## 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	N36° 30.9' E103° 37.2' center of RWY
2	方向、距离 Direction and distance from city	339° GEO, 55.6km from city center
3	标高 / 参考气温 Elevation/Reference temperature	1947m/26.1° C (JUL)
4	机场标高位置 / 高程异常 AD ELEV PSN/ geoid undulation	North of RWY/-
5	磁差 / 年变率 MAG VAR/Annual change	2° 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 730087, Gansu province, China 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

	机场当局(机场开放时间)		
1	AD Administration (AD operational	H24	
	hours)		
2	海关和移民	HS or O/R	
	Customs and immigration	III of O/R	
3	卫生健康部门	HS or O/R	
	Health and sanitation	TIS OF OFFICE	
4	航行情报服务讲解室	HS or O/R	
	AIS Briefing Office	TIS OF OFFICE	
5	空中交通服务报告室	HS or O/R	
	ATS Reporting Office (ARO)		
6	气象讲解室	HS or O/R	
	MET Briefing Office		
7	空中交通服务	S or O/R	
	ATS		
8	加油	HS or O/R	
	Fuelling		
9	地勤服务	HS or O/R	
	Handling		
10	保安	HS or O/R	
	Security		

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 (7 tonnes), 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, 20000, 14000 and 10000 litres) and hydrant cart; 20 litres/sec 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 various type of aircraft on request Capable of supplying line maintenance service for A319/A320/A321 B737-700/800, B757-200			
7	备注 Remarks	Power unit, air supply vehicle, oxygen supply tender, air preconditioni unit, potable water supply vehicles, emission vehicles, passeng boarding stairs, bridge load power and air-conditioning for Nr.108-1 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, taxis	
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, heavy-load foam tender, medium- load foam tender, water-tank truck, dry-chemical tender, illumination truck, command car, disassembly rescue truck, medicament reinforcement car; Emergency equipment: ambulance, chemical supply tender, airport passenger bus.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	Nil
4	备注 Remarks	Nil

# ZLLL AD 2.7 可用季节 - 扫雪 Seasonal availability-clearing

1	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

		Surface:	Cement concrete	
1	停机坪道面和强度 Apron surface and strength	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.	
		Width:	23m:parallel TWY A, B; 26.5m:A1; 28.5m:A3-A6; 30m:A8;30.5m:A9; 34m:B5; 38m:A2,A7; 48m:B10; 58m:B1-B4, B6-B9	
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Surface:	Cement concrete:(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), B(north of B5, south of B7), B1-B4, B8-B10,A9, D PCN 61/R/B/W/T:parallel TWY A, A1, A8, B5-B7, B(BTW B5&B7), 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 / 停放位置引导系统的使用 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.		
			RWY markings RWY lights	THR, RWY designation, TDZ, center line, edge line, aiming point marking  THR, center line, edge line, RWY end	
	2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	TWY markings	center line, edge line, RWY holding positions, intermediate holding positions, enhancement center line, no-entry marking	
I			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 lights	
	3 停止排灯 Stop bars Nil		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

序号	障碍物类型 (*	磁方位	距离	海拔高度	影响的飞行程序及起飞航径区
Serial Nr.	代表有灯光)	BRG	DIST(m)	Elevation(m)	Flight procedure/take-off flight
	Obstacle type	(MAG)(degree)			path area affected
	(*Lighted)				
1	*TWR	003	9300	2078	RWY36/Take-off flight path
2	Pole	003	1680	1962	
3	Pole	005	4326	1991	RWY18/ LNAV/VNAV final approach
4	Pole	006	4059	1987	
5	TWR	006	13240	2090	
6	BLDG	007	8037	2014	
7	Chimney	008	12306	2083	
8	BLDG	008	6113	2024	RWY18/ LNAV final approach RWY18/ VOR/DME
9	*TWR	012	5571	2007	
10	*TWR	016	12209	2100	
11	BLDG	016	8339	2040	
12	Pole	023	5003	1988	
13	*TWR	028	8400	2079	
14	BLDG	030	2435	1973	
15	*TWR	039	4661	2017	

