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

ZHCC- 郑州/新郑 ZHENGZHOU/Xinzheng

# ZHCC 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	N34° 31.1' E113° 50.4' Center of RWY12R/30L	
2	方向、距离 Direction and distance from city	160° GEO, 29.5km from Erqi square	
3	标高 / 参考气温 Elevation/Reference temperature	151m/32.1° C(JUL)	
4	机场标高位置 / 高程异常 AD ELEV PSN/ geoid undulation	THR12L/-	
5	磁差 / 年变率 MAG VAR/Annual change	4° W /-	
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	Zhengzhou Xinzheng International Airport Co. Ltd. Zhengzhou Xinzheng International Airport, Zhengzhou 450019, Henan province, China TEL: 86-371-58516932 FAX: 86-371-58516932 E-mail:cgozhb@126.com Website: www.zzairport.com	
7	允许飞行种类 Types of traffic permitted(IFR/VFR)	IFR/VFR	
8	机场性质 / 飞行区指标 Military or civil airport & Reference code	Civil RWY12L/30R: 4F, RWY12R/30L: 4E	
9	备注 Remarks	Nil	

# ZHCC 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 Customs and immigration	H24
3	卫生健康部门 Health and sanitation	H24
4	航行情报服务讲解室 AIS Briefing Office	H24
5	空中交通服务报告室 ATS Reporting Office (ARO)	H24
6	气象讲解室 MET Briefing Office	H24
7	空中交通服务 ATS	H24
8	加油 Fuelling	H24
9	地勤服务 Handling	H24

10	保安 Security	H24
11	除冰 De-icing	HS or O/R
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Platform lift, luggage towing vehicle, fork, baggage handling, luggag cargo trailer, rolling truck, rolling pallet truck, container trailer, collection paneling trailer.	
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 pipeline: 277 litres/sec Refueling truck(20000 litres): 20 litres/sec	
4	除冰设施 De-icing facilities	De-icer, de-icing fluid	
5	过站航空器机库 Hangar space for visiting aircraft	China Southern airlines hangar. Accommodate two narrow body aircraft(B737) Contact: 86-371-68518883	
6	过站航空器的维修设施 Repair facilities for visiting aircraft	Line maintenance available for various types of aircraft on request: B733, B737NG, B747, B767, A320, A330 series; Visiting aircraft maintenance for CRJ200	
7	备注 Remarks	Ground power unit, ground air supply unit, ground air preconditioning unit	

# ZHCC AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD	
2	餐馆 Restaurants	At AD	
3	交通工具 Transportation	Passenger's coaches, taxis	
4	医疗设施 Medical facilities	At AD	
5	银行和邮局 Bank and Post Office	At AD	
6	旅行社 Tourist Office	Nil	
7	备注 Remarks	Nil	

# ZHCC 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	2	援救设备 Rescue equipment	Fire fighting facilities: heavy-duty foam tender, command car, illumination truck, rapid intervention vehicle, primary foam tender, logistics truck, disassembly rescue truck, etc Rescue equipment: mobile surface operation devices, towing rack, uplift air cushion, fork, steel cable, etc	
3	3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to B747	
4	4	备注 Remarks	Nil	

# ZHCC 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 blowers, snow slingers, snow removal vehicles, ramp snow vehicles, snow fluid truck.			
2	扫雪顺序 Clearance priorities	RWY, TWY, Apron simultaneously			
3	备注 Remarks	Nil			

# ZHCC 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:	PCN 98/R/B/W/T (Stands Nr.32-35,71,235-240,266-270,266L,266R,805-808,888,903-906) PCN 82/R/B/W/T (Stands Nr.233,234,241,242,901,902,907,908) PCN 74/R/B/W/T (Stands Nr.14-19,27-31,58-69) PCN 72/R/B/W/T (Stands Nr.101-103) PCN 67/R/B/W/T (Stands Nr.72-83,210-222,228-232,243-265)
	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	50m: D4, E1-E4 48m: S1 44m: D2, D11 34.5m: D1, D12 31m: H2 29m: H1, H11 27m: H4. H8 25m: D, D3, D5, D8, D9, E, E5 23m: D6, D7, G4, G5, H, H6, R, R1-R4, S, U 20m: T8 18m: T9
		Surface:	Asphalt&cement concrete
2		Strength:	PCN 98/R/B/W/T: D, D1, D2, D4, D11, D12, E, E1-E5, R, R1-R4, S(BTN TWY D & 150m north of TWY H), S1, T10(west of stand Nr.35), U(BTN TWY D & 150m north of TWY H) PCN 90/F/B/W/T: S(BTN TWY H & 150m north of TWY H), U(BTN TWY H & 150m north of TWY H), U(BTN TWY H & 150m north of TWY H) PCN 82/R/B/W/T: D3, D5, D8, D9 PCN 74/R/B/W/T: G4, G5, H, H1, H2, H4, H6, H8, H11, T6-T8, T10(east of stand Nr.27) PCN 70/R/B/W/T: D6, D7 PCN 67/R/B/W/T: F, G2, G3, G6, H3, T2-T5, T9, T11
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		

# ZHCC 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 of TWY and RWY and at all holding positions.  Aircraft stand identification sign board at apron.  Guide lines at apron and TWYs.  Marshalling assistance for aircraft stands.		
		RWY markings	RWY designation, TDZ, edge line, THR, centerline, aiming point	
	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY lights	Center line, edge line, THR, RWY end, wing bar, TDZ(RWY12L)	
2		TWY markings	Center line, edge line, taxi holding positions, No-entry marking	
		TWY lights	RWY12R/30L: center line, edge line, RWY guard lights; RWY12L/30R: center line, edge line, RWY guard lights, rapid exit TWY indicator, No-entry lights, intermediate holding position lights	
3	停止排灯 Stop bars	Available for TWY D1 and D2		
4	备注 Remarks	Center line lights of TWY T4, T5 and G6 U/S		

# ZHCC AD 2.10 机场障碍物 Aerodrome obstacles

1	Obstacles within a circle with a radius of 15km centered on the center of RWY12R/30L							
	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		
	1	*GP 12L	012	2243	163.7	RWY12L ILS/DME final approach		
ı	2	*Control TWR	018	1150	246.3	CAT A circling		
	3	*BLDG	033	731	216.6			
	4	*Radar	055	2909	175.2			
I	5	*Antenna	074	3226	158.7	RWY30R ILS/DME final approach		
	6	TWR	079	4323	186.1			
I	7	TWR	096	6797	180.3	RWY30R ILS/DME GP INOP final approach		
	8	BLDG	099	2724	190			
	9	MT	101	2660	183	RWY30L ILS/DME GP INOP final approach		
	10	*Antenna	116	2700	161.4	RWY12R Take-off path		
	11	*Antenna	121	1415	162.5	RWY30L ILS/DME final approach		

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
12	*TWR	245	5064	247.6	CAT B, C, D circling
13	BLDG	248	2600	181	
14	*TWR	253	4117	209.4	
15	*Antenna	282	3639	185	
16	*Antenna	291	1393	166	RWY12R ILS/DME final approach
17	MT	292	13800	285	Minimum surveillance altitude sector
18	*Antenna	296	1950	154	RWY30L Take-off path
19	*Antenna	296	2750	169	RWY30L Take-off path
20	BLDG	306	13817	245	RWY12L/12R ILS/DME GP INOP final approach
21	BLDG	313	12419	243	
22	*TWR	324	2659	198	
23	TWR	334	3266	180.1	RWY30R Take-off path
24	TWR	336	3161	176.6	RWY30R Take-off path
25	BLDG	339	2863	171.4	RWY30R Take-off path
26	TWR	345	1600	191	
27	*LOC 30R	356	2383	155.3	RWY30R Take-off 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
1	MT	239	43884	409	
2	MT	240	34326	793	Sector
3	MT	243	26600	435	Minimum surveillance altitude sector
4	MT	276	46000	586	
5	MT	278	30500	435	Minimum surveillance altitude sector
6	MT	281	34784	304	
7	MT	284	42424	614	Minimum surveillance altitude sector
8	MT	290	44011	545	

Obstacles b	Obstacles between two circles with the radius of 15km and 50km centered on the center of RWY12R/30L					
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	
9	MT	294	20280	331	RWY12R RNAV procedure; RWY12L/12R intermediate approach;	
10	TWR	301	24390	324		
11	Chimney	302	37400	425		
12	BLDG	326	32082	338		
13	*TWR	338	25000	486	Sector; Minimum surveillance altitude sector	
14	BLDG	343	30131	377		
Remark:		1		I	1	

# ZHCC 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	Henan 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	Henan 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
8	提供信息的辅助设备 Supplementary equipment available for providing information	FAX, MET service terminal, radar display, AWOS display
9	接收气象信息的空中交通服务单位 ATS units provided with information	Zhengzhou ACC, APP, TWR
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, TREND
12	观测系统及位置 Observation System & Site(s)	SFC wind sensors: RWY12R: 118m S of RCL, 377m inward THR12R; RWY30L: 118m S of RCL, 292m inward THR30L; RWY12R/30L center: 118m S of RCL, 1705m inward THR12R; RWY12L: 110m N of RCL, 370m inward THR12L; RWY30R: 110m N of RCL, 350m inward THR30R; RWY12L/30R center: 110m N of RCL, 1795m inward THR12L. RVR EQPT: A: 118m S of RCL, 412m inward THR12R; B: 118m S of RCL, 1700m inward THR12R; C: 118m S of RCL, 302m inward THR30L; D: 110m N of RCL, 405m inward THR12L; E: 110m N of RCL, 1830m inward THR12L; F: 110m N of RCL, 355m inward THR30R. Ceilometer: RWY12R: 118m S of RCL, 372m inward THR30L; RWY30L: 118m S of RCL, 360m inward THR30L; RWY12L: 110m N of RCL, 360m inward THR30R.
13	气象观测系统的工作时间 Hours of operation for meteorological observation system	H24
14	气候资料 Climatological information	Climatological tables AVBL
15	其他信息 Additional information	Nil

