

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

ZSNB-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 | 方向、距离 Direction and distance from city | 239°GEO, 10.5km FM city center |
| 3 | 标高/参考气温 Elevation / Reference temperature | 3.7m/35.0℃(JUL) |
| 4 | 机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation | RCL/- |
| 5 | 磁差/年变率 MAG VAR/ Annual change | 6°2'W/-0°05'06"(2021) |
| 6 | 机场管理部门、地址、电话、传真、AFS、电子邮箱、网址 AD administration, address, telephone, telefax, AFS, E - mail, website | Ningbo Lishe International Airport Ningbo Lishe International Airport, Ningbo 315154, TEL:86-574-89006326 FAX:86-574-87427089 AFS:ZSNBYDYX Email:nbairport@nbairport.com 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 | 机场当局(机场开放时间) AD Administration (AD operational hours) | H24 |
| 2 | 海关和移民 Customs and immigration | HS or O/R |
| 3 | 卫生健康部门 | HS or O/R |

| | | |
|----|---|-----|
| | Health and sanitation | |
| 4 | 航行情报服务讲解室 AIS Briefing Office | H24 |
| 5 | 空中交通服务报告室 ATS Reporting Office (ARO) | H24 |
| 6 | 气象讲解室 MET Briefing Office | H24 |
| 7 | 空中交通服务 ATS | H24 |
| 8 | 加油 Fuelling | H24 |
| 9 | 地勤服务 Handling | H24 |
| 10 | 保安 Security | H24 |
| 11 | 除冰 De-icing | 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/滑油牌号 Fuel/oil types | Nr.3 jet fuel -- |
| 3 | 加油设施/能力 Fuelling facilities/capacity | tank vehicle (65000 litres, 47000 litres, 45000 litres , 20 litres/ sec); hydrant dispenser (20 litres/ sec, for all stands) |
| 4 | 除冰设施 De-icing facilities | 4 de-icer, deicing fluid(KHF-1, cleanwing-I, cleanwing-II) |
| 5 | 过站航空器机库 Hangar space for visiting aircraft | Nil |
| 6 | 过站航空器的维修设施 Repair facilities for visiting aircraft | Line maintenance available on request for A319, A320, A321, B737-300/500/700/800, B757-200; A319/320/321 APU change. |

| | | |
|---|---------------|--|
| 7 | 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 | 餐馆 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, water tank truck, demolition rescue truck, illumination truck, chemical supply tender, medicament reinforcement car. |
| 3 | 搬移受损航空器的能力 Capability for removal of disabled aircraft | MTWA up to A320-200, Rescue equipments: rescue lifting equipment, steel plate, tightwire, mobile surface operation devices, towing truck for B737-300/600/700/800, B747, B757, B767, A319-100, A320-200, A321, A330, A340, MD82, MD90, EMB145, EMB190, CRJ200, corporate aircraft . Rescue bandage for B757, A319/320/321, corporate aircraft. |
| 4 | 备注 Remarks | Nil |

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 Types of clearing equipment | All seasons Spreading vehicle, snow blower, snow pusher, snow removing 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 | Surface: | CONC |
| | | Strength: | PCN 86/R/B/W/T: stands Nr.305-312, 319-321, 510-519 PCN 78/R/B/W/T: stands Nr.17-26, 17A, 17B, 17C PCN 66/R/B/W/T: stands Nr.1-16 PCN 62/R/B/W/T: stands Nr.313-318, 326-332 |
| 2 | 滑行道宽度、道面和强度 Taxiway width, surface and strength | Width: | 60m: A3(S of TWY A), B3, B5 46m: B2 42m: B13 39m: B7-B10 38m: A5(S of TWY A) 34m: A3(N of TWY A), A4, A5(N of TWY A) 28.5m: A1, A7, K1 23m: A, B, B6(N of taxiline L2) |
| | | Surface: | CONC |
| | | Strength: | PCN 86/R/B/W/T: A3(S of TWY A), B(W of TWY B10), B2, B3, B5, B6(N of taxiline L2), B7-B9 PCN 78/R/B/W/T: B(E of TWY A5), B13 PCN 66/R/B/W/T: A, A1, A3 (N of TWY A), A4, A5, A7, B(TWY B10-TWY A5), B10, K1 |
| 3 | 高度表校正点的位置及其标高 ACL location and elevation | Nil | |
| 4 | VOR/INS 校正点 VOR/INS checkpoints | Nil | |
| 5 | 备注 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 and at all holding positions. Guide lines at apron. Nose-in guidance for aircraft stands. Visual docking guidance system at stands Nr.305-321. | |
| 2 | 跑道和滑行道标志及灯光 RWY and TWY marking and LGT | RWY markings | THR, RWY designations, TDZ, center line, edge line, aiming point |
| | | RWY lights | Center line, edge line, THR, RWY end, wing bar, road-holding position light |
| | | TWY markings | Center line, edge line, intermediate holding positions, RWY holding position, TWY shoulders, mandatory instruction marking, information marking |
| | | TWY lights | Center line, edge line, intermediate holding positions, RWY guard lights, reflective marker on the edge of TWY. |
| 3 | 停止排灯 Stop bars | Nil | |
| 4 | 备注 Remarks | RWY turn pad marking | |

ZSNB AD 2.10 机场障碍物 Aerodrome obstacles

| Obstacles within a circle with a radius of 15km centered on ARP | | | | | | |
|---|--|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞航径区 Flight procedure / take-off flight path area affected | 备注 Remarks |
| 1 | *TWR | 019 | 1920 | 49 | Circling CAT A/B | |
| 2 | *TWR | 040 | 2820 | 49 | | |
| 3 | *BLDG | 059 | 10112 | 165 | | |
| 4 | *BLDG | 062 | 11427 | 188 | | |
| 5 | *BLDG | 063 | 10001 | 145 | | |
| 6 | *BLDG | 065 | 9926 | 164 | | |
| 7 | *BLDG | 065 | 10071 | 139 | | |