序号	障碍物类型 (*	(* 磁方位	距离	海拔高度	影响的飞行程序及起飞航径区
Serial Nr.	代表有灯光)	BRG	DIST(m)	Elevation(m)	Flight procedure/take-off flight
	Obstacle type	(MAG)(degree)			path area affected
	(*Lighted)				
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	
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	*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	*BLDG	176	3850	1960	RWY18/ Take-off flight path
39	Pole	176	1725	1943.6	
40	*BLDG	177	3844	1961	RWY18/ Take-off flight path
41	*BLDG	179	4019	1964	RWY18/ Take-off flight path
42	Pole	179	2260	1929	
43	*TWR	187	4810	1981	
44	*BLDG	188	3279	1949	
45	Light	195	1621	1961.4	
46	Chimney	195	2338	1956	
47	*TWR	198	3453	2010	RWY36/ VOR/DME
48	Light	199	1324	1963.6	
49	*TWR	200	2575	1967	
50	BLDG	202	3025	1989	
51	*Light	203	994	1966	
52	*Light	204	1468	1961	
53	*Light	206	1257	1962	
54	*Light	213	750	1962	
55	*Light	216	937	1962	
56	*Light	216	682	1963	

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		a radius of 15km			
序号	障碍物类型 (*	磁方位	距离	海拔高度	影响的飞行程序及起飞航径区
Serial Nr.	代表有灯光)	BRG	DIST(m)	Elevation(m)	Flight procedure/take-off fligh
	Obstacle type	(MAG)(degree)			path area affected
	(*Lighted)				
57	*Light	217	375	1952	
58	*Light	217	373	1951	
59	*Light	220	929	1975	
60	*BLDG	222	819	1970	
61	*Light	234	284	1952	
62	*Light	234	287	1952	
63	*BLDG	236	662	2000	RWY18/36 ILS/DME
64	TWR	237	2294	2031	
65	*TWR	238	1553	2003	
					RWY 36 LNAV/VNAV final
66	*Radar	242	2277	2068	approach
67	*Light	249	559	1975	
68	*Light	250	557	1983	
69	*Light	262	530	1976	
70	*Light	263	534	1983	
71	MT	271	3417	2105	Circling
72	*Light	276	235	1952	_
73	MT	281	1649	2024	
74	MT	281	3818	2109	
75	MT	290	5203	2132	
76	*Light	300	271	1952	
77	MT	302	3315	2142	
78	MT	316	8515	2153	
79	*Light	317	344	1953	
80	MT	318	6328	2096	
81	BLDG	321	3280	2001	
82		324	585	1965.5	
83	Light	328	663	1965.3	
	Light				
84	*Radar	331	1259	1987	
85	Pole	334	5743	2031	
86	*TWR	335	4331	2027	
87	Light	336	1137	1969.6	
88	Antenna	341	12774	2114	
89	*TWR	344	9214	2075	
90	*TWR	346	13052	2094	
91	BLDG	351	9141	2022	
92	BLDG	351	9023	2016	
93	*TWR	356	13297	2088	
94	*TWR	357	9770	2046	RWY36/ Take-off flight path
95	Antenna	357	2926	1964.8	RWY36/ Take-off flight path
96	Pole	359	2290	1951.4	RWY36/ Take-off flight path
97	Antenna	359	2981	1965.6	RWY36/ Take-off flight path

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
98	MT	359	7730	2005	RWY18/ GP INOP
99	*Antenna	360	11192	2072	RWY36/ Take-off flight path

序号	障碍物类型 (*	磁方位	距离	海拔高度	影响的飞行程序及起飞航径区
Serial Nr.	代表有灯光)	BRG	DIST(m)	Elevation(m)	Flight procedure/take-off flight
	Obstacle type	(MAG)(degree)			path area affected
	(*Lighted)				
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
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