# ZHCC 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
12R	112° GEO 116° MAG	3400 × 45	74/R/B/W/T Concrete/-	Nil	THR150.7m TDZ150.7m
30L	292° GEO 296° MAG	3400 × 45	74/R/B/W/T Concrete/-	Nil	THR147.5m TDZ148.3m
12L	112° GEO 116° MAG	3600 × 60	98/R/B/W/T (0-800m inward THRs) 82/R/B/W/T (Others) Concrete/-	Nil	THR151.2m TDZ149.9m
30R	292° GEO 296° MAG	3600 × 60	98/R/B/W/T (0-800m inward THRs) 82/R/B/W/T (Others) Concrete/-	Nil	THR145.0m TDZ145.3m

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	3520 × 300	Nil	190 × 90m
See AOC	Nil	Nil	3520 × 300	Nil	190 × 90m
See AOC	Nil	Nil	3720 × 300	Nil	240 × 150m
See AOC	Nil	Nil	3720 × 300	Nil	240 × 150m

Remarks: Distance between RCL of RWY12L/30R and RCL of RWY12R/30L is 2050m, RWY12L THR is 800m east of RWY12R THR, RWY30R THR is 1000m east of RWY30L THR.RWY shoulder: 7.5m on each side. RWY12L/30R grooved:  $6mm \times 6mm \times 32mm$ .RWY12R/30L grooved:  $5mm \times 4mm \times 12mm$ .

#### ZHCC 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
12R	3400	3400	3400	3400	Nil
30L	3400	3400	3400	3400	Nil
12L	3600	3600	3600	3600	Nil
30R	3600	3600	3600	3600	Nil
12L	3300	3300	3300	3600	Enter FM D2
30R	3300	3300	3300	3600	Enter FM D11
Remarks:					

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

跑道 代号 RWY Desig nator	进类长强 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进近线 度 避低密 上 所 上 所 上 所 上 后 近 所 上 所 上 所 入 高 近 所 入 高 近 所 大 入 高 近 后 大 大 大 大 大 大 大 大 大 大 大 大 大 大 大 大 大 大	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
12R	CAT I* 900m LIH	Green Yes	PAPI Left/3° (14m)	Nil	3400m** spacing 30m	3400m*** spacing 60m	Red	Nil
30L	CAT I* 900m LIH	Green Yes	PAPI Left/3° (14m)	Nil	3400m** spacing 30m	3400m*** spacing 60m	Red	Nil
12L	CAT IIIA* 900m LIH	Green Yes	PAPI Left/3° (14m)	900m	3600m**** spacing 15m	3600m**** spacing 60m	Red	Nil

跑道 代号 RWY Desig nator	进类发 长强度 APCH LGT type LEN INTST	入口灯 颜色、 翼排灯 THR LGT colour WBAR	目视进近线 度超低深入口), 所 上 上 一 上 一 上 一 上 一 上 一 大 上 后 上 后 上 后 上 后 上 后 上 后 上 后 长 M E H 道 K M E H 道 K M E H 道 K M E H 道 K M E H E H	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
30R	CAT I* 900m LIH	Green Yes	PAPI Left/3° (14m)	Nil	3600m**** spacing 15m	3600m**** spacing 60m	Red	Nil

Remarks: \*SFL

- \*\*0-2500m White VRB LIH, 2500-3100m Red/White VRB LIH, 3100m-3400m Red VRB LIH
  \*\*\*0-2800m White VRB LIH, 2800-3400m Yellow VRB LIH
  \*\*\*\*0-2700m White VRB LIH, 2700-3300m Red/White VRB LIH, 3300m-3600m Red VRB LIH

- \*\*\*\*\* 0-3000m White VRB LIH, 3000-3600m Yellow VRB LIH

# ZHCC 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 LDI 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	Edge line lights: All TWYs Center line lights: All TWYs Flash stick: TWY D, E, S, U
4	备份电源 / 转换时间 Secondary power supply/switch-over time	Secondary power supply available Diesel generator set/ ≤ 15 sec(RWY12R/30L/30R) UPS/1sec(RWY12L)
5	备注 Remarks	Center line lights for TWY T4, T5 and G6 U/S

# ZHCC 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

	b 13	
7	备注 Remarks	Nil
1		

# ZHCC 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
Zhengzhou tower control area	A circuit, 4 arcs with radius 13km centered at centers of all RWY THRs and 4 lines tangential to the adjacent 2 arcs.	750m(QNH) or below	AD Control Zone is same as TWR area.
Altimeter setting region and TL/TA	A circle with a radius of 55km centered on Xinzheng VOR/DME	TL 3600m TA 3000m 3300m(QNH ≥ 1031hPa) 2700m(QNH ≤ 979hPa)	
Fuel Dumping Area	N3510.0E11305.0- N3512.0E11331.0- N3547.0E11316.0- N3530.0E11250.0- N3510.0E11305.0	Above 4000m	

# ZHCC AD 2.18 空中交通服务通信设施 ATS communication facilities

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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	Nil
TWR	Zhengzhou Tower	118.3(118.85)	By ATC	RWY12R/30L
TWR	Zhengzhou Tower	118.075(118.85)	By ATC	RWY12L/30R
APP	Zhengzhou Approach	120.275 (124.2) AP01	BY ATC	Nil
APP	Zhengzhou Approach	126.35 (124.2) AP02	H24	Nil
APP	Zhengzhou Approach	124.825 (124.2) AP03	H24	Nil
GND	Zhengzhou Ground	121.6	By ATC	SOUTH GROUND
GND	Zhengzhou Ground	121.9	By ATC	NORTH GROUND
DELIVERY	Zhengzhou Delivery	121.8	By ATC	Nil
APN	Zhengzhou Apron	121.975	By Apron Control	SOUTH APRON
APN	Zhengzhou Apron	121.7	H24	NORTH APRON
EMG		121.5	H24	Nil

# ZHCC 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
Xinzheng VOR/DME	CGO	114.5MHz CH 92X	N34° 31.1′ E113° 50.6′ 169° MAG/ 275m FM ARP	158m	
Zhongyuan VOR/DME	DZY	116.8MHz CH 115X	N34° 43.6′ E113° 33.0′	196m	
Weishi VOR/DME	DWS	117.4MHz CH 121X	N34° 19.4′ E114° 04.7′	80m	Range 300km
LOC 12R ILS CAT I	IFF	110.3MHz	116° MAG/ 250m FM end RWY 12R		Range 46km ( ± 10° of front course)
GP 12R		335.0MHz	120m S of RCL, 312m inwards THR12R		Angle 3°, RDH 15.6m
DME 12R	IFF	CH 40X (110.3MHz)		158m	Co-located with GP 12R
LMM 12R	F	228kHz	296° MAG/ 1050m FM THR12R		
LMM 30L	A	211kHz	116° MAG/ 1000m FM THR30L		
LOC 30L ILS CAT I	IAA	109.3MHz	296° MAG/ 250m FM end RWY 30L		Range 46km ( ± 10° of front course)
GP 30L		332.0MHz	120m S of RCL, 293m inwards THR30L		Angle 3°, RDH 16m
DME 30L	IAA	CH 30X (109.3MHz)		153m	Co-located with GP 30L
LOC 12L ILS CAT III	IXL	108.5MHz	116° MAG/ 472m FM end RWY 12L		In operation CAT I Range 46km ( ± 10° of front course)

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 12L		329.9MHz	120m N of RCL 339m inwards THR12L		Angle 3°, RDH 16m Range 18.5km
DME 12L	IXL	CH 22X (108.5MHz)		155m	Co-located with GP 12L
IM 12L		75MHz	296° MAG/ 340m FM THR12L		
LOC 30R ILS CAT I	IZR	110.7MHz	296° MAG/ 310m FM end RWY 30R		Range 46km
GP 30R		330.2MHz	120m N of RCL, 317m inwards THR30R		Angle 3°, RDH 16m Range 18.5km
DME 30R	IZR	CH 44X (110.7MHz)		150m	Co-located with GP 30R
Remark: Nil			1	L	1

#### ZHCC AD 2.20 本场飞行规定

# 1. 机场使用规定

- 1.1 所有技术试飞需要提前72 小时申请,并在得 到空中交通管制部门批准后方可进行;
- 1.2 未经空中交通管制部门许可,禁止未安装二 次雷达应答机的航空器起降;
- 1.3 未经空中交通管制部门和机场运行管理部门 许可,本场不接收运动航空器、滑翔机、载人气 球、滑翔伞和飞艇等航空器;
- 1.4 机场允许A380同类及以下航空器起降。

#### 2. 跑道和滑行道的使用

2.1 未经管制员许可,着陆航空器禁止在跑道上 2.1 180° turn around on RWY is strictly forbidden for all 180度转弯,应顺向尽快脱离跑道;

#### **ZHCC AD 2.20 Local traffic regulations**

#### 1. Airport operations regulations

- 1.1 Technical test flight shall be filed 72 hours early and conducted only after clearance has been obtained from ATC;
- 1.2 Take-off/landing of aircraft without SSR transponder are forbidden without ATC clearance;
- 1.3 Sport aircraft, glider, manned balloon, paraglider and airship are not accepted without ATC clearance;
- 1.4 Maximum aircraft to be available: A380 and equivalent.

