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

ZLLL/LHW-兰州/中川 LANZHOU/Zhongchuan

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

| 1 | 机场基准点坐标及其在机场的位置 | N36°30.9′ E103°37.2′ | |
|---|---|---|--|
| | ARP coordinates and site at AD | Center of RWY 18R/36L | |
| 2 | 机场基准点与城市的位置关系 | 339 °GEO, 55.6km from Dongfanghong Square, Lanzhou | |
| | Direction and distance from city | 339 GEO, 33.0km from Dongranghong Square, Lanzhou | |
| | 机场标高、基准温度、低温均值 | | |
| 3 | ELEV/Reference temperature/Mean low | 1948.7 m/26.4°C(JUL)/-14.8°C(JAN) | |
| | temperature | | |
| 4 | 机场标高位置的大地水准面波幅 | | |
| 4 | Geoid undulation at AD ELEV PSN | | |
| 5 | 磁差(测量年份)及年变率 | 2050/04/2022/10/100// | |
| 3 | VAR(Year)/Annual change | 2°59′W(2023)/06′00″ | |
| | 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 | Lanzhou Zhongchuan International Airport CO.LTD. | |
| | | Lanzhou Zhongchuan International Airport, Lanzhou New Area Nr.15, | |
| | | Lanzhou city, Gansu province, China. Post code:730087 | |
| 6 | | TEL:86-931-8168815 | |
| | | FAX:86-931-8168809 | |
| | | AFS:ZLLLYDYX | |
| | | E-mail:zlllygw@163.com | |
| 7 | 允许飞行种类 | IFR-VFR | |
| ' | Types of traffic permitted(IFR/VFR) | IFK-VFK | |
| 8 | 机场性质/飞行区指标 | CIVIL/4E | |
| 8 | Military or civil airport/Reference code | CIVIL/4E | |
| 9 | 备注 | Nil | |
| 9 | Remarks | INII | |
| | | | |

ZLLL 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 | H24 | |
| 4 | 航空情报服务讲解室 AIS Briefing Office | HS or O/R | |

| 5 | 空中交通服务报告室 ATS Reporting Office | HS or O/R | |
|----|-----------------------------------|-----------|--|
| 6 | 气象服务讲解室 MET Briefing Office | HS or O/R | |
| 7 | 空中交通服务 Air Traffic Service | HS or O/R | |
| 8 | 加油服务 Fuelling | HS or O/R | |
| 9 | 地勤服务 Handling | O/R | |
| 10 | 安保服务 Security | HS or O/R | |
| 11 | 除冰服务 De-icing | O/R | |
| 12 | 备注 Remarks | Nil | |

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

| 1 | 货物装卸设施 | Container lift (7t,14t), conveyor belt, baggage tow-tracker, dollies, container | |
|---|---|---|--|
| 1 | Cargo-handling facilities | pallet | |
| 2 | 燃油牌号 | Jet Fuel No.3 | |
| 2 | Fuel types | Jet Fuel No.5 | |
| 3 | 滑油牌号 | MODIL IET OIL II TUDDOMOT TUDDOMO | |
| 3 | Oil types | MOBIL JET OIL II,TURBO2197,TURBO2389 | |
| | 加油设施/能力 | 45000L Refueling truck, 47L/s; 20000L Refueling truck, 23L/s; | |
| 4 | Fuelling facilities & Capacity | 4100L Refueling truck, 8L/s; Hydrant cart, 64L/s; | |
| | ruening facilities & Capacity | Apron refueling well, 32L/s; Unpoweed refueling tank, 32L/s. | |
| 5 | 除冰设施 | 20 De-icers | |
| 3 | De-icing facilities | Deicing fluid: KHF-I, Cleanwing I, Cleanwing II | |
| | 过站航空器机库 | NEI | |
| 6 | Hangar space for visiting aircraft | Nil | |
| | | Line MAINT AVBL for A320 series, B737NG series, B737-8 series, and | |
| | | A330-200/300 series; 1500FH/1000FC/6 months(inclusive) and below | |
| | 过站航空器的维修设施 Repair facilities for visiting aircraft | regular MAINT for A320 series and B737NG series; general maintenance for | |
| 7 | | other aircraft types. | |
| | | Hainan Airlines Technology provides line MAINT and general services for | |
| | | B737NG series, B737-8 series, B787-8/9 series, A320 series, and A330 | |
| | | series. | |

| 8 | 备注 Remarks | Power unit, air supply vehicle, oxygen supply tender, air conditioning unit, |
|---|---------------|--|
| | | potable water supply vehicle, sewage vehicle, passenger boarding stairs, tow |
| | | truck, shuttle bus, follow-me vehicle, lift truck for the disabled; |
| | | Bridge stands Nr.301-368, 501-520 are equipped with 400Hz ground power |
| | | units(pit-mounted) and ground air conditioning units(pit-mounted). |

ZLLL AD 2.5 旅客设施 Passenger facilities

| 1 | 宾馆 Hotels | At AD, in the city and Lanzhou new district | |
|---|-------------------------------|---|--|
| 2 | 餐饮 Restaurants | At AD, in the city and Lanzhou new district | |
| 3 | 交通工具 Transportation | Passenger's coaches, intercity railway,high-speed railway, taxies, app-based taxis, buses, long-distance buses | |
| 4 | 医疗设施 Medical facilities | Emergency medical center at AD, one first aid station and four emergency rooms in T3 Terminal. The facilities are equipped with: resuscitation ambulance, standard ambulance, medical equipment transport vehicle, personnel transport vehicle for medical staff, emergency medical command vehicle, monitoring defibrillators, ventilators, electrocardiogram (ECG) Machines, first aid kits, stretchers, etc. These facilities provide emergency medical services for incidents occurring at the airport and in its surrounding areas, as well as medical assistance to passengers and staff at the airport. | |
| 5 | 银行和邮局 Bank and Post Office | At AD | |
| 6 | 旅行社 Tourist Office | At AD and in the city | |
| 7 | 备注 Remarks | Nil | |

ZLLL 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 tender: rapid intervention vehicle, primary foam tender, heavy-load foam tender, illumination truck, communication command vehicle, disassembly rescue truck, logistics truck; Rescue equipment: ambulance, rescue command vehicle, airport passenger bus,. | |
| 3 | 搬移受损航空器的能力 Capability for removal of disabled aircraft | MTWA up to B747 Moving Equipment: uplift air cushion, tow truck, lifting equipment, tie-down equipment, rubber crosstie, mobile surface operation devices, towing rake | |

| 4 | 备注 | Nil |
|---|---------|-----|
| | Remarks | |

ZLLL 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 Snow blower, snow pusher, spreader |
|---|---|--|
| 2 | 扫雪顺序 Clearance priorities | RWY, TWY, APN |
| 3 | 备注 Remarks | Nil |

ZLLL 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 | |
|---|---|----------------|---|--|
| 1 | | 强度 Strength | PCR 850/R/A/W/T : Stands Nr.301-368, 369, 405-413, 407L/R, 408L/R, 413L/R, 414L/R, 414-417, 418-420, 501, 502, 508-511, 517-520 PCR 670/R/A/W/T : Stands Nr. 503-507,512-516 | |
| 2 | 滑行道宽度、道面和强度 Taxiway width, surface and strength | 宽度 Width | 70m : F2-F4, F5-F9(west of TWY F), F10-F14, G7(west of TWY G, east of TWY T4), G10(west of TWY G, east of stand Nr.366), J1-J4(north of TWY K), L(short vertical strip), P1(south of TWY P), P2(south of TWY P) 66m : G2-G6, G7-G10(east of TWY G), G11-G13 65m : F8(east of TWY F, west of TWY T2), G9(west of TWY G, east of TWY T3) 64m : F5(east of TWY F, west of TWY T1) 60m : F7(east of TWY F, west of TWY T1), G8(west of TWY G, east of TWY T4) 53m : F9(east of TWY F, west of stand Nr.303) 46.5m : F1, F15 44.5m : G1, G14 38m : E2-E4, E9-E11, H2, H3, H10, H11 30.5m : E1, E12, H1, H12 23m : E, E5-E8, F, G, H, H4-H9, J, K, P, Q | |
| | | 道面 Surface | CONC | |
| | | 强度 Strength | PCR 1000/R/A/W/T : E, E1-E4, E9-E12, F, F1-F15, G, G1-G14, H, H1-H3, H10-H12, J, J1-J4, K, L, P, P1, P2, Q, T1-T4, Z2-Z4 PCR 830/R/A/W/T : E5-E8, H4-H9 | |
| 3 | 高度表校正点的位置及 其标高 | Nil | | |

| | ACL location and elevation | |
|---|----------------------------|-----|
| 4 | VOR 校正点 VOR checkpoints | Nil |
| 5 | INS 校正点 INS checkpoints | Nil |
| 6 | 备注 Remarks | Nil |

ZLLL 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 all stands. Guide lines at all TWYs. Guide lines at all aprons. Marshalling assistance for aircraft stands Nr. 369, 405-407, 407L, 407R, 408, 408L, 408R, 409-413, 413L, 413R, 414, 414L, 414R, 415-420, 501-520, Visual docking guidance system at 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 跑道灯光 RWY lights 滑行道标志 TWY markings 滑行道灯光 TWY lights | Pre-threshold area, THR, RWY designation, edge line, RWY center line, TDZ, aiming point RTHL, WBAR, REDL, RCLL, RTZL(RWY19), RENL Edge line, center line, enhanced TWY center line, No-entry(E4-E9, H4-H9), RWY holding position, intermediate holding position 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 | Stop bar lights: E1-E3, E10-E12, G1-G3, H1-H3, H10-H12, on RWY holding position Runway guard lights: E1-E3, E10-E12, H1-H3, H10-H12, on both sides of the RWY holding position | | |
| 5 | 其它跑道保护措施 Other runway protection measures 备注 Remarks | Nil BLUE apron edge line lights | | |