# 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	相关气象室的名称 Associated MET Office	Gansu ATMB MET Office
2	气象服务时间、服务时间以外的责任 气象室 Hours of service, MET Office outside hours	H24 
3	负责编发 TAF 的办公室: 有效期 Office responsible for TAF preparation,Periods of validity	Gansu ATMB MET Office 9 HR, 24 HR
4	着陆预报类型、发布间隔 Type of landing forecast, Interval of issuance	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 Flight documentation, Languages used	Chart, International MET Codes, Abbreviated Plain Language Text Ch, En
7	讲解 / 咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation	Synoptic charts, significant weather charts, upper W/T charts, satellite and radar material, AWOS real-time data, airport warning
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	接收气象信息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)	SFC wind sensors: RWY 18: 120m E of RCL, 345m inward THR; RWY 36: 120m E of RCL, 310m inward THR; MID: 120m E of RCL, 2000m inward THR18; RVR EQPT: A: 110m E of RCL, 345m inward THR18; C: 110m E of RCL, 340m inward THR36; B: 110m E of RCL, 1970m inward THR18. Ceilometer: RWY18: 30m E of RCL, 985m inward THR; RWY36: 30m E of RCL, 985m inward THR.
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 Designation s 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/SWY surface	着陆入口坐标及 高程异常 THR coordinates and geoid undulation	跑道着陆入口标高 ,精密进近跑道接 地地带最高标高 THR elevation and highest elevation of TDZ of precision APP RWY
1	2	3	4	5	6
18	177° GEO 179° MAG	4000 × 45	75/R/B/W/T Concrete/-	Nil	THR 1947.2m
36	357° GEO 359° MAG	4000 × 45	75/R/B/W/T Concrete/-	Nil	THR 1926.9m
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)	无障碍物地带 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
Remarks:					

# ZLLL AD 2.13 公布距离 Declared distances

跑道代号 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
18	4000	4000	4000	4000	Nil
18	3800	3800	3800	4000	Enter FM A2
36	4000	4000	4000	4000	Nil
36	3360	3360	3360	4000	Enter FM A7
36	3600	3600	3600	4000	Enter FM A8
Remarks:	<u> </u>			1	

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

跑道 代号 RWY Desig nator	进类人 类型度 在PCH LGT type LEN INTST	入口灯 颜建排灯 THR LGT colour WBAR	目视 度 避 低 密 出 近 系 口 ) ) , 航 器 近 后 近 示 无 高 近 示 系 S E 近 、 K S S S S S S S S S S S S S S S S S S	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/3°	Nil	4000m* spacing 30m	4000m** spacing 60m	Red	Nil
36	PALS CAT I SFL 900m LIH	Green Yes	PAPI Left/3°	Nil	4000m* spacing 30m	4000m** spacing 60m	Red	Nil

Remarks: \*0-3100m White LIH, 3100-3700m Red/White LIH, 3700m-4000m Red LIH \*\* 0-3400m White LIH, 3400-4000m Yellow LIH

# ZLLL AD 2.15 其它灯光, 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	着陆方向指示器位置和灯光; 风速表位置和灯光 比DI location and LGT, Anemometer location and LGT	Nil
3	滑行道边灯和中心线灯光 TWY edge and center line lighting	All TWYs, TWY center line lights(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 入口坐标及高程异常 Coordinates TLOF or THR of FATO Geoid undulation	Nil
2	TLOF 和 / 或 FATO 标高 (m) TLOF and/or FATO elevation (m)	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	横向界限 Lateral limits	垂直界限 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	N3728.0E10325.0 - N3728.0E10344.0 - N3640.0E10341.0 - N3644.0E10315.0 - N37 28.0E103 25.0	Above 6000m	
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
TWR	Lanzhou Tower	118.1(118.025)	H24	Nil
GND	Lanzhou Ground	121.95	BY ATC	Nil
EMG		121.5	H24	Nil
Delivery	Lanzhou Delivery	121.7	BY ATC	DCL available
APP	Lanzhou Approach	120.25 (127.9) AP01	H24	Nil
APP	Lanzhou Approach	119.15 (125.025) AP02	BY ATC	Nil
APP	Lanzhou Approach	124.2 (125.025) AP03	BY ATC	Nil
APP	Lanzhou Approach	119.45 (127.9) AP04	BY ATC	Nil
APP	Lanzhou Approach	119.825 (125.025) AP05	BY ATC	Nil

