength	道面 Surface	CONC
		强度 Strength	PCR 1210/R/A/W/T : stands Nr.510-519 PCR 1090/R/A/W/T : stands Nr.305-312, 319-321 PCR 920/R/A/W/T : stands Nr.8-16 PCR 900/R/A/W/T : stands Nr.17-26 PCR 860/R/A/W/T : stands Nr.313-318, 326-332 PCR 830/R/A/W/T : stands Nr.1-7

2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	60m : B3-B5, B6-B10(N of TWY B), B11 51m : B12 46m : A2(S of TWY A) 42m : B13 39m : A2(75m S of RCL-TWY A, 0-75m S of RCL), B7-B10(S of TWY B) 28.5m : A1, A7, K1-K4 23m : A, B, B6(TWY B-TWY L2)
		道面 Surface	ASPH : A1(0-75m south of RCL), A2(0-75m south of RCL), A7(0-75m south of RCL), K1-K4(0-75m south of RCL) CONC : A, A1(FM 75m south of RCL to TWY A), A2(FM 75m south of RCL to TWY A, south of TWY A), A7(FM 75m south of RCL to TWY A), B, B3-B13, K1-K4(FM 75m south of RCL to TWY A)
		强度 Strength	PCR 1920/F/C/X/T : K2(0-75m south of RCL) PCR 1750/F/C/X/T : A1(0-75m south of RCL), A7(0-75m south of RCL) PCR 1720/F/C/X/T : A2(0-75m south of RCL), K1(0-75m south of RCL) PCR 1600/F/C/X/T : K3(0-75m south of RCL), K4(0-75m south of RCL) PCR 1220/R/A/W/T : A2(south of TWY A), B3-B9 PCR 1200/R/B/W/T : B12 PCR 1130/R/A/W/T : A2(FM 75m south of RCL to TWY A) PCR 1000/R/B/W/T : A7(FM 75m south of RCL to TWY A) PCR 980/R/B/W/T : A PCR 970/R/A/W/T : B11 PCR 940/R/A/W/T : B13 PCR 920/R/A/W/T : B10 PCR 860/R/A/W/T : A1(FM 75m south of RCL to TWY A), K1(FM 75m south of RCL to TWY A) PCR 840/R/A/W/T : K3(FM 75m south of RCL to TWY A), K4(FM 75m south of RCL to TWY A) PCR 810/R/A/W/T : B PCR 790/R/A/W/T : K2(FM 75m south of RCL to TWY A)
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	

ZSNB 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. Guide lines at aprons. Visual docking guidance system at aircraft stands Nr. 1-7, 305-321, Marshalling assistance for other aircraft stands.	
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
		跑道灯光 RWY lights	RTHL, WBAR, REDL, RCLL, RENL
		滑行道标志 TWY markings	Edge line, center line, TWY shoulder marking, No-entry, information signs, RWY holding position, intermediate holding position
		滑行道灯光 TWY lights	Edge line retroreflective markers, edge line lights, center line lights, No-entry bar , RETILs, intermediate holding position lights
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Runway guard lights	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	Nil	

ZSNB 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
Antenna 001	Antenna	019/1920	49	LGT	Circling CAT A/B
Antenna 002	Antenna	040/2820	49	LGT	
BLDG 003	BLDG	059/10112	165	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
BLDG 004	BLDG	062/11427	188	LGT	
BLDG 005	BLDG	063/10001	145	LGT	
BLDG 006	BLDG	065/9926	164	LGT	
BLDG 007	BLDG	065/10071	139	LGT	
BLDG 008	BLDG	066/10472	178	LGT	
BLDG 009	BLDG	067/10267	147	LGT	
BLDG 010	BLDG	068/10492	253.3		
BLDG 011	BLDG	077/14548	412.7	LGT	
BLDG 012	BLDG	077/14641	266	LGT	
BLDG 013	BLDG	094/7795	173	LGT	
BLDG 014	BLDG	098/7996	173	LGT	
BLDG 015	BLDG	107/8036	171	LGT	
BLDG 016	BLDG	109/7790	228	LGT	
BLDG 017	BLDG	110/7697	168	LGT	
Antenna 018	Antenna	123/1028	20.3		
BLDG 019	BLDG	127/3165	30.8		RWY13 take-off path