ZLLL AD 2.10 机场障碍物 Aerodrome obstacles

| | 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 | 004/9297 | 2078.5 | | RWY36R Take-off flight path | |
| Pole 002 | Pole | 006/4391 | 1994.1 | | RWY36R Take-off flight path | |
| Pole 003 | Pole | 006/4434 | 1994.9 | | RWY36R Take-off flight path | |
| Pole 004 | Pole | 007/4059 | 1987.4 | | RWY36R Take-off flight path | |
| Pole 005 | Pole | 007/4096 | 1989.6 | | RWY36R Take-off flight path | |
| TRANSMISSION _LINE 006 | TRANSM ISSION_L INE | 008/4684 | 2006.0 | | RWY36R Take-off flight path | |
| TRANSMISSION _LINE 007 | TRANSM ISSION_L INE | 009/4695 | 2003.5 | | RWY36R Take-off flight path | |
| BLDG 008 | BLDG | 009/6112 | 2023.7 | | RWY36R Take-off flight path | |
| BLDG 009 | BLDG | 010/5753 | 2012.9 | | | |
| BLDG 010 | BLDG | 017/8331 | 2040.5 | | | |
| BLDG 011 | BLDG | 018/7337 | 2028.0 | | RWY01 Take-off flight path | |
| Pole 012 | Pole | 018/7655 | 2034.3 | | RWY01 Take-off flight path | |
| BLDG 013 | BLDG | 019/5669 | 1994.6 | | RWY01 Take-off flight path | |
| BLDG 014 | BLDG | 019/7545 | 2032 | | RWY01 Take-off flight path | |

| Obstacles within a c | ircle with a rac | dius of 15km (centered on t | he 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(9/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 015 | BLDG | 019/7677 | 2034.4 | | RWY01 Take-off flight path |
| STACK 016 | STACK | 019/7913 | 2038.3 | | RWY01 Take-off flight path |
| Antenna 017 | Antenna | 021/10542 | 2079.4 | | RWY01 Traditional departure |
| BLDG 018 | BLDG | 023/7417 | 2030.7 | | |
| Pole 019 | Pole | 029/5161 | 1979.5 | | RWY01 Take-off flight path |
| Moving OBST 020 | Moving OBST | 029/5174 | 1980.4 | | RWY01 Take-off flight path |
| Antenna 021 | Antenna | 032/4087 | 1957.7 | | RWY01 Take-off flight path |
| TRANSMISSION _LINE 022 | TRANSM ISSION_L INE | 032/5338 | 2004.3 | | RWY01 Departure |
| BLDG 023 | BLDG | 034/1794 | 1976.4 | | |
| Antenna 024 | Antenna | 034/4146 | 1957.3 | | RWY01 Take-off flight path |
| BLDG 025 | BLDG | 035/3774 | 1952.8 | | RWY01 Take-off flight path |
| Antenna 026 | Antenna | 036/3837 | 1953.0 | | RWY01 Take-off flight path |
| Antenna 027 | Antenna | 045/3973 | 1994.5 | | |
| Control TWR 028 | Control TWR | 069/1036 | 2049.9 | RED | RWY18L ILS/DME final approach |
| BLDG 029 | BLDG | 089/1544 | 1972.1 | | |
| | | | | | |

| Obstacles within a c | ircle with a rac | dius of 15km (centered on t | he 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(9/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 030 | Antenna | 098/3893 | 2011.2 | | |
| BLDG 031 | BLDG | 136/5803 | 1990.6 | | |
| BLDG 032 | BLDG | 145/4837 | 1958.2 | | RWY19 Traditional departure |
| BLDG 033 | BLDG | 149/7550 | 2003.2 | | |
| TRANSMISSION _LINE 034 | TRANSM ISSION_L INE | 157/7508 | 1981.8 | | |
| Bridge 035 | Bridge | 158/3510 | 1937.3 | | |
| Pole 036 | Pole | 159/2041 | 1956.7 | | |
| TRANSMISSION _LINE 037 | TRANSM ISSION_L INE | 161/8940 | 1992.2 | | RWY01 GP INOP final approach |
| TRANSMISSION _LINE 038 | TRANSM ISSION_L INE | 166/10250 | 2068.5 | | RWY19 Take-off flight path |
| CRANE 039 | CRANE | 166/10867 | 2084.4 | | RWY19 Take-off flight path |
| MT 040 | MT | 170/9115 | 2024.0 | | |
| BLDG 041 | BLDG | 174/5253 | 1972.9 | | |
| Bridge 042 | Bridge | 177/3158 | 1939.7 | | |
| BLDG 043 | BLDG | 177/3845 | 1961.4 | | RWY18L Take-off flight path, PBN departure |

| Obstacles within a c | circle with a rac | dius of 15km (centered on t | he 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(9/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 044 | BLDG | 179/4020 | 1964.4 | RED | RWY18L Take-off flight path |
| Antenna 045 | Antenna | 188/4803 | 1979.5 | | |
| Pole 046 | Pole | 191/1994 | 1950.3 | | |
| Antenna 047 | Antenna | 195/4017 | 1987.5 | | |
| Pole 048 | Pole | 198/4763 | 1991.4 | | |
| Pole 049 | Pole | 199/1323 | 1963.7 | | |
| Antenna 050 | Antenna | 199/3451 | 1998.9 | | |
| BLDG 051 | BLDG | 212/1096 | 1986.6 | | |
| MT 052 | MT | 214/13842 | 2033.7 | | RWY18L PBN departure |
| Control TWR 053 | Control TWR | 237/660 | 2000.0 | RED | |
| Antenna 054 | Antenna | 243/2275 | 2068.4 | RED | |
| Pole 055 | Pole | 316/746 | 1972.7 | | |
| Pole 056 | Pole | 327/735 | 1970.4 | | |
| Antenna 057 | Antenna | 332/1258 | 1986.7 | RED | |
| Antenna 058 | Antenna | 345/1346 | 1966.7 | | |
| Pole 059 | Pole | 350/1958 | 1970.7 | | _ |

Obstacles within a circle with a radius of 15km (centered on the ARP)

| Obstacles within a chere with a radius of 15km (contered on the 71km) | | | | | |
|---|---------------------------|--|---|---|--|
| 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(9/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 060 | Antenna | 357/4635 | 2008.6 | | RWY36R PBN departure |
| Antenna 061 | Antenna | 357/8624 | 2054.3 | | RWY18L GP INOP final approach |

| Obstacles between t | 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 | |
| Antenna 062 | Antenna | 001/27640 | 2312 | | RWY19 ILS/DME final approach | |
| MT 063 | MT | 003/33633 | 2484 | | RWY19 RNAV-ILS intermediate approach | |
| Antenna 064 | Antenna | 008/15820 | 2173 | | RWY18L/19 GP INOP final approach; RWY36R Departure | |
| MT 065 | MT | 014/64535 | 3321 | | Surveillance Vectoring Sector Nr.11 | |
| TRANSMISSION _LINE 066 | TRANSM ISSION_L INE | 017/39848 | 2545 | | RWY18L ILS/DME initial approach | |
| MT 067 | MT | 019/30094 | 2356 | | RWY18L/19 Traditional arrival | |
| MT 068 | MT | 019/45369 | 2553 | | RWY01 Traditional departure | |
| MT 069 | MT | 020/25759 | 2290 | | RWY01 PBN departure | |

| Obstacles between | two circles with | h the radius of 15km and 50 |)km (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(9/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 070 | MT | 021/33570 | 2443 | | RWY18L/19 RNAV-ILS initial approach |
| MT 071 | MT | 021/46196 | 2505 | | RWY36R PBN departure |
| MT 072 | MT | 025/23932 | 2241 | | RWY01 PBN departure |
| MT 073 | MT | 026/34744 | 2324 | | RWY18L/19 PBN arrival |
| MT 074 | MT | 028/23770 | 2215 | | Surveillance Vectoring Sector Nr.01 |
| MT 075 | MT | 030/33010 | 2306 | | RWY01 PBN departure |
| MT 076 | MT | 059/99224 | 3017 | | Surveillance Vectoring Sector Nr.10 |
| MT 077 | MT | 060/30307 | 2281 | | RWY19 PBN departure |
| MT 078 | MT | 091/135049 | 2850 | | Surveillance Vectoring Sector Nr.09 |
| MT 079 | MT | 118/46922 | 2315 | | RWY01 PBN arrival |
| MT 080 | MT | 120/46817 | 2345 | | Holding(DZH) |
| MT 081 | MT | 150/21886 | 2102 | | RWY19 PBN departure |
| MT 082 | MT | 154/22610 | 2185 | | RWY01 Traditional arrival |
| MT 083 | MT | 161/20085 | 2304 | | RWY19 Departure |
| MT 084 | MT | 161/20087 | 2289 | | |
| MT 085 | МТ | 162/92283 | 3671 | | Surveillance Vectoring Sector Nr.08 |

