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

ZYTL-大连/周水子 DALIAN/Zhoushuizi

ZYTL 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	N38° 58.0' E121° 32.4' RCL, 1610m FM THR RWY28
2	方向、距离 Direction and distance from city	298° GEO, 9.5km from Dalian Railway Station
3	标高 / 参考气温 Elevation/Reference temperature	32.6m/ 28.9° C (AUG)
4	机场标高位置 / 高程异常 AD ELEV PSN/ geoid undulation	-/ -
5	磁差 / 年变率 MAG VAR/Annual change	7° 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	Dalian International Airport Group CO.LTD Dalian Zhoushuizi Airport, No. 100 Yingke Street, Ganjingzi District Dalian 116033, Liaoning province, China TEL: 86-411-83886699 FAX: 86-411-86651188 AFS: ZYTLYDYX Website: www.dlairport.com
7	允许飞行种类 Types of traffic permitted(IFR/VFR)	IFR/VFR
8	机场性质 / 飞行区指标 Military or civil airport & Reference code	Civil/4E
9	备注 Remarks	Nil

ZYTL 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)	HS or O/R
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

ZYTL 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, conveyor belt truck, fork lift
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(20000/ 48000/ 65000 litres) and hydrant cart: 17 litres/ sec
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 types of aircraft on request
7	备注 Remarks	Nil

ZYTL AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	Adjacent to AD and in the city
2	餐馆 Restaurants	At AD and in the city
3	交通工具 Transportation	Passenger's coaches, buses, 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	In the city TEL: 86-411-3627070 or 3644088 FAX: 86-411-3645195
7	备注 Remarks	Nil

ZYTL AD 2.6 援救与消防服务 Rescue and fire fighting services

1	机场消防等级 AD category for fire fighting	CAT 8
2	援救设备 Rescue equipment	Fire fighting facilities: foam tender, fire-crash water tender, rapid intervention vehicle, disassembly rescue truck, illumination vehicle, dry-chemical vehicle, cutter.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	Uplift air cushion, mobile surface, etc.
4	备注 Remarks	Nil

ZYTL 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 ploughs
2	扫雪顺序 Clearance priorities	RWY, TWY, Apron
3	备注 Remarks	Nil

ZYTL 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:	Cement concrete
		Strength:	PCN 72/R/B/W/T (Stands Nr.134-144,138R,142R) PCN 69/R/B/W/T (Stands Nr.27, 28, 27L, 27R, 101-106, 127-133,206, 207, 211) PCN 68/R/B/W/T (Stands Nr.24-26, 201, 202) PCN 61/R/B/W/T (Stands Nr.19-23) PCN 58/R/B/W/T (Stands Nr.203-205, 208-210, 212-220, 212R, 214L) PCN 49/R/B/W/T (Stands Nr.11-18, 145-147)
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	Width:	30.5m: A1; 27m:E; 23m: others.
		Surface:	Cement concrete (main A) Asphalt (A(connect with THR RWY10), A1,A2, B, C, D, E)
		Strength:	PCN 61/R/B/W/T (main A) PCN 68/F/B/W/T (A(connect with THR RWY10), A1,A2, B, C, D) PCN 80/F/B/W/T (E)
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	

ZYTL 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 apron. Nose-in guidance at aircraft stands.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	RWY markings	RWY designations, THR, TDZ, center line, edge line, aiming point
		RWY lights	Center line, edge line, THR, RWY end
		TWY markings	Center line, edge line, TWY holding positions, No-entry
		TWY lights	Edge line, center line, RWY guard lights(TWYs A(connected THR RWY10), A1,A2,B)
3	停止排灯 Stop bars	Nil	

4	备注 Remarks	RWY guard lights (configuration A) on TWY A (connected THR RWY10), A1,A2, B and located 90m FM RCL.One Way Exit Twy Centerline Lights on TWY E

ZYTL AD 2.10 机场障碍物 Aerodrome obstacles

Obstacles within a circle with a radius of 15km centered on the 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**
1	TWR	020	2285	174	
2	MT	021	2245	142	
3	Chimney	045	642	74	
4	Power line	052	3883	124	
5	BLDG	053	2769	100	
6	Chimney	064	3251	120	
7	BLDG	069	2305	106	
8	BLDG	074	2165	92	
9	Power line	086	4950	143	
10	TWR	086	4602	133	
11	BLDG	088	5242	190	RWY28 VOR/DME, NDB final approach
12	Chimney	090	9229	125	
13	Torch	090	9194	154	
14	Light	097	1848	39	RWY10 departure
15	Tree	097	2060	48	RWY10 departure
16	Telegraph pole	097	2809	67	
17	Pole	097	2897	65	
18	Chimney	097	2704	68	
19	Crane	098	1937	45	RWY10 departure
20	BLDG	098	1970	43	RWY10 departure
21	Tree	098	2081	49	RWY10 departure
22	Steel frame	098	5011	37	
23	Crane	098	1982	46	
24	BLDG	098	3307	75	
25	Telegraph pole	098	2963	66	
26	TWR	098	1959	47	RWY10 departure
27	Pole	099	1991	44	RWY10 Take-off flight path
28	Steel frame	099	2010	42	
29	Tree	100	2059	48	RWY10 departure
30	Tree	100	2161	49	