| Obstacles within a circle with a radius of 15km centered on ARP | | | | | | |
|---|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| 8 | *BLDG | 066 | 10472 | 178 | | |
| 9 | *BLDG | 067 | 10267 | 147 | | |
| 10 | BLDG | 068 | 10492 | 253.3 | | |
| 11 | *BLDG | 077 | 14641 | 266 | | |
| 12 | *BLDG | 094 | 7795 | 173 | | |
| 13 | *BLDG | 098 | 7996 | 173 | | |
| 14 | *BLDG | 107 | 8036 | 171 | | |
| 15 | *BLDG | 109 | 7790 | 228 | | |
| 16 | *BLDG | 110 | 7697 | 168 | | |
| 17 | GP Antenna | 123 | 1028 | 20.3 | | |
| 18 | BLDG | 127 | 3165 | 30.8 | RWY13 take-off path | |
| 19 | Light Pole | 129 | 2288 | 18 | RWY13 take-off path | |
| 20 | Antenna | 130 | 2181 | 16 | RWY13 take-off path | |
| 21 | TWR | 134 | 3002 | 22 | | |
| 22 | *TWR | 181 | 552 | 45 | | |
| 23 | MT | 274 | 10502 | 270 | | |
| 24 | MT | 278 | 12686 | 537 | | |
| 25 | MT | 289 | 10108 | 277 | | |
| 26 | MT | 291 | 10716 | 342 | Circling CAT D | |
| 27 | *TWR | 294 | 3413 | 46 | | |
| 28 | Contour line | 296 | 9217 | 100 | Circling CAT C, RWY13 VOR final approach D5.0NGB-MAPt | |
| 29 | MT | 300 | 14154 | 416 | | |
| 30 | MT | 306 | 13254 | 350 | RWY31 take-off path | |

| Obstacles within a circle with a radius of 15km centered on ARP | | | | | | |
|---|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| 31 | MT | 308 | 14851 | 497.7 | RWY31 departure; RWY31 take-off path | |
| 32 | Light Pole | 310 | 2873 | 18 | RWY31 take-off path | |
| 33 | TWR | 310 | 5248 | 41 | | |
| 34 | BLDG | 311 | 2924 | 18 | RWY31 take-off path | |
| 35 | MT | 311 | 14097 | 447 | | |
| 36 | BLDG | 312 | 2493 | 12 | RWY31 take-off path | |
| 37 | BLDG | 313 | 2559 | 14 | RWY31 take-off path | |
| 38 | Antenna | 314 | 1591 | 20.2 | | |
| 39 | MT | 315 | 10463 | 195 | RWY13 GP INOP final approach D4.8 IBK-D2.9 IBK, RWY31 take-off path | |
| 40 | MT | 315 | 12647 | 369 | RWY13 GP INOP final approach FAF-D4.8IBK, RWY13 VOR/DME final approach D7.0NGB-D5.0NGB | |
| Others: | | | | | | |

| Obstacles between two circles with the radius of 15km and 50km centered on ARP | | | | | | |
|--|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| 1 | MT | 017 | 28143 | 436 | | |
| 2 | MT | 018 | 18416 | 294 | | |

| Obstacles between two circles with the radius of 15km and 50km centered on ARP | | | | | | |
|--|---|-----------------------------|---------------|----------------------|---|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| 3 | MT | 068 | 48388 | 456 | | |
| 4 | MT | 082 | 26675 | 388 | | |
| 5 | MT | 098 | 30537 | 673 | | |
| 6 | MT | 099 | 41175 | 542 | | |
| 7 | BLDG | 109 | 32068 | 546 | | |
| 8 | MT | 117 | 27778 | 556 | RWY31 RNAV ILS/DME initial approach | |
| 9 | MT | 127 | 15018 | 160 | RWY31 GP INOP final approach FAF-D3.0ILL, VOR/DME final approach FAF-D3.8NGB | |
| 10 | MT | 135 | 19649 | 465 | | |
| 11 | MT | 138 | 23747 | 497 | | |
| 12 | MT | 140 | 20019 | 465 | | |
| 13 | MT | 142 | 19886 | 505 | RWY31 VOR/DME intermediate approach; RWY13 RNAV departure; RWY13 RNAV ILS/DME, ILS/DME, GP INOP, VOR/DME approach | |
| 14 | BLDG | 142 | 29438 | 643 | | |
| 15 | BLDG | 145 | 29282 | 644 | | |
| 16 | MT | 146 | 21353 | 536 | | |
| 17 | BLDG | 146 | 25436 | 696 | | |
| 18 | BLDG | 147 | 25013 | 696 | | |
| 19 | BLDG | 147 | 25235 | 712 | RWY31 VOR/DME, | |

| Obstacles between two circles with the radius of 15km and 50km centered on ARP | | | | | | |
|--|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| | | | | | ILS/DME and RNAV ILS/DME initial approach; NGB holding; RWY13 conventional departure | |
| 20 | BLDG | 148 | 28593 | 652 | | |
| 21 | BLDG | 149 | 24620 | 646 | RWY31 RNAV ILS/DME, ILS/DME intermdiate approach | |
| 22 | BLDG | 149 | 27949 | 656 | | |
| 23 | MT | 150 | 25500 | 635 | | |
| 24 | MT | 150 | 45961 | 551 | | |
| 25 | MT | 187 | 24922 | 615 | | |
| 26 | MT | 197 | 41631 | 764 | | |
| 27 | MT | 206 | 33920 | 712 | | |
| 28 | MT | 220 | 30183 | 810 | | |
| 29 | MT | 227 | 42898 | 746 | | |
| 30 | MT | 236 | 45610 | 930 | | |
| 31 | MT | 254 | 28960 | 976 | | |
| 32 | MT | 254 | 48328 | 1000 | MSA sector 320 ~090 ° | |
| 33 | MT | 266 | 35952 | 896 | | |
| 34 | MT | 267 | 23739 | 800 | | |
| 35 | MT | 282 | 34082 | 777 | MSA sector 090 ~320 ° | |
| 36 | MT | 283 | 16042 | 521 | | |
| 37 | MT | 283 | 41533 | 649 | | |
| 38 | MT | 291 | 18586 | 602 | RWY31 ILS/DME, RNAV ILS/DME, GP | |