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
Pole 020	Pole	129/2288	18		RWY13 take-off path
Antenna 021	Antenna	130/2181	16		RWY13 take-off path
Antenna 022	Antenna	134/3002	22		
TOWER 023	TOWER	181/552	45	LGT	
MT 024	MT	274/10502	270		
MT 025	MT	278/12686	537		
MT 026	MT	289/10108	277		
MT 027	MT	291/10716	342		Circling CAT D
Antenna 028	Antenna	294/3413	46	LGT	
NATURAL_HIGHPOINT 029	NATURAL_HIGHPOINT	296/9217	100		Circling CAT C, RWY13 VOR final approach D5.0NGB-MAPt
MT 030	MT	300/14154	416		
MT 031	MT	306/13254	350		RWY31 take-off path
MT 032	MT	308/14851	497.7		RWY31 departure; RWY31 take-off path
Pole 033	Pole	310/2873	18		RWY31 take-off path
Antenna 034	Antenna	310/5248	41		

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
BLDG 035	BLDG	311/2924	18		RWY31 take-off path
MT 036	MT	311/14097	447		
BLDG 037	BLDG	312/2493	12		RWY31 take-off path
BLDG 038	BLDG	313/2559	14		RWY31 take-off path
Antenna 039	Antenna	314/1591	20.2		
MT 040	MT	315/10463	195		RWY13 GP INOP final approach D4.8 IBK-D2.9 IBK, RWY31 take-off path
MT 041	MT	315/12647	369		RWY13 GP INOP final approach FAF-D4.8IBK, RWY13 VOR/DME final approach D7.0NGB-D5.0NGB

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(°)/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
MT 042	MT	017/28143	436		
MT 043	MT	018/18416	294		
MT 044	MT	068/48388	456		
MT 045	MT	082/26675	388		

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
BLDG 046	BLDG	098/30537	673		
MT 047	MT	099/41175	542		
BLDG 048	BLDG	109/32068	546		
MT 049	MT	117/27778	556		RWY31 RNAV ILS/DME initial approach
MT 050	MT	127/15018	160		RWY31 GP INOP final approach FAF-D3.0ILL, VOR/DME final approach FAF-D3.8NGB
MT 051	MT	135/19649	465		
MT 052	MT	138/23747	497		
MT 053	MT	140/20019	465		
MT 054	MT	142/19886	505		RWY31 VOR/DME intermediate approach; RWY13 RNAV departure; RWY13 RNAV ILS/DME, ILS/DME, GP INOP, VOR/DME approach
WINDMILL 055	WINDMILL	142/29438	643		
WINDMILL 056	WINDMILL	145/29282	644		
MT 057	MT	146/21353	536		
WINDMILL 058	WINDMILL	146/25436	696		
WINDMILL 059	WINDMILL	147/25013	696		

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 060	WINDMILL	147/25235	712		RWY31 VOR/DME, ILS/DME and RNAV ILS/DME initial approach; NGB holding; RWY13 conventional departure
WINDMILL 061	WINDMILL	148/28593	652		
WINDMILL 062	WINDMILL	149/24620	646		RWY31 RNAV ILS/DME, ILS/DME intermdiate approach
WINDMILL 063	WINDMILL	149/27949	656		
MT 064	MT	150/25500	635		
MT 065	MT	150/45961	551		
MT 066	MT	187/24922	615		
MT 067	MT	197/41631	764		
MT 068	MT	206/33920	712		
MT 069	MT	220/30183	810		
MT 070	MT	227/42898	746		
MT 071	MT	236/45610	930		
MT 072	MT	254/28960	976		
MT 073	MT	254/48328	1000		MSA sector 320 °~090 °
MT 074	MT	266/35952	896		

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(°)/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
MT 075	MT	267/23739	800		
MT 076	MT	282/34082	777		MSA sector 090°~320°
MT 077	MT	283/16042	521		
MT 078	MT	283/41533	649		
MT 079	MT	291/18586	602		RWY31 ILS/DME, RNAV ILS/DME, GP INOP, VOR/DME missed approach
MT 080	MT	293/29559	650		RWY13 VOR/DME, ILS/DME initial approach
MT 081	MT	295/22032	538		
MT 082	MT	300/15994	521		
MT 083	MT	300/18216	573		RWY13 VOR/DME final approach FAF-D7.0NGB
MT 084	MT	300/31747	638		
MT 085	MT	300/39479	435		
TRANSMISSION_LINE 086	TRANSMISSION_LINE	302/18739	598		RWY13 VOR/DME intermediate approach
MT 087	MT	303/21580	452		
MT 088	MT	305/18103	535		RWY13 RNAV ILS/DME, ILS/DME intermediate approach
MT 089	MT	306/16103	431		

