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

ZLLL-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 ARP coordinates and site at AD	N3630.9 E10337.2 Center of RWY
2	方向、距离 Direction and distance from city	339 °GEO, 55.6km from Dongfanghong Square, Lanzhou
3	标高/参考气温 Elevation / Reference temperature	1947.2m/26.1 ℃(JUL)
4	机场标高位置/大地水准面波幅 AD ELEV PSN / geoid undulation	North of RWY/-
5	磁差/年变率 MAG VAR/ Annual change	2°17′W(2015)/57"
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	Lanzhou Zhongchuan International Airport CO.LTD. Lanzhou Zhongchuan International Airport, Lanzhou New Area Nr.15, Lanzhou city, Gansu province, China. Post code:730087 TEL:86-931-8168815 FAX:86-931-8168809 AFS:ZLLLYDYX
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	Available for aircraft B747-400(include) & A340-600(include) or below

ZLLL 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 Health and sanitation	HS or O/R

4	航行情报服务讲解室 AIS Briefing Office	HS or O/R
5	空中交通服务报告室 ATS Reporting Office (ARO)	HS or O/R
6	气象讲解室 MET Briefing Office	HS or O/R
7	空中交通服务 ATS	HS or O/R
8	加油 Fuelling	HS or O/R
9	地勤服务 Handling	HS or O/R
10	保安 Security	HS or O/R
11	除冰 De-icing	HS or 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 Cargo-handling facilities	Container lift (7t,14t), conveyor belt, baggage tow-tracker, dollies, container pallet
2	燃油/滑油牌号 Fuel/oil types	Nr.3 jet fuel --
3	加油设施/能力 Fuelling facilities/capacity	Refueling truck(45000 and 20000L) and hydrant cart; 20L/s Apron refueling well, well plug
4	除冰设施 De-icing facilities	De-icer
5	过站航空器机库 Hangar space for visiting aircraft	Nil
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for A319/A320/A321, B737-700/800, B757-200; 1500FH/1000FC/6 months and below regular maintenance for A319/A320/A321, B737-700/800 .

7	备注 Remarks	Power unit, air supply vehicle, oxygen supply tender, air conditioning unit, potable water supply vehicles, emission vehicles, passenger boarding stairs, tow truck, shuttle buses, follow-me vehicles, lift truck for disabled, bridge load power and air-conditioning for Nr.108-116 gallery bridge, bridge load power for Nr.101-107 gallery bridge.

ZLLL AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD and in the city
2	餐馆 Restaurants	At AD and in the city
3	交通工具 Transportation	Passenger's coaches,taxies
4	医疗设施 Medical facilities	First aid at AD, hospitals in the city
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 8
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, chemical supply tender, airport passenger bus, emergency rescue command vehicle.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747 uplift air cushion, tow truck, lifting equipment, tie-down equipment, rubber crosstie, mobile surface operation devices, towing system.
4	备注 Remarks	Nil

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 Types of clearing equipment	All seasons Snow blower, snow pusher, snow ploughs, snow fluid truck, friction coefficient test vehicle.
2	扫雪顺序 Clearance priorities	RWY, TWY, Apron
3	备注 Remarks	RWY&TWY: mechanical snow cleaning Apron: manual snow cleaning

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	Surface:	CONC
		Strength:	PCN74/R/A/W/T:Stands Nr. 109-116, 212, 214, 216, 218, 220, 222L, 222, 222R, 224, 226-238, 240, 242, 244, 246, 248, 250, 252, 301-308, C1, C2, G1, H1, Z1, Z2. PCN 61/R/B/W/T:Stands Nr. 101-108, 201-211, 213, 215, 217, 219, 221, 223, 225.
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	58m: B1-B4, B6-B9; 48m: B10; 38m: A2, A7; 34m: B5; 30.5m: A9; 30m: A8; 28.5m: A3-A6; 26.5m: A1; 23m: parallel TWY A, TWY B;
		Surface:	CONC:(parallel TWY A, A1, A2(TWY A to north deicing apron), A8-A9, B1-B10, B, C, D) Asphalt:(A2(TWY A to RWY), A3-A7)
		Strength:	PCN 99/F/A/X/T(A2（TWY A to RWY), A3-A7) PCN 74/R/A/W/T(A2（TWY A to north deicing apron）, A9, B1-B4, B8-B10, TWY B（north of B5, south of B7）, TWY D) PCN 61/R/B/W/T(parallel TWY A, A1, A8, B5-B7, TWY B（BTN B5 & B7）, TWY C)
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