Obstacles within a circle with a radius of 15km centered on the 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
31	Pole	100	2593	52	RWY10 Take-off flight path
32	Pole	100	3151	76	RWY10 Take-off flight path
33	Chimney	100	7537	86	RWY28 ILS/DME(GP INOP) final approach
34	Telegraph pole	102	2190	45	
35	Pole	102	2444	46	
36	Lightning rod	102	2771	63	RWY10 Take-off flight path
37	Power line	103	2161	42	
38	Pole	103	2555	51	RWY10 Take-off flight path
39	LMM 28	103	2669	57	
40	Lightning rod	103	2771	63	
41	Lightning rod	103	2807	63	RWY28 ILS/DME (missed approach gradient 5%)
42	Tree	104	2790	47	
43	Pole	105	1916	38	RWY10 Take-off flight path
44	Pole	105	2000	39	
45	Pole	106	1902	38	RWY10 Take-off flight path
46	Power line	107	1998	41	
47	Pole	108	2032	46	RWY10 departure
48	Light	109	1919	41	RWY10 departure
49	Tree	109	1964	44	RWY10 departure
50	Power line	109	4565	68	
51	GP 28	109	1197	43	
52	Chimney	111	1970	52	RWY10 departure
53	Chimney	112	2720	71	
54	Chimney	112	2798	67	
55	Chimney	115	2235	64	
56	Crane	118	6347	125	
57	Crane	119	6182	123	
58	Chimney	132	1898	138	
59	BLDG	133	9100	401	C/D Circling
60	BLDG	133	10287	189	
61	TWR	138	10197	376	RWY10 departure, ILS/DME, NDB missed approach turn RWY28 ILS/DME, VOR/DME, NDB, initial approach
62	TWR	144	9639	249	

Obstacles within a circle with a radius of 15km centered on the 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
63	MET station	151	702	73	
64	BLDG	157	11134	298	RWY28 RNAV star
65	Light	170	430	64	
66	Chimney	172	2689	110	
67	Chimney	173	1188	85	
68	Chimney	177	856	79	
69	Radar	189	3345	260	
70	MT	220	2691	169	
71	TWR	221	10578	398	Circling
72	MT	238	13207	402	RWY10 holding
73	BLDG	246	1769	82	
74	TWR	261	8169	385	RWY10 NDB missed approach, circling RWY28 ILS/DME missed approach turn
75	TWR	262	8188	378	RWY10 NDB initial approach, RWY28 departure turn
76	TWR	262	8754	338	
77	MT	262	9000	318	
78	MT	264	12521	388	RWY28 ILS/DME missed approach turn
79	MT	266	5997	227	
80	MT	266	7278	313	RWY28 ILS/DME(missed approach gradient 2.5%), RWY28 missed approach turn (missed approach gradient 5%)
81	Chimney	274	2211	63	
82	BLDG	276	2733	73	RWY28 Take-off flight path
83	GP 10	276	1181	49	
84	TWR	278	4796	102	RWY28 Take-off flight path
85	Lightning rod	279	3501	82	RWY28 Take-off flight path
86	Lightning rod	279	3587	86	RWY28 Take-off flight path
87	MT	279	11200	198	
88	Pole	281	2436	50	RWY28 Take-off flight path
89	BLDG	281	6027	143	RWY28 Take-off flight path
90	Pole	282	2404	47	RWY28 Take-off flight path
91	Pole	283	2364	46	RWY28 Take-off flight path