| Obstacles between two circles with the radius of 15km and 50km centered on ARP | | | | | | |
|--|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| | | | | | INOP, VOR/DME missed approach | |
| 39 | MT | 293 | 29559 | 650 | RWY13 VOR/DME, ILS/DME initial approach | |
| 40 | MT | 295 | 22032 | 538 | | |
| 41 | MT | 300 | 15994 | 521 | | |
| 42 | MT | 300 | 18216 | 573 | RWY13 VOR/DME final approach FAF-D7.0NGB | |
| 43 | MT | 300 | 31747 | 638 | | |
| 44 | MT | 300 | 39479 | 435 | | |
| 45 | TWR | 302 | 18739 | 598 | RWY13 VOR/DME intermediate approach | |
| 46 | MT | 303 | 21580 | 452 | | |
| 47 | MT | 305 | 18103 | 535 | RWY13 RNAV ILS/DME, ILS/DME intermediate approach | |
| 48 | MT | 306 | 16103 | 431 | | |
| 49 | MT | 306 | 22737 | 456 | | |
| 50 | MT | 308 | 18591 | 515 | | |
| 51 | MT | 309 | 18526 | 522 | | |
| 52 | MT | 310 | 15681 | 513 | RWY31 take-off path; RWY13 RNAV ILS/DME, ILS/DME intermediate approach | |
| 53 | MT | 310 | 16915 | 466 | | |
| 54 | *TV TWR | 315 | 42104 | 291 | | |

| Obstacles between two circles with the radius of 15km and 50km centered on ARP | | | | | | |
|--|---|-----------------------------|---------------|----------------------|--|---------------|
| 序号 Serial Nr. | 障碍物类型(*代表 有灯光) Obstacle type(*Lighted) | 磁方位 BRG (MAG)(degree) | 距离 DIST(m) | 海拔高度 Elevation(m) | 影响的飞行程序及起飞 航径区 Flight procedure / take - off flight path area affected | 备注 Remarks |
| 55 | *TWR | 315 | 42166 | 243 | | |
| 56 | *TV TWR | 334 | 44390 | 239 | | |
| 57 | MT | 339 | 31295 | 446 | | |
| 58 | MT | 355 | 29594 | 431 | | |
| Others: | | | | | | |

ZSNB AD 2.11 提供的气象信息、机场观测与报告

Meteorological information provided & aerodrome observations and reports

| | | |
|---|--|--|
| 1 | 相关气象台的名称 Associated MET Office | 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 Office responsible for TAF preparation, Periods of validity; Interval of issuance | Ningbo ATMB MET Office 9 HR, 24HR |
| 4 | 趋势预报发布间隔 Issuance interval of trend forecast | Trend 1 HR |
| 5 | 所提供的讲解/咨询服务 Briefing/consultation provided | T, P |
| 6 | 飞行文件及其使用语言 Flight documentation, Languages used | Chart, International MET Codes, Abbreviated Plain Language Text Ch, En |
| 7 | 讲解/咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation | Synoptic charts, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data |
| 8 | 提供信息的辅助设备 Supplementary equipment available for | FAX, MET Service Terminal |

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| | providing information | |
| 9 | 提供气象情报的空中交通服务单位 ATS units provided with information | Ningbo Tower |
| 10 | 观测类型与频率/自动观测设备 Type & frequency of observation/Automatic observation equipment | Hourly plus special observation/Yes |
| 11 | 气象报告类型及所包含的补充资料 Type of MET Report & supplementary information included | METAR, SPECI, TEND |
| 12 | 观测系统及位置 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. |
| 13 | 气象观测系统的工作时间 Hours of operation for meteorological observation system | H24 |
| 14 | 气候资料 Climatological information | Climatological tables AVBL |
| 15 | 其他信息 Additional information | Nil |

ZSNB AD 2.12 跑道物理特征 Runway physical characteristics

| 跑道号码 Designations RWY NR | 真方位和磁方位 TRUE & MAG BRG | 跑道长宽 Dimensions of RWY(m) | 跑道强度(PCN), 跑道道面/ 停止 道面 RWY strength (PCN), RWY surface / SWY surface | 着陆入口坐标及 高程异常 THR coordinates and geoid undulation | 跑道入口标高,精密进近 跑道接地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY |
|--------------------------------|------------------------------|---------------------------------|--|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | |
|--|-------------------------------|-------------------------------|---------------------------------|--------------|--|
| 13 | 123.25 °GEO 129 °MAG | 3200×45 | 66/R/B/W/T CONC/- | | THR3.7m TDZ3.7m |
| 31 | 303.25 °GEO 309 °MAG | 3200×45 | 66/R/B/W/T CONC/- | | THR3.7m TDZ3.7m |
| 跑道-停止道坡度 Slope of RWY-SWY | 停止道长宽 SWY dimensions(m) | 净空道长宽 CWY dimensions(m) | 升降带长宽 Strip dimensions(m) | 无障碍物区 OFZ | 跑道端安全区长宽 RWY end safety area dimensions(m) |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 0% | Nil | Nil | 3320×300 | Nil | 225×150 |
| 0% | Nil | Nil | 3320×300 | Nil | 225×150 |
| Remark: 60×60m anti-blast pad (asphalt concrete) on the both ends of RWY. | | | | | |

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 |
| 31 | 3200 | 3200 | 3200 | 3200 | Nil |
| Remarks: | | | | | |

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

| 跑道 代号 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(跑道入口最 低眼高), 精 密进近航道 指示器 VASIS (MEHT) PAPI | 接地地带 灯长度 TDZ LGT LEN | 跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST | 跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST | 跑道末端 灯颜色 RWY end LGT colour | 停止道灯 长度、颜 色 SWY LGT LEN, colour |
|-------------------------------|--|---|--|-------------------------------|---|--|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13 | PALS | GREEN | PAPI | Nil | 3200m** | 3200m*** | RED | Nil |

| 跑道 代号 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(跑道入口最 低眼高), 精 密进近航道 指示器 VASIS (MEHT) PAPI | 接地地带 灯长度 TDZ LGT LEN | 跑道中心线灯 长度、间隔、 颜色、强度 RWY Center line LGT LEN, spacing, colour, INTST | 跑道边灯长 度、间隔、颜 色、强度 RWY edge LGT LEN, spacing, colour, INTST | 跑道末端 灯颜色 RWY end LGT colour | 停止道灯 长度、颜 色 SWY LGT LEN, colour |
|--|--|---|--|-------------------------------|---|--|---|--|
| | CAT I* 900m LIH | Yes | LEFT 330m inward displaced THR13 3° | | spacing 30m | spacing 60m | | |
| 31 | PALS CAT I* 900m LIH | GREEN Yes | PAPI LEFT 330m inward THR31 3° | Nil | 3200m** spacing 30m | 3200m*** spacing 60m | RED | Nil |
| Remarks:*SFL ** 0-2300m White VRB LIH, 2300-2900m Red/White VRB LIH, 2900-3200m Red VRB LIH *** 0-2600m White VRB LIH, 2600-3200m Yellow VRB LIH | | | | | | | | |