#### 2. Use of runways and taxiways

aircraft without ATC permission;

- 2.2 跑道使用规定
- 2.2.1RWY12L/30R 允许 A380 同类及其以下航空器起降。
- 2.2.2RWY12R/30L允许B747-8同类及其以下航空 器起降。
- 2.3 顺风分量大于 3m/s 时,管制部门需对跑道运行方向进行转换。当转换使用跑道方向的过程中,短时使用跑道顺风分量超过 3m/s 但不大于5m/s时,管制员应通知机组,飞行员应根据机型性能或者运行手册,决定是否使用管制员安排的顺风跑道起飞或者着陆,并通知管制员;
- 2.4 专机滑行路线以塔台管制员通知为准;
- 2.5 使用 12L/30R 跑道起飞时,从 D1, D12 进跑道,除非管制员指令使用其他联络道;
- 2.6 当使用30L号跑道时,未经管制员许可,着陆航空器应该选择H4或H1联络道脱离跑道。若使用H6联络道脱离跑道,可能导致对头滑行冲突造成无法及时脱离跑道,着陆航空器应避免在H6联络道附近刹死;
- 2.7 D1和D2滑行道划设有A类、B类跑道等待位置, 机组注意不能超过跑道等待位置;
- 2.8 航空器在进入跑道前应在指定的跑道等待位置外等待管制员指令;
- 2.9 航空器在跑道等待位置等待时,机头应尽量靠近跑道等待位置标志,但不能超过此标识;
- 2.10 航空器未获管制员许可,机头越过跑道等待位置时,立即向管制员报告;
- 2.11 航空器在障碍物附近滑行时,速度应减到 15 千米/小时以下;
- 2.12 禁止使用滑行道 D4, U进入跑道;
- 2.13 在滑行道D和H滑行的航空器应主动避让落 地脱离跑道的航空器;
- 2.14 管制员在征得机组同意后,可实施非全跑道起飞管制程序。

- 2.2General rules for the use of runways
- 2.2.1RWY12L/30R is used for aircraft type A380 and below.
- 2.2.2RWY12R/30L is used for aircraft type B747-8 and below.
- 2.3 When downwind speed is more than 3m/s, ATC need change direction of runway. when aircraft change direction of runway in use, if downwind speed is more than 3m/s and not exceeding 5m/s for short time, ATC controller shall inform flight crew. According to aircraft performance or operation handbook, pilot shall decide whether aircraft will take off or land on downwind runway allocated, then inform ATC controller:
- 2.4 Taxiing routes of special flight will be instructed by TWR Control;
- 2.5 When aircraft take-off on RWY12L/30R, aircraft shall taxi into runway via TWY D1 and TWY D12, except received other ATC instructions;
- 2.6 When landing in RWY30L, aircraft shall vacate RWY via TWY H4 or TWY H1. Vacating RWY via TWY H6 may lead to head to head conflict;
- $2.7\ RWY$  holding position of CAT A and CAT B established on TWY D1 and TWY D2 , pay attention and don't taxi beyond it;
- 2.8 Aircraft shall stop and wait for ATC instruction at the runway holding positions;
- 2.9 The nose of A/C shall get close to the runway holding position marking without exceeding it when A/C is waiting at the RWY holding position;
- 2.10 A/C shall report to ATC when the nose of A/C exceeding holding position without instruction;
- 2.11 IAS shall be slowed down to 15km/h and below, while aircraft is taxiing near the obstacles;
- 2.12 Enter RWY via TWY D4 and TWY U is forbidden;
- 2.13 Aircraft taxiing on TWY D and H shall avoid aircraft vacating runway;
- 2.14 It is available to use non-full length RWY to take-off when ATC get permission form flight crew;

#### 2.15 机场冲突多发地带运行要求

2.15.1 机动区冲突多发地带位置见 ZHCC AD2.24-1A, 2。

2.15.2 为减少运行差错,降低地面冲突和跑道入侵事件的发生概率,在机场活动区运行的航空器需严格按照下述的要求运行:

HS1: E、S及U滑行道交叉区域 航空器在此区域运行时需仔细目视观察,避免冲 突。

HS2: S、U及H滑行道交叉区域 S,U上滑行航空器与H上滑行航空器存在交叉冲 突,此区域流量较大,冲突较明显,机组应提前 目视观察,避免冲突。

HS3: T13及T7滑行道交叉区域

T13与T7交叉口使用率较高,且重型机较多,自 T13滑入T6或T7滑行道的翼展限制不同,重型航 空器在此区域滑行时应多加注意,防止滑入翼展 不符区域。

HS4: T7及G5滑行道交叉区域

T7滑行道在G5以西的部分和G5以东的部分翼展限制不同, 翼展36米(含)以上航空器在此区域滑行时应多加注意, 防止滑入翼展不符区域。

HS5: G5及H滑行道交叉区域 机组在由G5进入H滑行道前,应提前目视观察, 避免与H上滑行的航空器出现对头滑行的情况; 发现冲突应及时报告管制员。

HS6: H2及H滑行道交叉区域

当使用30L跑道进场时,应避免与H4脱离即将进入货机坪的飞机发生冲突,若发生冲突应立即原地等待并报告管制员。

# 2.16 滑行道的滑行限制 /Taxiing limits:

2.15 Hot spot procedure

2.15.1 Refer to ZHCC AD2.24-1A, 2.

2.15.2 For the purpose of reducing errors that lead to ground conflicts and runway incursions, aircraft operating within the maneuvering area must follow the requirements below:

HS1: INTERSECTIONS OF TWY E, TWY S AND TWY U

Aircraft in this area shall observe cautiously to avoid conflict.

HS2: INTERSECTIONS OF TWY S, TWY U AND TWY H

Heavy traffic flow and significant conflicts within the intersection area of TWY S, TWY U and TWY H. Visual observation in advance is required to avoid conflicts.

#### HS3: INTERSECTIONS OF TWY T13 AND TWY T7

Intersection of TWY T13 and TWY T7 is frequently used, most by heavy aircraft. Wingspan limits are different from taxiing on T13 to T6 and T7, heavy aircraft shall pay attention on these limits, avoiding entering non-applicable wingspan area.

#### HS4: INTERSECTIONS OF TWY T7 AND TWY G5

Wingspan limits on TWY T7 is different between west of G5 and east of G5. Aircraft with wingspan greater than 36m shall pay attention while taxiing, avoiding entering non-applicable wingspan area.

#### HS5: INTERSECTIONS OF TWY G5, AND TWY H

Visual observation in advance is required before aircrew entering TWY H from TWY G5, avoiding going in opposite direction with aircraft taxiing on TWY H, report conflict to controller immediately.

#### HS6: INTERSECTIONS OF TWY H2 AND TWY H

Aircraft shall avoid head to head conflicts with the aircraft vacating apron via TWY H4 to cargo apron whenTWY 30L in use, if have any conflict, stop immediately and inform ATC.

滑行道 /TWY	航空器翼展限制 / Wing span limits for aircraft
D, D1, D2, D3, D4(north of TWY E), D5, D8, D9, D11, D12, E, E1, E2(BTN TWY D and E), E3-E5	≤ 79.8m
G5(BTN TWY T7 and H), H, H1, H2, H11, R, R1-R4, S, T7(BTN TWY T13 and G5), T10, T11, T13, U	≤ 68.56m

D4(south of TWY E), G4, H4, H6, H8	<65m
G5(BTN TWY T6 and T7), T6	<61m
D6, D7, S1	<52m
E2(south of TWY E), F, G2, G3, G6(north of TWY T11), H3, T2-T5, T7(BTN TWY G4 and G5), T8, T9	<36m

#### 2.17 跑道关闭维护计划 /Plan of runway closed and maintenance

RWY	TWY	Closing time in every week	Closing time in every day (UTC)
RWY12R/30L	G4, G5, H, H1, H2, H4, H6, H8, H11, S(BTN S1 & H), U(BTN S1 & H), R3, R4	Saturday, Sunday	18:30-21:30
RWY12L/30R	D, D1-D9, D11, D12, E, E1, E2(BTN D & E), E3-E5, R(BTN D & E), R1, R2, S(BTN S1 & D), S1, U(BTN S1 & D)	Monday, Tuesday	18:30-21:30

#### Remarks:

- 1. During the runway closure period, navigational lighting will be testing. Aircrew shall pay attention to avoid landing on the wrong runway.
- 2. Changes of plan of runway closed and maintenance will be published by NOTAM.
- 3. When RWY12L/30R is closed, airport is not AVBL for A380 to take off or land.
- 2.18 A380 机型地面运行区域
- 2.18.1 满足A380机型地面运行条件的区域包括:
- a. 12L/30R 跑道;
- b. D滑、D1-D3滑、D4滑(E滑以北)、D5滑、 D8滑、D9滑、D11滑、D12滑、E滑、E1滑、E2 滑(D滑和E滑之间)、E3-E5滑;
- c. 停机位: 266、268号停机位、805、807号除冰机位、888号隔离机位。
- 2.18 A380 Ground Operation Areas
- 2.18.1 The following areas are satisfied with A380 ground operations:
- a. RWY12L/30R;
- b. TWY D, D1-D3, D4(North of TWY E), D5, D8, D9, D11, D12, E, E1, E2(BTN TWY D&E), E3-E5;
- c. Parking stands Nr.266, 268, deicing stands Nr.805, 807, isolated stand Nr.888.