Obstacles within a circle with a radius of 15km centered on the 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
92	MT	283	6150	193	RWY28 Take-off flight path
93	Antenna	284	2247	48	
94	Pole	284	2374	47	RWY28 Take-off flight path
95	MT	284	6153	197	RWY28 Take-off flight path
96	MT	284	6168	206	RWY10 RNP z AR final approach RWY28 Take-off flight path
97	MT	284	6187	212	RWY28 Take-off flight path
98	Tree	285	2090	39	RWY28 Take-off flight path
99	MT	285	6208	222	RWY28 Take-off flight path
100	MT	285	6250	231	RWY28 Take-off flight path
101	MT	285	6274	236	RWY28 Take-off flight path
102	MT	286	6286	245	RWY28 Take-off flight path
103	MT	286	6303	251	RWY10 ILS/DME (GP INOP), take-off flight path RWY28 Departure
104	BLDG	287	2520	53	RWY28 Take-off flight path
105	Antenna	291	1536	50	RWY10 ILS/DME approach
106	Chimney	299	1312	72	
107	MT	305	4610	246	RWY28 ILS/DME final approach(missed approach gradient 2.5%)
108	MT	305	4658	243	
109	BLDG	306	1142	73	
110	TWR	307	6270	373	RWY10 ILS/DME initial approach, RWY28 VOR/DME, NDB missed approach,A/B circling
111	MT	310	1340	105	
112	TWR	318	1465	112	RWY10 RNP z AR missed approach
113	Chimney	341	708	77	
114	MT	354	1946	161	RWY10 RNP y AR missed approach
Remarks:					

Obstacles between two circles with the radius of 15km and 50km centered on the 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
1	MT	045	49600	476	RWY28 TAA
2	TWR	063	25800	699	RWY10/28 TAA, RWY28 arrival
3	MT	063	25920	663	Sector
4	TWR	088	25200	267	RWY28 RNAV initial approach
5	MT	092	24300	202	Determining factor
6	TWR	094	27000	252	RWY28 ILS, VOR/DME RNAV initial approach RWY28 RNAV arrival
7	MT	119	27300	159	RWY28 RNAV initial approach
8	TWR	123	16009	230	RWY28 ILS/DME,ILS,VOR/DME intermediate approach
9	Lightning rod	124	15975	240	RWY28 ILS, VOR/DME initial approach
10	Lightning rod	238	40400	484	RWY10/28 TAA
11	MT	239	40750	466	Sector
12	TWR	255	15780	464	
13	MT	264	16196	408	RWY10 ILS/DME initial approach, RWY28 holding, RWY28 departure turn(gradient 3.3%)
14	MT	274	22900	233	
15	MT	275	48000	230	
16	TWR	277	22300	235	RWY10 RNAV AR initial approach RWY10 RNAV, RNAV AR intermediate approach
17	MT	279	20538	246	RWY10 ILS/DME,RNP y AR intermediate approach
Remark:					

ZYTL 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	Dalian MET station of ATMB
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	Dalian MET station of ATMB 9 HR, 24HR
4	着陆预报类型、发布间隔 Type of landing forecast, Interval of issuance	Trend 30 min
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
9	接收气象信息的空中交通服务单位 ATS units provided with information	TWR, Dalian ACC
10	观测类型与频率 / 自动观测设备 Type & frequency of observation/ Automatic observation equipment	Half hourly plus special observation/Yes
11	气象报告类型及所包含的补充资料 Type of MET Report & supplementary information included	METAR, SPECI, TEND
12	观测系统及位置 Observation System & Site(s)	RVR EQPT: A: 100m S of RCL, 520m inward THR10; B: 107.5m S of RCL, 1590m inward THR28. C: 100m N of RCL, 660m inward THR28. SFC wind sensors: MID: 107.5m S of RCL, 1550m inward THR28; RWY28: 110m N of RCL, 653m inward THR. Ceilometer: RWY10: 107.5m S of RCL, 537m inward THR; RWY28: 100m N of RCL, 625m 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	Nil

ZYTL 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/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
10	096° GEO 103° MAG	3300 × 45	68/F/B/W/T Asphalt/ Concrete	Nil	THR 32.3m TDZ 31.6m
28	276° GEO 283° MAG	3300 × 45	68/F/B/W/T Asphalt/ Concrete	Nil	THR 27.2m TDZ 28.2m
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	50 × 60	Nil	3520 × 256	Nil	189 × 150
See AOC	50 × 60	Nil	3520 × 256	Nil	132 × 150
Remarks:					

ZYTL 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
10	3300	3300	3350	3100	THR of RWY 10 displaced 200m inwards
28	3300	3300	3350	3000	THR of RWY 28 displaced 300m inwards
28	3170	3170	3220	3000	FM A2
28	3070	3070	3120	3000	FM B
Remarks:					

ZYTL 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
10	CAT I* 840m VRB LIH	Green Yes	PAPI Left/3.3°	Nil	3100m** spacing 30m	3300m**** spacing 60m	Red	Nil
28	CAT I* 870m VRB LIH	Green Yes	PAPI Left/3°	Nil	3000m*** spacing 30m	3300m**** spacing 60m	Red	Nil