ZSNB AD 2.15 其他灯光,备份电源 Other lighting, secondary power supply

| | | |
|---|---|--|
| 1 | 机场灯标/识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation | Nil |
| 2 | 着陆方向标/风向标位置和灯光 LDI/WDI location and LGT | WDI: 13:90m N of RCL, 320m inward THR, Lighting; 31:90m S of RCL, 320m inward THR, Lighting. |
| 3 | 滑行道边灯和中线灯 TWY edge and center line lighting | All TWYs |
| 4 | 备份电源/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 (m/ft) TLOF and/or FATO elevation (m/ft) | Nil |
| 3 | TLOF 和 FATO 区域范围、道面、强度和标志 TLOF and FATO area dimensions,surface, strength, marking | Nil |
| 4 | FATO 的真方位和磁方位 True and MAG BRG of FATO | Nil |
| 5 | 公布距离 Declared distance available | Nil |
| 6 | 进近灯光和 FATO 灯光 APP and FATO lighting | Nil |
| 7 | 备注 Remarks | Nil |

ZSNB AD 2.17 空中交通服务空域 ATS airspace

| 名称 Designation | 水平范围 Lateral limits | 垂直范围 Vertical limits | 备注 Remarks |
|------------------------------------|---|---|-----------------------------|
| 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) | 3000m(QNH) or below: by ATC |

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 Call sign | 频率 Frequency (MHz) | 工作时间 Hours of operation | 备注 Remarks |
|--------------------------|-----------------|---------------------|-------------------------|------------|
| 1 | 2 | 3 | 4 | 5 |
| ATIS | | 126.45 | H24 | |
| APP | Ningbo Approach | 125.45(119.55) | H24 | |
| TWR | Ningbo Tower | 118.35(130.0,118.7) | H24 | |
| APN | Ningbo Apron | 121.6(130.00) | H24 | |
| Delivery | Ningbo Delivery | 121.95 | 0030-1230 | |

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

| 设施名称和类型 Name and type of aid | 识别 ID | 频率 Frequency | 发射天线位置、坐标 Antenna site coordinates | DME 发射天线标高 Elevation of DME transmitting antenna | 备注 Remarks |
|---------------------------------|----------|--------------------|--|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| Ningbo VOR/DME | NGB | 116.3MHz CH110X | N29°49.8' E121°27.8' 333°MAG/493m FM ARP | 9m | |
| Andong VOR/DME | AND | 114.8MHz CH95X | N30°15.4' E121°13.3' | 32m | |
| Shengzhou VOR/DME | SHZ | 113.4MHz CH81X | N29°36.0' E120°49.0' | | |
| Lishe NDB | BK | 227kHz | N29°53.7' E121°20.0' 308°MAG/ 14877m FM ARP | | For arrival and departure procedure: 11-15.5NM on bearing 094 ↖/S, 8-10NM on bearing 243 ↖/S, 8-13.5NM and 16-17.5NM and 18.5-19.5NM on bearing 293 ↖/S; for holding procedure: 12-14NM on bearing |

| 设施名称和类型 Name and type of aid | 识别 ID | 频率 Frequency | 发射天线位置、坐标 Antenna site coordinates | DME 发射天线标 高 Elevation of DME transmitting antenna | 备注 Remarks |
|---------------------------------|----------|---------------------|--|--|--|
| | | | | | 243 °U/S; for departure procedure: 2-3.5NM on bearing 147 °U/S; for initial approach procedure: on bearing 288 °U/S. |
| LOC 13 ILS CATI | IBK | 108.9MHz | 129 °MAG /290m FM end RWY 13 | | Beyond -22 ° of front course U/S. |
| GP 13 | | 329.3MHz | 120m N of RCL, 289m inward displaced THR | | Angle 3.22 ° RDH 16.6m Coverage 10NM |
| DME 13 | IBK | CH26X (108.9MHz) | 116m N of RCL, 289m inward THR13 | 9m | Co-located with GP 13 |
| LOC 31 ILS CATI | ILL | 110.9MHz | 309 °MAG / 290m FM end RWY 31 | | Beyond +27 ° of front course U/S. |
| GP 31 | | 330.8MHz | 120m N of RCL, 304m inward THR | | Angle 3 ° RDH 16.6m Coverage 10NM |
| DME 31 | ILL | CH46X (110.9MHz) | 123m N of RCL, 304m inward THR | 9m | Co-located with GP 31 |

ZSNB AD 2.20 本场飞行规定**ZSNB AD 2.20 Local traffic 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
空中交通管制部门批准后方可进行；

1.1 Each and every training and technical test flight
shall be filed in advance and shall be made only after
clearance has been obtained from ATC;

1.2 可用最大机型：B747 同类及其以下机型。

1.2 Maximum aircraft to be available: B747 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.

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 对机组的要求:

2.3 Flight crew requirements:

2.3.1 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。

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

2.3.2 推出前, 机组应向地面管制员证实使用的跑道和推出方向。

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

2.4 机坪滑行线翼展限制/Taxiline wing span limits:

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

2.5 本场 A1、A3 (A 滑以北)、K1、A4(A 滑以北)、A5(A 滑以北)、A7、B13 滑行道增补面按 B747-400 为最大机型设计, B777、A340-600、B747-8 机型在上述滑行道运行时需采用偏置转弯方式滑行; B10(B 滑以北)、A4 (A 滑以南)、A5(A 滑以南)滑行道增补面按 B767-300 最大机型设计; 其他滑行道增补面

2.5 Maximum aircraft of supplementary surface of TWY A1, A3(N of TWY A), K1, A4(N of TWY A), A5 (N of TWY A), A7, B13 is B747-400. Aircraft B777, A340-600 and B747-8 shall offset TWY centerline while turning. Maximum aircraft of supplementary surface of TWYs B10(N of TWY B), A4(S of TWY A),

按 A340-600 为最大机型设计。

A5(S of TWY A) is A767-300. Maximum aircraft of other supplementary surface of TWYs is A340-600.

