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

ZSPD/PVG-上海/浦东 SHANGHAI/Pudong

ZSPD 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	N31°08.7′ E121°47.6′ Center of RWY17L/35R
2	机场基准点与城市的位置关系 Direction and distance from city	108° GEO, 32.3km from city center
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	3.8 m/30.4℃(JUL)/1.4℃(JAN)
4	机场标高位置的大地水准面波幅 Geoid undulation at AD ELEV PSN	
5	磁差（测量年份）及年变率 VAR(Year)/Annual change	5°47′W(2017)/-42″
6	机场管理部门、地址、电话、传真、AFS 地址、电子邮箱、网址 AD administration/Address/Telephone/Telefax/ AFS/ E-mail/Website	Shanghai Airport (Group) CO. LTD. Nr. 900 Qi Hang street, Shanghai, China Post code:201207 TEL:86-21-68347494; [H24]021-68347571 FAX:86-21-68347153; [H24]021-68347537 AFS:ZSPDYDYX Website:www.shanghaiairport.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/RWY16L/34R, RWY16R/34L, RWY17R/35L: 4F; RWY17L/35R: 4E
9	备注 Remarks	Nil

ZSPD AD 2.3 工作时间 Operational hours

1	机场开放时间 AD Operational hours	H24
2	海关和移民 Customs and immigration	HS or O/R
3	卫生健康部门 Health and sanitation	HS or O/R
4	航空情报服务讲解室 AIS Briefing Office	H24
5	空中交通服务报告室 ATS Reporting Office	H24

6	气象服务讲解室 MET Briefing Office	H24
7	空中交通服务 Air Traffic Service	H24
8	加油服务 Fuelling	HS or O/R
9	地勤服务 Handling	HS or O/R
10	安保服务 Security	HS or O/R
11	除冰服务 De-icing	H24
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Lift(7t, 14t, 30t), platform trailer, container trailer, tow-tractor, cargo trailer, container baggage trailer, conveyor truck
2	燃油牌号 Fuel types	Jet Fuel No.3,Jet A-1
3	滑油牌号 Oil types	(various types of oil)
4	加油设施/能力 Fuelling facilities & Capacity	Tank refueller(65000L: 63L/s); hydrant dispenser: 63L/s; hydrant pipeline and pit: 1000L/s
5	除冰设施 De-icing facilities	De-icing apron(stands Nr. 510-512, 585, 586, 589, 590), 10 de-icers, de-icing fluid(I, II, IV)
6	过站航空器机库 Hangar space for visiting aircraft	AVBL
7	过站航空器的维修设施 Repair facilities for visiting aircraft	Airline repair: B737, B747, B767, B777, B787, A300, A320, A330, A340, A350, A380
8	备注 Remarks	Air preconditioning unit, oxygen filling vehicle, aircraft traction rod(for B737-A380), potable water vehicle, sewage disposal vehicle, garbage truck, ferry vehicle, the disabled lift car, no power source car, forklift, bridge equipment(400Hz), air-conditioning equipment

ZSPD AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	At AD and in the city
2	餐饮 Restaurants	At AD

3	交通工具 Transportation	Passenger's coaches,taxis, magnetic aero train
4	医疗设施 Medical facilities	First-aid, 6 ambulances and medical center at AD
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	At AD TEL: 86-21-68346452
7	备注 Remarks	Nil

ZSPD 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 10
2	援救设备 Rescue equipment	Fire fighting facilities: rapid intervention vehicle, primary foam tender, disassembly rescue truck, heavy-duty foam tender, medium-load foam tender, illumination truck, dry-chemical tender, lift rescue truck, small-scale foam tender, command car, rescue command car, logistics truck. Rescue equipment: uplift air cushion, tethered hoisting equipment, damaged aircraft trailer, forklift, mobile pavement, tethered hoisting equipment, lifting equipment, wheelbarrow, towing rack and accessories, rubber cushion block, assault boat, narrow body aircraft rescue trailer, executive airplane rescue trailer, jack.
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to A380
4	备注 Remarks	Nil

ZSPD AD 2.7 可用季节- 扫雪 Seasonal availability-clearing

1	可用季节及扫雪设备类型 Seasonal availability/Types of clearing equipment	All seasons Snow blowers, snow fluid truck
2	扫雪顺序 Clearance priorities	RWY→TWY→APN
3	备注 Remarks	Nil

ZSPD AD 2.8 停机坪、滑行道及校正位置数据 Aprons, taxiways and check locations data

1	停机坪道面和强度 Apron surface and strength	道面 Surface	CONC
		强度 Strength	PCR 1060/R/B/W/T : 50-65, 67, 69, 71, 73, 75, 77, 79-98, 801-816 PCR 990/R/A/W/T : 501-509