Remarks:
* SFL
** up to 2200m White VRB LIH, 2200-2800m Red/White VRB LIH, 2800-3100m Red VRB LIH
*** up to 2100m White VRB LIH, 2100-2700m Red/White VRB LIH, 2700-3000m Red VRB LIH
**** up to 2700m White VRB LIH, 2700-3300m Yellow VRB LIH

ZYTL 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	Available
4	备份电源 / 转换时间 Secondary power supply/switch-over time	Secondary power supply available/ 15 sec
5	备注 Remarks	Nil

ZYTL 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

ZYTL 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
Dalian Control Zone	N390400E1211400- N390200E1215000- N385100E1214900- N385300E1211200- N390400E1211400	Below 900m(AGL)	
Fuel Dumping Area	N3815E12200- N3840E12200- N3815E12330- N3840E12330- N3815E12200	Above 3000m	
Altimeter setting region and TL/TA	Same as Dalian Approach Control Zone	TL 3600 TA 3000 2700(QNH ⩽ 979hpa) 3300(QNH ⩾ 1031hpa)	

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

服务名称 Service Designation	呼号 Call sign	频率 Frequency (MHz)	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5
ATIS		126.65	H24	D-ATIS available
APP	Dalian Approach	123.85 (127.95) AP01	H24	Nil
APP	Dalian Approach	119.6 (127.95) AP02	0100-1200	Contact ZYTLAP01 when ZYTLAP02 U/S.
TWR	Dalian Tower	118.25 (118.85)	H24	Nil
GND	Dalian Ground	121.65	H24	
Delivery	Dalian Delivery	121.85	HO	DCL available
EMG		121.5	H24	

ZYTL 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
Fujiazhuang NDB	FC	213kHz	N38° 52.1′ E121° 37.7′		On bearing 163° U/S, on bearing 107° beyond 7NM U/S, on bearing 190° within 6NM U/S, on bearing 103° BTN 3-5NM U/S.
Dalian VOR/DME	DBL	115.4MHz CH 101X	N38° 57.7′ E121° 34.2′ 102.6° MAG/ 2735m FM ARP	59m	
LOM 10	ZF	391kHz	283° MAG/ 3656m FM displaced THR10		Outer marker unavailable.
LMM 10	Z	440kHz	283° MAG/ 1113m FM displaced THR10		
LOC 10 ILS CAT I	IZF	109.1MHz	089° MAG/ 787m FM RWY center		Beyond 20° leftside of front course U/S

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 10		331.4MHz	120m S of RCL,316m FM displaced THR10		Angle 3.3° RDH 18m
DME 10	IZF	CH 28X (109.1MHz)	120m S of RCL,316m FM displaced THR10	38m	Co-located with GP 10
NDB	KD	530kHz	103° MAG/ 4321m FM displaced THR28		U/S
LMM 28	K	257kHz	103° MAG/ 1359m FM displaced THR28		U/S
LOC 28 ILS CAT I	IKD	111.1MHz	283° MAG/ 550m FM displaced THR10		
GP 28		331.7MHz	120m N of RCL, 320m FM displaced THR28		Angle 3° RDH 15m
DME 28	IKD	CH 48X (111.1MHz)	320m FM displaced THR28 126m N of RCL	33m	Co-located with GP 28
Remarks:					

ZYTL AD 2.20 本场飞行规定

1. 机场使用规定

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。

2. 跑道和滑行道的使用

无

ZYTL AD 2.20 Local traffic regulations

1. Airport operations regulations

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

2. Use of runways and taxiways

Nil

3. 机坪和机位的使用

3.1. 未经机场塔台同意，严禁航空器利用自身动力倒滑；

3.2. 滑行速度不得超过30千米/小时；

3.3 发动机试车，需经塔台许可，并在指定的地点进行。严禁在廊桥附近试大车；

3. Use of aprons and parking stands

3.1Push-back of aircraft on its own power is strictly forbidden without Tower Control clearance;

3.2Taxi speed shall not exceed 30km/h;

3.3 Engine run-ups are subject to Tower Control clearance, and shall be carried out at a designated location. Fast engine run-ups near boarding bridges are strictly forbidden;