2.6 掉头线限制/Turning guidance marking limits:

| 掉头线位置/Turning guidance marking | 主起落架外轮外侧边间距限制/Outside distance limits of main landing gear outer wheel | 机身长度限制/Fuselage limits | 鼻轮转向角限制/Steering angle of front wheels limits |
|------------------------------------|--|------------------------|---|
| RWY31 end | ≤12.6m | ≤70.67m | ≤59° |
| RWY13 end | ≤9m | ≤47.32m | ≤48.52° |
| Intersection BTN TWY A3/K1 and RWY | ≤10.9m | ≤54.94m | ≤48.19° |

2.7 跑道运行原则:

2.7 General rules for using runways:

2.7.1 起飞航空器:

2.7.1 For departure aircraft:

2.7.1.1 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)。

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

2.7.1.2 起飞航空器使用 13 号跑道时,离地后需保持跑道方向,联系宁波进近后听管制员雷达引导。

2.7.1.2 Departure aircraft use RWY13, keep the RWY direction after departure, contact APP ATC controller.

2.7.2 落地航空器:

2.7.2 For landing aircraft:

2.7.2.1 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 60s 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）。
2.7.2.1 Aircraft shall fully vacate runway within 60 seconds after touching down; If flight crew consider that they can not fulfill the process within the required time, pilot shall inform TWR ATC controller at first contact(except for wet or contaminated RWY).

2.7.2.2 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。
2.7.2.2 Landing aircraft shall vacate the RWY as soon as possible, then inform TWR ATC controller.

2.7.3 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。
2.7.3 When aircraft change direction of runway in use, if downwind speed is more than 3m/s and not exceeding 5m/s for short time, ATC controller shall inform flight crew. According to aircraft performance or operation handbook, pilot shall decide whether aircraft will take off or land on downwind runway allocated, then inform ATC controller.

2.8 机动区冲突多发地带运行要求：

2.8 Hot spot procedure:

2.8.1 使用 13 号跑道时，滑行冲突热点区域：B6、B9、B10、B13 滑行道与平滑 A、B 交叉地带。
2.8.1 Hot spot when RWY13 in use: Intersection between TWY B6, B9, B10, B13 and main TWY A, B.

2.8.2 使用 31 号跑道时，滑行冲突热点区域：B3、B6、B9、B10、B13 滑行道与平滑 A、B 交叉地带。
2.8.2 Hot spot when RWY31 in use: Intersection between TWY B3, B6, B9, B10, B13 and main TWY A, B.

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 未经空中交通管制部门同意，严禁航空器利用自
3.1 Aircraft push-back on its own power without ATC

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。

clearance is strictly forbidden. Aircraft taxiing and push-back on apron shall follow ATC clearance strictly.

3.2 航空器发动机试车需经塔台和现场指挥中心许可，并在 B13 滑行道以东的 A 滑行道和 23 至 26 号机位区域试车点进行，严禁在其他区域试车，试车时间是 21:00 至 16:00(UTC)。

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

| 停机位/Stands | 航空器翼展限制(m)/ Wing span limits for aircraft | 机身长度限制(m)/ Fuselage limits | 滑入、滑出方式/ 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 | ≤47.57 | ≤53.61 | Taxi in/Push-back |
| 6, 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, 5, 7, 305-307, 313-318, 320, 321 | <36 | ≤45 | Taxi in/Push-back |
| 7, 10-16 | <36 | ≤44.5 | Taxi in/Push-back |
| 17A, 17B, 17C | <24 | ≤29.87 | Taxi in/Push-back |

3.4 组合机位的使用模式/Use of combined stands:

| 组合机位群/ Combined stands | 组合模式/ Combined mode | 模式包含机位及使用限制/ Stands included in use mode and limits | | | |
|---------------------------|------------------------|---|--------------------|----------------------------|--------------|
| | | 机位/ Stand | 翼展限制/ Wing span | 机身长度限制/ Fuselage limits | 滑进、滑出方式 / |

| | | | limits | | Enter or exit |
|----------------------|---------------|-----|--------|---------|----------------------|
| 17, 17A, 17B, 17C | 17 | 17 | <65m | ≤70.67m | Taxi in/Push-back |
| | 17A, 17B, 17C | 17A | <24m | ≤29.87m | |
| | | 17B | <24m | ≤29.87m | |
| | | 17C | <24m | ≤29.87m | |
| | 17A, 17B | 17A | <24m | ≤29.87m | Taxi in/ Taxi out |
| | | 17B | <24m | ≤29.87m | |

3.5 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:

3.5 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:

3.5.1 服务方不能够提供有效的桥载设备服务;

3.5.1 Bridge equipment is unavailable;

3.5.2 航空器因启动发动机而需开启APU;

3.5.2 Aircraft needs APU to start up engine;

3.5.3 航空器进行APU的维修检测活动;

3.5.3 APU is under maintenance;

3.5.4 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。

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

3.6 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T3之间中点连线及延长线以北区域)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T3之间中点连线及延长线以南区域)航空

3.6 Apron operation: Ningbo TWR is responsible for releasing delivery clearance and providing air traffic control service in Tower Ground Control Area(north of the midpoint line and extended line between TWY A and T3); After the aircraft obtains delivery clearance, Ningbo APN is responsible for push-back, start-up,

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。

taxiing and other related operation control in Apron Control Area(south of the midpoint line and extended line between TWY A and T3). Ningbo APN transfer the departure aircraft to Ningbo TWR at the intersections of TWYs. The pilot must strictly obey apron control rules or taxi by ATC.

3.6.1 13 号跑道离港航空器:

305-318,326-332 号机位移交点为 B6;510-519 号机位移交点为 B2;17-26 号机位移交点为 B13。

3.6.1 Departure Aircraft on RWY13:

B6 is the transfer point on Stands Nr.305-318, 326-332. B2 is the transfer point on Stands Nr.510-519. B13 is the transfer point on Stands Nr.17-26.

3.6.2 13 号跑道进港航空器:

305-318,326-332,510-519 号机位移交点为 B8;17-26 号机位移交点为 B13。

3.6.2 Landing Aircraft on RWY13:

B8 is the transfer point on Stands Nr.305-318, 326-332, 510-519. B13 is the transfer point on Stands Nr.17-26.