| Obstacles between | two circles witl | h the radius of 15km and 50 |)km (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(9/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 086 | MT | 164/88999 | 3515 | | Traditional MSA sector |
| MT 087 | MT | 165/86785 | 3280 | | Surveillance Vectoring Sector Nr.07 |
| MT 088 | MT | 166/15692 | 2113 | | RWY01 GP INOP final approach |
| MT 089 | MT | 166/19101 | 2280 | | RWY18L PBN departure |
| MT 090 | MT | 166/28015 | 2076 | | |
| MT 091 | MT | 167/19484 | 2215 | | |
| MT 092 | MT | 168/29064 | 2048 | | RWY18L PBN departure |
| MT 093 | MT | 168/32270 | 2097 | | RWY01 ILS/DME initial approach; RWY18L PBN departure |
| MT 094 | MT | 170/15647 | 2104 | | |
| MT 095 | MT | 173/18616 | 2062 | | |
| MT 096 | MT | 177/61850 | 2840 | | Traditional MSA sector |
| MT 097 | MT | 179/68663 | 2950 | | Surveillance Vectoring Sector Nr.06 |
| MT 098 | MT | 196/26320 | 2100 | | RWY18L departure |
| MT 099 | MT | 200/24346 | 2136 | | RWY18L PBN departure |
| MT 100 | MT | 202/23327 | 2128 | | RWY18L/36R PBN departure |
| MT 101 | MT | 218/39565 | 2080 | | RWY01 PBN arrival |

| Obstacles between | two circles with | n the radius of 15km and 50 | km (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(9/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 102 | MT | 223/38220 | 2085 | | RWY01 PBN arrival |
| MT 103 | MT | 242/42584 | 2233 | | RWY01 PBN arrival |
| MT 104 | MT | 251/28594 | 2363 | | RWY18L/36R PBN departure; RWY01 traditional arrival |
| MT 105 | MT | 254/17027 | 2038 | | RWY36R PBN departure |
| MT 106 | MT | 257/117324 | 4484 | | Surveillance Vectoring Sector Nr.16 |
| MT 107 | MT | 262/30697 | 2462 | | RWY18L/19 PBN arrival |
| MT 108 | MT | 270/43813 | 2475 | | RWY18L/19 Traditional arrival; RWY01 PBN arrival; RWY36R Traditional departure |
| MT 109 | MT | 272/35949 | 2562 | | RWY01 PBN departure |
| MT 110 | MT | 274/16879 | 2066 | | RWY01 Traditional arrival |
| MT 111 | MT | 274/49921 | 2509 | | RWY18L Traditional departure; RWY01 PBN arrival |
| MT 112 | MT | 278/44516 | 2572 | | RWY18L/19 PBN arrival; RWY36R PBN departure |
| MT 113 | MT | 288/33991 | 2444 | | RWY18L/19 PBN arrival |
| MT 114 | MT | 289/46722 | 2669 | | RWY36R PBN departure |
| MT 115 | MT | 289/72509 | 2950 | | Surveillance Vectoring Sector Nr.14 |
| MT 116 | MT | 293/48616 | 2695 | | Traditional MSA sector |

| Obstacles between t | two circles with | h the radius of 15km and 50 | Okm (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(9/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 117 | MT | 297/40089 | 2656 | | RWY18L/19 Traditional arrival; RWY36R Traditional departure |
| MT 118 | MT | 299/17258 | 2130 | | RWY01 Traditional arrival |
| MT 119 | MT | 303/60095 | 3250 | | Surveillance Vectoring Sector Nr.12 |
| MT 120 | MT | 305/58215 | 3115 | | Traditional MSA sector |
| MT 121 | MT | 309/176516 | 4580 | | Surveillance Vectoring Sector Nr.15 |
| MT 122 | MT | 316/24020 | 2091 | | RWY18L PBN departure |
| MT 123 | MT | 325/41103 | 2465 | | RWY18L/19 PBN arrival |
| MT 124 | MT | 328/19648 | 2239 | | RWY36R PBN departure |
| MT 125 | MT | 328/41306 | 2545 | | RWY18L/19 Traditional arrival |
| MT 126 | MT | 330/32958 | 2335 | | RWY36R Traditional departure |
| MT 127 | MT | 331/43880 | 2705 | | Surveillance Vectoring Sector Nr.05 |
| MT 128 | MT | 333/84522 | 4074 | | Surveillance Vectoring Sector Nr.13 |
| MT 129 | МТ | 336/47107 | 2954 | | Holding(DJC); PBN sector; Surveillance Vectoring Sector Nr.04; RWY18L/19 initial approach; RWY36R traditional departure |
| MT 130 | MT | 339/79053 | 3859 | | Traditional MSA sector |

| Obstacles between | two circles with | h the radius of 15km and 50 | km (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 |
| Antenna 131 | Antenna | 348/16434 | 2177 | | |
| WINDMILL 132 | WINDMI LL | 349/47475 | 2937 | | RWY18L/19 Traditional initial approach; RWY36R traditional departure |
| MT 133 | MT | 351/31005 | 2392 | | RWY36R PBN departure |
| MT 134 | MT | 352/31363 | 2407 | | RWY18L/19 RNAV-ILS initial approach |
| WINDMILL 135 | WINDMI LL | 352/42484 | 2904 | | RWY36R PBN departure |
| WINDMILL 136 | WINDMI LL | 354/40949 | 2867 | | RWY36R PBN departure |
| WINDMILL 137 | WINDMI LL | 354/41754 | 2900 | | RWY18L/19 ILS/DME intermediate approach; RWY36R PBN departure |
| MT 138 | МТ | 355/37977 | 2655 | | Surveillance Vectoring Sector Nr.03 |
| MT 139 | MT | 356/35548 | 2520 | | Surveillance Vectoring Sector Nr.02 |
| WINDMILL 140 | WINDMI LL | 356/47263 | 2842 | | RWY18L ILS/DME initial approach |
| WINDMILL 141 | WINDMI LL | 358/44213 | 2857 | | RWY19 ILS/DME initial approach |
| MT 142 | МТ | 359/31485 | 2384 | | RWY18L RNAV-ILS intermediate approach |
| WINDMILL 143 | WINDMI LL | 359/38318 | 2807 | | RWY36R Departure |
| MT 144 | MT | 360/33729 | 2520 | | RWY18L Traditional departure, GP INOP final approach |
| Remarks: | | | | | |

ZLLL 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 | 的气象情报 | |
|-------|---|---|
| | prological information provided | |
| 1 | 相关气象台的名称 Associated MET Office | Gansu ATM Sub-bureau MET Office of Northwest ATMB, 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 | Gansu ATM Sub-bureau MET Office of Northwest ATMB, CAAC;24h;6h |
| 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 | Synoptic charts, significant weather charts, upper W/T charts, numerical weather forecast data, meteorological satellite and radar information, 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, Synoptic radar display terminal, satellite cloud display terminal, AWOS data display terminal |
| 9 | 提供气象情报的空中交通服务单位 ATS units provided with information | Lanzhou ACC, Lanzhou APP, Lanzhou TWR, flight service office |
| 10 | 其他信息 Additional information | Forecast room service TEL: 86-0931-6699223 |
| 气象; | | |
| Meteo | orological 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/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: 115m W of RCL, 354m inward THR18L; B: 100m W of RCL, 1985m inward THR36R; C: 115m W of RCL, 325m inward THR36R. D: 95m E of RCL, 343m inward THR19. |

| | | E: 105m E of RCL, 2135m inward THR19. | | |
|---|---|--|--|--|
| | | F: 95m E of RCL, 307m inward THR01. | | |
| | | SFC wind sensors | | |
| | | 18L: 100m W of RCL, 345m inward THR18L. | | |
| | | RWY18L/36R center: 120m W of RCL, 2000m inward THR18L/36R. | | |
| | | 36R: 100m W of RCL, 325m inward THR36R. | | |
| | | 19: 105m E of RCL, 343m inward THR19. | | |
| | | RWY01/19 center: 105m E of RCL, 2120m inward THR01/19. | | |
| | | 01: 105m E of RCL, 307m inward THR01. | | |
| | | Ceilometer | | |
| | | 18L: on RCL extension line, 910m outward THR18L. | | |
| | | 36R: on RCL extension line, 700m outward THR36R. | | |
| | | 01: on RCL extension line, 910m outward THR01 | | |
| | | 19: on RCL extension line, 910m outward THR19. | | |
| | 观测系统的工作时间 | | | |
| 4 | Hours of operation for meteorological observation | H24 | | |
| | system | | | |
| _ | 气候资料 | | | |
| 5 | Climatological information | Climatological tables AVBL | | |
| | 其他信息 | OL .: TEN 04 0001 440020 | | |
| 6 | Additional information | Observation room service TEL: 86-0931-6699233 | | |
| | | | | |

ZLLL 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 |
| 19 | 177.13 °GEO 180 °MAG | 4000×45 | PCR 1000/R/A/W/T CONC/- | Nil | THR 1948.7m TDZ 1944.6m | -0.45% |
| 01 | 357.13 °GEO 360 °MAG | 4000×45 | PCR 1000/R/A/W/T CONC/- | Nil | THR 1930.6m TDZ 1934.7m | 0.45% |
| 18L | 177.12 °GEO 180 °MAG | 4000×45 | PCR 1000/R/A/W/T CONC/- | Nil | THR 1945.5m TDZ 1941.6m | -0.45%(3149m)/- 0.5%(851m) |
| 36R | 357.12 °GEO 360 °MAG | 4000×45 | PCR 1000/R/A/W/T CONC/- | Nil | THR 1926.9m TDZ 1931.4m | 0.5%(851m)/0.45 %(3149m) |

| 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 |
| 19 | Nil | Nil | 4120×280 | 240×280 | Nil | Yes |
| 01 | Nil | Nil | 4120×280 | 240×280 | Nil | Yes |
| 18L | Nil | Nil | 4120×280 | 240×280 | Nil | Yes |
| 36R | Nil | Nil | 4120×280 | 240×280 | Nil | Yes |

Remarks: RWY18L/36R and RWY01/19 grooved at full length. The grooving is trapezoidal in shape, with a top width of 6mm, bottom width of 4mm, and depth of 6mm.