3.4 机位限制 /Limits for aircraft parking on the following stands

停机位 /Stands	可用机型 /ACFT Type	机身长度限制 / Fuselage limite	翼展限制 /Wing span limits	滑入、滑出方式 / Enter or Exit
Nr.103	B	⩽ 21m	⩽ 19.5m	Taxi in/Push back
Nr.127	B	⩽ 32m	<24m	Taxi in/Taxi back
Nr.128	C	⩽ 36m	⩽ 30m	Taxi in/Taxi back
Nr.101,102	C	⩽ 38m	⩽ 34.15m	Taxi in/Push back
Nr.218-220,145-147	C	⩽ 39.5m	<36m	Taxi in/Taxi back
Nr.134,135	C	⩽ 39.5m	<36m	Taxi in/Push back
Nr.104-106	C	<45m	⩽ 34.15m	Taxi in/Push back
Nr.129-133,201, 202,208-211	C	<45m	<36m	Taxi in/Taxi back
Nr.11-14,24,25, 27R,27L,28,136-144	C	<45m	<36m	Taxi in/Push back
Nr.203-206,212R, 213,214L,215-217	C	⩽ 46.5m	<36m	Taxi in/Taxi back
Nr.207	C	⩽ 46.5m	<36m	Taxi in/Push back
Nr.212,214	D	<55m	<48m	Taxi in/Taxi back
Nr.15-19,26	D	<55m	<48m	Taxi in/Push back
Nr.138R,142R	E	<71m	<65m	Taxi in/Taxi back
Nr.20-23,27	E	<75.4m	<65m	Taxi in/Push back

3.5 航空器不能同时使用的机位 /Pair of stands forbidden to be used simultaneously

使用机位 /Stand in use	不可用机位 /Stands forbidden to be use	使用机位 /Stand in use	不可用机位 /Stands forbidden to be use
Nr.27	Nr.27R, 27L, 201, 202	Nr.201 or 202	27
Nr.27R or 27L	Nr.27	Nr.212	Nr.212R, 213
Nr.138 or 139 or 140	Nr.138R	Nr.212R	Nr.212
Nr.138R	Nr.138, 139, 140	Nr.213	Nr.212, 214
Nr.142R	Nr.143, 144	Nr.214L	Nr.214
Nr.143 or 144	Nr.142R	Nr.214	Nr.213, 214L

4. 进、离场管制规定

无

4. Air traffic control regulations

Nil

5. 机场的 II/III 类运行

无

5. CAT II/III operations at AD

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

无

8. Warning

Nil

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

ZYTL AD 2.21 噪音限制规定及减噪程序

ZYTL AD 2.21 Noise restrictions and Noise abatement procedures

无

Nil

ZYTL AD 2.22 飞行程序

ZYTL AD 2.22 Flight procedures

1. 总则

1. General

除经塔台特殊许可外，在塔台管制区内的飞行，必须按照仪表飞行规则进行。

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

2. 起落航线

起落航线在跑道两侧均可，A类航空器高度600米(QNH)，B、 C、 D类航空器高度900米(QNH)。

2. Traffic circuits

Traffic circuits shall be made to both sides of RWY, 600m(QNH) for aircraft CAT A, and 900m(QNH) for aircraft CAT B, C and 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

大连进近管制区域内实施雷达管制。航空器最小水平间隔为6千米。

4. Radar procedures and/or ADS-B procedures

Radar control within Dalian APP has been implemented. The minimum horizontal radar separation is 6km.

5. 无线电通信失效程序

无

5. Radio communication failure procedures

Nil

6. 目视飞行程序

无

6. Procedures for VFR flights

Nil

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

Waypoint ID	COORDINATES	Waypoint ID	COORDINATES
TL102	N385835 E1211532	TL404	N390407 E1212222
TL103	N385849 E1210835	TL405	N390051 E1205234
TL104	N390504 E1210920	TL406	N390310 E1213454
TL105	N385415 E1210802	TL407	N390205 E1214846
TL106	N390434 E1211616	TL408	N385242 E1212954
TL107	N385344 E1211456	TL409	N385339 E1211709
		TL410	N384822 E1212026
		TL411	N384019 E1211926
TL110	N390340 E1212821	TL500	N385803.1 E1213119.0
TL111	N385240 E1212912	TL501	N385807.1 E1212923.6
TL112	N385748 E1213416	TL502	N385822.7 E1212140.5
TL113	N384900 E1221531	TL503	N385823.9 E1212104.7
TL201	N385700 E1214426	TL504	N385749.1 E1213801.5
TL202	N390222 E1214508	TLC04	N385457.3 E1213801.2
TL203	N390320 E1213234	CHI	N391600 E1223700
TL204	N390401 E1212331	FC	N385206 E1213742
TL205	N385756 E1213220		
TL206	N385253 E1212551	ANRAT	N3839.5 E11957.4
TL208	N384627 E1214536	BUBLO	N3838.9 E12035.2
TL209	N390212 E1214909	DOBGA	N3824.8 E12127.5
TL301	N385657 E1214503	EKULI	N3832.6 E12113.0
TL302	N385649 E1214638	INTIV	N3828.5 E12031.2
TL303	N385617 E1215335	KARPI	N3815.0 E12043.0
TL304	N385527 E1220402	LOTGO	N3832.0 E12009.5
TL305	N385002 E1220319	NIXEP	N3815.0 E12059.3
TL306	N390049 E1220446	ORAVA	N3842.6 E12012.4
TL307	N385050 E1215252	PATRI	N3833.5 E12130.7
TL308	N390137 E1215417	POVAG	N3816.7 E12215.1
TL309	N385123 E1214556	RUPID	N3824.5 E12224.7
TL310	N390212 E1214720	SANKO	N3815.0 E12227.2
TL311	N385221 E1213332	SARUD	N3849.9 E12009.8
TL312	N383558 E1213648	TANIB	N3822.9 E12105.2
TL401	N385844 E1212142	UDETI	N3841.5 E12209.6
TL402	N385921 E1211324	VENOS	N3854.2E12219.6
TL403	N390444 E1211404		