# 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
Lanzhou VOR/DME	DNC	114.0MHz CH 87X	N36° 32.5′ E103° 37.1′	1 965m	
Wangjiachuan VOR/DME	DJC	115.2MHz CH 99X	N36° 46.2′ E103° 26.5′	2 304m	
Zhonghe VOR/DME	DZH	116.0MHz	N36° 14.1′ E103° 47.9′	1 857m	Outside of VOR 001° radial direction 25NM is not available,outside of DME 001° radial direction 18NM is not available
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	CH 22X (108.5MHz)		1 952m	Co-located with GP18
LOC 36 ILS CAT I	IYY	109.3MHz	359° MAG/ 290m FM end RWY36		

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
GP 36		332.0MHz	120m E of RCL, 280m inward THR36		Angle 3°, RDH16.7m
DME 36	IYY	CH 30X (109.3MHz)		1 935m	Co-located with GP36
Remark: Nil				1	

#### ZLLL AD 2.20 本场飞行规定

#### **ZLLL AD 2.20 Local traffic regulations**

#### 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。

#### 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50千米/小时, 在机坪内滑行速度不超过15千米/小时。
- 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 taxing 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 taxing 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)	<36m	The TWY C, north of Stand Nr.202, is available for aircraft with wingspan <48m to taxi		
D	<36m			

#### 2.4 机动区冲突多发地带运行要求

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。

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。

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。

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。

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。

#### 2.6 非全跑道起飞程序

- 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。
- 2.6.2 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。
- 2.7 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。
- 2.8 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。

#### 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。

# 2.4 Hot spot procedure

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: 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: 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: 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 When transform RWY directions, ATC can conduct aircraft take-off and land with tailwind  $> 2.5 \text{m/s} \& \le 5 \text{m/s}$  temporarily according to operational conditions, pilots should be informed.

#### 2.6 Non-full length RWY take-off

- 2.6.1 After flight crew apply for non-full length RWY takeoff, ATC can approve and provide air traffic control service according to actual conditions.
- 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 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 If aircraft( $52m \le wing span < 65m$ ) are not able to vacate RWY via A3/A4/A5/A6, aircrew should inform ATC in advance.

#### 3. Use of aprons and parking stands

3.1 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.

#### 3.2 机位限制 /Limits for aircraft parking on the following stands:

停机位编号 /Stands Nr.	航空器翼展限制/	机身长度限制/	滑入、滑出方式/
行和位编号/Stands IVI.	Wing span limits for aircraft	Fuselage limits	Enter or exit

	111,114,G1,308(with 52m ≤ wing span<65m)	<65m	≤ 75.5m	Taxi in on own power and push-back by tow tractors
I	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
	106-109,115,116	<52m	≤ 55m	Taxi in on own power and push-back by tow tractors
	102,211,215,217,219,221,22 3,225	<48m	≤ 55m	Taxi in on own power and push-back by tow tractors
	204,208,210	<48m	≤ 55m	Taxi in/out on own power
	104,105,227,229,231,233,23 5,237,240,242,244,246,248, 250,252	<36m	≤ 45m	Taxi in on own power and push-back by tow tractors
	202,206,212,214,216,218,22 0,222,224,230,232,234,236, 238,301-307,308(with wing span<36m)	<36m	≤ 45m	Taxi in/out on own power
	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
	North de-icing stand C2	<65m	≤ 75.5m	Taxi in/out on own power
	South de-icing stand C1, cargo stand H1	<52m	≤ 62m	Taxi in/out on own power

#### 3.3 不能同时使用的区域 / Pair of area forbidden to use simultaneously:

使用的机位 /Stands in use	不能同时使用的区域 /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 3.4 Stands Nr.217, 219, 221, 223, 225 are available for 保障作业

- 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  $\geq$  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 /Nose direction of aircraft in stands

ĺ	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

2 0 1 - 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

Nil

4. Air traffic control regulations

5. CAT II/III operations at AD

6. Rules for deicing

4. 进、离场管制规定

5. 机场的 II/III 类运行

无 Nil

6. 除冰规则

无

无 Nil

7. 平行跑道同时仪表运行

无 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。
- 9. 直升机飞行限制, 直升机停靠区

无

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.