- 2.19 B747-8机型地面运行区域
- 2.19.1 满足B747-8机型地面运行条件的区域包括.
- a. 12L/30R、 12R/30L 跑道;
- b. D滑、D1-D3滑、D4滑(E滑以北)、D5滑、D8滑、D9滑、D11滑、D12滑、E滑、E1滑、E2滑(D滑和E滑之间)、E3-E5滑、G5滑(T7滑和H滑之间)、H滑、H1滑、H2滑、H11滑、R滑、R1-R4滑、S滑、T7滑(T13滑和G5滑之间)、T10滑、T11滑、T13滑、U滑;
- c. 停机位: 32-35、266、268、904、905号停机位、805、807号除冰机位、888号隔离机位。

- 2.19 B747-8 Ground Operation Areas
- 2.19.1 The following areas are satisfied with B747-8 ground operations:
- a. RWY12L/30R, RWY12R/30L;
- b. TWY D, D1-D3, D4(North of TWY E), D5, D8, D9, D11, D12, E, E1, E2(BTN TWY D&E), E3-E5, G5(BTN TWY T7&H), H, H1, H2, H11, R, R1-R4, S, T7(BTN TWY T13&G5), T10, T11, T13, U;
- c. Parking stands Nr.266, 268, deicing stands Nr.805, 807, isolated stand Nr.888.

#### 3. 机坪和机位的使用

- 3.1 未经地面管制同意,严禁航空器利用自身动力倒滑;
- 3.2 发动机试车须在指定地点进行,83号机位为C 类试大车机位,试大车航空器须拖行进出试车 位。禁止在廊桥机位进行任何形式的试车活动, 客机坪远机位禁止试大车。如有除试大车之外的 试车活动,须由飞行区指挥室安排试车位,经所 在管制区的管制部门同意后,方可进行作业;
- 3.3 使用27-35、58-82号停机位的航空器出入港时以及使用248-252 号停机位的航空器入港时,需有引导车引导;
- 3.4 103除冰位作为滑行线供进入货机坪飞机滑行使用,滑行翼展限制为68.56m。

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

- 3.1 Push-back of aircraft on its own power is strictly forbidden without GND Control clearance;
- 3.2 Engine run-ups shall be carried out at a designated location. Stand Nr.83 is used for CAT C aircraft fast engine-up, aircraft shall be pushed in/back. Engine run-ups on the boarding bridges stands or fast engine run-ups on remote stands are strictly forbidden. Other engine run-ups shall be carried out at a designated location with ATC clearance;
- 3.3 Arrival and departure A/C on stands Nr.27-35, 58-82 and arrival A/C on stands Nr.248-252 shall be guided by followme vehicle;
- 3.4 When de-icing stand Nr.103 used as taxiway for acft enter/exit apron, acft shall be with wing span no more than 68.56m.

#### 3.5 进出停机位的滑行道 / Enter stand by and Exit stand by

停机位 /Stands	滑入 /Enter stand by	滑出 /Exit stand by
14-19	T7	T6(Taxi out)
27-30,32-35	T10	T10
31	T10 or H2	T10
58-69,71	Т8	Т8
72-82	Т8	T9(Taxi out)
83	T8(push back)	T8(Taxi out)

210-215	G6	T5		
216	G6	T4 or T5		
217-222	G6	T4		
228-247,901-908	R	R		
248-252	F	F		
253-258	E2	Т3		
259	E2	T2 or T3		
260-265	E2	T2		
266-268,266L,266R	Е	Е		
269,270	D4	D4		
805,806	Е	D12		
807,808	Е	D1		
Remarks: Aircraft shall enter/exit stands Nr.101-103 with ATC instructions.				

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

停机位 /Stands Nr.	航空器翼展限制 / Wing span limits for aircraft	机身长度限制 / Fuselage limits
266,268,805,807,888	<80m	
31-35,904,905	≤ 69m	
28-30,71,103,235-240,267, 269,270,903,906	<65m	
27	<52m	
233,234,241,242,901,902,907,908	≤ 47.6m	55m
58-69,72-82	<36m	39.47m
14-19	<36m	42.11m
83,101,102,210-222,228-232, 243-265,266L,266R,806,808	<36m	44.51m

# 3.7 进出机位的滑行路线 /Taxiing routes of enter or exit stands

停机位 /Stands	航空器翼展限制 / Wing span limits for aircraft	滑入路线 /Enter taxiing routes	滑出路线/Exit taxiing routes
71	≤ 52m	$G4 \rightarrow T8 \text{ or } G5 \rightarrow T6 \rightarrow T8$ $\rightarrow \text{ stand}$	stand $\rightarrow$ T8 $\rightarrow$ G4 or T8 $\rightarrow$ T6 $\rightarrow$ G5

71	≤ 65m	G4 → T8 → stand	stand → T8 → G4
32		T10(turn right) → stand; forbidden to enter G1	stand $\rightarrow$ push back to G1, G1 $\rightarrow$ T10 $\rightarrow$ H2

3.8 210-222、 228-270 号机位为廊桥机位, 其中 266 号机位为复合机位。

3.8 Nr.210-222, 228-270 are bridge stands, Nr.266 is combined stand.

#### 4. 进、离场管制规定

- 4.1 着陆航空器脱离跑道前需在塔台频率保持长守,并在脱离跑道后及时向塔台管制员报告;
- 4.2 航空器着陆后应尽快(飞越跑道入口端置完全 脱离跑道应在50秒内)脱离跑道,如需使用更长的 时间占用跑道应尽可能在着陆前通知塔台管制 员;
- 4.3 机组须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,必须向地面管制报告脱离 的跑道和所使用的滑行道;
- 4.4 航空器起飞离地后自动与管制席位脱波(不需要通话脱波),塔台将在ATC许可中发布脱波后应该联系的离场管制频率;
- 4.5 离港航空器起飞离地后首次与进近联系时,需通报起飞跑道号;
- 4.6 离场航空器获得进跑道许可后,从跑道外等待 点滑行至进跑道完成起飞准备的时间在 60 秒内, 如需更长时间,应及时通报管制员;
- 4.7 离场飞行的航空器在推出开车前,必须联系 塔台管制室申请放行许可。空中交通管制的放行 许可的申请不早于发动机开车前10分钟进行;
- 4.8 机场机坪区域由机场机坪管制部门负责指挥,具体的移交点和移交方式听管制员指挥。

#### 4. Air traffic control regulations

- 4.1 Landing aircraft shall keep TWR frequency before vacating the runway, and report to TWR Control after RWY vacated;
- 4.2 Landing aircraft shall fully vacate RWY within 50s after touchdown if flight crew can not fulfill the process within the required time, pilot shall inform ATC immediately;
- 4.3 Under low visibility condition, landing aircraft must report the vacated runway designation and the taxiway in use during initial contact with GND control;
- 4.4 Pilot shall leave TWR frequency without instruction when aircraft is in flight, and assigned APP frequency will be informed in ATC clearance from TWR;
- 4.5 When aircraft contact APP controller at the first time, pilot shall inform runway designation used to take-off;
- 4.6 After getting clearance for entering RWY, department aircraft shall enter RWY from taxi holding positions and get ready to take off within 60 seconds, pilot shall contact ATC if they need more time;
- 4.7 Departing aircraft shall contact TWR for departure clearance not earlier than 10 minutes prior to push-out for engine start-up;
- 4.8 Aircraft shall be instructed by Apron Control (APN) in airport apron area. The specific hand-over point and mode shall be instructed by ATC.

#### 5. 机场的 II/III 类运行

#### 5. CAT II/III operations at AD

5.1 低能见度运行 (标准Ⅱ类、HUD特殊Ⅱ类、 低能见度起飞、HUD低能见度起飞)

5.1 Low visibility operation (LVO)(standard CAT II, HUD SA II, Low visibility take-off, HUD Low visibility take-off)

#### 5.1.1Low visibility procedures commencement

	Operation requirement	Operation requirement	
operation mode	RVR or ceiling	L V P REQUIREMENT	RWY AVBL
HUD SA ILS CAT I	450 ≤ RVR<550 or 45 ≤ ceiling<60	No	R W Y 1 2 R / 3 0 L , RWY12L/30R
HUD SA ILS CAT II	350 ≤ RVR<450 or 30 ≤ ceiling<45	Yes	RWY12L
standard ILS CAT II (Autopilot to DH and below)	300 ≤ RVR<550 or 30 ≤ ceiling<60	Yes	RWY12L
standard ILS CAT II(Manual operation below DH)	ACFT CAT A, B, C: 300 \le RVR<550 or 30 \le ceiling<60  A/C CAT D: 350 \le RVR<550 or 30 \le ceiling<60	Yes	RWY12L
Low visibility take-off	ACFT CAT A, B, C: 200 \le RVR<400  A/C CAT D: 250 \le RVR<400	Yes	RWY12L/30R
HUD Low visibility take-off(RVR200m)	200 ≤ RVR<400	Yes	RWY30R
HUD Low visibility take-off(RVR150m)	150 ≤ RVR<400	Yes	RWY12L

- 5.1.2 低能见度运行程序的启动与结束:
- 5.1.2.1 下列情形下将进入低能见度运行程序准备 阶段
- (1) 跑道视程(RVR)下降至600米,或云底高下降至60米,并且预计继续下降。
- (2) 跑道视程(RVR)上升至100米,并且预计继续上升。

当天气条件达到低能见度运行准备阶段天气标准时,机场指挥中心与空管塔台沟通后,按程序启动低能见度运行程序。机场完成低能见度运行启动准备工作后,由民航河南空管分局塔台管制室通过D-ATIS、ATIS、VHF(根据运行情况选择方式)向机组发布信息。

- 5.1.2 Low visibility procedures commencement and termination
- 5.1.2.1 LVP is commencing when comply with the following criteria:
- (1) RVR is down to 600m or ceiling is down to 60m and expected to decline.
- (2) RVR is up to 100m, and expected to rise.