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 with TWY and RWY and at all holding positions. Guide lines at all TWYs and apron. Aircraft stand identification sign board at stands(exclude 222L, 222R, 228, G1,Z1, Z2). Aircraft visual docking guidance system is available for Nr.101-116. Marshaller guidance at stands Nr.201-238, 240, 242, 244, 246, 248, 250, 252, 301-308, 222L, 222R, Z1, Z2.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	THR, RWY designation, TDZ, center line, edge line, aiming point marking
		RWY lights	THR,wing bar,center line, edge line, RWY end
		TWY markings	center line, edge line, RWY holding positions, intermediate holding positions, enhancement center line, no-entry marking
		TWY lights	Edge line, center line(A, A1-A9, B, B1-B10), RWY guard light(A1, A2, A7-A9), rapid exit TWY indicator, no-entry,intermediate holding position lights
3	停止排灯 Stop bars	Nil	
4	备注 Remarks	Blue parking apron edge line, red obstacle light, yellow de-icing apron exit light	

ZLLL 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	Antenna	003	1680	1962		
2	*TWR	003	9300	2078	RWY36 Take-off flight 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
3	Pole	005	4326	1991		
4	Pole	006	4059	1987		
5	TWR	006	13240	2090		
6	BLDG	007	8037	2014		
7	BLDG	008	6113	2024	RWY18 VOR/DME approach	
8	Chimney	008	12306	2083		
9	*TWR	012	5571	2007		
10	BLDG	016	8339	2040		
11	*TWR	016	12209	2100		
12	Pole	023	5003	1988		
13	*TWR	028	8400	2079		
14	BLDG	030	2435	1973		
15	*TWR	039	4661	2017		
16	*TWR	041	1170	1970		
17	*TWR	044	3972	1995		
18	MT	047	14556	2072		
19	*TWR	051	1340	1967		
20	MT	054	12370	2035		
21	*TWR	055	2940	1985		
22	TWR	076	3565	1983		
23	TWR	077	2127	1972		
24	MT	090	10735	2011		
25	*BLDG	094	3550	1969		
26	BLDG	119	4729	1976		

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
27	*TWR	120	1689	1957		
28	TWR	120	8235	1989		
29	*BLDG	135	5802	1991		
30	BLDG	136	7495	2015		
31	Chimney	147	2283	1940		
32	*TV TWR	153	2403	1976		
33	TWR	164	9935	2085		
34	Chimney	171	2228	1941		
35	Pole	173	2220	1931		
36	*BLDG	174	3865	1960	RWY18 Take-off flight path	
37	MT	175	14200	2010	RWY36 GP INOP FAF-SDF	
38	Pole	176	1725	1943.6		
39	*BLDG	176	3850	1960	RWY18 Take-off flight path	
40	*BLDG	177	3844	1961	RWY18 Take-off flight path	
41	Pole	179	2260	1929		
42	*BLDG	179	4019	1964	RWY18 Take-off flight path	
43	*TWR	187	4810	1981		
44	*BLDG	188	3279	1949		
45	*Light Pole	195	1621	1961.4		
46	Chimney	195	2338	1956		
47	*TWR	198	3453	2010	RWY36 VOR/DME	

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
48	*Light Pole	199	1324	1963.6		
49	*TWR	200	2575	1967		
50	BLDG	202	3025	1989		
51	*Light Pole	203	994	1966		
52	*Light Pole	204	1468	1961		
53	*Light Pole	206	1257	1962		
54	*Light Pole	213	750	1962		
55	*Light Pole	216	682	1963		
56	*Light Pole	216	937	1962		
57	*Light Pole	217	373	1951		
58	*Light Pole	217	375	1952		
59	*Light Pole	220	929	1975		
60	*BLDG	222	819	1970		
61	*Light Pole	234	284	1952		
62	*Light Pole	234	287	1952		
63	*Control TWR	236	662	2000	RWY18/36 ILS/DME	
64	TWR	237	2294	2031		
65	*TWR	238	1553	2003		
66	*Antenna	242	2277	2068		
67	*Light Pole	249	559	1975		
68	*Light Pole	250	557	1983		
69	*Light Pole	262	530	1976		
70	*Light Pole	263	534	1983		
71	MT	271	3417	2105	Circling	
72	*Light Pole	276	235	1952		