			PCR 990/R/B/W/T : 611-626 PCR 960/R/A/W/T : 301-308 PCR 940/R/A/W/T : 6-12, 14-24 PCR 930/R/A/W/T : 201-211 PCR 920/R/B/W/T : 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38 PCR 790/R/A/W/T : 1-5, 25-32 PCR 770/R/A/W/T : 101-190 PCR 750/R/A/W/T : 581-586, 589, 590, 551-572 PCR 740/R/A/W/T : 510-512 PCR 710/R/A/W/T : 401A/B, 402A/B, 403A/B, 404A/B, 405-407, 408A/B, 409A/B, 410A/B, 411-418, 451-453, 458, 459
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	69m : V8 56m : E1, E2, S1, V7 46m : B6 44m : Q1-Q6 43.5m : J1, J2 40m : B2 34.5m : P6 34m : B1, B7 33.5m : B4 33m : B5 31.5m : B8, P1 29.5m : B3 29m : A, A1-A6, B, C1, C2, C5, C6, D1, D2, D5, D6 28m : C3, C4, D3, D4 25m : C, D, E, E0, E3-E8, F, F1-F4, G, G1-G6, H, H1-H6, P2-P5, R1-R6, S2, T1-T6, W2, W3 23m : V1-V6, W1, W4-W7
		道面 Surface	ASPH : G(N of TWY G6 exit & S of TWY G1 exit), P1(BTN TWY D & RWY17L/35R), P2-P6(BTN TWY A&D), R1(BTN TWY G & RWY16R/34L), R2(BTN TWY G & RWY16R/34L), R3(E of TWY F), R4(E of TWY F), R5(BTN TWY G & RWY16R/34L), R6(BTN TWY G & RWY16R/34L), S2(S of TWY T5) CONC : A, A1-A6, B, B1-B8, C, C1-C6, D, D1-D6, E, E0-E8, F, F1-F4, G(BTN TWY G1&G6 exit), G1-G6, H, H1-H6, J1, J2, P1(W of TWY D, BTN TWY B & RWY17L/35R), P2(E of TWY A & W of TWY D), P3(E of TWY A), P4(E of TWY A & W of TWY D), P5(E of TWY A), P6(E of TWY A & W of TWY D), Q1-Q6, R1(E of TWY G & W of RWY16R/34L), R2(E of TWY G & W of RWY16R/34L), R3(W of TWY F), R4(W of TWY F), R5(E of TWY G & W of RWY16R/34L), R6(E of TWY G & W of RWY16R/34L), S1, S2(N of TWY T5), T1-T6, V1-V8, W1-W7
		强度	PCR 1780/F/C/X/T : P1(BTN TWY D & RWY17L/35R), P2-P6(BTN TWY

		Strength	A&D) PCR 1680/F/C/X/T : R1(BTN TWY G & RWY16R/34L), R2(BTN TWY G & RWY16R/34L), R3(E of TWY F), R4(E of TWY F), R5(BTN TWY G & RWY16R/34L), R6(BTN TWY G & RWY16R/34L) PCR 1620/F/C/X/T : G(N of TWY G6 exit & S of TWY G1 exit) PCR 1100/R/A/W/T : B7 PCR 1030/R/B/W/T : S1, S2, T5, T6 PCR 1000/R/A/W/T : A1-A4 PCR 980/R/A/W/T : B2-B6, F1-F4 PCR 960/R/A/W/T : B8 PCR 950/R/A/W/T : B1, C1, C2, C5, C6, D1, D2, D5, D6 PCR 940/R/A/W/T : A5, A6 PCR 910/R/A/W/T : A, B PCR 900/R/A/W/T : P1(BTN TWY B & RWY17L/35R) PCR 890/R/A/W/T : H1-H6, J1, J2 PCR 880/R/A/W/T : Q1-Q6 PCR 870/R/A/W/T : E0-E8, W1-W7 PCR 860/R/A/W/T : G2-G5 PCR 850/R/A/W/T : G1, G6 PCR 840/R/A/W/T : P3(E of TWY A), P4(E of TWY A & W of TWY D) PCR 820/R/A/W/T : H, P2(E of TWY A & W of TWY D), P5(E of TWY A) PCR 810/R/A/W/T : C3, C4, D3, D4, R2(E of TWY G & W of RWY16R/34L), R3(W of TWY F), R4(W of TWY F), R5(E of TWY G & W of RWY16R/34L) PCR 790/R/A/W/T : C, D, E, F, T3, T4, V3-V8 PCR 780/R/A/W/T : G(BTN TWY G1&G6 exit) PCR 770/R/A/W/T : P6(E of TWY A & W of TWY D) PCR 750/R/A/W/T : R1(E of TWY G & W of RWY16R/34L), R6(E of TWY G & W of RWY16R/34L) PCR 740/R/A/W/T : P1(W of TWY D), T1, T2, V1, V2
3	高度表校正点的位置及其标高 ACL location and elevation	Nil	
4	VOR 校正点 VOR checkpoints	Nil	
5	INS 校正点 INS checkpoints	Nil	
6	备注 Remarks	Nil	