When the weather conditions comply with the above criteria, aerodrome control center will implement LVP after coordinated with TWR.ATC will inform A/C via D-ATIS, ATIS or VHF depending on the operation mode.

- 5.1.2.2 下列情形下将结束低能见度运行程序:
- (1) 当跑道视程 (RVR) 上升至600米以上,且 云底高上升至60米以上,并稳定或继续好转时;
- 2) 当跑道视程 (RVR) 小于100米, 并稳定或继续变差时。

达到结束阶段的天气条件时, 机场指挥中心与空管塔台沟通后, 按程序退出低能见度运行程序。

- 5.2 在郑州新郑机场实施低能见度运行的航空运营人必须获得所在国民航有关部门运行批准。
- 5.3 飞行员应该获得如下信息:
- 5.3.1 气象实况和预报;
- 5.3.2 确认低能见度程序正在实施。
- 5.4 准备实施低能见度运行 (进近或起飞)的机组 (HUD ILS 特殊 I 类运行除外),应主动向空管管制员提出申请。
- 5.5 地面运行规定
- 5.5.1 航空器引导:在实施低能见度运行时,所有进离港航空器在停机坪区域滑行必须全程引导车引导,空管塔台管制地带内根据机组需求提供引导车引导。引导车在终止引导时,关闭引导指示灯,表示引导结束。
- 5.5.2 机坪滑行道G2、G3、H3中线灯的纵向间距为30米, 机坪滑行道F、G6、T4-T11、T13没有滑行道中线灯, 航空器低能见度运行滑行使用时机组需要注意观察, 跟随地面滑行引导车滑行。4.5.3 低能见度运行时, 12L号跑道离场航空器应
- 4.5.3 低能见度运行时,12L号跑道离场航空器应在指定滑行道的Ⅱ类等待位置等待,未经空管塔台管制员许可,禁止越过等待线,避免进入仪表着陆系统Ⅲ类敏感区(A380 航空器离场时,应在E滑行道等待,机身与跑道平行,未经空管塔台管制员许可,不得进入D滑行道)。停止排灯亮起状态时,禁止越过等待线。
- 5.5.4 进场航空器落地后进入D滑行道表明已离开仪表着陆系统Ⅱ类敏感区,然后再向空管塔台管制员报告"航空器已脱离跑道"(A380航空器落地后进入E滑行道表明已离开仪表着陆系统Ⅱ类敏感区,然后再向空管塔台管制员报告"航空器已脱离跑道")。

- 5.1.2.2 LVP is terminated when comply with the following criteria:
- (1) RVR is up to 600m or above and ceiling is up to 60m or above, and keep stable or be better.
- (2) RVR is lower than 100m, and keep stable or expected to decline.

When the weather conditions comply with the above criteria, aerodrome control center will terminate LVP after coordinated with TWR.

- 5.2 The operator conducting LVP in ZHCC shall get the authorization from the applicable foreign regulatory authority.
- 5.3 Pilot shall get the following information:
- 5.3.1 Weather conditions and forecasts:
- 5.3.2 Confirm the low visibility procedures is being implemented.
- 5.4 Aircrew shall apply for LVP(approach or take-off except HUD SA CAT I) on initial contact with ATC controller.
- 5.5 Ground operation regulation
- 5.5.1 A/C guidance: when conducting LVP, all arrival/departure A/C shall be guided by follow-me vehicle while taxiing within the apron. Follow-me vehicle service is available on request by flight crew within the tower controlled area. Follow-me vehicle will turn off lights when the guidance finished.
- 5.5.2 The centerline lights spacing of TWYs G2, G3, H3 is 30m, and TWYs F, G6, T4-T11, T13 do not have centerline lights. Aircrew shall pay more attention and taxi along with follow-me vehicle.
- 5.5.3 When conducting LVP, A/C departure from RWY12L shall follow ATC instructions and hold at designated TWY CAT II holding positions, and prohibit to cross holding line without permission, for avoiding entering the ILS sensitive area(A/C type A380 shall hold at TWY E with fuselage parallel to RWY, and prohibit to taxi into TWY D without ATC clearance). It is prohibited to cross the holding positions when the stop bar lights are on.
- 5.5.4 Arrival A/C have left ILS sensitive area once entering TWY D, then report to TWR: 'RWY vacated'. A/C type A380 have leave ILS sensitive area once entering TWY E, then report to TWR: 'RWY vacated'.

#### 6. 除冰规则

#### 6.1 一般要求

- 6.1.1 需除冰的航空器,在推出前向所在区域管制部门申请;按管制指令滑行至除冰等待点等待;然后,跟随引导车进入除冰机位,按引导员指挥停稳航空器,开始除冰;除冰完毕,向所在区域管制部门申请开车滑出;
- 6.1.2 航空器进入除冰位时,请机组注意观察机头方向保障人员;航空器离位时,请机组注意控制发动机油门,防止尾流对附近保障人员和设备造成伤害。

#### 6. Rules for deicing

#### 6.1 General rules

- 6.1.1 Contact the relative ATC before pushed-back; Follow the ATC instruction to taxi to the deicing holding position; Follow the follow-me vehicle to deicing location, stop the aircraft according to marshaller's instructions and then start deicing; Contact the relative ATC for start-up clearance after deicing.
- 6.1.2 Aircrew shall watch out support personnel at the nose direction when enter into the deicing stands. Aircrew shall control the throttle carefully, avoiding the exhausted gas causing damage to support personnel and equipment, when aircraft exit the deicing stands.

#### 6.2 除冰机位使用规则 / rules of De-icing stands:

起飞跑道 /RWY in use	使用除冰位 /Stands in use		
12L	807, 808		
30R	805, 806		
12R/30L	101-103		

#### 6.3 除冰模式

- 6.3.1 根据不同运行情况,本场采用定点除冰(在指定机位或区域除冰,可实施航空器关车除冰和慢车除冰)和原位除冰(在原机位除冰,仅实施航空器关车除冰)两种除冰方式;
- 6.3.2 本场慢车除冰适用机型: 国内航空公司的 B737系列、A320系列航空器;
- 6.3.3 本场慢车除冰适用时间为 23:00 至 9:00(UTC), 关车除冰不受时间限制;
- 6.3.4 郑州机场航空器除冰领导小组根据本场运行特点选择适用的除冰模式,并由机场运行管制部门告知机组,机组如需咨询本场航空器除冰相关业务可联系:郑州机场机务工程部生产控制室0371-58517012/58517013。
- 6.4 定点除冰流程
- 6.4.1 除冰开始

#### 6.3 Deicing mode

- 6.3.1 According to different operational situations, two ways for deicing in Zhengzhou airport: deicing at designated location (at designated stand or area, engine off deicing and engine idle deicing shall be used) and deicing at parking stand (at parking stand, only engine off deicing shall be used);
- 6.3.2 Aircraft type for engine idle deicing: B737 and A320 series of domestic airlines;
- 6.3.3 Time for engine idle deicing: 2300-0900 (UTC), no time limitation for engine off deicing;
- 6.3.4 Deicing leading group for Zhengzhou airport shall choose the applicable deicing mode according to the operational situation. AOC shall inform aircrew the applicable deicing mode. When in doubt, aircrew shall contact 86-371-58517012/58517013.
- 6.4 Procedures of deicing at designated location
- 6.4.1 Deicing begining

- 6.4.1.1 关车除冰: 航空器入位停好后,关闭发动机,并与机务沟通确认除冰需求,除冰构型设置后,开始除冰;
- 6.4.1.2 慢车除冰: 航空器入位停好后, 机组需保持发动机慢车状态, 并通过耳机与机务建立联系, 沟通确认除冰需求, 除冰构型设置后, 开始执行慢车除冰作业, 慢车除冰期间机组须与机务保持通讯畅通;
- 6.4.2 除冰结束: 除冰完毕, 机组联系本场管制部门申请滑出除冰位置。
- 6.5 APU故障航空器除冰
- 6.5.1 关车除冰: 若航空器APU已知故障, 机组需提前向机场运行管制部门说明, 申请原位除冰; 若在定点除冰期间突发APU故障, 机组需立即联系地面机务, 并由机务提供电源车或气源车到航空器所在除冰位待命;
- 6.5.2 慢车除冰: APU故障不影响慢车除冰作业。

- 6.4.1.1 Engine off deicing: after aircraft stopped at stand, aircrew shall shut down the engine, confirm the deicing demand with maintenance personnel, then set deicing configuration and start deicing;
- 6.4.1.2 Engine idle deicing: after aircraft stopped at stand, aircrew shall keep the engine idle, contact with maintenance personnel via earphone and confirm the deicing demand, then set deicing configuration and start deicing. During the engine idle deicing period, aircrew shall keep smooth communications with maintenance personnel;
- 6.4.2 Deicing completion: when deicing completed, aircrew shall contact ATC to applying for taxiing out deicing stands.
- 6.5 APU failure aircraft deicing
- 6.5.1 Engine off deicing: if APU failure detected, aircrew shall contact AOC to apply for deicing at parking stand. When APU suddenly fails during deicing at designated location, aircrew shall report to maintenance personnel immediately. Maintenance personnel shall provide ground power unit and air supply unit to the designated stand;
- 6.5.2 Engine idle deicing: engine idle deicing does not affected by APU failure.