3.6.3 31 号跑道离港航空器:

305-318,326-332,510-519 号机位移交点为 B9;17-26 号机位移交点为 B13。

3.6.3 Departure Aircraft on RWY31:

B9 is the transfer point on Stands Nr.305-318, 326-332, 510-519. B13 is the transfer point on Stands Nr.17-26.

3.6.4 31 号跑道进港航空器:

305-318,326-332 号机位移交点为 B6;510-519 号机位移交点为 B3;17-26 号机位移交点为 B13。

3.6.4 Landing Aircraft on RWY31:

B6 is the transfer point on Stands Nr.305-318, 326-332. B3 is the transfer point on Stands Nr.510-519. B13 is the transfer point on Stands Nr.17-26.

3.7 航空器应取得宁波机坪许可后方可推出开车，推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 3mins 之内执行；超过 3mins 仍未推出开车则视为指令失效，机组需重新申请推出开车。

3.7 Aircraft shall confirm RWY in use and push-back 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.

4. 进、离场管制规定**4. Air traffic control regulations**

无

Nil

5. 机场的 II/III 类运行**5. CAT II/III operations at AD**

无

Nil

6. 除冰规则**6. Rules for deicing**

无

Nil

7. 平行跑道同时仪表运行**7. Simultaneous operations on parallel runways**

无

Nil

8. 警告**8. Warning**

无

Nil

9. 直升机飞行限制，直升机停靠区**9. Helicopter operation restrictions and helicopter parking / docking area**

无

Nil

ZSNB AD 2.21 噪音限制规定及减噪程序**ZSNB AD 2.21 Noise restrictions and Noise abatement procedures**

无

Nil

ZSNB AD 2.22 飞行程序**ZSNB AD 2.22 Flight procedures****1. 总则****1. General**

除经塔台特殊许可外，在塔台管制区内的飞行，必须按照仪表飞行规则进行。

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

2. 起落航线

2. Traffic circuits

起落航线在跑道西南侧进行，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。

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. 仪表飞程序

3. IFR flight procedures

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。

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.

4. 雷达程序和/或 ADS-B 程序

4. Radar procedures and/or ADS-B procedures

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 6km，最小垂直间隔为 300m。

4.1 Radar control within Ningbo APP Control Area has been implemented. The minimum horizontal radar separation is 6km, the minimum vertical radar separation is 300m.

5. 无线电通信失效程序

5. Radio communication failure procedures

5.1 航空器单向通信失效

5.1 Aircraft communication partly failure

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

5.1.1 If the radio receiver available, aircraft shall follow the instruction to fly. At the same time, ATC shall send information to the relevant control unit about communication failure.

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

5.1.2 If the radio transmitter available, aircraft pilot shall notify her/his flight intention to ATC and report aircraft position and altitude. ATC will conduct the traffic accordingly. If possible, ATC shall inform aircraft operator to contact with aircraft by internal communication.

5.2 航空器双向通信失效

5.2 Aircraft communication totally failure

航空器双向通信失效时,如有可能管制员将通知航空器运营人使用其内部通信方式(如卫星电话)与航空器联系。

When aircraft communication totally failure, If possible, ATC shall inform aircraft operator to contact with aircraft by internal communication(such as GNSS).

5.2.1 航空器进场

5.2.1 Aircraft arrival

航空器应按照下列特定的进近程序继续进近并尽快落地;如果本场不具备落地条件,飞行员可自行决定返航或备降。

Aircraft shall continue to approach and land according to the following specific procedures as soon as possible; If airport condition is not available for landing, pilot shall decide to return or alternate by themselves.

5.2.1.1 航空器按照最后接收到的管制员指令高度(如果低于 1800m 则上升至 1800m)飞向 VOR(NGB)台,进入等待程序,随后按仪表进近程序着陆。

5.2.1.1 Aircraft fly to NGB according to the last command ALT by ATC(climb to 1800m if lower). Join the holding procedure, then approach according to

instrument approach procedure.

5.2.2 航空器离场

航空器应按照最后接收到的管制指令（程序）继续离场(如果低于 1800m, 则上升至 1800m), 管制员将迅速组织其它航空器进行避让; 如果航空器意图等待、耗油, 直飞 VOR(NGB)台加入等待程序; 如果航空器意图返场, 则飞向 NGB 台, 并根据当时的运行方向选择进近着陆方法, 管制员将迅速组织其它航空器进行避让。

5.2.2 Aircraft departure

Aircraft continue departure according to the last command (procedure) by ATC(climb to 1800m if lower). ATC will conduct the traffic accordingly. If aircraft decide to hold and dump fuel, direct to NGB and join the holding procedure; if aircraft decide to return, fly to NGB and land according to operation direction. ATC will conduct the traffic accordingly.

5.3 本场通信失效

本场通信失效本场无线电收发功能失效,航空器无法与管制单位建立有效的通讯联系时,配备有卫星电话的航空器可以通过拨打管制单位值班岗位电话与管制单位重新建立联系(宁波进近 0574-28916727; 宁波塔台 0574-28916726)。未配备卫星电话的航空器应联系上一管制单位,并按照接收管制单位的管制指令继续飞行。

5.3 Aerodrome communication failure

If aircraft cannot establish communication with the aerodrome control unit, aircraft shall call ATC by satellite telephone to establish communication(Ningbo APP 86-574-28916727 or Ningbo TWR 86-574-28916726), no satellite telephone aircraft shall contact the previous control unit, and follow the instruction to continue.

5.4 无线电通信恢复

失去通信联络的航空器已经着陆,或者已经恢复联络的,可恢复正常的管制运行,并立即通知相关管制单位。

5.4 Radio communication resume to normal

It is available to resume activities when the aircraft that lose touch via Communication Channel has landed or get in touch again. Inform the ATC office immediately.