7. Simultaneous operations on parallel runways

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

ZLLL AD 2.21 Noise restrictions and Noise abatement procedures

无

Nil

#### ZLLL AD 2.22 飞行程序

#### **ZLLL AD 2.22 Flight procedures**

#### 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。

### 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2350米, C、D类航空器高度2450米。

#### 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

3.1 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

3.1 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6千米。实施雷达管制的航空器与管制区边界之间的间隔,相邻管制区使用非雷达间隔时不小于10km

#### 4. Radar procedures and/or ADS-B procedures

Radar control within Lanzhou APP has been implemented. The minimum horizontal radar separation is 6km. The distance between aircraft under radar control and boundary of control area, the distance between neighboring control areas should not less than 10km while implementing non-radar control.

#### 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;
- 5.1.2 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. 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 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

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;

#### 5.1.2.2 向南落地

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;

#### 5.2 本场通信失效

本场无线电收发功能失效, 航空器无法与管制单位建立有效的通信联系时, 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:

#### 5.3 无线电通信恢复

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.

#### 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。

#### 7. 目视飞行航线

无

#### 8. 目视参考点

无

#### 9. 其它规定

Waypoint list

无

### 10. 区域导航飞行程序相关数据

#### 5.1.2.1 Landing to north

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 RWY 36 instrument approach procedure;

#### 5.1.2.2 Landing to south

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 Aerodrome communication failure

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 Radiocommunication resume to normal

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

#### 6. Procedures for VFR flights

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

#### 7. VFR route

Nil

#### 8. Visual reference point

Nil

#### 9. Other regulations

Nil

#### 10. Data for RNAV flight procedures

ID	COORDINATES(WGS-84)	ID	COORDINATES(WGS-84)
LL901	N362952E1035150	DZH	N3614.1E10347.9
LL905	N364419E1034652	JTA	N3711.8E10404.8
LL908	N364723E1031230	ANDIM	N3721.5E10226.4
LL910	N364352E1033626	AKMAT	N3736.1E10350.6
LL920	N355448E1040842	AVBUD	N3706.9E10218.9
LL923	N361605E1032754	B3	N365052E1040546
LL928	N363149E1031212	BESMI	N3546.6E10409.1
LL930	N361634E1033808	BUKPU	N3656.2E10317.0
LL940	N363205E1035309	PANRA	N3649.0E10254.7
LL941	N360300E1035629	SUNUV	N3631.8E10406.8
DJC	N3646.2E10326.5	XIXAN	N3616.8E10407.5

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (km/h)	VPA/ TCH	Navigation Specification
RWY18 AK	MAT-09D							
CA			179		2400			RNAV1
DF	LL901			L		MAX425		RNAV1
TF	В3							RNAV1
TF	JTA							RNAV1
TF	AKMAT							RNAV1
RWY18 BE	SMI-09D	I.	I.	I	-1		1	l
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1
TF	XIXAN				↑ 5100			RNAV1
TF	LL920				1 6600			RNAV1
TF	BESMI							RNAV1
RWY18 BE by ATC)	SMI-08D(						1	
CA			179		2400			RNAV1
DF	DZH			L		MAX425		RNAV1
TF	LL920							RNAV1
TF	BESMI							RNAV1
RWY18 AN	DIM-09D	1	1	1	1	1		I
CA			179		2400			RNAV1
CF	DJC		359	R				RNAV1

TF	BUKPU					RNAV1
TF	ANDIM					RNAV1
RWY36	AKMAT-19D				•	
CA		359		2400		RNAV1
DF	LL905		R		MAX425	RNAV1
TF	В3					RNAV1
TF	JTA					RNAV1
TF	AKMAT					RNAV1
RWY36	BESMI-19D	<u> </u>	<b>'</b>	<u>'</u>	1	
CA		359		2400		RNAV1
DF	LL901		R		MAX425	RNAV1
TF	XIXAN			↑ 5100		RNAV1
TF	LL920			↑ 6600		RNAV1
TF	BESMI					RNAV1
RWY36	ANDIM-19D	<u> </u>	<b>'</b>	<u>'</u>	1	
CA		359		2400		RNAV1
DF	DJC		L		MAX425	RNAV1
TF	BUKPU			1 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 AK	MAT-09A					•		•
IF	AKMAT							RNAV1
TF	JTA							RNAV1
TF	LL905				3300	MAX380		RNAV1
RWY18 BE	SMI-09A	I						
IF	BESMI							RNAV1
TF	LL920				1 6600			RNAV1
TF	XIXAN				1 5400			RNAV1
TF	SUNUV							RNAV1
TF	LL905				3300	MAX380		RNAV1
RWY18 BE	SMI-08A(						<u> </u>	
by								
ATC)								
IF	BESMI							RNAV1
TF	DZH							RNAV1