ZSPD AD 2.9 地面活动引导和管制系统与标识
Surface movement guidance and control system and markings

1	航空器机位号码标记牌、滑行道引导线、航空器目视停靠引导系统的使用 Use of aircraft stand ID signs, TWY guide lines and visual docking / parking guidance system of aircraft stands	Taxiing guidance signs at all intersections of TWY and RWY. Taxiing guidance signs at all holding positions. Aircraft stand identification sign boards at stands Nr. 1-12, 14-32, 50-65, 67, 69, 71, 73, 75, 77, 79-98, 101-190, 201-211, 301-308, 310-341, 346, 347, 401A, 401B, 402A, 402B, 403A, 403B, 404A, 404B, 405, 408A, 408B, 409A, 409B, 410A, 410B, 501-509, 551-572, 581-586, 589, 590, 611-626, 801-816. Guide lines at all TWYs. Guide lines at all aprons. Visual docking guidance system at aircraft stands Nr. 1-12, 14-32, 50-65, 67, 69, 71, 73, 75, 77, 79-89, 91-94, 97, 98, 101-110, 112-123, 125-129, 131-156, 158, 159, 161-177, 179-190, Marshalling assistance for other aircraft stands.	
2	跑道和滑行道标志及灯光 RWY and TWY marking and LGT	跑道标志 RWY markings	THR, RWY designation, edge line, RWY center line, TDZ, aiming point
		跑道灯光 RWY lights	RTHL, WBAR, REDL, RCLL, RTZL(16R, 17L, 34L, 35R), RENL
		滑行道标志 TWY markings	Edge line, center line, TWY shoulder marking, No-entry, mandatory instruction marking, information signs, RWY holding position, intermediate holding position
		滑行道灯光 TWY lights	Edge line lights, center line lights, No-entry bar(A1-A6, C1-C6, D1-D6, F1-F4, G1-G6, H1-H6) , RETILs(A1-A6、C1-C6、D1-D6、F1-F4、G1-G6、H1-H6), intermediate holding position lights
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Stop bar lights: 16R/34L: Type B RWY holding position of TWY E(BTN TWY E0&R1) on the W of RWY. 17L/35R: Type B RWY holding position of TWYs P1, P2, P4, P6, B1, B7, B8 on the E of RWY, Type B RWY holding position of TWY P1-P6 on the W of RWY. Runway guard lights: Type A(vertical): both sides of type A RWY holding position and stop bars lights of fast exit TWY. Type B(embedded): the cross-taxiway at type A RWY holding position.	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	Temporary stand taxiline is bule; dedicated stand taxiline is yellow dotted line. Stop bars lights only works when RVR ＜550m or CIG ＜60m and is controlled by TWR. Runway guard lights works when RWY operating.	

ZSPD AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对机场 ARP) Obstacles within a circle with a radius of 15km (centered on the ARP)					
障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
1	2	3	4	5	6
BLDG 001	BLDG	009/2375	54.0	LGT	
Pole 002	Pole	010/2180	40.5		
BLDG 003	BLDG	012/2121	51.6	LGT	
Antenna 004	Antenna	062/2485	18.4		
Antenna 005	Antenna	063/2661	17.1	LGT	
Control TWR 006	Control TWR	099/931	106.3	LGT	CAT A/B/C Circling
Control TWR 007	Control TWR	099/3734	67.9	LGT	
Antenna 008	Antenna	107/681	48.9	LGT	
Antenna 009	Antenna	122/3584	17.5	LGT	
Antenna 010	Antenna	123/3440	18.5	LGT	
CRANE 011	CRANE	128/5882	54.4	LGT	
CRANE 012	CRANE	128/6114	54.4	LGT	
CRANE 013	CRANE	132/6136	50.0		RWY16L TKOF path
CRANE 014	CRANE	134/5953	50.0		RWY16L/R TKOF path