Coding table

PT [ARC CTR,Radius NM]	Waypoint	Over fly	Course (°)	Turn Direction	Alt(m)	SPD LMT (kt)	NAV PERF
RWY10 Departure SARUD-09D(by ATC)							
CF	TL201		103		↑ 800		RNAV1
TF	TL202					MAX230	RNAV1
TF	TL204						RNAV1
TF	TL104						RNAV1
TF	SARUD						RNAV1
RWY10 Departure ORAVA-09D							
CF	TL201		103		↑ 800		RNAV1
TF	TL202					MAX230	RNAV1
TF	TL203				↑ 2700		RNAV1
TF	TL206				↑ 3900		RNAV1
TF	EKULI				↑ 6600		RNAV1
TF	BUBLO						RNAV1
TF	ORAVA						RNAV1
RWY10 Departure CHI-07D							
CF	TL201		103		↑ 800		RNAV1
TF	TL202						RNAV1
TF	TL203				↑ 2700		RNAV1
TF	TL205					MAX220	RNAV1
TF	TL201						RNAV1
TF	TL304						RNAV1
TF	VENOS				↑ 4200		RNAV1
TF	CHI						RNAV1
RWY10 Departure CHI-08D							
CF	TL201		103		↑ 800		RNAV1
TF	TL304						RNAV1
TF	VENOS				↑ 4200		RNAV1
TF	CHI						RNAV1
RWY10 Departure CHI-09D(by ATC)							
CF	TL201		103		↑ 800		RNAV1
TF	TL209						RNAV1
TF	CHI						RNAV1
RWY10 Departure KARPI-08D(by ATC)							
CF	TL201		103		↑ 800		RNAV1
TF	TL202					MAX230	RNAV1
TF	TL203				↑ 2700		RNAV1
TF	TL204						RNAV1
TF	TL107				↑ 3900		RNAV1
TF	KARPI						RNAV1
RWY10 Departure KARPI-09D							
CF	TL201		103		↑ 800		RNAV1
TF	TL202					MAX230	RNAV1

TF	TL203				↑ 2700		RNAV1
TF	TL206				↑ 3900		RNAV1
TF	EKULI				↑ 6600		RNAV1
TF	KARPI						RNAV1
RWY10 Departure SANKO-08D							
CF	TL201		103		↑ 800		RNAV1
TF	TL208						RNAV1
TF	POVAG						RNAV1
TF	SANKO						RNAV1
RWY10 Departure SANKO-09D							
CF	TL201		103		↑ 800		RNAV1
TF	TL202					MAX230	RNAV1
TF	TL203				↑ 2700		RNAV1
TF	TL205						RNAV1
TF	TL208						RNAV1
TF	POVAG						RNAV1
TF	SANKO						RNAV1
RWY28 Departure SARUD-19D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL402				↑ 1200		RNAV1
TF	TL405				↑ 3600		RNAV1
TF	SARUD						RNAV1
RWY28 Departure ORAVA-18D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL410						RNAV1
TF	TL411						RNAV1
TF	EKULI						RNAV1
TF	BUBLO						RNAV1
TF	ORAVA						RNAV1
RWY28 Departure ORAVA-19D							
CF	TL401		283		↑ 700		RNAV1
TF	TL404					MAX230	RNAV1
TF	TL406				↑ 2700	MAX250	RNAV1
TF	TL112						RNAV1
TF	TL408				↑ 3900		RNAV1
TF	TL411						RNAV1
TF	EKULI				↑ 6600		RNAV1
TF	BUBLO						RNAV1
TF	ORAVA						RNAV1
RWY28 Departure CHI-18D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL404					MAX230	RNAV1
TF	TL406				↑ 2700		RNAV1
TF	TL407						RNAV1
TF	CHI						RNAV1
RWY28 Departure CHI-19D							
CF	TL401		283		↑ 700		RNAV1