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
73	MT	281	1649	2024		
74	MT	281	3818	2109		
75	MT	290	5203	2132		
76	*Light Pole	300	271	1952		
77	MT	302	3315	2142		
78	MT	316	8515	2153		
79	*Light Pole	317	344	1953		
80	MT	318	6328	2096		
81	BLDG	321	3280	2001		
82	*Light Pole	324	585	1965.5		
83	*Light Pole	328	663	1966		
84	*Antenna	331	1259	1987		
85	Pole	334	5743	2031		
86	*TWR	335	4331	2027		
87	*Light Pole	336	1137	1969.6		
88	Antenna	341	12774	2114		
89	*TWR	344	9214	2075		
90	*TWR	346	13052	2094		
91	BLDG	351	9023	2016		
92	BLDG	351	9141	2022		
93	*TWR	356	13297	2088		
94	Antenna	357	2926	1964.8	RWY36 Take-off flight path	
95	*TWR	357	9770	2046	RWY36 Take-off flight 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
96	Pole	359	2290	1951.4	RWY36 Take-off flight path	
97	Antenna	359	2981	1965.6	RWY36 Take-off flight path	
98	MT	359	7730	2005	RWY18 GP INOP	
99	*Antenna	360	11192	2072	RWY36 Take-off flight path	
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	*TWR	004	15692	2139	RWY18 FAF-SDF	
2	TWR	004	23200	2238	RWY18 Intermediate approach	
3	TWR	007	15800	2173		
4	MT	016	31020	2393		
5	MT	060	30330	2267		
6	MT	121	44840	2312		
7	MT	160	20030	2289		
8	MT	165	19100	2265	RWY36 Intermediate approach	
9	MT	169	15630	2089	RWY36 VOR/DME FAF-SDF	

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
10	MT	228	35000	2117		
11	MT	267	36000	2551	Significant obstacle	
12	MT	296	39890	2641		
13	MT	332	45640	2941	Significant obstacle	
14	MT	352	41900	2752		
15	MT	354	38980	2678	Sector	
16	MT	357	24800	2232	RWY18 Intermediate approach	
17	MT	359	33700	2505	RWY18 Initial approach	
Others:						

ZLLL 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	Gansu 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	Gansu ATMB MET Office 9 HR, 24 HR
4	趋势预报发布间隔 Issuance interval of trend forecast	Trend 1 HR
5	所提供的讲解/咨询服务 Briefing/consultation provided	P, T
6	飞行文件及其使用语言	Chart, International MET Codes, Abbreviated Plain Language Text; Ch,

	Flight documentation, Languages used	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, other numerical weather forecast data, meteorological satellite information, weather radar and wind profile radar information
8	提供信息的辅助设备 Supplementary equipment available for providing information	FAX, MET Service Terminal, Synoptic radar display terminal, AWOS data display terminal, satellite cloud display terminal, short message platform
9	提供气象情报的空中交通服务单位 ATS units provided with information	Lanzhou TWR, Lanzhou ACC, Lanzhou APP, flight service office
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: 110m E of RCL, 345m inward THR18; B: 110m E of RCL, 1970m inward THR18; C: 110m E of RCL, 340m inward THR36. SFC wind sensors RWY18: 120m E of RCL, 345m inward THR18; RWY18/36 center: 120m E of RCL, 2000m inward THR18; RWY36: 120m E of RCL, 310m inward THR36. Ceilometer RWY18: 115m E of RCL, 355m inward THR18; RWY36: 115m E of RCL, 320m inward THR36.
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	International weather surveillance TEL: 86-931-8166412

ZLLL AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 Designations RWY NR	真方位和磁方位 TRUE &MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度(PCN), 跑道道面/ 停止道道面 RWY strength (PCN), RWY surface / SWYsurface	着陆入口坐标及高程异常 THR coordinates and geoid undulation	跑道入口标高,精密进近跑道接地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
18	177.11°GEO 179°MAG	4000×45	75/R/B/W/T CONC/-		THR1947.2m
36	357.11°GEO 359°MAG	4000×45	75/R/B/W/T CONC/-		THR1926.9m
跑道-停止道坡度 Slope of RWY-SWY	停止道长宽 SWY dimensions(m)	净空道长宽 CWY dimensions(m)	升降带长宽 Strip dimensions(m)	无障碍物区 OFZ	跑道端安全区长宽 RWY end safety area dimensions(m)
7	8	9	10	11	12
See AOC	Nil	Nil	4120×300	Yes	240×300
See AOC	Nil	Nil	4120×300	Yes	240×300
Remark:					

ZLLL 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
18	4000	4000	4000	4000	Nil
18	3800	3800	3800	4000	Enter FM A2
36	4000	4000	4000	4000	Nil
36	3600	3600	3600	4000	Enter FM A8
36	3360	3360	3360	4000	Enter FM A7
Remarks:					

ZLLL 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
18	PALS CAT I 900m LIH	GREEN Yes	PAPI LEFT 410m inward THR18 3°	Nil	4000m** spacing 30m	4000m*** spacing 60m	RED	Nil
36	PALS CAT I* 900m LIH	GREEN Yes	PAPI LEFT 300m inward THR36 3°	Nil	4000m** spacing 30m	4000m*** spacing 60m	RED	Nil
Remarks: *SFL **up to 3100m WHITE VRB LIH, 3100-3700m RED/WHITE VRB LIH, 3700-4000m RED VRB LIH ***up to 3400m WHITE VRB LIH, 3400-4000m YELLOW VRB LIH								

ZLLL 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	Nil
3	滑行道边灯和中线灯 TWY edge and center line lighting	Blue edge line , Green center line (A,A1-A9, B, B1-B10)
4	备份电源/转换时间 Secondary power supply/switch-over time	Secondary power supply, diesel oil dynamotor available/ 15 sec.