Runway18L/36R shoulder: 7.5m on each side; Runway01/19 shoulder: 15m on each side.

RWY18L/36R and RWY01/19 are parallel runways. Distance between RCL of RWY18L/36R and RCL of RWY01/19 is 1870m. THR RWY18L is 800m south of THR RWY 19.

Within the RESA, 220m from the end of the CWY, there is an antenna array using frangible structures, and measures have been taken to eliminate vertical surfaces.

ZLLL AD 2.13 公布距离 Declared distances

| 跑道号码 | 可用起飞滑跑距离 | 可用起飞距离 | 可用加速停止距离 | 可用着陆距离 | 备注 |
|----------------|----------|---------|----------|--------|---------|
| RWY Designator | TORA(m) | TODA(m) | ASDA(m) | LDA(m) | Remarks |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 19 | 4000 | 4000 | 4000 | 4000 | Nil |
| 01 | 4000 | 4000 | 4000 | 4000 | Nil |
| 18L | 4000 | 4000 | 4000 | 4000 | Nil |
| 36R | 4000 | 4000 | 4000 | 4000 | Nil |

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

| · | | 1 | 1 | 1 | Т | 1 | 1 | |
|-----------------------------------|---|--|---|------------------------------------|---|---|---|---|
| 跑道 号码 RWY Desig nator | 进近灯 类型、长 度、强度 APCH LGT type/ LEN/ /INTST | 入口灯 颜色、翼 排灯 THR LGT colour/ WBAR | 目视进近坡度 指示系统类 型、位置、仰 角、跑道入口 最低眼高 Type of VASIS/Position /Angle/MEHT | 接地 带长 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 |
| 19 | PALS CAT III SFL 900 m LIH | GREEN Yes | PAPI LEFT 439m inward THR19 3° 19.1m | 900 m | 4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH | 4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH | RED | Nil |
| 01 | PALS CAT I SFL 900 m LIH | GREEN Yes | PAPI LEFT 365m inward THR01 3° 19.2m | Nil | 4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH | 4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH | RED | Nil |
| 18L | PALS CAT I SFL 900 m LIH | GREEN Yes | PAPI LEFT 410m inward THR18L 3° 17.9m | Nil | 4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH | 4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH | RED | Nil |
| 36R | PALS CAT I SFL 720 m LIH | GREEN Yes | PAPI LEFT 366m inward THR36R 3° 19.4m | Nil | 4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH | 4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH | RED | Nil |
| Remar | ks: | 1 | | | • | 1 | • | |

ZLLL 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: 18L: 87.5m E of RCL, 396.5m inward THR18L, LGT. 36R: 87.5m W of RCL, 356.5m inward THR23L, LGT. 01: 87.5m W of RCL, 351.5m inward THR01, LGT. 19: 87.5m E of RCL, 439m inward THR19, LGT. |
| 3 | 滑行道边灯和滑行道中线灯 TWY edge and center line lighting | All TWYs: yellow center line lights, green center line lights, blue edge line lights |
| 4 | 备份电源及转换时间 Secondary power supply/Switch-over time | Aeronautical lighting: Dual feed, UPS available, diesel engine driven generator/less than 15s; RWY19 PALS 300m before THR, RTHL, RENL, RTZL, and stop bar LGT, UPS available/1s. |
| 5 | 备注 Remarks | Nil |

ZLLL 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 |

ZLLL 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 |
| Lanzhou tower control area | N364019E1033316-N36 4040E1034128-N36215 6E1034242-N362135E1 033429-N364019E1033 316 | SFC to 2700m(QNH) | | | | |
| Fuel dumping area | N372800E1032500- N372800E1034400- N364000E1034100- N364400E1031500- N372800E1032500 | Above 6000m | | | | |
| Altimeter setting region and TL/TA | N373115E1030059-N37 3736E1040951-N37060 1E1051110-N360437E1 051110-N353000E1043 000-N353000E1040000 -N354656E1024555-N3 73115E1030059 | TL 5400m TA 4800m 5100m(QNH≥1031hPa) 4500m(QNH≤979hPa) | | | | |

ZLLL 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 | | 126.8 (English) | | | H24 | D-ATIS available |
| AHS | | 128.45 (Chinese) | | | H24 | D-ATIS available |
| | | APP01:120.25 (125.025) | | | H24 | |
| APP | Lanzhou | APP02:119.15 (125.025) | | | by ATC | |
| AFF | Approach | APP03:124.2 (127.9) | | | by ATC | |
| | | APP04:119.45 (127.9) | | | 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 |
| | | APP05:119.825 (125.025) | | | H24 | |
| | | APP06:121.15 (121.05) | | | by ATC | |
| | | APP07:124.725 (121.05) | | | by ATC | |
| | | APP08:125.475 (121.05) | | | by ATC | |
| | Lanzhou Tower | TWR01:118.4 (118.025) | | | H24 | RWY01/19 |
| TWR | | TWR02:118.1 (118.025) | | | by ATC | RWY18R/36L |
| | | TWR03:130.3 (118.025) | | | by ATC | RWY18L/36R |
| CNID | Lanzhou | GND01:122.2 | | | 0700-240 | |
| GND | Ground | GND02:121.95 | | | by ATC | |
| | | GND03:122.6 | | | by ATC | |
| APN | Lanzhou Apron | 121.8 (121.625) | | | H24 | |
| Delivery | Lanzhou Delivery | 121.7 | | | by ATC | DCL available |
| EMG | | 121.5 | | | H24 | |

ZLLL 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 |
| Lanzhou VOR/DME | DNC | 114.0 MHz CH 87X | H24 | N36°32.5′ E103°37.1′ 360 MAG/2994m FM the ARP | 1965 m | |
| Wangjiachuan VOR/DME | DJC | 115.2 MHz CH 99X | H24 | N36°46.2' E103°26.5' 333 MAG/32578m FM the ARP | 2304 m | |
| Zhonghe VOR/DME | DZH | 116.0 MHz CH 107X | H24 | N36°14.1′ E103°47.9′ 156 MAG/34903m FM the ARP | 1857 m | Beyond VOR 001° radial direction 25NM U/S, beyond DME 001° radial direction 18NM U/S, beyond DME 276° radial direction 42NM U/S. Beyond VOR 001° radial direction 25NM U/S, beyond DME 001° radial direction 18NM U/S, beyond DME 276° radial direction 42NM U/S. |
| IM 19 | | 75 MHz | H24 | 360 MAG/320m outside THR19 | | |
| LOC 19 ILS CAT III | IJF | 110.3 MHz | H24 | 180 MAG/280m FM RWY19 end | | Operated according to CAT-II standard |
| GP 19 | | 335.0 MHz | H24 | 120m E of RCL, 334m inside THR19 | | Angle 3°, RDH 15.6 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 |
|--|----------|--|-----------------------------------|--|--|---------------------------|
| DME 19 | IJF | CH 40X (110.3 MHz) | H24 | | 1954m | Co-located with GP 19 |
| LOC 18L ILS CAT I | IXC | 108.9 MHz | H24 | 180 MAG/280m FM RWY18L end | | |
| GP 18L | | 329.3 MHz | H24 | 120m W of RCL, 340m inside THR18L | | Angle 3°, RDH 16.2 m |
| DME 18L | IXC | CH 26X (108.9 MHz) | H24 | | 1952m | Co-located with GP 18L |
| LOC 01 ILS CAT I | IYG | 111.5 MHz | H24 | 360 MAG/280m FM RWY01 end | | |
| GP 01 | | 332.9 MHz | H24 | 120m E of RCL, 282m inside THR01 | | Angle 3°, RDH 16.7 m |
| DME 01 | IYG | CH 52X (111.5 MHz) | H24 | | 1939m | Co-located with GP 01 |

ZLLL AD 2.20 本场规定

1. 机场使用规定

1.1 禁止未安装二次雷达应答机的航空器起降。特殊情况下,经批准,可允许无雷达应答机的航空器起降; 航空器地面运行阶段应将应答机设置为地面模式。

- 1.2 所有技术试飞需事先申请, 并在得到 ATC 许可后 方可进行。
- 1.3 需要 DCL 服务的航空器,在 ETD 前 20min 至 30min 向 ATC 申请 DCL 服务。

ZLLL AD 2.20 Local aerodrome regulations

1. Airport operations regulations

- 1.1 TKOF/LDG of aircraft without SSR transponder are forbidden. Aircraft without a radar transponder may be permitted to take off and land under special circumstances and with approval. During ground operations, the transponder shall be set to ground mode.
- 1.2 Each and every technical test flight shall be filed in advance and conducted only after clearance has been obtained from ATC.
- 1.3 Aircraft requesting DCL service shall apply to ATC20-30 minutes prior to ETD.

1.4 可使用最大机型: B747-400(含)及 A340-600(含)以下机型,01/19 跑道满足 A380 备降需求。

380 备降需求。 (inclusive) and A340-600 (inclusive); RWY 01/19 is available for the diversion of A380.

2. 跑道和滑行道的使用

- 2.1 有飞行活动时,禁止任何车辆、人员穿越跑道。 如确需通过跑道时,须经塔台管制室同意后方可穿 越。
- 2.2 航空器滑行速度一般不得大于 50km/h, 在机坪内 滑行速度不超过 15km/h。
- 2.3 滑行道及机坪滑行通道翼展限制

2. Use of runways and taxiways

2.1 No vehicles or personnel is allowed to cross the runway in use. Flight crew shall contact TWR Control for crossing clearance if indeed necessary.