TF	TL404					MAX230	RNAV1
TF	TL406				↑ 2700		RNAV1
TF	TL301						RNAV1
TF	TL304						RNAV1
TF	VENOS						RNAV1
TF	CHI						RNAV1
RWY28 Departure KARPI-17D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL402				↑ 1200		RNAV1
TF	TL403					MAX225	RNAV1
TF	TL404					MAX250	RNAV1
TF	TL401						RNAV1
TF	TL409				↑ 3900		RNAV1
TF	KARPI						RNAV1
RWY28 Departure KARPI-18D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL410						RNAV1
TF	TL411						RNAV1
TF	EKULI						RNAV1
TF	KARPI						RNAV1
RWY28 Departure KARPI-19D							
CF	TL401		283		↑ 700		RNAV1
TF	TL404					MAX230	RNAV1
TF	TL406				↑ 2700	MAX250	RNAV1
TF	TL112						RNAV1
TF	TL408				↑ 3900		RNAV1
TF	TL411						RNAV1
TF	EKULI				↑ 6600		RNAV1
TF	KARPI						RNAV1
RWY28 Departure SANKO-18D(by ATC)							
CF	TL401		283		↑ 700		RNAV1
TF	TL410						RNAV1
TF	POVAG						RNAV1
TF	SANKO						RNAV1
RWY28 Departure SANKO-19D							
CF	TL401		283		↑ 700		RNAV1
TF	TL404					MAX230	RNAV1
TF	TL406				↑ 2700		RNAV1
TF	TL112						RNAV1
TF	POVAG						RNAV1
TF	SANKO						RNAV1
RWY10 Arrival ANRAT-07A							
IF	ANRAT						RNAV1
TF	LOTGO						RNAV1
TF	INTIV						RNAV1
TF	TANIB				↑ 3600 or by ATC		RNAV1

TF	PATRI				↓ 3000		RNAV1
TF	TL111					MAX210	RNAV1
TF	TL107				↑ 1200	MAX210	RNAV1
RWY10 Arrival ANRAT-08A							
IF	ANRAT						RNAV1
TF	LOTGO						RNAV1
TF	INTIV						RNAV1
TF	TANIB				↑ 3600 or by ATC		RNAV1
TF	PATRI				↓ 3000		RNAV1
TF	TL111						RNAV1
TF	TL110					MAX210	RNAV1
TF	TL106				1200	MAX210	RNAV1
RWY10 Arrival CHI-07A							
IF	CHI						RNAV1
TF	VENOS						RNAV1
TF	TL113						RNAV1
TF	TL111					MAX210	RNAV1
TF	TL107				↑ 1200	MAX210	RNAV1
RWY10 Arrival CHI-08A							
IF	CHI						RNAV1
TF	VENOS						RNAV1
TF	TL113						RNAV1
TF	TL111						RNAV1
TF	TL110					MAX210	RNAV1
TF	TL106				1200	MAX210	RNAV1
RWY10 Arrival NIXEP-07A							
IF	NIXEP						RNAV1
TF	DOBGA						RNAV1
TF	PATRI				↓ 3000		RNAV1
TF	TL111					MAX210	RNAV1
TF	TL107				↑ 1200	MAX210	RNAV1
RWY10 Arrival NIXEP-08A							
IF	NIXEP						RNAV1
TF	DOBGA						RNAV1
TF	PATRI				↓ 3000		RNAV1
TF	TL111						RNAV1
TF	TL110					MAX210	RNAV1
TF	TL106				1200	MAX210	RNAV1
RWY10 Arrival SANKO-07A							
IF	SANKO						RNAV1
TF	RUPID						RNAV1
TF	UDETI				↓ 3000		RNAV1
TF	TL111					MAX210	RNAV1
TF	TL107				↑ 1200	MAX210	RNAV1
RWY10 Arrival SANKO-08A							
IF	SANKO						RNAV1