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(°)/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
MT 090	MT	306/22737	456		
MT 091	MT	308/18591	515		
MT 092	MT	309/18526	522		
MT 093	MT	310/15681	513		RWY31 take-off path; RWY13 RNAV ILS/DME, ILS/DME intermediate approach
MT 094	MT	310/16915	466		
Antenna 095	Antenna	315/42104	291	LGT	
Antenna 096	Antenna	315/42166	243	LGT	
Antenna 097	Antenna	334/44390	239	LGT	
MT 098	MT	339/31295	446		
MT 099	MT	355/29594	431		

Remarks:

ZSNB 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	Ningbo ATMB MET Office
2	气象服务时间、服务时间以外的责任气象台 Hours of service/MET Office outside hours	H24
3	负责编发 TAF 的气象台、有效时段、发布间隔	Ningbo ATMB MET Office;9h, 24h;3h, 6h

	Office responsible for TAF preparation/Periods of validity/Interval of issuance	
4	趋势预报及发布间隔 Trend forecast/Interval of issuance	trend 1h
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	Briefing provided: Synoptic charts, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	FAX，MET Service Terminal
9	提供气象情报的空中交通服务单位 ATS units provided with information	Nil
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	Hourly plus special observation/
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: 100m L of RCL,440m inward THR13; B: 100m R of RCL,310m inward THR31. SFC wind sensors 13: 106m L of RCL,446m inward THR; 31: 106m R of RCL,316m inward THR. Ceilometer 60m S of RCL extension line,306m outside THR31; 4m S of RCL extension line,1000m outside THR31.
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

ZSNB 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
13	123.25 °GEO 129 °MAG	3200×45	PCR 790/R/A/W/T CONC/-	Nil	THR 3.7m DTHR 3.7m TDZ 3.7m	0%
31	303.25 °GEO 309 °MAG	3200×45	PCR 790/R/A/W/T CONC/-	Nil	THR 3.7m TDZ 3.7m	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
13	Nil	Nil	3320×300	225×150	Nil	Yes
31	Nil	Nil	3320×300	225×150	Nil	Yes

Remarks: THR13 displaced 150m inwards; anti-blast pads on both ends of RWY: 60m×60m, ASPH.

ZSNB 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
13	3200	3200	3200	3050	THR displaced 150m inwards
13	2980	2980	2980	NOT AVBL	FM A2,THR displaced 150m inwards
31	3200	3200	3200	3200	Nil

ZSNB 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
13	PALS CAT I SFL 900 m LIH	GREEN Yes	PAPI LEFT 380m inward DTHR13 3.2 ° 19.2m	Nil	3050 m spacing 30m 0-2150m, WHITE 2150-2750m, RED/WHITE 2750-3050m, RED VRB LIH	3200 m spacing 60m 0-150m, RED 150-2600m, WHITE 2600-3200m, YELLOW VRB LIH	RED	Nil
31	PALS CAT I SFL 900 m LIH	GREEN Yes	PAPI LEFT 330m inward THR31 3 ° 15.5m	Nil	3200 m spacing 30m 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
Remarks: RWY13 runway lighting:from APCH view, 4 upright Red REDL installed 150m before DTHR. RWY13 APCH LGTs start FM DTHR.								

ZSNB 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: 13:90m N of RCL, 320m inward THR, Lighting; 31:90m S of RCL, 320m inward THR, Lighting.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: green center line lights, blue retroreflective markers, blue edge line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	Dual feed, diesel engine driven generator / 15 sec
5	备注 Remarks	Nil

ZSNB 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

ZSNB 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
Ningbo tower control area	A circuit, 2 arcs with radius 13km centered at center of both RWY ends and 2 parallel lines of 13km FM RCL.	SFC-1200m MSL				
Altimeter setting region and TL/TA	N300456 E1211619-N294501 E1205854-N292600 E1210643-N301509 E1214543-An arc with a radius of 30NM centered on Ningbo VOR(NGB).	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)				

ZSNB 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		126.45			H24	
TWR	Ningbo Tower	118.35 (118.7/130.0)			H24	
APN	Ningbo Apron	121.6 (130.00)			H24	
Delivery	Ningbo Delivery	121.95			0030-1230	DCL available