1.4 Maximum aircraft to be available: B747-400

- 2.2 Taxiing speed on TWY shall not exceed 50 km/h; taxiing speed on APN shall not exceed 15km/h.
- 2.3 Wing span limits for TWYs and apron taxiing lanes

| 滑行道/TWYs | 航空器翼展限制(m)/Wing span limits for aircraft(m) | |
|--|---|--|
| G10(east of TWY T3), H, H1, H12 | <80 | |
| E, E1-E12, F, F1-F8, F9(west of TWY T2), F10-F15, G, | | |
| G1-G9, G11-G14, H2-H11, J, J1-J4(north of TWY L), | <65 | |
| K, L, P, P1, P2, Q, T1-T4, Z2-Z4 | | |
| F9(east of TWY T2), G10(west of TWY T3), | -226 | |
| J1-J4(south of TWY L) | <36 | |

2.4 为了能够尽量缩小航空器起飞着陆间隔, 使跑道的利用率最大化, 并减少因着陆航空器长时间占用跑道导致后续进近航空器复飞的情况:

2.4.1 着陆航空器应就近选择合适的快速脱离道,尽可能快速退出跑道,或者遵从管制员的指令退出。当机组不能使用管制员建议的快速脱离道退出跑道时,

- 2.4 To minimize the takeoff and landing intervals of aircraft, maximize RWY utilization, and reduce instances where prolonged runway occupancy by landing aircraft causes subsequent approaching aircraft to perform a missed approach:
- 2.4.1 Landing aircraft shall choose the nearest suitable rapid exit taxiway and vacate the runway as soon as possible, or follow the instructions of the controller. If

应尽早告知管制员。

2.4.2 通常情况下,起飞航空器从等待位置到对正跑 道时间应控制在 60s 以内;着陆航空器从接地到滑出 跑道应控制在 50s 以内。

2.5 跑道运行规则

2.5.1 根据空中流量、天气状况、空域限制、起降分布等情况,本场灵活采用隔离平行运行模式或单跑道运行。

- 2.5.2 隔离运行主用模式: 18L/36R 跑道用于离港, 01/19 跑道用于进港。
- 2.5.3 单跑道运行: 主用 01/19 号跑道。

2.6 顺风起降规定

2.6.1 当跑道顺风分量达到 3.5m/s, 且有继续增大趋势时, 管制员将启动跑道转换工作。

2.6.2 在转换使用跑道方向过程中,使用跑道的顺风 分量大于 3.5m/s 但不大于 5m/s 时,管制员通知机组 地面风向、风速后,如果因航空器性能限制等原因无 法接受时,机组应立即告知管制员,并听从其进一步 指令。 unable to comply with the rapid exit taxiway instructed by the controller, the crew shall inform the controller as early as possible.

2.4.2 Under normal conditions, DEP aircraft shall finish RWY alignment within 60s after receiving ATC instruction of entering RWY; LDG aircraft shall fully vacate RWY within 50s after touchdown.

- 2.5 General rules for the use of runways
- 2.5.1 Segregated parallel operation mode or single-runway operation mode may be selectively adopted according to air traffic flow volume, weather conditions, airspace restrictions, and takeoff/landing distribution.
- 2.5.2 During segregated parallel operations, RWY18L/36R are mainly used for departure, RWY 01/19 are mainly used for arrival.
- 2.5.3 During single-runway operations, RWY 01/19 are mainly used.
- 2.6 Rules for downwind take off and landing
- 2.6.1 When the downwind component reaches 3.5 m/s and shows a trend of increasing, ATC will initiate directions changing procedures for RWY in use.
- 2.6.2 During changing the direction of RWY in use, if downwind is more than 3.5 m/s but not more than 5 m/s, ATC will notify the crew of ground wind direction and speed. If unable to comply due to aircraft performance limitations or other reasons, the crew shall immediately inform the controller and follow further instructions.

- 2.7 机组在脱离跑道首次与地面管制联系时,尤其在低能见度情况下,必须向管制员报告脱离的跑道和所使用的滑行道等具体位置。
- 2.7 Upon first contacting Ground Control after exiting the RWY, the crew shall report the position, specifying the runway vacated and the taxiway being used, especially when operating under low visibility conditions.
- 2.8 航空器在跑道等待位置等待时, 机头应靠近跑道等待位置标志, 但不能超过此标识。
- 2.8 When holding at the RWY holding positions, the aircraft nose shall approach the holding position markings without exceeding it.
- 2.9 航空器驾驶员在收到起飞指令后,应尽快开始滑跑并保持常守塔台频率,不允许自动脱波。
- 2.9 After receiving the takeoff clearance, pilots shall begin the takeoff roll promptly and remain on the tower frequency without automatically switching frequencies.

2.10 地面及滑行道使用规则

- 2.10 Rules for ground movements and the use of taxiways
- 2.10.1 禁止航空器在滑行道上做 180 "转弯。
- $2.10.1\ 180\ ^{\circ}$ turnaround on TWY is strictly forbidden for all aircrafts.
- 2.10.2 机组须听清并重复管制员的滑行指令,尤其是 界限性指令,发现疑问及时证实。
- 2.10.2 The crew shall listen carefully to and read back the taxi instructions issued by ATC, especially those concerning boundaries or limitations, and promptly verify any uncertainties.
- 2.10.3 机组须在进入交接点前主动报告接近某滑行道,等待管制员的进一步指令。
- 2.10.3 The crew shall repor tapproaching a TWY before entering the intersection, and wait for further instructions from ATC.
- 2.10.4 机组如在地面管制扇区移交后联系不畅,应在等待线前停止滑行,并应向原管制频率报告。
- 2.10.4 If communication is poor after the transfer between ground control sectors, the crew shall hold position at the holding line and report to the original control frequency.
- 2.10.5 机组须密切观察地面相关活动,及时依照管制员的活动通报进行观察,要将观察到的不明活动情况
- 2.10.5 The crew shall closely monitor ground activities and promptly observe in accordance with activity

及时通报管制员。

2.10.6 当机组误操作滑错方向时,应该立即停止滑行并向管制员报告。

2.10.7 航空器滑行经过机动区冲突多发地带时机组需要加强观察,严格按照管制指令滑行。

2.11 机动区冲突多发地带运行需注意如下事项:

HS1: 货机坪停放的航空器,推出开车时会影响 F 滑行道,存在航空器剐蹭和滑行堵塞风险,此处 P、Q 滑行道与 F 滑行道交叉,存在滑行堵塞风险。

HS2:使用F滑行道与F8滑行道(与机坪相连接)进入F滑行道的航空器,应注意观察,避让从E5脱离进入F滑行道的航空器。

HS3: E、F、T2与J、K、L滑行道的交汇处,地面交叉滑行较多,存在滑行堵塞风险。

HS4: J1、J2、J3、J4与J、K、L滑行道的交汇处, 地面交叉滑行较多,存在滑行堵塞风险。

HS5: H、G、T3与J、K、L滑行道的交汇处,地面交叉滑行较多,存在滑行堵塞风险。

HS6: 使用 G 滑行道与 G9 滑行道(与机坪相连接) 进入 G 滑行道的航空器,应注意观察,避让从 H6 脱

notifications from ATC. Any observed unclear or unusual activities shall be immediately reported to ATC.

2.10.6 If a wrong turn is made, the crew shall immediately stop and report to ATC.

2.10.7 When taxiing through hotspots in the maneuvering area, the crew shall proceed with extreme caution and strictly follow ATC instructions.

2.11 Hot spots operating requirements:

HS1: Aircraft parked on the cargo apron may affect TWY F during pushback and start up, posing risks of aircraft scraping and taxiway blockages. The intersection of TWYs P, Q, and F poses a risk of TWY blockages.

HS2: Aircraft using TWYs F and F8 (connected to theapron) to enter TWY F shall proceed with extreme caution and give way to aircraft vacating via TWY E5 to TWY F.

HS3: The intersection of TWYs E, F, T2 with TWYs J, K, L has frequent crossing taxi movements, posing a risk of TWY blockages.

HS4: The intersection of TWY J1, J2, J3, J4 with TWYs J, K, L has frequent crossing taxi movements, posing a risk of TWY blockages.

HS5: The intersection of TWYs H, G, T3 with TWYs J, K, L has frequent crossing taxi movements, posing a risk of TWY blockages.

HS6: Aircraft using TWYs G and G9 (connected to theapron) to enter TWY G shall proceed with extreme

离进入G滑行道的航空器。

2.12 翼展 65-80m 航空器进出港滑行路线及停靠机位 详见航图手册 ZLLL-2R-1。

3. 机坪和机位的使用

3.1 发动机试车,需经机场公司同意后,申请塔台许可,并在指定的地点进行。严禁在客机坪试大车。

3.2 停机位限制

caution and give way toaircraft vacating via H6 to TWY G.

2.12 For aircraft with wingspans of 65-80 meters, taxi routes and stands are detailed in aerodrome chart manual ZLLL-2R-1.