TF	LL923							RNAV1
TF	DJC				3300	MAX380		RNAV1
RWY18 AV	BUD-09A							
IF	AVBUD							RNAV1
TF	PANRA				↑ 5100			RNAV1
TF	LL908				↑ 3900			RNAV1
TF	DJC				3300	MAX380		RNAV1
RWY18 Tra	RWY18 Transition LL905							
IF	LL905				3300	MAX380		RNAV1
TF	LL910				2900			RNAV1
RWY18 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 AK	RWY36 AKMAT-19A								
IF	AKMAT							RNAV1	
TF	JTA							RNAV1	
TF	LL940							RNAV1	
TF	DZH				↑ 3000	MAX380		RNAV1	
RWY36 AK	MAT-17A	·!	!	!	·!	·	-1	· ·	
IF	AKMAT							RNAV1	
TF	JTA							RNAV1	
TF	DJC							RNAV1	
TF	LL923				3000	MAX380		RNAV1	
RWY36 BE	SMI-19A	1	1	•	1	1	•		
IF	BESMI							RNAV1	
TF	LL920				↑ 6600			RNAV1	
TF	XIXAN				↑ 5400	MAX470		RNAV1	
TF	SUNUV							RNAV1	
TF	LL940							RNAV1	
TF	DZH				1 3000	MAX380		RNAV1	
RWY36 BESMI-17A(									
by									
ATC)									
IF	BESMI							RNAV1	

TF	LL941			↑ 3600		RNAV1		
TF	DZH			1 3000	MAX380	RNAV1		
RWY36 AV	RWY36 AVBUD-19A							
IF	AVBUD					RNAV1		
TF	PANRA			↑ 5100		RNAV1		
TF	LL928					RNAV1		
TF	LL923			3000	MAX380	RNAV1		
RWY36 Tra	RWY36 Transition DZH							
IF	DZH			↑ 3000	MAX380	RNAV1		
TF	LL930			2700		RNAV1		
RWY36 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 Hol	RWY18 Holding (outbound time:1min)							
HM	LL905	Y	331	R	3600	MAX425		RNAV1
НМ	DJC	Y	360	L	3600	MAX425		RNAV1
RWY36 Hol	RWY36 Holding (outbound time:1min)							
НМ	DZH	Y	262	R	3300	MAX425		RNAV1
HM	LL923	Y	143	R	3300	MAX425		RNAV1
Note: Magne	Note: Magnetic Course for Holding is inbound angle.							

#### ZLLL AD 2.23 其它资料

#### **ZLLL AD 2.23 Other information**

1. 全年有鸟类活动。主要以中型鸟和小型鸟为主。9月、3至4月为高峰期。机场当局采取了驱赶措施,以减少鸟群活动。

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

Activity season	Activity time	Flight height(m)	
Spring and summer	All day	10-20	
All seasons	All day	10-20	
All seasons	All day	10-20	
All seasons	0:00-2:00 8:00-10:00	10-40	

All seasons	0:00-2:00	10-40	
All scasons	8:00-10:00		
All seasons	0:00-2:00	10-20	
THI Seasons	8:00-10:00	10 20	
All seasons	0:00-2:00	10-20	
THI SCUSONS	8:00-10:00	10 20	
All seasons	8:00-10:00	0-100	
Spring, summer and autumn	All day	10-20	
All seasons	All day	20-50	
Summer and autumn	8:00-10:00	0-100	
Spring, summer and autumn	8:00-10:00	0-100	
Spring, summer and autumn	All day	10-20	