ZSNB 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
Andong VOR/DME	AND	114.8 MHz CH 95X	H24	N30°15.4′ E121°13.3′	32 m	
Shengzhou VOR/DME	SHZ	113.4 MHz CH 81X	H24	N29°36.0′ E120°49.0′		
Ningbo VOR/DME	NGB	116.3 MHz CH 110X	H24	N29°49.8′ E121°27.8′ 333°MAG/493m FM ARP	9 m	

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
Lishe NDB	BK	227 kHz	H24	N29°53.7′ E121°20.0′ 308 °MAG/ 14877m FM ARP		BTN 11-15.5NM on BRG273 °for STAR/SID, BRG130 °for STAR/SID, BTN 2-5NM on BRG323 °for SID, BRG113 °for initial approach procedure, BTN 2.5-3.5NM on BRG308 °for SID, BTN 2.5-3.5NM on BRG307 °for STAR U/S.
LOC 13 ILS CAT I	IBK	108.9 MHz		129 °MAG /290m FM end RWY 13		Beyond -22 °of front course U/S.
GP 13		329.3 MHz		120m N of RCL, 289m inward displaced THR		Angle 3.2 ° RDH 16.6m Coverage 10NM angle below 2 °U/S
DME 13	IBK	CH 26X (108.9 MHz)		116m N of RCL, 289m inward THR13	9m	Co-located with GP 13
LOC 31 ILS CAT I	ILL	110.9 MHz		309 °MAG / 290m FM end RWY 31		Beyond +27 ° of front course U/S.
GP 31		330.8 MHz		120m N of RCL, 304m inward THR		Angle 3 ° RDH 16.6m Coverage 10NM
DME 31	ILL	CH 46X (110.9 MHz)		123m N of RCL, 304m inward THR	9m	Co-located with GP 31

ZSNB AD 2.20 本场规定 ZSNB AD 2.20 Local aerodrome regulations

1. 机场使用规定 **1.Airport operations regulations**

1.1 所有训练飞行和技术试飞需事先申请，并在得到 1.1 Each and every training and technical test flight shall

空中交通管制部门批准后方可进行;

be filed in advance and shall be made only after clearance has been obtained from ATC;

1.2 本场可供 B747-400 同类及其以下机型使用。

1.2 Maximum aircraft to be available: B747-400 and equivalent.

1.3 应答机使用注意事项:

1.3 Notice for using transponder:

1.3.1 落地航空器脱离跑道后，离场航空器到达跑道外等待点前，应将应答机设置为地面模式。

1.3.1 After landing aircraft vacate RWY, departure aircraft shall set transponder on ground mode before reaching the runway holding point.

1.3.2 离场航空器在收到进跑道指令后应将应答机设置为空中模式。

1.3.2 After departure aircraft receive the enter RWY instruction, set transponder to air mode.

1.4 机组应根据机型及进近方式，检查机场运行最低标准，若不能满足时应及时报告管制员。

1.4 Aircrew shall according to aircraft types and approach mode, check the aerodrome operating minima, pilot shall inform ATC if can not fulfill the aerodrome operating minima.

1.5 本场实施机坪运行管理，由宁波塔台负责所有航空器放行许可的发布工作以及向塔台地面管制区域（平行滑行道 A 和 B 之间中点连线以北区域）航空器提供空中交通管制服务；在航空器获得放行许可后，宁波机坪负责机坪管制区域（平行滑行道 A 和 B 之间中点连线以南区域）航空器推出、开车、滑行和其他涉及航空器运行的指挥工作。宁波机坪向宁波塔台以道口移交的方式移交出港航空器，航空器驾驶员必须严格遵守机坪管理规定或听从管制员指令滑行。

1.5 Apron operation implemented at Ningbo/Lishe airport, TWR is responsible for issuing delivery clearance for all the aircrafts, and providing air traffic service for the aircrafts at TWR control area (N of the midpoint line between parallel TWY A and TWY B); when aircraft get delivery clearance, APN is responsible for aircraft push out, start up, taxiing, and other command relate to aircraft operation at APN contrl area (S of the midpoint line between parallel TWY A and TWY B). The exit aircraft shall be handed over from APN to TWR in the way of crossing. The pilot shall strictly abide the APN management regulations or taxi according to the instructions of controllers.