#### 7. 平行跑道同时仪表运行

- 7.1 根据实际情况,管制单位可采用平行跑道同时仪表隔离运行模式;
- 7.2 平行跑道隔离运行期间,未经管制员许可,落 地跑道禁止用干起飞。

#### 7. Simultaneous operations on parallel runways

- 7.1 Segregated parallel approaches/departures might apply by ATC;
- 7.2 It is forbidden for aircraft to take off on RWY for landing without ATC clearance when implement the segregated parallel approaches/departures.

#### 8. 警告

- 8.1 航空器向 30L/30R 号跑道进近时航空器禁止偏东。
- 8.2 航空器一旦发现滑错路线或误入跑道,应立即 向管制员报告。
- 9. 直升机飞行限制, 直升机停靠区

无

#### 8. Warning

- 8.1 Aircraft approaching to RWY30L/30R is prohibited deviating eastwards.
- 8.2 Aircraft shall report to ATC immediately when realize taxiing on the wrong way or an incursion of RWY.
- 9. Helicopter operation restrictions and helicopter parking/docking area

Nil

#### ZHCC AD 2.21 噪音限制规定及减噪程序

#### 1. 起飞减噪程序

在保证安全超障和飞行程序最低爬升梯度的条件下,执行如下起飞减噪程序。由于非管制原因不执行减噪程序,飞行员必须在起飞前告知管制员并说明原因(校验飞行等特殊飞行除外)。

- 1.1 在航空器起飞性能运行允许的情况下,尽可能使用减推力起飞;
- 1.2 在高度 450 米时,起始爬升速度 V2+20km/h (10海里/小时),减小功率至爬升功率,保持原有襟翼和速度继续爬升;
- 1.3 高度900米以上时,转为正常航路爬升速度并按规定收襟翼/缝翼。

# ZHCC 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。

#### 2. 起落航线

起落航线通常在跑道南侧, A、B类航空器高度 450米, C、D类航空器高度650米; 如经空中交 通管制部门许可, 可在跑道北侧进行。

### 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。

# ZHCC AD 2.21 Noise restrictions and Noise abatement procedures

#### 1. Noise abatement procedures for departure

In condition of complying with the requirements of obstacle clearance and climb gradient required by flight procedure, the following noise abatement climb procedures shall be implemented. If the procedures can not be implemented due to any reason except ATC, pilot shall inform the controller with a reasonable explanation(except for flight check and other special flight).

- 1.1 The derated take-off is strongly recommended if the take-off performance of aircraft permit;
- 1.2 At altitude 450m, with a climb speed of V2 plus 20km/h(10kt), reduce engine power/thrust to climb power/thrust and maintain a speed with flaps and slats in the take-off configuration;
- 1.3 At altitude 900m or above, maintain a positive rate of climb, accelerate to normal en-route climb speed and retract flaps/slats on schedule.

#### **ZHCC 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. Traffic circuits

Traffic circuits shall be made to the south of runway, at the altitude of 450m for aircraft CAT A/B, and 650m for aircraft CAT C/D. Traffic circuits to the north of runway are subject to ATC clearance.

#### 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

- 4.1 郑州进近管制区域内实施雷达管制。航空器 4.1 Radar control within Zhengzhou Approach Control Area 最小水平间隔为6千米。
- 4.2 最低监视引导高度扇区

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

- has been implemented. The minimum horizontal radar separation is 6km.
- 4.2 Surveillance Minimum Altitude Sectors

Sector 1	ALT limit: 2400m or above
N352645E1132817-N344424E1122348-N345839E1130812-N	N352659E1141742-N353121E1141500
-N352645E1132817	
Sector 2	ALT limit: 800m or above
a circle with a radius of 6km centered on N344324E1134326	
Sector 3	ALT limit: 600m or above
	-N344005E1134459-N344018E1134048-N344133E1133651- -N333948E1143912-N334611E1144546-N343338E1145030- N344647E1132807
Sector 4	ALT limit: 750m or above
N344347E1133307-N342755E1132931-N341745E1134547- N344005E1134459-N344157E1134714-N345211E1134811-N	-N343815E1134223-N344133E1133651-N344018E1134048- N344647E1132807-N344347E1133307
Sector 5	ALT limit: 950m or above
N343040E1132506-N342755E1132931-N344347E1133307-D	N343040E1132506
Sector 6	ALT limit: 1150m or above
N343831E1132135-N343159E1132004-N342450E1131319- N335809E1133059-N341745E1134547-N343040E1132506-N	-N332927E1132724-N332200E1141218-N333948E1143912- N344347E1133307-N345839E1130812-N343831E1132135
Sector 7	ALT limit: 2150m or above
N342618E1121130-N341601E1123739-N342450E1131319- N344424E1122348-N342618E1121130	-N343159E1132004-N343831E1132135-N345839E1130812-
Sector 8	ALT limit: 1800m or above
N333552E1124722-N332927E1132724-N342450E1131319-	N341601E1123739- N333552E1124722
Sector 9	ALT limit: 2400m or above
N333905E1122916-N333552E1124722-N341601E1123739-N	N342618E1121130- N333905E1122916

#### 5. 无线电通信失效程序

#### 5. Radio communication failure procedures

Nil 无

# 6. 目视飞行程序

机场塔台(进近)管制区正式实施目视间隔和目视进近运行,此运行方式须得到ATC许可。

#### 6. Procedures for VFR flights

With the prior permission of ATC, visual separation and visual approach can be implemented within TWR control area and APP control area.

#### 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

- 9.1 对机组的要求
- 9.1.1 听清并复诵塔台管制员的滑行指令,尤其是界限性指令,发现疑问并及时证实;
- 9.1.2 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,并向原地面管制扇区报告;
- 9.1.3 重型机机组首次联系塔台或申请滑行前应 向管制员报告"重型"或"HEAVY"。

#### 9. Other regulations

- 9.1 Requirements for pilots:
- 9.1.1 Repeat the whole taxiing instructions issued by TWR Control, especially boundary instruction and make it clear when there is a doubt;
- 9.1.2 If aircraft fail to contact with the assigned GND frequency, stop prior to the holding position and contact the original GND frequency;
- 9.1.3 Flight crew shall report 'HEAVY' when first contact with TWR or apply for taxiing clearance.

#### 10. 区域导航飞行程序相关数据

#### 10. Data for RNAV flight procedures

#### Waypoint Coordinates

Waypoint ID	COORDINATES	Waypoint ID	COORDINATES
CC304	N343205 E1132721	CC540	N340920 E1135948
CC305	N342955 E1133344	CC541	N342742 E1134016
CC306	N342602 E1134511	CC543	N342123 E1135847
CC309	N342516 E1140744	CC561	N342924 E1140557
CC312	N342617 E1140815	CC562	N342707 E1141052
CC315	N350532 E1133747	CC563	N342510 E1141339

CC317	N344538 E1133540	CC565	N341456 E1140718
CC350	N343208 E1134337	CC568	N341855 E1132909
CC401	N344610 E1134537	CC571	N335239 E1140238
CC405	N343901 E1133047	CC572	N340807 E1135747
CC406	N343800 E1133016	CC573	N341409 E1134008
CC407	N342316 E1135315	CC574	N341612 E1133407
CC408	N342547 E1134554	CC575	N341824 E1132739
CC409	N342849 E1133700	CC576	N342705 E1132453
CC410	N343715 E1133603	CC577	N342502 E1133055
CC413	N343613 E1133532	CC578	N342250 E1133724
CC418	N344320 E1134412	CC579	N342047 E1134325
CC449	N342959 E1135728	CC581	N342751 E1133952
CC450	N342444 E1135851	CC582	N343003 E1133323
CC451	N342752 E1140338	CC583	N344143 E1133847
CC452	N343436 E1135946	CC584	N344024 E1134245
CC501	N343632 E1133810	CC585	N343835 E1134804
CC502	N343254 E1133623	CC587	N344238 E1134646
CC503	N344110 E1134028	CC589	N342051 E1140019
CC504	N342638 E1133308	CC591	N342425 E1134955
CC505	N342426 E1133936	CC592	N344047 E1135224
CC506	N341625 E1133528	CGO	N3431.1 E11350.6
CC507	N340620 E1133016	DWS	N3419.4 E11404.7
CC510	N344405 E1134123	DZY	N3443.6 E11333.0
CC512	N340555 E1142635	ZHO	N3339.9 E11439.3
CC513	N340800 E1142035	AGSOS	N3425.5 E11426.3
CC514	N341005 E1141435	DUBAG	N3451.8 E11343.8
CC515	N341215 E1140817	DUDBI	N3312.4 E11442.9
CC516	N341419 E1140216	GUKNA	N3527.7 E11417.3
CC517	N341715 E1141047	GUTUS	N3401.9 E11438.2
CC518	N341504 E1141705	IDVUK	N3413.9 E11326.6
CC519	N341259 E1142305	IGMIG	N3317.2 E11427.3
CC520	N341054 E1142905	IGPIL	N3541.4 E11332.5