TF	RUPID						RNAV1
TF	UDETI				↓ 3000		RNAV1
TF	TL111						RNAV1
TF	TL110					MAX210	RNAV1
TF	TL106				1200	MAX210	RNAV1
RWY10 ILS Z Approach transition VIA TL106							
IF	TL106				1200	MAX210	RNAV1
TF	TL102				900		RNAV1
RWY10 ILS Z Approach transition VIA TL107							
TF	TL107				↑ 1200	MAX210	RNAV1
TF	TL105						RNAV1
TF	TL103				900		RNAV1
TF	TL102				900		RNAV1
RWY10 AR Z&Y Approach transition VIA TL106							
IF	TL106				1200	MAX210	RNAV1
TF	TL102				900		RNP1
RWY10 AR Z&Y Approach transition VIA TL107							
IF	TL107				↑ 1200	MAX210	RNAV1
TF	TL105						RNAV1
TF	TL103				900		RNAV1
TF	TL102				900		RNP1
RWY10 Approach AR Z(VPA 3.5° ,TCH 15m)							
IF	TL102				900		RNP1
TF	TL502				900	MAX160	RNP1
TF	TL501						RNP0.3
TF	TL500	Y					RNP0.3
TF	TL504						RNP1
RF[TLC04,2.9]	FC			R	900	MAX210	RNP1
TF	TL111				1500		RNP1
RWY10 Approach AR Y(VPA 3.3° ,TCH 15m)							
IF	TL102				900		RNP1
TF	TL503				900	MAX160	RNP1
TF	TL501						RNP0.3
TF	TL500	Y					RNP0.3
TF	TL504						RNP1
RF[TLC04,2.9]	FC			R	900	MAX210	RNP1
TF	TL111				1500		RNP1
RWY10 HOLDDING(outbound time:1min)							
HM	DOBGA	Y	023	R	By ATC	MAX250	RNAV1
HM	UDETI	Y	333	L	By ATC	MAX250	RNAV1
HM	TL111	Y	283	L	1500	MAX210	RNAV1
RWY28 Arrival ANRAT-18A							
IF	ANRAT						RNAV1
TF	LOTGO						RNAV1
TF	INTIV						RNAV1
TF	TANIB				↑ 3600 or by ATC		RNAV1

TF	PATRI				↓ 3000		RNAV1
TF	TL311						RNAV1
TF	TL309				↑ 900	MAX210	RNAV1
RWY28 Arrival ANRAT-19A							
IF	ANRAT						RNAV1
TF	LOTGO						RNAV1
TF	INTIV						RNAV1
TF	TANIB				↑ 3600 or by ATC		RNAV1
TF	PATRI				↓ 3000		RNAV1
TF	TL312				↓ 3000		RNAV1
TF	TL309				↑ 900	MAX210	RNAV1
RWY28 Arrival CHI-19A							
IF	CHI						RNAV1
TF	VENOS						RNAV1
TF	TL304				↑ 900	MAX210	RNAV1
RWY28 Arrival NIXEP-18A							
IF	NIXEP						RNAV1
TF	DOBGA						RNAV1
TF	PATRI				↓ 3000		RNAV1
TF	TL311						RNAV1
TF	TL309				↑ 900	MAX210	RNAV1
RWY28 Arrival NIXEP-19A							
IF	NIXEP						RNAV1
TF	DOBGA						RNAV1
TF	TL312				↓ 3000		RNAV1
TF	TL309				↑ 900	MAX210	RNAV1
RWY28 Arrival SANKO-19A							
IF	SANKO						RNAV1
TF	RUPID						RNAV1
TF	UDETI				↓ 3000		RNAV1
TF	TL305						RNAV1
TF	TL304				↑ 900	MAX210	RNAV1
RWY28 ILS Z Approach transition VIA TL304							
IF	TL304				↑ 900	MAX210	RNAV1
TF	TL303				900		RNAV1
TF	TL302				600		RNAV1
RWY28 ILS Z Approach transition VIA TL309							
IF	TL309				↑ 900	MAX210	RNAV1
TF	TL307						RNAV1
TF	TL305						RNAV1
TF	TL304				↑ 900		RNAV1
TF	TL303				900		RNAV1
TF	TL302				600		RNAV1
RWY28 HOLDING(outbound time:1min)							
HM	DOBGA	Y	023	R	By ATC	MAX250	RNAV1
HM	UDETI	Y	333	L	By ATC	MAX250	RNAV1

HM	TL311	Y	103	R	1500	MAX210	RNAV1
HM	TL304	Y	283	R	1200	MAX210	RNAV1

ZYTL AD 2.23 其它资料

1. 全年有鸟类活动，机场当局采取了驱赶措施，以减少鸟群活动。

ZYTL AD 2.23 Other information

1. Activities of birds flocks are found all the year round, Aerodrome Authority resorts to dispersal methods to reduce bird activities.