6. 目视飞行程序

无

6. Procedures for VFR flights

Nil

7. 目视飞行航线

7. VFR route

无

Nil

8. 目视参考点

8. Visual reference point

无

Nil

9. 其它规定

9. Other regulations

无

Nil

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

1. Waypoint list

| | | | |
|-------|----------------------|-------|----------------------|
| NB104 | N295812.6 E1211237.2 | NB210 | N295832.7 E1210039.0 |
| NB106 | N300304.6 E1210402.1 | NB211 | N294622.9 E1214438.5 |
| NB107 | N300613.9 E1210623.8 | NB302 | N294333.4 E1212659.8 |
| NB108 | N295611.1 E1210449.1 | NB303 | N293857.9 E1212141.8 |
| NB109 | N294350.6 E1204942.5 | NB304 | N294552.4 E1213414.4 |
| NB110 | N295326.2 E1210939.8 | NB401 | N295739.3 E1211335.7 |
| NB111 | N295348.7 E1212020.9 | NH1 | N294804 E1210357 |
| NB112 | N295410.4 E1213103.1 | NH2 | N294422 E1210503 |
| NB113 | N300514.9 E1211136.2 | AND | N3015.4 E12113.3 |
| NB202 | N294442.2 E1213616.9 | HSN | N2955.9 E12221.8 |
| NB203 | N294151.7 E1214113.8 | SHZ | N2936.0 E12049.0 |
| NB204 | N293720.8 E1213749.7 | AVGOM | N3000.7 E12108.2 |
| NB205 | N293857.1 E1213200.0 | GOVNI | N3021.3 E12123.7 |
| NB206 | N293856.7 E1205548.8 | ISPUR | N3014.9 E12156.0 |
| NB207 | N294010.1 E1213254.8 | OVNEV | N2954.6 E12143.3 |

| | | | |
|-------|----------------------|--|--|
| NB208 | N294917.3 E1211657.4 | | |
|-------|----------------------|--|--|

2.Database coding table

| Path Terminator | Waypoint ID | Fly over | Magnetic Course (°) | Turn Direction | Altitude (m) | IAS (kt) | VPA/ TCH | Navigation Specification |
|---------------------------|-------------|----------|---------------------|----------------|--------------------|----------|----------|--------------------------|
| RWY13 SID GOV-81D | | | | | | | | |
| CF | NB202 | | 129 | | ↑700 | | | RNAV1 |
| TF | NB207 | | | | | MAX 230 | | RNAV1 |
| TF | NB302 | | | | ↓1500 ↑1200 | | | RNAV1 |
| TF | NB208 | | | | ↑2100 | | | RNAV1 |
| TF | NB108 | | | | | | | RNAV1 |
| TF | GOVNI | | | | | | | RNAV1 |
| RWY13 SID GOV-82D(BY ATC) | | | | | | | | |
| CF | NB203 | | 129 | | ↑1200 | MAX 250 | | RNAV1 |
| TF | NB211 | | | | | | | RNAV1 |
| TF | OVNEV | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | GOVNI | | | | | | | RNAV1 |
| RWY13 SID HSN-81D | | | | | | | | |
| CF | NB202 | | 129 | | ↑700 | | | RNAV1 |
| TF | NB207 | | | | | MAX 230 | | RNAV1 |
| TF | NB302 | | | | ↓1500 ↑1200 | | | RNAV1 |
| TF | NB208 | | | | ↑2100 | | | RNAV1 |
| TF | NB111 | | | | ↑2700 or by ATC | | | RNAV1 |

| | | | | | | | | |
|---------------------------|-------|---|-----|---|--------------------|---------|--|-------|
| TF | OVNEV | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | HSN | | | | | | | RNAV1 |
| RWY13 SID HSN-82D(BY ATC) | | | | | | | | |
| CF | NB203 | | 129 | | ↑1200 | MAX 250 | | RNAV1 |
| TF | NB211 | | | | | | | RNAV1 |
| TF | OVNEV | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | HSN | | | | | | | RNAV1 |
| RWY13 SID SHZ-81D | | | | | | | | |
| CF | NB202 | | 129 | | ↑700 | | | RNAV1 |
| TF | NB205 | | | | ↑1200 | MAX 230 | | RNAV1 |
| TF | NB303 | | | | @1500 | | | RNAV1 |
| TF | NB206 | | | | | | | RNAV1 |
| TF | SHZ | | | | | | | RNAV1 |
| RWY31 SID GOV-91D | | | | | | | | |
| CF | NB401 | | 309 | | ↑1500 or by ATC | | | RNAV1 |
| TF | AVGOM | | | | | | | RNAV1 |
| TF | NB113 | | | | ↑2100 | | | RNAV1 |
| TF | GOVNI | | | | | | | RNAV1 |
| RWY31 SID HSN-91D | | | | | | | | |
| CF | NB401 | Y | 309 | | ↑1500 or by ATC | | | RNAV1 |
| CF | NB111 | | 094 | L | ↑2700 or by ATC | MAX 250 | | RNAV1 |
| TF | NB112 | | | | ↑2700 or by ATC | | | RNAV1 |

| | | | | | | | | |
|----------------------------|-------|---|-----|---|--------------------|---------|--|-------|
| TF | OVNEV | | | | | | | RNAV1 |
| TF | HSN | | | | | | | RNAV1 |
| RWY31 SID HSN-92D(BY ATC) | | | | | | | | |
| CF | NB401 | Y | 309 | | ↑1500 or by ATC | | | RNAV1 |
| CF | NB112 | | 129 | R | ↑2700 or by ATC | MAX 250 | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | HSN | | | | | | | RNAV1 |
| RWY31 SID SHZ-91D | | | | | | | | |
| CF | NB401 | | 309 | | ↑1500 or by ATC | | | RNAV1 |
| TF | AVGOM | | | | | | | RNAV1 |
| TF | NB108 | | | | | | | RNAV1 |
| TF | NB109 | | | | | | | RNAV1 |
| TF | SHZ | | | | | | | RNAV1 |
| RWY13 STAR ISP-81A(BY ATC) | | | | | | | | |
| IF | ISPUR | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB112 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB111 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB110 | | | | ↑1800 | | | RNAV1 |
| TF | NB108 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY13 STAR ISP-82A(BY ATC) | | | | | | | | |
| IF | ISPUR | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |

| | | | | | | | | |
|------------------------------------|-------|---|-----|---|--------------------|---------|--|-------|
| TF | NB112 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB113 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY13 STAR HSN-81A | | | | | | | | |
| IF | HSN | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB112 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB111 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB110 | | | | ↑1800 | | | RNAV1 |
| TF | NB108 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY13 STAR HSN-82A(BY ATC) | | | | | | | | |
| IF | HSN | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB112 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB113 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY13 STAR SHZ-81A | | | | | | | | |
| IF | SHZ | | | | | | | RNAV1 |
| TF | NB109 | | | | | | | RNAV1 |
| TF | NB108 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY13 STAR AND-81A | | | | | | | | |
| IF | AND | | | | | | | RNAV1 |
| TF | NB107 | | | | ↑2100 | | | RNAV1 |
| TF | NB106 | | | | ↑1800 | MAX 210 | | RNAV1 |
| RWY13 HOLDING(OUTBOUND TIME:1 MIN) | | | | | | | | |
| HM | AND | Y | 219 | L | 2100 | MAX 220 | | RNAV1 |