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
CRANE 015	CRANE	134/6087	50.0		RWY16L/R TKOF path
TOWER 016	TOWER	144/5211	36.8		RWY16R TKOF path
WATER_TOWER 017	WATER_TOWER	145/5514	33.1		RWY16R TKOF path
Pole 018	Pole	147/5857	40.1		RWY16R TKOF path
Pole 019	Pole	147/6109	28.9		
WINDMILL 020	WINDMILL	150/13625	116.8		
WINDMILL 021	WINDMILL	150/14044	117.3		
WINDMILL 022	WINDMILL	150/14483	117.3		
WINDMILL 023	WINDMILL	151/13231	117.0		
WINDMILL 024	WINDMILL	151/13815	116.5		
TOWER 025	TOWER	153/13209	33.4		
WINDMILL 026	WINDMILL	153/13399	117.3		
WINDMILL 027	WINDMILL	153/14009	117.5		RWY34L/R GP INOP Final approach; RWY35R VOR/DME Final approach
WINDMILL 028	WINDMILL	153/17501	122.8	LGT	RWY34L/R traditional Initial and Intermediate approach; RWY35L/R traditional Initial approach
Pole 029	Pole	154/12953	28.9		

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
TOWER 030	TOWER	156/10803	50.5	LGT	RWY34L/R GP INOP Final approach
TOWER 031	TOWER	158/8357	50.2	LGT	
TOWER 032	TOWER	158/8566	43.7	LGT	
TOWER 033	TOWER	165/13275	47.0	LGT	
Pole 034	Pole	167/13269	39.3		
TOWER 035	TOWER	167/14883	60.7	LGT	RWY35R GP INOP approach
TOWER 036	TOWER	170/10258	54.8		RWY35L/R GP INOP Final approach
TOWER 037	TOWER	171/11848	49.0		
Antenna 038	Antenna	172/1691	18.1	LGT	
TOWER 039	TOWER	172/4624	36.6		RWY17L/R TKOF path
TOWER 040	TOWER	172/5136	48.0	LGT	RWY17L/R TKOF path
TOWER 041	TOWER	175/13498	61.8	LGT	RWY35L GP INOP Final approach
Antenna 042	Antenna	179/1713	18.6	LGT	
Pole 043	Pole	179/11216	35.3		
TOWER 044	TOWER	182/5734	48.7	LGT	
TOWER 045	TOWER	185/7785	62.1		RWY35R VOR/DME Final approach

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
BLDG 046	BLDG	204/10161	149.9	LGT	CAT D Circling
TOWER 047	TOWER	208/10851	108.2	LGT	
Pole 048	Pole	220/7001	58.5		
STACK 049	STACK	230/5637	65.6		
TOWER 050	TOWER	241/4467	52.7	LGT	
TOWER 051	TOWER	242/4695	47.8	LGT	
Antenna 052	Antenna	279/4475	23.7	LGT	
TRANSMISSION _LINE 053	TRANSM ISSION_L INE	289/4814	47.9		
Antenna 054	Antenna	295/3883	46.5	LGT	
Antenna 055	Antenna	307/10918	98.8	LGT	
Antenna 056	Antenna	331/1154	18.6	LGT	
TOWER 057	TOWER	332/9212	43.7	LGT	
Antenna 058	Antenna	332/12732	59.0		
TOWER 059	TOWER	337/5628	29.7	LGT	
Antenna 060	Antenna	338/10042	32.8		

半径 15 千米内主要障碍物 (相对机场 ARP)
Obstacles within a circle with a radius of 15km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志，灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
TOWER 061	TOWER	339/11172	50.3	LGT	
BLDG 062	BLDG	341/8818	54.2		
TOWER 063	TOWER	342/7009	55.8	LGT	RWY17R GP INOP Final approach
Pole 064	Pole	343/12894	34.8		
Antenna 065	Antenna	344/1691	18.0		
TOWER 066	TOWER	345/4724	41.4	LGT	RWY35R TKOF path
TOWER 067	TOWER	346/7947	39.3		
STACK 068	STACK	347/13608	64.6	LGT	RWY17L/R GP INOP, RWY17L VOR/DME Final approach
TOWER 069	TOWER	348/5002	46.8	LGT	RWY35R TKOF path
TOWER 070	TOWER	349/5267	46.7	LGT	RWY35R TKOF path
TOWER 071	TOWER	350/4313	33.8	LGT	RWY35R TKOF path
Pole 072	Pole	354/7780	57.3		RWY17L GP INOP, VOR/DME Final approach
Antenna 073	Antenna	356/3766	47.9	LGT	

半径 15 千米-50 千米内主要障碍物 (相对机场 ARP)
Obstacles between two circles with the radius of 15km and 50km (centered on the ARP)