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（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

ZLLL 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
Lanzhou tower control area	A rectangle, 2 parallel lines of 10km from RWY center line and 2 parallel lines of 20km from RWY center vertical to RWY center line	SFC to 2700m(QNH)	
Fuel dumping area	N3728E10325－ N3728E10344－ N3640E10341－ N3644E10315－ N3728E10325	Above 6000m	

名称 Designation	水平范围 Lateral limits	垂直范围 Vertical limits	备注 Remarks
Altimeter setting region and TL/TA	A circle with a radius of 55km centered on Lanzhou VOR/DME(DNC) (exclude the area which is south of N360412E1032030-N361230E1040630)	TL 4800m TA 4200m 4500m(QNH≥1031hPa) 3900m(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 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5
ATIS		128.45	H24	D-ATIS available
APP	Lanzhou Approach	APP01:120.25(127.9)	H24	
APP	Lanzhou Approach	APP02:119.15(125.025)	by ATC	
APP	Lanzhou Approach	APP03:124.2(125.025)	by ATC	
APP	Lanzhou Approach	APP04:119.45(127.9)	by ATC	
APP	Lanzhou Approach	APP05:119.825(125.025)	by ATC	
TWR	Lanzhou Tower	118.1(118.025)	H24	
GND	Lanzhou Delivery	121.7	by ATC	DCL available
GND	Lanzhou Ground	121.95	by ATC	
APN	Lanzhou Apron	121.625	H24	
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
Zhonghe VOR/DME	DZH	116.0MHz CH107X	N36°14.1' E103°47.9'	1857m	Outside of VOR 001° radial direction 25NM is not available, outside of DME 001°

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
					radial direction 18NM is not available
Wangjiachuan VOR/DME	DJC	115.2MHz CH99X	N36°46.2' E103°26.5'	2304m	
Lanzhou VOR/DME	DNC	114.0MHz CH87X	N36°32.5' E103°37.1'	1965m	
LOC 18 ILS CAT I	IKQ	108.5MHz	179°MAG/260m FM end RWY18		Outside of LOC front course 17NM is not available
GP 18		329.9MHz	110m E of RCL, 325m inward THR18		Angle 3°, RDH 16m
DME 18	IKQ	CH22X (108.5MHz)		1952m	Co-located with GP18
LOC 36 ILS CAT I	IYY	109.3MHz	359°MAG/290m FM end RWY36		
GP 36		332.0MHz	120m E of RCL, 280m inward THR36		Angle 3°, RDH16.7m
DME 36	IYY	CH30X (109.3MHz)		1935m	Co-located with GP36

ZLLL AD 2.20 本场飞行规定

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。

1.2 所有技术试飞需事先申请，并在得到空中交通管制部门批准后方可进行。

ZLLL AD 2.20 Local traffic regulations

1.Airport operations regulations

1.1 Takeoff/landing of aircraft without SSR transponder are forbidden.

1.2 Each and every technical test flight shall be filed in advance and conducted only after clearance has been obtained from ATC.

2. 跑道和滑行道的使用

2.1 可以通过塔台申请引导车和拖车服务。

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 Follow-me vehicle service and towing service are available via Tower Control.

2.2 Taxiing speed on TWY shall not exceed 50 km/h; taxiing speed on apron 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/ Wing span limits for aircraft	其他规定/other rules
A、A1-A9、B1-B4、B6-B10	<65m	TWY A3-A6 are only used for vacating RWY
B5	<52m	
机坪滑行通道/Apron taxiing lanes	航空器翼展限制/ Wing span limits for aircraft	其他规定/other rules
B(BTN B1&B4,BTN B6&B10)	<65m	
B(BTN B4&B6)	<48m	
C(BTN B4&B5)	<48m	
C(BTN B5&B6)	<48m	
	<36m	when aircraft with wingspan between 52m(inclusive) and 65m(exclusive)parking on stand Nr.101
D	<36m	

2.4 机动区冲突多发地带运行要求

2.4 Hot spot procedure

HS1：使用 A 滑行道或 B2 滑行道（与机坪相连）进入 A 滑行道的航空器，应注意观察，避让从 A3 滑行道脱离的航空器。

HS1: Aircraft shall proceed with extreme caution before taxiing into this area via TWY A or TWY B2(connected with apron) then TWY A, and shall give way to aircraft vacating RWY via TWY A3.

HS2：使用 A 滑行道或 B4 滑行道（与机坪相连）进入 A 滑行道的航空器，应注意观察，避让从 A4 滑行道脱离的航空器。

HS2: Aircraft shall proceed with extreme caution before taxiing into this area via TWY A or TWY B4(connected with apron) then TWY A, and shall give way to aircraft vacating RWY via TWY A4.