| | | | | | | | | |
|---------------------------------|-------|---|-----|---|--------------------|---------|--|-------|
| HM | NB110 | Y | 309 | R | 1800 | MAX 230 | | RNAV1 |
| HM | NH1 | Y | 053 | R | 1800 | MAX 230 | | RNAV1 |
| RWY13 APPROACH TRANSITION NB108 | | | | | | | | |
| IF | NB108 | | | | ↑1500 | MAX 210 | | RNAV1 |
| TF | AVGOM | | | | ↑1500 | | | RNAV1 |
| TF | NB104 | | | | ↑1200 | | | RNAV1 |
| RWY13 APPROACH TRANSITION NB106 | | | | | | | | |
| IF | NB106 | | | | ↑1800 | MAX 210 | | RNAV1 |
| TF | AVGOM | | | | ↑1500 | | | RNAV1 |
| TF | NB104 | | | | ↑1200 | | | RNAV1 |
| RWY13 APPROACH TRANSITION NB113 | | | | | | | | |
| IF | NB113 | | | | ↑1500 | MAX 210 | | RNAV1 |
| TF | AVGOM | | | | ↑1500 | | | RNAV1 |
| TF | NB104 | | | | ↑1200 | | | RNAV1 |
| RWY13 MISSED APPROACH | | | | | | | | |
| CF | NB304 | Y | 129 | | ↑500 | | | RNP1 |
| DF | NB110 | | | R | @1500 | MAX210 | | RNP1 |
| RWY31 STAR ISP-91A(BY ATC) | | | | | | | | |
| IF | ISPUR | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB211 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY31 STAR HSN-91A | | | | | | | | |
| IF | HSN | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB111 | | | | ↑2700 or by ATC | | | RNAV1 |
| TF | NB208 | | | | ↑1500 | | | RNAV1 |

| | | | | | | | | |
|------------------------------------|-------|---|-----|---|--------|---------|--|-------|
| TF | NB302 | | | | ↓1500 | | | RNAV1 |
| TF | NB204 | | | | ↑1200 | MAX 210 | | RNAV1 |
| RWY31 STAR HSN-92A(BY ATC) | | | | | | | | |
| IF | HSN | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB211 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY31 STAR SHZ-91A | | | | | | | | |
| IF | SHZ | | | | | | | RNAV1 |
| TF | NB206 | | | | | | | RNAV1 |
| TF | NB303 | | | | @1500 | | | RNAV1 |
| TF | NB205 | | | | | | | RNAV1 |
| TF | NB204 | | | | ↑1200 | MAX 210 | | RNAV1 |
| RWY31 STAR AND-91A | | | | | | | | |
| IF | AND | | | | | | | RNAV1 |
| TF | NB107 | | | | ↑2100 | | | RNAV1 |
| TF | NB210 | | | | | | | RNAV1 |
| TF | NB208 | | | | ↑1500 | | | RNAV1 |
| TF | NB302 | | | | ↓1500 | | | RNAV1 |
| TF | NB204 | | | | ↑1200 | MAX 210 | | RNAV1 |
| RWY31 STAR AND-92A(BY ATC) | | | | | | | | |
| IF | AND | | | | | | | RNAV1 |
| TF | OVNEV | | | | | | | RNAV1 |
| TF | NB211 | | | | ↑1500 | MAX 210 | | RNAV1 |
| RWY31 HOLDING(OUTBOUND TIME:1 MIN) | | | | | | | | |
| HM | AND | Y | 219 | L | 2100 | MAX 220 | | RNAV1 |
| HM | OVNEV | Y | 134 | L | by ATC | MAX 230 | | RNAV1 |
| HM | NB208 | Y | 129 | L | 1800 | MAX 230 | | RNAV1 |

| | | | | | | | | |
|------------------------------------|-------|---|-----|---|-------|---------|--|-------|
| HM | NH2 | Y | 096 | L | 1800 | MAX 230 | | RNAV1 |
| RWY31 APPROACH TRANSITION NB204 | | | | | | | | |
| IF | NB204 | | | | ↑1200 | MAX 210 | | RNAV1 |
| TF | NB203 | | | | ↑1100 | | | RNAV1 |
| RWY31 APPROACH TRANSITION NB211 | | | | | | | | |
| IF | NB211 | | | | ↑1500 | MAX 210 | | RNAV1 |
| TF | NB203 | | | | ↑1100 | | | RNAV1 |
| RWY31 MISSED APPROACH | | | | | | | | |
| CF | NB111 | Y | 309 | | ↑600 | | | RNP1 |
| DF | NB207 | | | L | ↑1200 | MAX210 | | RNP1 |
| RWY31 HOLDING(OUTBOUND TIME:1 MIN) | | | | | | | | |
| HM | NB207 | Y | 129 | L | 1500 | MAX 230 | | RNAV1 |

ZSNB AD 2.23 其它资料

ZSNB AD 2.23 Other information

鸟类主要活动情况见下表，机场当局采取了驱赶措施，以减少鸟群活动。

Mainly activities of bird flocks are described in the following table. Aerodrome Authority resorts to dispersal methods to reduce bird activities.

| Type of bird | Activity period | Flight altitude(m) | Activity habit |
|--------------|--|--------------------|---------------------|
| aigret | From end of June to beginning of October | 0-30 | bevy |
| night heron | From end of June to beginning of October | 0-30 | solo or little bevy |
| snipe | March to May, August to September | 0-20 | bevy |
| sparrow | Whole year | 0-10 | bevy |
| skylark | November to | 0-30 | bevy |

| | | | |
|------------|--------------------------------|-------|---------------------|
| | February(Next year) | | |
| swallow | April to August | 0-20 | solo or little bevy |
| kestrel | October to March(Next year) | 0-200 | solo |
| turtledove | Whole year | 0-20 | pair or little bevy |