障碍物名称或编号 Obstacle ID/ Designation	障碍物类型 Obstacle type	障碍物位置 磁方位(°)/距离(m) Obstacle position MAG BRG(degree)/DIST(m)	标高或(高) Elevation /(Height) (m)	障碍物标志、灯光类型及颜色 Obstacle marking /Lighting Type & Colour	影响的飞行程序及起飞航径区/备注 Flight procedure/take-off path area affected & Remarks
STACK 074	STACK	154/16233	51		
TOWER 075	TOWER	155/16966	93		
STACK 076	STACK	259/32421	215	LGT	
Pole 077	Pole	272/31600	222	LGT	
Pole 078	Pole	290/28475	156	LGT	
BLDG 079	BLDG	292/34055	284	LGT	
BLDG 080	BLDG	293/17859	324	LGT	RWY16L/R, 17L/R traditional Initial approach
BLDG 081	BLDG	296/29419	494	LGT	
BLDG 082	BLDG	296/29564	635		Sector
Pole 083	Pole	296/29603	423	LGT	
Antenna 084	Antenna	297/30332	466	LGT	
Pole 085	Pole	303/27289	230	LGT	
STACK 086	STACK	327/30036	245	LGT	RWY16L/R, 17L/R Initial approach
BLDG 087	BLDG	357/32273	216	LGT	Sector; RWY16L/R, 17L/R Initial approach
备注：Other obstacles refer to AD OBST chart.					

ZSPD AD 2.11 提供的气象情报、气象观测和报告
Meteorological information provided & meteorological observations and reports

提供的气象情报 Meteorological information provided		
1	相关气象台的名称 Associated MET Office	MET Center of Shanghai Pudong AD MET Office
2	气象服务时间、服务时间以外的责任气象台 Hours of service/MET Office outside hours	H24
3	负责编发 TAF 的气象台、有效时段、发布间隔 Office responsible for TAF preparation/Periods of validity/Interval of issuance	MET Center of East ATMB MET Center;9h(important guarantee), 30h;3h(important guarantee), 6h
4	趋势预报及发布间隔 Trend forecast/Interval of issuance	trend 30min
5	所提供的讲解或咨询服务 Briefing/Consultation provided	Briefing provided: P, T
6	飞行文件及其使用语言 Flight documentation/Language(s) used	Chart, INTL MET Codes, Abbreviated Plain Language TXT;Ch,En
7	讲解或咨询服务时可利用的图表和其它信息 Charts and other information available for briefing or consultation	Synoptic charts, real-time data, FCST, satellite and radar material, data FCST product
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	FAX, MET SER Terminal
9	提供气象情报的空中交通服务单位 ATS units provided with information	Pudong Tower, Shanghai ACC, Shanghai Approach
10	其他信息 Additional information	Nil
气象观测和报告 Meteorological observations and reports		
1	机场观测类型与频率、自动观测设备 Type & frequency of observation /Automatic observation equipment	Half hourly plus special observation plus special observation/Yes
2	气象报告类型及所包含的补充资料 Type of MET Report/Supplementary information included	METAR, SPECI
3	观测系统及安装位置 Observation system/Site(s)	RVR EQPT A: 100m W of RCL16L/34R, 323m inward THR16L; B: 100m W of RCL16L/34R, 1660m inward THR34R; C: 100m W of RCL16L/34R, 323m inward THR34R; D: 110m E of RCL16R/34L, 340m inward THR16R;

		E: 120m E of RCL16R/34L, 1900m inward THR34L; F: 110m E of RCL16R/34L, 340m inward THR34L; G: 120m W of RCL17L/35R, 330m inward THR17L; H: 120m W of RCL17L/35R, 2000m inward THR17L; J: 120m W of RCL17L/35R, 330m inward THR35R; K: 100m E of RCL17R/35L, 340m inward THR17R; L: 100m E of RCL17R/35L, 1660m inward THR35L; M: 100m E of RCL17R/35L, 310m inward THR35L. SFC wind sensors 16R: 120m E of RCL, 336m inward THR; 34L: 120m E of RCL, 336m inward THR; 16L: 110m W of RCL, 343m inward THR; 34R: 110m W of RCL, 343m inward THR; 16L/34R center: 110m W or RCL, 1650m inward THR34R; 17L: 120m W of RCL, 330m inward THR; 35R: 120m W of RCL, 330m inward THR; 17L/35R center: 125m W of RCL, 2000m inward THR35R; 17R: 107m E of RCL, 325m inward THR; 35L: 107m E of RCL, 325m inward THR; 17R/35L center: 107m E of RCL, 1650m inward THR35L. Ceilometer 16R: 1040m N of RCL extension line; 34L: 1040m S of RCL extension line; 17L: N end MM; 35R: S end MM; 17R: 115m E of RCL, 335m inward THR; 35L: 115m E of RCL, 335m inward THR; 16L: 8m E of RCL, 905m outward THR; 34R: 8m E of RCL, 905m outward THR.
4	观测系统的工作时间 Hours of operation for meteorological observation system	H24
5	气候资料 Climatological information	Climatological tables AVBL
6	其他信息 Additional information	Nil