3. Use of aprons and parking stands

- 3.1 Engine run-ups are subject to airport corporation, with TWR Control clearance, and shall be carried out at a designated location. Fast engine run-ups on apron are strictly forbidden.
- 3.2 Limits for parking stands:

| 停机位编号/Stands Nr. | 航空器翼展限制/Wing | 机身长度限制/Fuselage | 航空器进出机位规定 |
|--------------------------|--------------------------|-----------------|--------------------|
| | span limits for aircraft | limits | /Entry and exit; |
| 366 | <80m | ≤77m | Taxi in, push-back |
| 303, 306, 308-311, | | | |
| 322-324, 345-347, | <65m | ≤76m | Taxi in, push-back |
| 358-360, 364, 365, 414 | | | |
| 369 (For engine run-ups) | <65m | ≤76m | Push in, tow out |
| 369 (For isolated | <65m | ≤76m | Taxi in, push-back |
| aircraft) | | | |
| 407, 408, 413, 418, 518, | <65m | ≤76m | Taxi in/out |
| 519 | COSIII | | Tan in out |
| 301, 302, 304, 305, | | | |
| 306L/R, 307, 312-321, | <36m | ≤45m | Taxi in, push-back |
| 323L/R, 324L/R, 325-344, | | | Tan in, push ouch |
| 345L/R, 346L/R, 348-357, | | | |

| 361-363, 365L/R, 367, | | | |
|---------------------------|--------|----------|--------------------|
| 368, 414L/R, 415-417 | | | |
| 405, 406, 407L/R, 408L/R, | | | |
| 409-412, 413L/R, 419, | /26.00 | ≤45m | Taxi in/out |
| 420, 501, 502, 508-511, | <36m | <u> </u> | Taxi iii/Out |
| 517, 520 | | | |
| 503-507, 512-516 | <36m | ≤45m | Taxi in, push-back |

- 3.3 试车坪 369 号停机位停放隔离航空器时, 其净距 3.3 While stand Nr.369 with isolated aircraft, other 100m 范围内不应该有其他航空器和物体。
- 3.4 航空器不能同时使用的机位

- aircrafts and OBSTs are forbidden within 100m.
- 3.4 Pair of areas forbidden to use simultaneously

| | 不能同时使用的机位/ | | 不能同时使用的机位/ |
|--------------------|------------------------|--------------------|------------------------|
| 使用机位/Stands in use | Stands forbidden to be | 使用机位/Stands in use | Stands forbidden to be |
| | used | | used |
| 306 | 306L and 306R | 306L or 306R | 306 |
| 323 | 323L and 323R | 323L or 323R | 323 |
| 324 | 324L and 324R | 324L or 324R | 324 |
| 345 | 345L and 345R | 345L or 345R | 345 |
| 346 | 346L and 346R | 346L or 346R | 346 |
| 365 | 365L and 365R | 365L or 365R | 365 |
| 407 | 407L and 407R | 407L or 407R | 407 |
| 408 | 408L and 408R | 408L or 408R | 408 |
| 413 | 413L and 413R | 413L or 413R | 413 |
| 414 | 414L and 414R | 414L or 414R | 414 |

3.5 机位停放航空器机头朝向

3.5 Nose direction of aircraft in stands

| 使用中的停机位/Stands in use | 机头朝向/ Nose direction |
|--|----------------------|
| 369 (For engine run-up), 405-407, 407L/R, 408L/R, 408-410, 414L/R, 414-417, 508-511, 517-520 | E |
| 369 (For isolated aircraft), 411-413, 413L/R, 418-420, 501, 502 | W |
| 503-507, 512-516 | N |

3.6 机组须在 5min 内执行推出开车指令,如果超时该管制指令自动取消,机组须重新向机坪管制申请推出开车。

3.6 The crew shall push back and start up within 5 minutes after receiving the clearance. If this time limit is exceeded, the clearance will automatically expire, and the crew must request again to the apron control for push-back and start-up.

3.7 机位分类使用

3.7 Stand classification and usage

| 除冰机位/De-icing stand | 405-407, 407L/R, 408L/R, 408-410, 411-413, 413L/R, |
|--------------------------|--|
| | 418-420 |
| 货机机位/Cargo stand | 414L/R, 414-417 |
| 试车机位/Engine Run-up Stand | 369(also serve as isolated stand) |

4. 低能见度运行

4. Low visibility operation

4.1 低能见度运行标准种类及可使用跑道

4.1 Low visibility operation modes and RWY in use

| 运行标准种类/Low visibility operation modes | | 可使用的跑道/RWY in use |
|---------------------------------------|----------------------------------|-----------------------------|
| Standard ILS Cat II | | RWY19 |
| I W THE OFF | Low Visibility Take-Off(RVR200m) | RWY19/01 Aircraft CAT A/B/C |
| Low Visibility Take-Off | Low Visibility Take-Off(RVR250m) | RWY19/01 Aircraft CAT D |

| HUD Low Visibility Take-Off(RVR150m) | RWY18L/36R, RWY01/19 |
|---------------------------------------|----------------------|
| Take On(KVK150III) | |

4.2 启动阶段

- 1)当兰州机场跑道视程(RVR)测报值大于等于 150m (天气转好),或者小于 600m (天气转坏);
- 2) 兰州机场云底高测报值大于等于 30m(天气转好), 或小于 60m (天气转好);
- 3) 经空管确认,机场和空管具备低能见度程序保障能力。

4.3 结束阶段

- 1) 当兰州机场跑道视程 (RVR) 测报值上升至 800m, 且云底高抬升至 90m, 并预计有好转趋势或稳定 20min 后:
- 2) 跑道视程 (RVR) 测报值小于 150m, 或云底高小于 30m 时, 并且预计未来 1h 以上无法好转;
- 在低能见度程序运行期间因设备或其他原因不具 备低能见度程序保障能力时。
- 4.4 低能见度运行时, 机组须收听 ATIS, 并审核天气标准, 尽早将意图告知管制员;
- 4.5 在兰州中川机场低能见度运行期间,所有航空器

4.2 Initiation Phase

- 1) When the reported Runway Visual Range (RVR) at Lanzhou Airport is greater than or equal to 150m (weather improving), or less than 600m (weather deteriorating);
- 2) When the reported ceiling at Lanzhou Airport is greater than or equal to 30m (weather improving), or less than 60m (weather deteriorating);
- 3) When ATC has confirmed that the airport and ATC have the capability to implement Low Visibility Procedures(LVP).
- 4.3 Termination Phase
- 1) When the reported RVR at Lanzhou Airport increases to 800m, and the ceiling rises to 90m, with an expected trend of improvement or after 20 minutes stability;
- 2) When the reported RVR is less than 150m, or the ceiling is less than 30m, and it is forecasted that conditions will not improve within the next hour;
- 3) During LVP operations, if the airport loses its LVP support capability due to equipment failure orother reasons.
- 4.4 During LVP operations, the crew shall monitor ATIS and review the applicable weather standards, and inform ATC of their intentions as soon as possible.
- 4.5 During LVP operations at Lanzhou Zhongchuan

在执行跑道外等待指令时需在B型等待位置外等待。

4.6 兰州中川机场为航空器提供引导服务,所有进港航空器由引导车提供引导,出港航空器在滑出前或滑行过程中,均可向当前管制频率提出引导车引导服务申请,引导车依据管制员指令实施引导。

5. 直升机飞行限制, 直升机停靠区

无

6. 警告

6.1 本机场地势北高南低,且高差较大。由北向南着 陆时,应及时调整进场的高度和速度。

6.2 机场跑道北端以北地势呈平缓上坡状态,特别是RWY19 进近灯光北侧地形高出跑道入口标高约20m,进近灯光中线的两侧各约200m处的地形高出跑道入口标高约10m,目视着陆时,机组注意观察。

6.3 RWY19入口前约1.8km处有一条呈东西走向的公路,在其上行驶的车辆按照4.2m限高(总高度见东跑道机场障碍物图-A型, ZLLL-6A-2),且公路安装

Airport, all aircraft shall hold at the Type B holding position when instructed to hold short of the RWY.

4.6 Lanzhou Zhongchuan Airport provides guidance services for aircraft. All inbound aircraft are guided by follow-me vehicles. Outbound aircraft can request follow-me vehicle service before taxiing out or during taxiing on the current control frequency. The follow-me vehicle operates according to instructions from the controller.

5. Helicopter operation restrictions and helicopter parking/docking area

Nil

6. Warning

6.1 High terrain in north and low terrain in south at the airport, large difference in elevation. Pilot should pay more attention to adjust the altimeter.

6.2 North of the runway's northern end, the terrain rises gently. Specifically, north of RWY19's Precision

Approach Lighting System (PALS), the terrain is about
20 meters higher than the runway threshold elevation.

Additionally, approximately 200 meters on either side of the PALS centerline, the terrain is about 10 meters higher than the runway threshold elevation. Pilots should be aware of these conditions during visual approaches.

6.3 An east-west oriented road is situated approximately1.8 kilometers before RWY19's threshold. Vehiclestraveling on this road are subject to aheight restriction of

有照明灯, 机组注意观察。

6.4 机场跑道南端外约 1km 处有一座呈东西走向 (横 跨跑道延长线)的高架桥,进近着陆时机组注意观察。

6.5 双跑道启用后,原 18/36 号跑道(后更名为 18R/36L 号跑道)关闭进行施工改造,请机组注意辨别。

6.6 本机场为平行多跑道机场, 机组落地时应加强观察, 防止跑道混淆。

ZLLL AD 2.21 减噪程序

无

ZLLL AD 2.22 飞行程序

1. 总则

- 1.1 本场进离场程序以 RNAV 飞行程序为主用程序 (仅提供水平引导),传统飞行程序为备份程序。
- 1.2 除经兰州进近或兰州塔台(适用时)特殊许可外, 在兰州进近管制区或兰州塔台机场管制地带的飞行, 均须按照仪表飞行规则进行。

4.2 meters (refer to the Aerodrome Obstruction Chart-Type A for East Runway, ZLLL-6A-2 for altitudeinformation). The road is equipped with lighting. Pilotsshould proceed with caution.

6.4 An east-west oriented overpass (spanning the extended centerline of the runway) is situated approximately 1 kilometer south of the runway's southern end. Pilots should proceed with caution.

6.5 With the commissioning of the dual runways, the original Runway 18/36 (later renamed to Runway 18R/36L) is to be closed for construction and renovation. Pilots should take note of this change.

6.6 The airport operates with parallel multiple runways.Pilots should proceed withcaution during landing to prevent runway confusion.