1.6 航空器应取得宁波机坪许可后方可推出开车，推

1.6 Aircraft shall confirm RWY in use and push-back

出时须向宁波机坪证实使用跑道、推出方向。宁波机坪发布许可指令后，机组应在 3min 之内执行；超过 3min 仍未推出开车则视为指令失效，机组需重新申请推出开车。

orientation to Ningbo APN, then push back and start up after obtaining Ningbo APN clearance. Aircrew shall execute in 3 minutes, otherwise the instruction is invalid, they need to reapply for push-back and start-up.

1.7 本机场放行时不再要求机组话音复诵已经通过数据链成功发布的放行许可。

1.7 No readback required when the delivery clearance has been received through DCL.

2. 跑道和滑行道的使用

2. Use of runways and taxiways

2.1 可以通过现场指挥中心申请拖车服务;

2.1 Towing service is available via Ground Control;

2.2 禁止航空器在滑行道和机坪滑行通道上做 180°转弯;

2.2 180°turnaround on TWY and apron taxilane is forbidden for all aircraft;

2.3 机坪滑行线翼展限制

2.3 Taxiline wing span limits:

机坪滑行线/Taxiline	航空器翼展限制/Wing span limits for aircraft(m）
B6(south of L2), L1, L2	≤65
M1(taxi in stands Nr. 515, 516)	≤52
M1(taxi in stands Nr. 517-519), S1	≤36

2.4 对机组的要求:

2.4 Flight crew requirements:

2.4.1 飞行机组应认真听取并重复地面管制员的滑行指令,按指定的滑行路线滑行。发现问题及时证实。

2.4.1 Flight crew shall listen carefully, repeat and follow the taxi clearances given by ATC. IF there is any question, confirm in time.

2.4.2 推出前，机组应向地面管制员证实使用的跑道和推出方向。

2.4.2 Flight crew shall confirm the RWY in use and the taxiing direction before pushed-back.

2.5 本场 A1、A2、A7、B12、B13、K2 滑行道增补面按 B747-400 为最大机型设计，B777、A340-600、A350-1000、A350-900 机型在上述滑行道运行时需采

2.5 Maximum aircraft to be available on the fillets of TWYs A1, A2, A7, B12, B13 and K2 is B747-400. Aircrafts B777, A340-600, A350-1000 and A350-900

用偏置转弯方式滑行;其他滑行道增补面按 A340-600 为最大机型设计。B747-400 在从 B 滑行道经 B12、B13滑行道至A滑行道掉头转弯时需采用偏置转弯方式滑行。

shall use Judgement Oversteering Method while taxiing on these TWYs. Maximum aircraft to be available on the fillets of other TWYs is A340-600. B747-400 shall use Judgement Oversteering Method when turnaround from TWY B to TWY A via TWY B12 & B13.

2.6 跑道运行原则:

2.6 General rules for using RWYs:

2.6.1 起飞航空器:

2.6.1 For departure aircraft:

起飞航空器从接到管制员进跑道指令到对正跑道时间应控制在 60s 以内，并能够立即执行起飞指令。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（湿跑道或污染跑道除外）。

Departure aircraft shall finish RWY alignment within 60s after receiving ATC instructions of entering RWY; If flight crew consider that they can not fulfill the process within the required time, pilot shall inform TWR ATC before reaching the RWY holding point(except for wet or contaminated RWY).

2.6.2 落地航空器:

2.6.2 For landing aircraft:

2.6.2.1 落地航空器应尽快退出跑道,从接地到滑出跑道时间应控制在 50s 以内，如机组认为无法在上述要求的时间内完成，须在首次联系塔台时向管制员说明（湿跑道或污染跑道除外）。

2.6.2.1 Aircraft shall fully vacate RWY within 50s after touching down; If flight crew consider that they can not fulfill the process within the required time, pilot shall inform TWR ATC at first contact(except for wet or contaminated RWY).

2.6.2.2 落地航空器应尽快退出跑道,脱离跑道后应及时向塔台管制员报告已脱离跑道和脱离所使用的滑行道。

2.6.2.2 Landing aircraft shall vacate the RWY as soon as possible, then inform TWR ATC.

2.6.3 在转换跑道运行方向过程中，短时使用跑道顺风分量大于 3m/s，但不大于 5m/s 时，管制员应将该信息通知相关航空器驾驶员。航空器驾驶员根据机型性能或运行手册，决定是否使用管制员安排的顺风跑道起飞或着陆，并将决定告知管制员。

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

ATC.