ZSPD AD 2.12 跑道物理特征 Runway physical characteristics

跑道号码 RWY Designator	真方位和磁方位 TRUE & MAG BRG	跑道长宽 Dimensions of RWY(m)	跑道强度、跑道和停止道道面 RWY strength/ Surface of RWY /SWY	跑道入口坐标、跑道末端坐标、跑道入口大地水准面波幅 THR coordinates & RWY end coordinates & THR geoid undulation	跑道入口标高和精密进近跑道接地带最高标高 THR elevation & highest elevation of TDZ of precision APP RWY	跑道和停止道坡度 Slope of RWY/SWY
1	2	3	4	5	6	7
16L	162.01° GEO 168° MAG	3800×60	PCR 980/R/B/W/T CONC/-	Nil	THR 3.6m	0.01%(1900m)/-0.01%(1900m)
34R	342.02° GEO 348° MAG	3800×60	PCR 980/R/B/W/T CONC/-	Nil	THR 3.6m	0.01%(1900m)/-0.01%(1900m)
16R	162.01° GEO 168° MAG	3800×60	PCR 960/R/B/W/T CONC/-	Nil	THR 3.4m	0.02%(1900m)/-0.02%(1900m)
34L	342.02° GEO 348° MAG	3800×60	PCR 960/R/B/W/T CONC/-	Nil	THR 3.4m	0.02%(1900m)/-0.02%(1900m)
17L	162° GEO 168° MAG	4000×60	PCR 890/R/A/W/T CONC/-	Nil	THR 3.0m	0.00%
35R	342° GEO 348° MAG	4000×60	PCR 890/R/A/W/T CONC/-	Nil	THR 3.1m	0.00%
17R	161.99° GEO 168° MAG	3400×60	PCR 930/R/A/W/T CONC/-	Nil	THR 3.6m	0%
35L	342.1° GEO 348° MAG	3400×60	PCR 930/R/A/W/T CONC/-	Nil	THR 3.6m	0%

跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区长宽 RESA dimensions (m)	拦阻系统的位置及描述 Location& Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
16L	Nil	Nil	3920×280	240×150	Nil	Nil
34R	Nil	Nil	3920×280	240×150	Nil	Nil
16R	Nil	Nil	3920×280	235×150	Nil	Nil
34L	Nil	Nil	3920×280	235×150	Nil	Nil
17L	Nil	Nil	4120×280	235×150	Nil	Nil
35R	Nil	Nil	4120×280	235×150	Nil	Nil

跑道号码 RWY Designator	停止道长宽 SWY dimensions (m)	净空道长宽 CWY dimensions (m)	升降带长宽 Strip dimensions (m)	跑道端安全区长宽 RESA dimensions (m)	拦阻系统的位置及描述 Location& Description of arresting system	无障碍物区 OFZ
1	8	9	10	11	12	13
17R	Nil	Nil	3520×280	230×150	Nil	Nil
35L	Nil	Nil	3520×280	230×150	Nil	Nil
Remarks: 1. RWYs grooved at full LEN, WID 60m; 2. DIST BTN RCL16R/34L and RCL17L/35R is 2260m; THR16R is 1000m S of THR17L; THR34L is 800m S of THR35R; DIST BTN RCL17R/35L and RCL17L/35R is 460m; THR17R is 600m S of THR17L; DIST BTN RCL16L/34R and RCL16R/34L is 440m.						

ZSPD AD 2.13 公布距离 Declared distances

跑道号码 RWY Designator	可用起飞滑跑距离 TORA(m)	可用起飞距离 TODA(m)	可用加速停止距离 ASDA(m)	可用着陆距离 LDA(m)	备注 Remarks
1	2	3	4	5	6
16L	3800	3800	3800	3800	Nil
16L	3700	3700	3700	3800	FM J2
16L	3263	3263	3263	3800	FM R5
34R	3800	3800	3800	3800	Nil
34R	3700	3700	3700	3800	FM J1
34R	3176	3176	3176	3800	FM R2
16R	3800	3800	3800	3800	Nil
16R	3700	3700	3700	3800	FM E5
16R	3320	3320	3320	3800	FM R5
34L	3800	3800	3800	3800	Nil
34L	3700	3700	3700	3800	FM E0
34L	3230	3230	3230	3800	FM R2
17L	4000	4000	4000	4000	Nil
17L	3780	3780	3780	4000	FM B7
17L	3386	3386	3386	4000	FM P6
35R	4000	4000	4000	4000	Nil
35R	3780	3780	3780	4000	FM B1
35R	3200	3200	3200	4000	FM P2
17R	3400	3400	3400	3400	Nil
17R	3200	3200	3200	3400	FM Q6
35L	3400	3400	3400	3400	Nil
35L	3200	3200	3200	3400	FM Q1