HS3：使用 A 滑行道或 B6 滑行道（与机坪相连）进入 A 滑行道的航空器，应注意观察，避让从 A5 滑行道脱离的航空器。

HS3: Aircraft shall proceed with extreme caution before taxiing into this area via TWY A or TWY B6(connected with apron) then TWY A, and shall give way to aircraft vacating RWY via TWY A5.

HS4：使用 A 滑行道或 B7 滑行道（与机坪相连）进入 A 滑行道的航空器，应注意观察，避让从 A6 滑行道脱离的航空器。

HS4: Aircraft shall proceed with extreme caution before taxiing into this area via TWY A or TWY B7(connected with apron) then TWY A, and shall give way to aircraft vacating RWY via TWY A6.

2.5 在转换跑道方向时，管制可根据运行情况，短时安排航空器使用顺风风量大于 2.5m/s 但不大于 5m/s 起降，但需通知航空器驾驶员。

2.5 During changing the direction of RWY in use, if downwind is more than 2.5m/s but not more than 5m/s, ATC can direct aircraft to take off or land downwind temporarily according to operational conditions, and should inform the pilots.

2.6 非全跑道起飞程序

2.6 Non-full length RWY take-off

2.6.1 在航空器驾驶员提出非全跑道起飞申请后，管制员可根据实际情况批准并提供管制服务。

2.6.1 After flight crew apply for non-full length RWY take-off, ATC can approve and provide air traffic

control service according to actual conditions.

2.6.2 塔台根据跑道实际运行情况，将安排航空器由A2/A7,A8 进入 RWY18/36 使用非全跑道起飞，如航空器驾驶员不能接受非全跑道起飞，请告知管制员。

2.6.2 ATC can command aircraft to enter RWY18/36 via A2/A7, A8 by using non-full length RWY take-off, inform ATC if flight crew cannot accept this.

2.7 A5、A6 快滑与平滑 A 相接处存在上坡，局部坡度达 1.4%，请使用 A5、A6 滑脱离的航空器提前做好准备。

2.7 Slopes at the connection BTN A5&A, A6&A are +1.4%, flight crew should pay attention when using TWY A5 or A6.

2.8 航空器（52m≤翼展＜65m）不能使用 A3、A4、A5、A6 快速出口滑行道脱离跑道时，应提前告知管制员。

2.8 If aircrafts with wingspan between 52m(inclusive) and 65m(exclusive) are not able to vacate RWY via A3/A4/A5/A6, aircrew should inform ATC in advance.

2.9 为规范航空器从进入跑道和落地后的跑道占用时间，提高跑道容量，根据兰州中川机场跑道及快速脱离道的布局，做如下要求：

2.9 For optimizing runway occupancy time and increasing runway capacity, according to runways and rapid exiting taxiways layout, requirements as follows:

2.9.1 起飞航空器：起飞航空器从接到管制单位进跑道指令到对正跑道时间应控制在 60s 内，若机组认为无法在上述要求的时间内完成，需在到达跑道外等待点之前，向管制部门说明。

2.9.1 For departure aircraft:
Departure aircraft shall finish RWY alignment within 60s after receiving ATC instruction of entering RWY. If flight crew cannot fulfill the process within the required time, flight crew shall inform control unit before reaching RWY holding position.

2.9.2 落地航空器

2.9.2 For landing aircraft

2.9.2.1 落地航空器应尽快脱离跑道，从接地到滑出跑道应控制在 50s 内，若机组认为无法在上述要求的时间内完成，需更长时间占用跑道，应尽早通知管制单位。

2.9.2.1 Landing aircraft shall fully vacate RWY within 50s after touchdown. If flight crew cannot fulfill the process within the required time and will occupy runway for more time, flight crew shall inform control

unit as soon as possible.

2.9.2.2 落地航空器脱离跑道后，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。

2.9.2.2 As soon as vacating the RWY, landing aircraft shall report and inform the TWY they used to TWR controller.

3. 机坪和机位的使用

3. Use of aprons and parking stands

3.1 机位限制

3.1 Limits for parking stands:

停机位编号/Stands Nr.	航空器翼展限制/ Wing span limits for aircraft	机身长度限制/ Fuselage limits	滑入、滑出方式/ Enter or exit
111,114,116,G1,308	<65m	≤75.5m	Taxi in on own power and push-back by tow tractors
C2,Z1,Z2	<65m	≤75.5m	Taxi in/out on own power
101	<65m	≤70.5m	Taxi in on own power and push-back by tow tractors
C1,H1	<52m	≤62m	Taxi in/out on own power
106-109	<52m	≤55m	Taxi in on own power and push-back by tow tractors
102,211,215,217,219,221,223,225	<48m	≤55m	Taxi in on own power and push-back by tow tractors