2.7 机动区冲突多发地带:

滑行冲突热点区域：B6、B10 滑行道与 A、B 平滑交叉地带。

2.7 Hot spot:

Hot spot area: Intersection between TWY B6 and TWY A, between TWY B6 and TWY B, between TWY B10 and TWY A, between TWY B10 and TWY B.

2.8 非全跑道起飞运行规定

因管制调配等原因需要或航空器驾驶员提出申请，经塔台管制员同意后，离场航空器可以使用非全跑道起飞。

2.8 Partial RWY take-off operations rules

Due to ATC control allocation and other reasons or flight crew request, it is available to use partial RWY to take-off when flight crew get permission from TWR ATC.

3. 机坪和机位的使用

3.1 未经空中交通管制部门同意，严禁航空器利用自身动力倒滑。航空器在机坪上活动必须经空管部门同意后，方可按指定的滑行路线滑行、牵移。

3.2 航空器进行发动机试车须经塔台和现场指挥中心许可，在 B13 滑行道以东的 A 滑行道和停机位 23 至 26 区域试车点进行，严禁在其他区域试车，试车时间是 05:00 至 24:00（北京时间）。

3.3 停机位使用限制

3. Use of aprons and parking stands

3.1 Aircraft push-back on its own power without ATC clearance is strictly forbidden. Aircraft taxiing and push-back on apron shall follow ATC clearance strictly.

3.2 Engine run-ups are subject to Tower Control and Command Center clearance, and may only be carried out between TWY A(east of TWY B13) and stands Nr.23-26 from 21:00 to 16:00(next day). Other areas are strictly forbidden.

3.3 Limits for aircraft parking on the following stands:

停机位编号/Stands Nr.	翼展限制（m）/Wing span limits(m)	机身长度限制（m）/Fuselage limits(m)	进出方式/Enter or Exit
309-311, 319, 510-513	< 65	≤75.36	Taxi in, Push back
3, 17, 18	< 65	≤70.67	Taxi in, Push back
19, 20, 308, 312, 514, 515	< 52	≤61.6	Taxi in, Push back
8, 9	< 52	≤54.94	Taxi in, Push back

10-16, 21-26, 516-519	< 36	≤46.5	Taxi in, Push back
326-332	< 36	≤46.5	Taxi in, Taxi out
1, 2, 4-7, 305-307, 313-318, 320, 321	< 36	≤45	Taxi in, Push back

3.4 为降低碳排放及噪音,所有停靠廊桥机位的航空器必须关闭 APU,使用 400Hz 桥载电源及飞机专用空调设备。以下特殊情况除外:

3.4.1 服务方不能够提供有效的桥载设备服务;

3.4.2 航空器因启动发动机而需开启 APU;

3.4.3 航空器进行 APU 的维修检测活动;

3.4.4 遇到影响航班安全、正常运行的特殊情形,例如极端天气、专机保障、航班过站时间不足等有关情况。

3.4 All aircrafts parking on boarding bridge stands shall turn off APU and use bridge equipment (400Hz) and special air conditioning. Except for the following circumstances:

3.4.1 Bridge equipment is unavailable;

3.4.2 Aircraft needs APU to start up engine;

3.4.3 APU is under maintenance;

3.4.4 In case of exceptional circumstances influencing the operation safety, such as extreme weather, special plane support, insufficient flight transition time.

4. 低能见度运行

无

4. Low visibility operation

Nil

5. 直升机飞行限制，直升机停靠区

无

5. Helicopter operation restrictions and helicopter parking/docking area

Nil

6. 警告

无

6. Warning

Nil

ZSNB AD 2.21 减噪程序

无

ZSNB AD 2.21 Noise abatement procedures

Nil

ZSNB AD 2.22 飞行程序

1. 总则

ZSNB AD 2.22 Flight procedures

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

起落航线在跑道西南侧进行，通常在使用跑道及其进近灯 5km 范围内，C、D 类航空器高度 600m，A、B 类航空器高度 300m。

2. Traffic circuits

Traffic circuits shall be made to the southwest of runway, usually within 5km of runway and its approach lights, at the altitude of 600m for aircraft CAT C/D, and 300m for aircraft CAT A/B.