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

跑道号码 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类型、位置、仰角、跑道入口最低眼高 Type of VASIS/Position /Angle/MEHT	接地带灯长度 TDZ LGT LEN	跑道中线灯长度、间隔、颜色、强度 RWY center line LGT LEN/Spacing /Colour/INTST	跑道边灯长度、间隔、颜色、强度 RWY edge LGT LEN/Spacing /Colour/INTST	跑道末端灯颜色 RWY end LGT colour	停止道灯长度、颜色 SWY LGT LEN /Colour
1	2	3	4	5	6	7	8	9
16L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 454m inward THR16L 3° 20.9m	Nil	3800 m spacing 15m 0-2900m, WHITE 2900-3500m, RED/WHITE 3500-3800m, RED VRB LIH	3800 m spacing 60m 0-3200m, WHITE 3200-3800m, YELLOW VRB LIH	RED	Nil
34R	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 455m inward THR34R 3° 21.5m	Nil	3800 m spacing 15m 0-2900m, WHITE 2900-3500m, RED/WHITE 3500-3800m, RED VRB LIH	3800 m spacing 60m 0-3200m, WHITE 3200-3800m, YELLOW VRB LIH	RED	Nil
16R	PALS CAT II/III SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 452m inward THR16R 3° 21.9m	900 m	3800 m spacing 15m 0-2900m, WHITE 2900-3500m, RED/WHITE 3500-3800m, RED VRB LIH	3800 m spacing 60m 0-3200m, WHITE 3200-3800m, YELLOW VRB LIH	RED	Nil
34L	PALS CAT II/III SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 452m inward THR34L 3° 22.4m	900 m	3800 m spacing 15m 0-2900m, WHITE 2900-3500m, RED/WHITE 3500-3800m, RED VRB LIH	3800 m spacing 60m 0-3200m, WHITE 3200-3800m, YELLOW VRB LIH	RED	Nil

跑道号码 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类型、位置、仰角、跑道入口最低眼高 Type of VASIS/Position /Angle/MEHT	接地带灯长度 TDZ LGT LEN	跑道中线灯长度、间隔、颜色、强度 RWY center line LGT LEN/Spacing /Colour/INTST	跑道边灯长度、间隔、颜色、强度 RWY edge LGT LEN/Spacing /Colour/INTST	跑道末端灯颜色 RWY end LGT colour	停止道灯长度、颜色 SWY LGT LEN /Colour
17L	PALS CAT II/III SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 464m inward THR17L 3° 21.7m	900 m	4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH	4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH	RED	Nil
35R	PALS CAT II/III SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 464m inward THR35R 3° 22.5m	900 m	4000 m spacing 15m 0-3100m, WHITE 3100-3700m, RED/WHITE 3700-4000m, RED VRB LIH	4000 m spacing 60m 0-3400m, WHITE 3400-4000m, YELLOW VRB LIH	RED	Nil
17R	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 452m inward THR17R 3° 21.4m	Nil	3400 m spacing 30m 0-2500m, WHITE 2500-3100m, RED/WHITE 3100-3400m, RED VRB LIH	3400 m spacing 60m 0-2800m, WHITE 2800-3400m, YELLOW VRB LIH	RED	Nil
35L	PALS CAT I SFL 900 m VRB LIH	GREEN Yes	PAPI LEFT 452m inward THR35L 3° 21.0m	Nil	3400 m spacing 30m 0-2500m, WHITE 2500-3100m, RED/WHITE 3100-3400m, RED VRB LIH	3400 m spacing 60m 0-2800m, WHITE 2800-3400m, YELLOW VRB LIH	RED	Nil
Remarks:								

ZSPD AD 2.15 其它灯光,备份电源 Other lighting, secondary power supply

1	机场灯标或识别灯标位置、特性和工作时间 ABN/IBN location, characteristics and hours of operation	Nil
2	着陆方向标和风向标位置和灯光 LDI/ WDI location and LGT	WDI: 16L: 100m E of RCL, 405m inward THR, LGT; 34R: 100m W of RCL, 405m inward THR, LGT; 16R: 100m W of RCL, 350m inward THR, LGT; 34L: 100m W of RCL, 350m inward THR, LGT; 17L: 115m E of RCL, 350m inward THR, LGT; 35R: 115m E of RCL, 350m inward THR, LGT; 17R: 120m E of RCL, 350m inward THR, LGT; 35L: 120m W of RCL, 350m inward THR, LGT.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: green center line lights, blue edge line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	Standby PWR supply AVBL; 1s for RWY LGT, APCH LGT and stop bars LGT of RWY17L/35R and 16R/34L; 15s for other LGTs of RWY17L/35R and 16R/34L; 15s for all LGTs of RWY17R/35L and 16L/34R.
5	备注 Remarks	Nil