ZLLL AD 2.21 Noise abatement procedures

Nil

ZLLL AD 2.22 Flight procedures

1. General

- 1.1 RNAV flight procedures (lateral guidance only) are used as the primary ARR/DEP procedures for the airport. Conventional flight procedures are available as backup procedures.
- 1.2 Flights within Lanzhou APP Control Area and Lanzhou TWR Control Area shall operate under IFR unless special clearance has been obtained from

2. 起落航线

起落航线在 01/19 跑道东侧进行, 高度 A、B 类航空器为 2350m, C、D 类为 2450m。

3. 仪表飞行程序

- 3.1 进离场程序
- 3.1.1 严格按照航图中公布的标准进、离场程序飞行, 当 ATC 指令高度与进离场程序中各类限制高度不一 致时,以管制员的指令高度为准。
- 3.1.2 兰州中川机场周围地形复杂, 航图公布的程序高度为最低越障高度, 实际高度以 ATC 指令高度为准。
- 3.1.3 进场航空器在加入传统进场程序前需要管制提供雷达引导,否则应严格按照航路飞行,并保持不低于航路安全高度过进场程序起始点(与航路衔接点)后加入传统进场程序。
- 3.1.4 按照传统离场程序离场的航空器,在加入航路后需要管制提供雷达引导,否则应在传统离场程序结束点(与航路衔接点)至少达到后续航路最低安全高度并严格按照航路飞行。

Lanzhou APP Control or Lanzhou TWR Control (if applicable).

2. Traffic circuits

Traffic circuits shall be made to the east of RWY, at ALT 2350m for aircraft CAT A/B, and 2450m for aircraft CAT C/D.

3. IFR flight procedures

- 3.1 ARR/DEP procedures
- 3.1.1 Strict adherence is required to the relevant ARR/DEP procedures published on aeronautical charts. When the ATC-instructed altitude differs from the various altitude restrictions specified in the ARR/DEP procedures, the altitude instructed by ATC shall be followed.
- 3.1.2 Given the complex terrain surrounding Lanzhou Zhongchuan Airport, the published procedure altitudes on the aeronautical charts are OCA. The actual altitude shall comply with ATC instructions.
- 3.1.3 Aircraft should be provided with radar vectors from ATC before joining the conventional ARR procedures; otherwise, ATS routes shall be strictly followed and flight altitudes no lower than MFA shall be maintained until passing the initial fix (intersecting with ATS routes) of the conventional ARR procedure.
- 3.1.4 Aircraft departing according to conventional DEP procedures should be provided with radar vectors from ATC after joining the ATS routes; otherwise, altitudes no lower than the MFA of the following route segment shall

3.2 等待程序

- 3.2.1 等待程序见标准仪表进场图和仪表进近图。所有等待程序需经 ATC 许可,等待高度以 ATC 指令高度为准。
- 3.2.2 当位于本场西北方向约 56km 有空域限制时,管制员应及时引导航空器避开该区域。
- 3.3 本场离港航空器首次联系兰州进近时须通报起飞 跑道号。

4. 雷达程序和/或 ADS-B 程序

4.1 兰州进近管制区垂直上限为7200(含)m,在进近管制区域内实施雷达管制。

4.2 雷达引导与排序

- 4.2.1 管制员将根据航空器性能或管制规定,发布雷达引导、上升或下降高度及速度调整指令,使航空器之间保持规定的雷达间隔或尾流间隔。航空器性能许可时,应严格执行管制指令。
- 4.2.2 雷达引导航迹不同于公布的进、离场程序。航空器在得到雷达引导后,严格按管制指令飞行。

4.3 应急程序

be reached before passing the final fix (intersecting with ATSroutes) of the conventional DEP procedure, and ATS routes shall be strictly followed.

- 3.2 Holding procedure
- 3.2.1 Holding procedures are specified on STAR and Instrument Approach Charts. All holding procedures require ATC clearance, and the holding altitude shall be as instructed by ATC.
- 3.2.2 When there are airspace restrictions at approximately 56km northwest of the airport, ATC shall promptly vector aircraft to avoid this area.
- 3.3 Departing aircraft shall report takeoff RWY number upon first contacting Lanzhou Approach.

4. Radar procedures and/or ADS-B procedures

- 4.1 The upper limit of the Lanzhou APP Area is7200m(inclusive). Radar control within Lanzhou APP has been implemented.
- 4.2 Radar vectors and sequencing
- 4.2.1 Instructions for radar vectors, ascent/descent or speed adjustment will be issued for radar separation and wake turbulence separation, taking into account aircraft performance or control rules. These instructions shall be strictly followed when aircraft performance allows.
- 4.2.2 Radar vectoring tracks differ from published ARR/DEP procedures. Aircraft under radar vectors shall strictly follow ATC instructions.
- 4.3 Contingency procedures

- 4.3.1 通信设备故障: 确认航空器具有接受能力时, 可继续提供雷达管制服务。
- 4.3.1 Communication equipment failure: Radar control may continue to be provided if it is confirmed that the aircraft still has reception capability.

4.3.2 雷达设备故障:

- 4.3.2 Radar Equipment Failure:
- 4.3.2.1 雷达管制服务终止,指挥航空器建立非雷达管制间隔,航空器恢复自主领航。
- 4.3.2.1 Upon termination of radar control services, aircraft will be instructed to establish non-radar separation and resume own navigation.
- 4.3.2.2 程序管制时,默认使用 RNAV 程序,如航空器不具备 RNP1 能力请告知管制员。
- 4.3.2.2 RNAV procedures are used by default for procedural control. If unable RNP1, the crew shall inform ATC.
- 4.3.2.3 尽快配备规定的高度层,必要时,实施流量控制。
- 4.3.2.3 Assigned flight levels shall be reached as soon as possible. If necessary, flow control measures are taken.

4.1 最低监视引导高度扇区

4.1 Surveillance Minimum Altitude Sectors

| Sector Nr.01 | ALT limit: 2700m or above |
|---|---|
| N363542.28E1032335.26- N363553.52E1033504.54- | N363940.86E1033503.63- N363919.97E1034708.76- |
| N361023.98E1040443.24- N360247.65E1035709.84- | N361130.01E1032801.17- N361058.37E1031625.71- |
| N361426.37E1031635.5- N362441.5E | 21032519.1- N363542.28E1032335.26 |
| Sector Nr.02 | ALT limit: 3000m or above |

N364533.44E1031810.09- N364547.78E1032922.68- N364618.7E1033102.72- N364644.77E1033227.14-N364701.35E1033806.07- N364820.28E1033947.92- N364839.33E1034618.74- N365807.62E1035315.65-N365849.4E1041028.9- N365017.18E1042745.41- N364945.2E1044628.6- N361216.13E1050253.43-N360956.45E1051109.99- N360437.0E1051110.0- N353704.76E1043820.87- N355951.96E1040153.74-N355827.56E1035153.13- N360751.52E1032504.4- N360730.04E1030214.0- N362358.3E1030437.15-

N362822.93E1031934.82- N364533.44E1031810.09

Sector Nr.03 ALT limit: 3200m or above

N365738.36E1034146.13-N365807.62E1035315.65- N364839.33E1034618.74- N364820.28E1033947.92-

N364701.35E1033806.07- N364644.77E1033227.14- N364618.7E1033102.72-N364800.17E1033150.53-N364821.65E1033822.85- N365349.44E1034148.38- N365738.36E1034146.13