204,208,210	<48m	≤55m	Taxi in/out on own power
104,105,115,227,229,231,233,235,237, 240,242,244,246,248,250,252	<36m	≤45m	Taxi in on own power and push-back by tow tractors
202,206,212,214,216,218,220,222, 224,230,232,234,236,238	<36m	≤45m	Taxi in/out on own power
301-307	<36m	≤45m	Taxi in on own power and push-back by tow tractors
103,110,112,113,201,203,205,207, 209,213	<36m	≤40m	Taxi in on own power and push-back by tow tractors
222L,222R,226,228	<24m	≤35m	Taxi in/out on own power

3.2 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 Engine run-ups are subject to airport corporation, with Tower Control clearance, and shall be carried out at a designated location. Fast engine run-ups on apron are strictly forbidden.

3.3 不能同时使用的区域

3.3 Pair of areas forbidden to use simultaneously

使用的机位/Stands in use	禁止使用的区域/Areas forbidden to be used
Stand Nr.101(aircraft with wingspan≥52m)	Stand Nr.102 and Nr.202
Stand Nr.222L,222R	Stand Nr.222
Z1	Stands Nr.240,242,244,246
Z2	Stands Nr.242,244,246,248,250,252

3.4 217,219,221,223,225 号停机位白天可实施客货保障作业。

3.4 Stands Nr.217, 219, 221, 223, 225 are available for passenger and cargo security operation in the daytime.

3.5 G1 停放隔离航空器时，其净距 100m 范围内不应该有其他航空器和物体。

3.5 While stand Nr.G1 with isolated aircraft, other aircrafts and obstacles are forbidden within 100m.

3.6 使用 101 号停机位时，翼展≥52m 的航空器只能从 B6-B10 滑行道滑入、滑出。

3.6 Aircraft with wingspan ≥52m can only taxi in and out from TWY B6-B10 when using Stand Nr. 101.

3.7 机位停放航空器机头朝向

3.7 Nose direction of aircraft in stands

使用中的停机位/Stands in use	机头朝向/ Nose direction
212,214,216,218,220,222L,222,222R,224,226,228,230,232,234, 236,238,G1(For Engine run-ups)	East
201-211,213,215,217,219,221,223,225,227,229,231,233,235,237,240, 242,244,246,248,250,252,301-308,G1(For isolated aircraft)	West
C1, H1,Z1	South
C2,Z2	North

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

无

6. Rules for deicing

Nil

7. 平行跑道同时仪表运行

无

7. Simultaneous operations on parallel runways

Nil

8. 警告

8.1 本机场地势北高南低，高差较大。航空器由北向南着陆时，应及时调整飞行的高度和速度。

8.2 勿将机场路的灯光误认为跑道灯光。

8. Warning

8.1 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.

8.2 Do not mistake the airport road lights for RWY lights.

9. 直升机飞行限制，直升机停靠区

无

9. Helicopter operation restrictions and helicopter parking / docking area

Nil

ZLLL AD 2.21 噪音限制规定及减噪程序

无

ZLLL AD 2.21 Noise restrictions and Noise abatement procedures

Nil

ZLLL AD 2.22 飞行程序

1. 总则

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。

ZLLL AD 2.22 Flight procedures

1. General

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

Tower Control.

2. 起落航线

起落航线在跑道东西两侧，A、B 类航空器高度 2350m，C、D 类航空器高度 2450m。

2. Traffic circuits

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

3. 仪表飞行程序

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

3. IFR flight procedures

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

4. 雷达程序和/或 ADS-B 程序

兰州进近管制区域内实施雷达管制。在进近管制区范围内最小水平间隔为 6km。相邻管制区使用非雷达间隔时，实施雷达管制的航空器与管制区边界之间的间隔不小于 10km。

4. Radar procedures and/or ADS-B procedures

Radar control within Lanzhou APP has been implemented. The minimum horizontal radar separation is 6km. When the adjacent control area isn't under radar control, the distance between aircraft under radar control and boundary of control area should not less than 10km.

5. 无线电通信失效程序

5.1 航空器通信失效

5.1.1 航空器如果具有信号接收能力，根据接收到的管制指令继续飞行;

5. Radio communication failure procedures

5.1 Aircraft communication failure

5.1.1 If the radio receiver available, aircraft shall follow the instruction from it;

5.1.2 航空器如果不具备信号接收能力，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;

5.1.2 If the radio receiver not available, aircraft shall continue to land with following specific approach procedure as soon as possible, if condition of airport is not available for landing, the flight crew should decide to return or alternate by themselves;

5.1.2.1 向北落地

5.1.2.1 Landing to north

航空器按照最后接收到的管制员指令高度（如果低于 3300m 则上升到 3300m）飞向 DZH，进入等待程序，下降至起始进近高度 3000m，然后按 36 号跑道仪表进近图着陆;