3. 仪表飞行程序

3.1 严格按照航图中公布的进、离场程序和 ENR2.2.3 中公布的有关规定飞行。如果需要，航空器可在空中交通管制部门指定的航路、导航台或定位点上空等待或做机动飞行。

3. IFR flight procedures

3.1 Strict adherence is required to the relevant arrival/departure procedures published in the aeronautical charts and the relevant regulations published in subsection ENR2.2.3. Aircraft may, if necessary, hold or maneuver on an airway, over a navigation facility or a fix designated by ATC.

3.2 不能执行 PBN 程序的航空器，听从 ATC 指令，由管制员进行雷达引导。

3.2 The aircraft that cannot execute PBN procedure shall follow the command of ATC and be guided by radar.

4. 雷达程序和/或 ADS-B 程序

4.1 宁波进近管制区域内实施雷达管制。航空器最小水平间隔为 5.6km，最小垂直间隔为 300m。

4. Radar procedures and/or ADS-B procedures

4.1 Radar control within Ningbo APP Control Area has been implemented. The minimum horizontal radar separation is 5.6km, the minimum vertical radar separation is 300m.

5. 无线电通信失效程序

参见 AIP 总则 3.4.5 中的仪表飞行规则航空器地空双向无线电通信失效通用程序。

5. Radio communication failure procedures

Refer to AIP GEN3.4.5 general procedures for aircraft under instrument flight rule with air-ground two-way radio communication failure.

6. 目视飞行程序

6. Procedures for VFR flights

无

7. 目视飞行航线

无

8. 其它规定

无

Nil

7. VFR route

Nil

8. Other regulations

Nil

ZSNB AD 2.23 其它资料

鸟情资料

1. 机场当局采取了驱赶和捕捉措施,以减少鸟群活动和防范其它动物侵入。

2. 主要危险鸟类及其它动物活动规律和特征

ZSNB AD 2.23 Other information

Bird's information

1. AD Authority resorts to dispersal methods to reduce bird activities and animal trap to prevent other animals invasion.

2. Mainly species activities around or near AD

Species		ACT time	Residence type	FLT HGT(m)	Characteristic
Birds	Magpie	Feb.-Jun.	Resident	0-30	Solitary or paired
	Sparrow	The whole year			In group
	Skylark	Oct.—Mar.(next year)	Migrant		
	Barn swallow, Hirundo daurica	Mar.-May, Jul., Aug.		0-60	
	Wader	Mar.-May, Sep.-Nov.		0-150	
	Heron	Jun.-Oct.	Majority is migrant, minority is resident		
	Hawk and other bird of prey	Oct.-Feb.(next year)		0-300	Normally solitary

Other animals	Bat	May-Oct.	\	0-30	In small group
	Yellow weasel, Muroid	The whole year		\	Solitary

3. 机场及周边地区鸟类迁徙活动规律

春季（3 月-5 月）候鸟开始繁殖迁徙，迁徙路线为从南向北，主要包括鸻鹬类，短暂停栖后继续北上，低空活动高度为 0-150m，迁徙时高度为 800m 以上。此外，本地留鸟筑巢繁殖，主要包括麻雀、斑鸠、乌鸫、喜鹊等。

夏季（6 月-8 月）以留鸟及夏候鸟为主。夏候鸟居多，主要包括：鹭类、燕类。

秋季（9 月-11 月）候鸟开始越冬迁徙，迁徙路线为从北向南，主要包括：鹭类、鸻鹬类。低空活动高度为 0-150m，高空迁徙飞行高度 800m 以上。

冬季（12 月-次年 2 月）候鸟基本完成迁徙，以留鸟及冬候鸟为主。留鸟主要包括：麻雀、斑鸠、乌鸫、喜鹊等；冬候鸟包括：云雀、猛禽类。

3. Regularity of bird migration around or near AD

Migrant birds fly FM S to N in spring(Mar.-May). Mainly are waders, stay temporarily and then fly to N. Activity height is 0-150m in low altitude, and above 800m during migration. Resident birds(mainly sparrows, turtledoves, blackbirds and magpies) nest for breed in spring.

Main birds are resident birds and summer birds in summer(Jun.-Aug.). Summer birds are the majority, mainly are herons and hirundo.

Migrant birds fly FM N to S in autumn(Sep.-Nov.), mainly are herons and waders. Activity height is 0-150m in low altitude, and above 800m during migration.

Main birds are resident birds and winter birds in winter(Dec.-next year Feb.). Resident birds mainly are sparrows, turtledoves, blackbirds and magpies; winter birds mainly are skylarks and birds of prey.