CC521	N341651 E1143205	KAMDA	N3321.9 E11412.2
CC522	N341856 E1142605	LEKUB	N3531.4 E11415.0
CC523	N342101 E1142004	LENPO	N3402.0 E11454.7
CC524	N342311 E1141345	MILOM	N3342.1 E11402.7
CC526	N343417 E1140043	NOPIN	N3526.8 E11328.3
CC527	N343055 E1141034	OGOVI	N3408.7 E11435.6
CC528	N342850 E1141635	OKTOX	N3427.7 E11433.9
CC529	N342640 E1142254	PASGU	N3340.8 E11342.6
CC530	N342435 E1142855	PUBOV	N3453.2 E11353.7
CC531	N342229 E1143456	RUMGU	N3328.9 E11444.5
CC532	N341752 E1143236	SUKTO	N3411.1 E11348.9
CC533	N341957 E1142636	SUPEV	N3413.1 E11422.8
CC534	N342202 E1142035	UNTEL	N3342.2 E11445.8
CC535	N342413 E1141416	VENUT	N3420.5 E11321.7
CC537	N335922 E1141615	VETIP	N3354.1 E11500.4
CC538	N340443 E1141311	VINIG	N3336.9 E11429.1
CC539	N340716 E1140548		

Path Terminator	Waypoint ID	Fly over	Magnetic Course (°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/ TCH	Navigation Specificati on
RWY12L De	eparture NOP-	9W				•		
CF	CC449		116					RNAV1
TF	CC452					MAX205		RNAV1
TF	CC592				↑ 2100 or by ATC			RNAV1
TF	DUBAG							RNAV1
TF	NOPIN							RNAV1
RWY12L De	eparture IGP-9	W(by ATC)	l	l	1	1	1	
CF	CC449		116					RNAV1
TF	CC452					MAX205		RNAV1
TF	PUBOV							RNAV1
TF	IGPIL							RNAV1

CF	CC449	116				RNAV1
		110			25477207	
TF	CC452				MAX205	RNAV1
TF	PUBOV					RNAV1
TF	GUKNA					RNAV1
RWY12	L Departure OKT-9W			T		
CF	CC451	116				RNAV1
TF	CC562			↑ 1800		RNAV1
TF	AGSOS			1 2100		RNAV1
TF	OKTOX			↓ 5700		RNAV1
RWY12	L Departure RUM-9W					
CF	CC451	116				RNAV1
TF	SUPEV			↓ 3000		RNAV1
TF	ZHO					RNAV1
TF	RUMGU					RNAV1
RWY12	L Departure DUD-9W	<u> </u>	<u> </u>		<u> </u>	<u> </u>
CF	CC451	116				RNAV1
TF	DWS					RNAV1
TF	CC565			↓ 3000		RNAV1
TF	DUDBI					RNAV1
RWY12	R Departure NOP-9X					
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	CC561				MAX205	RNAV1
TF	CC452					RNAV1
TF	CC592			↑ 2100		RNAV1
11	CC392			or by ATC		KNAVI
TF	DUBAG					RNAV1
TF	NOPIN					RNAV1
RWY12	R Departure IGP-9X(by	ATC)	I	1	<u> </u>	<u> </u>
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	CC561				MAX205	RNAV1

TF	CC452					RNAV1
TF	PUBOV					RNAV1
TF	IGPIL					RNAV1
RWY121	R Departure GUK-9X(by	(ATC)				
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	CC561				MAX205	RNAV1
TF	CC452					RNAV1
TF	PUBOV					RNAV1
TF	GUKNA					RNAV1
RWY121	R Departure OKT-9X	 	<u> </u>	<b>'</b>		
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	CC563			↑ 1800		RNAV1
TF	AGSOS			1 2100		RNAV1
TF	OKTOX			↓ 5700		RNAV1
RWY121	R Departure RUM-9X				<u> </u>	I
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	SUPEV			↓ 3000		RNAV1
TF	ZHO					RNAV1
TF	RUMGU					RNAV1
RWY121	R Departure DUD-9X					
VA		131		450		RNAV1
DF	CC450		R			RNAV1
TF	DWS					RNAV1
TF	CC565			↓ 3000		RNAV1
TF	DUDBI					RNAV1
RWY301	L Departure NOP-9Y				<u> </u>	
CF	CC502	281				RNAV1
TF	CC503			↑ 1800	MAX230	RNAV1
TF	CC510			† 2100 or by ATC		RNAV1

TF	DUBAG				RNAV1
TF	NOPIN				RNAV1
RWY30	L Departure IGP-9Y(by	ATC)			•
CF	CC502	281			RNAV1
TF	CC503		1800	MAX230	RNAV1
TF	PUBOV				RNAV1
TF	IGPIL				RNAV1
RWY30	L Departure GUK-9Y(by	ATC)	-		<b>'</b>
CF	CC502	281			RNAV1
TF	CC503		1800	MAX230	RNAV1
TF	PUBOV				RNAV1
TF	GUKNA				RNAV1
RWY30	L Departure OKT-9Y	1	<u> </u>		l
CF	CC502	281			RNAV1
TF	CC503		1800	MAX230	RNAV1
TF	CC585				RNAV1
TF	AGSOS		1 2100		RNAV1
TF	OKTOX		↓ 5700		RNAV1
RWY30	L Departure RUM-9Y		-		<b>-</b>
CF	CC350	281		MAX205	RNAV1
TF	CC505		↓ 2100		RNAV1
TF	CC506				RNAV1
TF	SUKTO				RNAV1
TF	MILOM				RNAV1
TF	RUMGU				RNAV1
RWY30	L Departure DUD-9Y		•	· '	•
CF	CC350	281		MAX205	RNAV1
TF	CC505		↓ 2100		RNAV1
TF	CC506				RNAV1
TF	CC507				RNAV1
TF	PASGU				RNAV1
TF	KAMDA				RNAV1

TF	DUDBI					RNAV1
RWY30	R Departure NOP-9Z		<u>'</u>	<u> </u>		<u> </u>
CF	CC501	296				RNAV1
TF	CC503			1800	MAX230	RNAV1
TF	CC510			↑ 2100 or by ATC		RNAV1
TF	DUBAG					RNAV1
TF	NOPIN					RNAV1
RWY30	R Departure IGP-9Z(1	by ATC)	I	I	<u> </u>	<u> </u>
VA		296		450	MAX205	RNAV1
DF	CC585		R			RNAV1
TF	PUBOV					RNAV1
TF	IGPIL					RNAV1
RWY30	R Departure GUK-9Z	(by ATC)	I	L	<u> </u>	I
VA		296		450	MAX205	RNAV1
DF	CC585		R			RNAV1
TF	PUBOV					RNAV1
TF	GUKNA					RNAV1
RWY30	R Departure OKT-9Z					
CF	CC501	296				RNAV1
TF	CC503			1800	MAX230	RNAV1
TF	CC585					RNAV1
TF	AGSOS			1 2100		RNAV1
TF	OKTOX			↓ 5700		RNAV1
RWY30	R Departure RUM-9Z	,		l .		
CF	CC501	296				RNAV1
TF	CC504			↓ 2100		RNAV1
TF	CC568					RNAV1
TF	SUKTO					RNAV1
TF	MILOM					RNAV1
TF	RUMGU					RNAV1
RWY30	R Departure DUD-9Z	1	<u> </u>	L	<u> </u>	I
CF	CC501	296				RNAV1

1			ı	-	_	ı	1	ı	1
	TF	CC504				↓ 2100			RNAV1
	TF	CC568							RNAV1
	TF	IDVUK							RNAV1
	TF	PASGU							RNAV1
	TF	KAMDA							RNAV1
	TF	DUDBI							RNAV1
ı	RWY12L/R	Arrival NOP-	9U(by ATC)						
	IF	NOPIN							RNAV1
	TF	CC315							RNAV1
	TF	DUBAG							RNAV1
	TF	DZY				↑ 1200	MAX205		RNAV1
ı	RWY12L/R	Arrival NOP-	8U			l	1	l	1
	IF	NOPIN							RNAV1
	TF	CC315							RNAV1
	TF	DUBAG							RNAV1
	TF	CC401							RNAV1
	TF	CC418				1 2100	MAX205		RNAV1
	TF	CC584							RNAV1
	TF	CC583							RNAV1
	TF	DZY				↑ 1200			RNAV1
ı	RWY12L/R	Arrival NOP-	7U						l
	IF	NOPIN							RNAV1
	TF	CC315							RNAV1
	TF	DUBAG							RNAV1
	TF	CC401							RNAV1
	TF	CC585							RNAV1
	TF	CGO							RNAV1
	TF	CC409				1200	MAX205		RNAV1
I	RWY12L/R	Arrival LKB-	9U(by ATC)	1		1		1	1
	IF	LEKUB							RNAV1
	TF	DUBAG							RNAV1
	TF	DZY				↑ 1200	MAX205		RNAV1

RWY121	L/R Arrival VET	-9U(by ATC)				
IF	VETIP					RNAV1
TF	LENPO					RNAV1
TF	OGOVI					RNAV1
TF	DWS				MAX230	RNAV1
TF	CC589			1 3600		RNAV1
TF	CC591			1 2400		RNAV1
TF	CC408					RNAV1
TF	CC581					RNAV1
TF	CC409			1200	MAX205	RNAV1
RWY121	L/R Arrival VET	-8U(by ATC)	1	<u>'</u>		•
IF	VETIP					RNAV1
TF	LENPO					RNAV1
TF	OGOVI					RNAV1
TF	DWS				MAX230	RNAV1
TF	CC452			↑ 1800		RNAV1
TF	CC585					RNAV1
TF	CC584					RNAV1
TF	CC583					RNAV1
TF	DZY			1200	MAX205	RNAV1
RWY121	L/R Arrival UNT	-9U	<b>'</b>	1	1	<b>'</b>
IF	UNTEL					RNAV1
TF	OGOVI					RNAV1
TF	DWS				MAX230	RNAV1
TF	CC589			↑ 3600		RNAV1
TF	CC591			1 2400		RNAV1
TF	CC408					RNAV1
TF	CC581					RNAV1
TF	CC409			1200	MAX205	RNAV1
RWY121	L/R Arrival UNT	-8U	1	<u>'</u>		•
IF	UNTEL					RNAV1
TF	OGOVI					RNAV1