Aircraft fly to DZH according to the last command ALT (climb to 3300m if not reached), then join the holding procedure, descend to initial approach altitude(3000m), and then approach and land according to RWY36 instrument approach procedure;

5.1.2.2 向南落地

5.1.2.2 Landing to south

航空器按照最后接收到的管制员指令高度（如果低于 3600m 则上升到 3600m）飞向 DJC，进入等待程序，下降至起始进近高度 3300m，然后按 18 号跑道仪表进近图着陆;

Aircraft fly to DJC according to the last command ALT climb to 3600m if not reached), then join the holding procedure, descend to initial approach altitude(3300m), and then approach and land according to RWY18 instrument approach procedure;

5.2 本场通信失效

5.2 Aerodrome communication failure

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信联系时，航空器应联系上一管制单位，并按照管制单位的管制指令继续飞行;

If aircraft cannot establish communication with the aerodrome control unit, aircraft shall contact the previous control unit, and follow the instruction to continue;

5.3 无线电通信恢复

5.3 Radio communication resume to normal

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

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

等待:在机场上空,跑道东侧按起落航线进行等待。

6. Procedures for VFR flights

Holding:aircraft could hold east of RWY following the traffic circuits mentioned above.

7. 目视飞行航线

无

7. VFR route

Nil

8. 目视参考点

无

8. Visual reference point

Nil

9. 其它规定

无

9. Other regulations

Nil

10. 区域导航飞行程序相关数据

10. Data for RNAV flight procedures

Waypoint list			
ID	COORDINATES	ID	COORDINATES
LL901	N362952.1E1035150.2	ANDIM	N3721.5E10226.4
LL905	N364419.0E1034652.4	AKMAT	N3736.1E10350.6
LL908	N364723.2E1031229.6	AVBUD	N3706.9E10218.9
LL910	N364352.4E1033625.8	MUDAP	N3651.0E10405.8
LL920	N355448.0E1040842.0	BESMI	N3546.6E10409.1

LL923	N361604.6E1032754.0	BUKPU	N3656.2E10317.0
LL927	N362923.6E1032736.4	PANRA	N3649.0E10254.7
LL928	N363149.1E1031212.0	SUNUV	N3631.8E10406.8
LL930	N361633.6E1033808.3	XIXAN	N3616.8E10407.5
LL940	N363204.5E1035308.9	IRSUM	N3601.6E10439.9
LL941	N360300.0E1035629.0	OVTIB	N3624.0E10444.2
DJC	N3646.2E10326.5	LEVGI	N3712.9E10436.7
DZH	N3614.1E10347.9		
JTA	N3711.8E10404.8		

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (km/h)	VPA/ TCH	Navigation Specification
RWY18 AKMAT-09D								
CA			179		2400			RNAV1
DF	LL901			L		MAX425		RNAV1
TF	MUDAP							RNAV1
TF	JTA							RNAV1
TF	AKMAT							RNAV1
RWY18 LEVGI-09D								
CA			179		2400			RNAV1
DF	LL901			L		MAX425		RNAV1
TF	MUDAP							RNAV1
TF	LEVGI							RNAV1
RWY18 IRSUM-09D								
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1

TF	XIXAN				↑5100			RNAV1
TF	IRSUM							RNAV1
RWY18 IRSUM-08D(by ATC)								
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1
TF	IRSUM							RNAV1
RWY18 BESMI-09D								
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1
TF	XIXAN				↑5100			RNAV1
TF	LL920				↑6600			RNAV1
TF	BESMI							RNAV1
RWY18 BESMI-08D(by ATC)								
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1
TF	LL920							RNAV1
TF	BESMI							RNAV1
RWY18 ANDIM-09D								
CA			179		2400			RNAV1
DF	LL927			R		MAX425		RNAV1
TF	DJC							RNAV1
TF	BUKPU							RNAV1
TF	ANDIM							RNAV1
RWY36 AKMAT-19D								
CA			359		2400			RNAV1
DF	LL905			R		MAX425		RNAV1
TF	MUDAP							RNAV1

TF	JTA							RNAV1
TF	AKMAT							RNAV1
RWY36 LEVGI-19D								
CA			359		2400			RNAV1
DF	LL905			R		MAX425		RNAV1
TF	MUDAP							RNAV1
TF	LEVGI							RNAV1
RWY36 IRSUM-19D								
CA			359		2400			RNAV1
DF	LL901			R	↑5100	MAX425		RNAV1
TF	XIXAN							RNAV1
TF	IRSUM							RNAV1
RWY36 BESMI-19D								
CA			359		2400			RNAV1
DF	LL901			R		MAX425		RNAV1
TF	XIXAN				↑5100			RNAV1
TF	LL920				↑6600			RNAV1
TF	BESMI							RNAV1
RWY36 ANDIM-19D								
CA			359		2400			RNAV1
DF	DJC			L		MAX425		RNAV1
TF	BUKPU				↑4200			RNAV1
TF	ANDIM							RNAV1