Sector Nr.04

ALT limit: 3500m or above

N370027.8E1032505.31-N365738.36E1034146.13-N365349.44E1034148.38-

N364821.65E1033822.85-N364800.17E1033150.53- N364753.42E1031235.41- N365602.82E1031814.38-

N370027.8E1032505.31

Sector Nr.05

ALT limit: 3300m or above

N364753.42E1031235.41- N364800.17E1033150.53- N364618.7E103312.72- N364547.78E1032922.68-

N364533.44E1031810.09- N362822.93E1031934.82- N362358.3E1030437.15- N360730.04E1030214-

N360747.84E1032048.53- N354138.36E1030929.93- N354416.94E1025746.55- N361533.45E1025640.89-

N363639.06E1025942.93- N363633.62E1030920.97- N364120.35E1031238.31- N364753.42E1031235.41

Sector Nr.06

ALT limit: 3600m or above

N360747.84E1032048.53- N360751.52E1032504.4- N360016.85E1034643.22- N353318.5E1034549.6-

N354138.36E1030929.93- N360747.84E1032048.53

Sector Nr.07

ALT limit: 3850m or above

N360016.85E1034643.22- N355827.56E1035153.13- N355951.96E1040153.74- N353704.76E1043820.87-

N353004.57E1043005.37- N355106.53E1035951.26- N355102.71E1034624.82- N360016.85E1034643.22

Sector Nr.08

ALT limit: 4350m or above

N355102.71E1034624.82- N355106.53E1035951.26- N353004.57E1043005.37- N353000.0E1043000.0-

N353000.0E1040000.0- N353318.5E1034549.6- N355102.71E1034624.82

Sector Nr.09

ALT limit: 3500m or above

N364945.2E1044628.6- N364858.5E1051109.98- N360956.45E1051109.99- N361216.13E1050253.43-

N364945.2E1044628.6

Sector Nr.10

ALT limit: 3700m or above

N373515.91E1034339.16- N373736E1040951- N370601E1051110- N364858.5E1051109.98-

N364945.2E1044628.6- N365017.18E1042745.41- N365849.4E1041028.9- N365822.71E1035921.48-

N373515.91E1034339.16

| Sector Nr.11 | ALT limit: 4000m or above | | |
|--|---|--|--|
| N373401.3E1033008.09- N373515.91E1034339.16- N365822.71E1035921.48- N365738.36E1034146.13- | | | |
| N370027.8E1032505.31- | N373401.3E1033008.09 | | |
| Sector Nr.12 ALT limit: 3900m or above | | | |
| N370226.5E1030715.65- N370027.8E1032505.31- N | N365602.82E1031814.38- N364753.42E1031235.41- | | |
| N364120.35E1031238.31- N363633.62E1030920.97 | - N363637.03E1030329.42- N370226.5E1030715.65 | | |
| Sector Nr.13 | ALT limit: 4750m or above | | |
| N373115E1030059- N373401.3E1033008.09- N | 370027.8E1032505.31- N370226.5E1030715.65- | | |
| N363637.03E1030329.42- N363643.8E1024954.08- | N361713.53E1024706.62- N362455.01E1020153.06- | | |
| N364339.32E1020204.01- N364343E10228 | 37- N364805E1023208- N365643E1023004- | | |
| N365951.39E1025623. | 32- N373115E1030059 | | |
| Sector Nr.14 | ALT limit: 3600m or above | | |
| N363643.8E1024954.08- N363639.06E1025942.93- | N361533.45E1025640.89- N361713.53E1024706.62- | | |
| N363643.8E | E1024954.08 | | |
| Sector Nr.15 | ALT limit: 5250m or above | | |
| N372618E1020228- N373115E1030059- N365951.39E1025623.32- N365643E1023004- N364805E1023208- | | | |
| N364343E1022837- N364339.32E1020204.01- N372618E1020228 | | | |
| Sector Nr.16 | ALT limit: 5150m or above | | |
| N362455.01E1020153.06-N361533.45E | N362455.01E1020153.06-N361533.45E1025640.89- N354416.94E1025746.55- | | |
| N354656E1024555-N354641E1020130- N362455.01E1020153.06 | | | |

5. 无线电通信失效程序

- 5.1 参见 AIP GEN3.4.5 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。
- 5.2 在本场运行的航空器,如遇有空中无线电通信故障时,机组可尝试联系兰州进近电话: 0931-6699363

5. Radio communication failure procedures

- 5.1 Refer to AIP GEN3.4.5 general procedures for aircraft under instrument flight rule with air-ground two-way radio communication failure.
- 5.2 In the event of radio communication failure while operating at the airport, the crew should try to contact

或 0931-6699368。

6. 目视飞行程序

- 6.1 等待: 在 01/19 跑道东侧按起落航线进行等待。
- 6.2 目视间隔和目视进近
- 6.2.1 在兰州进近管制区域 6000 (含) m 以下和兰州 塔台管制范围内可实施目视间隔和目视进近。
- 6.2.2 目视进近只在昼间实施,当兰州中川机场能见度不小于5km,云底高不低于300m时,可以实施目视进近。
- 6.3 当实施目视进近的航空器驾驶员明确表示能够目视另一架航空器并接受目视间隔时, 航空器驾驶员应 当负以下职责:
- 6.3.1 始终保持对相关航空器的目视监控,并保持与相关航空器间的安全间隔。
- 6.3.2 为保持与相关航空器的安全间隔作必要的调速、机动飞行及避开尾流影响区域。
- 6.3.3 当无法目视相关航空器或为保持与相关航空器 间的安全间隔所采取的各种措施必须及时通报管制 员,以便重新为其配备其他的安全间隔。

Lanzhou APP by telephone at 86-931-6699363 or 86-931-6699368.

6. Procedures for VFR flights

- 6.1 Holding: aircraft could hold east of RWY01/19 following the traffic circuits mentioned above.
- 6.2 Visual Separation and Visual Approaches
- 6.2.1 Visual separation can be applied and visual approaches may be conducted below 6,000 meters (inclusive) within Lanzhou APP Control Area and Lanzhou Tower Control Area.
- 6.2.2 Visual approaches are only applicable during daylight hours when visibility at Lanzhou Zhongchuan Airport is no less than 5km and the ceiling is no lower than 300m.
- 6.3 When the pilot conducting a visual approach has reported having the preceding aircraft in sight and accepts visual separation, the pilot shall assume the following responsibilities:
- 6.3.1 Continuously maintain visual monitoring of the relevant traffic and maintain own separation.
- 6.3.2 Perform necessary speed adjustments,
 manoeuvres, and take actions to avoid wake turbulence
 areas to maintain safe separation from relevant aircraft.
- 6.3.3 If no visual contact can be established with the traffic, or if various measures are taken to maintain safe separation, the crew shall promptly inform the ATC unit accordingly. This allows ATC to re-establish appropriate separation.

6.3.4 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间的安全间隔。

7. 目视飞行航线

无

8. 其它规定

无

ZLLL AD 2.23 其它资料

鸟情资料

1.1 鸟情资料: 本场活动危险鸟种 17 种, 主要有环颈 雉、赤麻鸭、灰山鹑、斑翅山鹑、家鸽、山斑鸠、丘 鹬、苍鹰、白尾鹞、普通鵟、长耳鸮、短耳鸮、红隼、 猎隼、游隼、喜鹊、红嘴山鸦, 其中旅鸟4种, 为赤 麻鸭、苍鹰、普通鵟、丘鹬,每年3-5、9-10月迁徙, 其迁徙期间活动的时间为 6:00-10:00、18:00-次日清 晨,飞行高度10-200m;在4-8月期间主要活动时间 为 6:00-10:00、18:00-20:00, 飞行高度 10-100m; 本 地常留鸟13种,主要活动时间为白天,活动高度达 0-100m; 非危险鸟种 33 种, 主要以鹌鹑、灰斑鸠、 棕斑鸠、小杜鹃、金眶鸻、大沙锥、扇尾沙锥、纵纹 腹小鸮、戴胜、小斑啄木鸟、灰背隼、燕隼、棕背伯 劳、灰喜鹊、大山雀等, 其中旅鸟 16 种, 每年 3-5、 9-10 月迁徙, 活动时间为全天, 高度 0-100m; 留鸟 17种,活动时间为全天,高度 0-100m,群鸟主要以 短趾百灵为主, 其活动时间为 4、9 月, 在多云、阴

6.3.4 When visual separation is applied during the final approach segment of the instrument approach procedure, the pilot shall follow the instrument approach procedures while maintaining visual separation from other traffic.

7. VFR route

Nil

8. Other regulations

Nil

ZLLL AD 2.23 Other information

Bird's information

1.1 Bird information: There are 17 dangerous bird species in this activity, mainly including Phasianus colchicus, Tadorna ferruginea, Perdix perdix, Perdix dauurica, Columba livia domestica, Streptopelia orientalis, Scolopax rusticola, Accipiter gentilis, Circus cyaneus, Buteo japonicus, Asio otus, Asio flammeus, Falco tinnunculus, Falco cherrug, Falco peregrinus, Pica pica, Pyrrhocorax pyrrhocorax. Among them, there are 4 species of traveling birds, which are Tadorna ferruginea, Accipiter gentilis, Buteo japonicus, Scolopax rusticola, which migrate from March to May and September to October every year, and their activity time during the migration period is 22:00-02:00(next day), 10:00-early morning of the next day, and the flight height is 10-200m; 13 species of local resident birds, the main activity time is daytime, activity height of 0-100m.

天时活动数量较多,活动时间为全天,活动高度 0-50m。

1.2 迁徙路线:本场处于西北候鸟迁徙通道,旅鸟迁徙路线及活动区域:主要集中在跑道南端、芦井水湿地公园;普通鵟主要活动区域集中在跑道北端;留鸟在全场均有活动,南端较为频繁。

1.3 主要防范措施: 鸟击防范工作通过开展中川机场 周围半径 8km 范围生态调研, 科学系统分析鸟类、昆虫、植物信息, 通过喷洒鸟类趋避剂、杀虫剂、除草剂、割草及碾压等多种措施, 控制飞行区内生态环境,

33 species of non-dangerous birds, Mainly to Coturnix japonica, Streptopelia decaocto, Spilopelia senegalensis, Cuculus poliocephalus, Charadrius dubius, Gallinago megala, Gallinago gallinago, Athene noctua, Upupa epops, Dendrocopos minor, Falco columbarius, Falco subbuteo, Lanius schach, Cyanopica, Parus major etc. Among them, there are 16 species of migratory birds, which migrate from March to May and September to October every year, the main activity time is daytime, activity height of 0-100m. 17 species of resident birds, which are active for a whole day and a height of 0-100m. The flock is dominated by Short-toed Larks, the activity time is April and September, and the number of activities is more in cloudy and cloudy days, and the activity time is all day, and the activity height is 0-50m.

- 1.2 Migration route: This field is located in the northwest migratory bird migration channel, and the migration route and activity area of the traveling birds: mainly concentrated at the south end of the runway, Lushuijing Wetland Park; Buteo japonicus the main activity area is concentrated at the north end of the runway, and the resident birds are active throughout the course, and the south end is more frequent.
- 1.3 Main preventive measures: bird strike prevention work through the ecological survey of a radius of 8km around Zhongchuan Airport, scientific and systematic analysis of birds, insects, plant information, through

同时结合季节变化,科学运用煤气炮、驱鸟车、定向 声波驱鸟器、电子音爆、全向声波驱鸟器、自动喷药 机、拦鸟网、猎枪、锣、高空驱鸟器等驱鸟设备,提 高人为干预,最大限度地降低鸟击风险。

spraying bird repellents, insecticides, herbicides, mowing, rolling and other measures, to control the ecological environment in the flight area, at the same time, combined with seasonal changes, the scientific use of gas cannons, bird repellents, directional sonic bird repellents, electronic sonic booms, omnidirectional sonic bird repellents, automatic spraying machines, Bird repellent equipment such as bird nets, shotguns, gongs, and high-altitude bird repellents can improve human intervention and minimize the risk of bird strikes.