_	1			1	ı			
	TF	DWS					MAX230	RNAV1
	TF	CC452				↑ 1800		RNAV1
	TF	CC585						RNAV1
	TF	CC584						RNAV1
	TF	CC583						RNAV1
	TF	DZY				↑ 1200	MAX205	RNAV1
ı	RWY12L/R	Arrival IGM-9	<b>9</b> U					
	IF	IGMIG						RNAV1
	TF	KAMDA						RNAV1
	TF	CC571						RNAV1
	TF	CC572						RNAV1
	TF	CC573						RNAV1
	TF	CC574						RNAV1
	TF	CC575						RNAV1
	TF	VENUT				↑ 1500	MAX230	RNAV1
	TF	CC576						RNAV1
	TF	CC577						RNAV1
	TF	CC578						RNAV1
	TF	CC579						RNAV1
	TF	CC408						RNAV1
	TF	CC581						RNAV1
	TF	CC409				1200	MAX205	RNAV1
ı	RWY12L/R	Holding(Outb	ound time:1m	in)				
	НМ	CC315	Y	165	R	3600 or by ATC	MAX230	RNAV1
	НМ	CC409	Y	296	L	↓ 2400 ↑ 1200	MAX205	RNAV1
	НМ	CC571	Y	349	L	3600	MAX230	RNAV1
	НМ	CC584	Y	296	L	1500	MAX205	RNAV1
	НМ	DZY	Y	231	R	1500 or by ATC	MAX205	RNAV1
ſ	НМ	OGOVI	Y	347	R	3600	MAX230	RNAV1
ı	RWY30L/R	Arrival NOP-9	9V			•		

IF	NOPIN		RNAV1
TF	CC315		RNAV1
TF	DUBAG		RNAV1
TF	CC317	† 2700	RNAV1
TF	DZY		RNAV1
TF	CC304		RNAV1
TF	CC305		RNAV1
TF	CC541		RNAV1
TF	CC306	† 2400	RNAV1
TF	CC407		RNAV1
TF	CC543		RNAV1
TF	DWS	900 MAX205	RNAV1
RWY30	L/R Arrival NOP-8V		-
IF	NOPIN		RNAV1
TF	CC315		RNAV1
TF	DUBAG		RNAV1
TF	CC587	† 2700	RNAV1
TF	CC585		RNAV1
TF	CC526	MAX230	RNAV1
TF	CC527	or by ATC MAX205	RNAV1
RWY30	L/R Arrival LKB-9V(by ATC)		
IF	LEKUB		RNAV1
TF	DUBAG		RNAV1
TF	CC317	† 2700	RNAV1
TF	DZY		RNAV1
TF	CC304		RNAV1
TF	CC305		RNAV1
TF	CC541		RNAV1
TF	CC306	† 2400	RNAV1
TF	CC407		RNAV1
TF	CC543		RNAV1
TF	DWS	900 MAX205	RNAV1

RWY30	L/R Arrival LKB-8V(by ATC)		
IF	LEKUB		RNAV1
TF	DUBAG		RNAV1
TF	CC587	1 2700	RNAV1
TF	CC585		RNAV1
TF	CC526	MAX	230 RNAV1
TF	CC527	† 1800 or by ATC	205 RNAV1
RWY30	L/R Arrival VET-9V(by ATC)		
IF	VETIP		RNAV1
TF	GUTUS	MAX	230 RNAV1
TF	CC512		RNAV1
TF	CC513		RNAV1
TF	CC514		RNAV1
TF	CC515		RNAV1
TF	CC516		RNAV1
TF	DWS	900 MAX	205 RNAV1
RWY30	L/R Arrival UNT-9V		
IF	UNTEL		RNAV1
TF	GUTUS	MAX	230 RNAV1
TF	CC512		RNAV1
TF	CC513		RNAV1
TF	CC514		RNAV1
TF	CC515		RNAV1
TF	CC516		RNAV1
TF	DWS	900 MAX	205 RNAV1
RWY30	L/R Arrival IGM-9V	1 1	
IF	IGMIG		RNAV1
TF	VINIG		RNAV1
TF	CC537		RNAV1
TF	CC538	MAX	230 RNAV1
TF	CC539		RNAV1
TF	CC540		RNAV1

TF	CC516						RNAV1
TF	DWS				900	MAX205	RNAV1
RWY30I	_/R Holding(Ou	tbound time	e:1min)	L	I	<u>l</u>	
НМ	CC305	Y	116	L	2400	MAX205	RNAV1
НМ	CC315	Y	165	R	3600 or by ATC	MAX230	RNAV1
HM	CC527	Y	116	R	1800	MAX205	RNAV1
НМ	CC538	Y	338	L	2100	MAX205	RNAV1
НМ	DZY	Y	231	R	3600 or by ATC	MAX230	RNAV1
HM	GUTUS	Y	298	L	3600	MAX230	RNAV1
RWY12I	Approach Trai	nsition (Fro	m CC409)	I		<u> </u>	
IF	CC409				1 1200	MAX205	RNAV1
TF	CC582						RNAV1
TF	CC304				1 900		RNAV1
TF	CC405				1 900		RNAV1
TF	CC410				900		RNAV1
RWY12I	Approach Trai	nsition (Fro	m DZY)				
IF	DZY				1 1200	MAX205	RNAV1
TF	CC405				1 900		RNAV1
TF	CC410				900		RNAV1
RWY12I	Missed Appro	ach				<u>l</u>	1
CA			116		350		RNAV1
DF	CC585			L		MAX190	RNAV1
TF	CC584				900		RNAV1
RWY12I	Missed Approx	ach Holding	g (Outbound ti	me:1min)			
НМ	CC584	Y	296	R	900	MAX190	RNAV1
RWY12F	R Approach Trai	nsition (Fro	m CC409)	<b>.</b>	<b>-</b>		,
IF	CC409				1200	MAX205	RNAV1
TF	CC582						RNAV1
TF	CC304				1 900		RNAV1
TF	CC406				1 900		RNAV1
TF	CC413				900		RNAV1

F	DZY				↑ 1200	MAX205	RNAV1
ΓF	CC406				↑ 900		RNAV1
ΓF	CC413				900		RNAV1
RWY12	R Missed Appro	ach					
CA			116		350		RNAV1
DF	CC408			R		MAX205	RNAV1
TF	CC409				900		RNAV1
RWY12	R Missed Appro	ach Holding	(Outbound tir	ne:1min)			
НМ	CC409	Y	296	L	900	MAX205	RNAV1
RWY30	L Approach Tran	nsition (Fron	n CC527)				
IF	CC527				1800 or by ATC	MAX205	RNAV1
TF	CC528						RNAV1
TF	CC529				1800 or by ATC		RNAV1
TF	CC530						RNAV1
TF	CC531						RNAV1
TF	CC521						RNAV1
TF	CC522						RNAV1
TF	CC523						RNAV1
TF	CC524						RNAV1
TF	CC309				600		RNAV1
RWY30	L Approach Tran	nsition (Fron	n DWS)		L	<u> </u>	L
IF	DWS				900	MAX205	RNAV1
TF	CC517						RNAV1
TF	CC518						RNAV1
TF	CC519						RNAV1
TF	CC520						RNAV1
TF	CC521						RNAV1
TF	CC522						RNAV1
TF	CC523						RNAV1
TF	CC524						RNAV1

TF	CC309				600		RNAV1
RWY30	L Missed Appro	ach	•				<u>.</u>
CA			296		350		RNAV1
DF	CC306			L		MAX205	RNAV1
TF	CC543				900		RNAV1
RWY30	L Missed Appro	ach Holding	(Outbound tir	ne:1min)			<b>1</b>
НМ	CC543	Y	116	R	900	MAX205	RNAV1
RWY30	R Approach Tra	nsition (Fron	n CC527)				1
IF	CC527				↑ 1800 or by ATC	MAX205	RNAV1
TF	CC528						RNAV1
TF	CC529				↑ 1800 or by ATC		RNAV1
TF	CC530						RNAV1
TF	CC531						RNAV1
TF	CC532						RNAV1
TF	CC533						RNAV1
TF	CC534						RNAV1
TF	CC535						RNAV1
TF	CC312				900		RNAV1
RWY30	R Approach Tra	nsition (Fron	n DWS)	l .			1
IF	DWS				900	MAX205	RNAV1
TF	CC517						RNAV1
TF	CC518						RNAV1
TF	CC519						RNAV1
TF	CC520						RNAV1
TF	CC532						RNAV1
TF	CC533						RNAV1
TF	CC534						RNAV1
TF	CC535						RNAV1
TF	CC312				900		RNAV1
RWY30	R Missed Appro	ach	l	l	1	1	l
CA			296		350		RNAV1

	DF	CC526			R	1800	MAX190		RNAV1
	TF	CC531				2100			RNAV1
I	RWY30R Missed Approach Holding (Outbound time:1min)								
	НМ	CC531	Y	116	L	2100	MAX205		RNAV1

# ZHCC AD 2.23 其它资料

#### **ZHCC AD 2.23 Other information**

无 Nil