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (km/h)	VPA/ TCH	Navigation Specification

RWY18 AKMAT-09A								
IF	AKMAT							RNAV1
TF	JTA							RNAV1
TF	LL905				3300	MAX380		RNAV1
RWY18 OVTIB-09A								
IF	OVTIB							RNAV1
TF	SUNUV							RNAV1
TF	LL905				3300	MAX380		RNAV1
RWY18 BESMI-09A								
IF	BESMI							RNAV1
TF	LL920				↑6600			RNAV1
TF	XIXAN				↑5400			RNAV1
TF	SUNUV							RNAV1
TF	LL905				3300	MAX380		RNAV1
RWY18 BESMI-08A(by ATC)								
IF	BESMI							RNAV1
TF	DZH							RNAV1
TF	LL923							RNAV1
TF	DJC				3300	MAX380		RNAV1
RWY18 AVBUD-09A								
IF	AVBUD							RNAV1
TF	PANRA				↑5100			RNAV1
TF	LL908				↑3900			RNAV1
TF	DJC				3300	MAX380		RNAV1
RWY18 Approach Transition LL905								
IF	LL905				3300	MAX380		RNAV1
TF	LL910				2900			RNAV1

RWY18 Approach Transition DJC								
IF	DJC				3300	MAX380		RNAV1
TF	LL910				2900			RNAV1

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (km/h)	VPA/ TCH	Navigation Specification
RWY36 AKMAT-19A								
IF	AKMAT							RNAV1
TF	JTA							RNAV1
TF	LL940							RNAV1
TF	DZH				↑3000	MAX380		RNAV1
RWY36 AKMAT-17A								
IF	AKMAT							RNAV1
TF	JTA							RNAV1
TF	DJC							RNAV1
TF	LL923				3000	MAX380		RNAV1
RWY36 OVTIB-19A								
IF	OVTIB							RNAV1
TF	SUNUV							RNAV1
TF	LL940							RNAV1
TF	DZH				↑3000	MAX380		RNAV1
RWY36 BESMI-19A								
IF	BESMI							RNAV1
TF	LL920				↑6600			RNAV1
TF	XIXAN				↑5400	MAX470		RNAV1
TF	SUNUV							RNAV1

TF	LL940							RNAV1
TF	DZH				↑3000	MAX380		RNAV1
RWY36 BESMI-17A(by ATC)								
IF	BESMI							RNAV1
TF	LL941				↑3600			RNAV1
TF	DZH				↑3000	MAX380		RNAV1
RWY36 AVBUD-19A								
IF	AVBUD							RNAV1
TF	PANRA				↑5100			RNAV1
TF	LL928							RNAV1
TF	LL923				3000	MAX380		RNAV1
RWY36 Approach Transition DZH								
IF	DZH				↑3000	MAX380		RNAV1
TF	LL930				2700			RNAV1
RWY36 Approach Transition LL923								
IF	LL923				3000	MAX380		RNAV1
TF	LL930				2700			RNAV1

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (km/h)	VPA/ TCH	Navigation Specification
RWY18 Holding (outbound time:1min)								
HM	LL905	Y	331	R	3600	MAX425		RNAV1
HM	DJC	Y	360	L	3600	MAX425		RNAV1
RWY36 Holding (outbound time:1min)								
HM	DZH	Y	262	R	3300	MAX425		RNAV1
HM	LL923	Y	143	R	3300	MAX425		RNAV1

Note: Magnetic Course for Holding is inbound angle.

ZLLL AD 2.23 其它资料

1. 全年有鸟类活动。主要以中型鸟和小型鸟为主。4-6 月、8-10 月为高峰期。机场当局采取了驱赶措施，以减少鸟群活动。

ZLLL AD 2.23 Other information

1. Activities of bird flocks are found in the whole year.Small and medium-sized birds are in the majority.Birds activities frequently take place during April to June, and August to October. Authority resorts to dispersal methods to reduce bird activities.

Activity season	Activity time	Flight height(m)	Characteristic
Spring and summer	All day	10-20	Small size
Spring, summer and autumn	All day	10-20	Small size
All seasons	All day	10-20	Small size
All seasons	0:00-2:00 8:00-10:00	10-20	Small size
Spring, summer and autumn	8:00-10:00	0-100	Small size
Spring, summer and autumn	All day	10-20	Medium size
All seasons	All day	20-50	Medium size
All seasons	0:00-2:00 8:00-10:00	10-40	Medium size
All seasons	8:00-10:00	0-100	Medium size
Summer and autumn	8:00-10:00	0-100	Medium size