ZSPD AD 2.16 直升机着陆区域 Helicopter landing area

1	TLOF 坐标或 FATO 入口坐标及大地水准面波幅 Coordinates TLOF or THR of FATO, Geoid undulation	Nil
2	TLOF 和（或）FATO 标高 TLOF and/or FATO elevation	Nil
3	TLOF 和 FATO 区域范围、道面、强度和标志 TLOF and FATO area dimensions,surface, strength, marking	Nil
4	FATO 的真方位和磁方位 True and MAG BRG of FATO	Nil
5	公布距离 Declared distance available	Nil
6	进近灯光和 FATO 灯光 APP and FATO lighting	Nil
7	备注 Remarks	Nil

ZSPD AD 2.17 空中交通服务空域 ATS airspace

空域名称和水平范围 Designation and lateral limits		垂直范围 Vertical limits	空域分类 Airspace class	空中交通服务单位呼号和使用语言 ATS unit callsign Language	工作时间 Hours of applicability	备注 Remarks
1	2	3	4	5	6	7
Shanghai/Pudong tower control area	10km range beside landing path after RWY aligned					
Fuel Dumping Area	N3113E12300-N3130E12400-N3100E12400-N3100E12300-N3113E12300	3000m and ABV				See Fuel Dumping Area Chart
Restricted Area	N311449E1212726-N311214E1212547-N311201E1212554-N311223E1212730-N311224E1213008-N311519E1213234-N311557E1213156-N311449E1212726	SFC-QNH1500m(exclusive)				
Altimeter setting region and TL/TA	SASAN-PIKAS-'NTG' VOR-N315826E1212554-UDOXI-IBEGI-N314611E1224630-EMSAN-DUMET-N311241E1224630 -BONGI-PONAB-N301500E1221200-'AND' VOR-'NXD' VOR-SASAN	TL 3600m TA 3000m 3300m(QNH≥1031hPa) 2700m(QNH≤979hPa)				Aircraft taking-off or landing in ZSSS/ZSPD shall follow the rules: 1. above 900m: use ZSPD QNH; 2. at 900m or below: use QNH of the taking-off or landing aerodrome. 3. above TA: do as usual.

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

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星话音通信号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
ATIS		127.85 (English)			H24	D-ATIS available
		128.65 (Chinese)			H24	D-ATIS available
APP	Shanghai Approach	APP01:120.3 (119.75)			by ATC	
		APP02:125.4 (124.05)			H24	
		APP03:125.85 (119.2)			by ATC	
		APP04:123.8 (119.2)			by ATC	
		APP05:126.65 (128.05)			H24	
		APP06:126.3 (120.65)			by ATC	
		APP07:121.1 (119.75)			by ATC	
		APP08:127.75 (124.05)			by ATC	
		APP09:121.375 (128.05)			by ATC	
		APP10:125.625 (120.65)			by ATC	
		APP11:119.075 (128.05)			by ATC	
		APP12:119.975 (120.65)			by ATC	
TWR	Pudong Tower	TWR01:118.8 (118.325)			H24	For RWY 17L/35R,17R/35L
		TWR02:118.4 (118.725)			H24	For RWY 16L/34R,16R/34L
		TWR03:124.35 (118.325)			0030-1300(UTC)	For RWY17L/35R

服务名称 Service designation	呼号 Callsign	频率 Frequency (MHz)	卫星话音通信号码 SATVOICE number	登录地址 Logon address	工作时间 Hours of operation	备注 Remarks
1	2	3	4	5	6	7
		TWR04:118.575 (118.725)			0030-1300(UTC)	For RWY16R/34L
GND	Pudong Ground	GND01:121.7			H24	
		GND02:121.8			H24	
		GND03:121.875			0030-1300(UTC)	CTC GND01 when U/S.
		GND04:121.625			0030-1300(UTC)	CTC GND02 when U/S.
	Pudong Delivery	121.95 (121.625)			H24	DCL AVBL, no readback required when the delivery CLR has been RECd THRU DCL.
APN	Pudong Apron	APN01:121.65 (122.125)			H24	
		APN02:121.975 (122.125)			H24	
		APN03:122.7 (122.125)			H24	
		APN04:122.6 (122.125)			H24	
EMG		121.5			H24	

ZSPD AD 2.19 无线电导航和着陆设施 Radio navigation and landing aids

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
1	2	3	4	5	6	7
Andong VOR/DME	AND	114.8 MHz CH 95X	H24	N30°15.4′ E121°13.3′	32 m	

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
Hengsha VOR/DME	HSH	114.4 MHz CH 91X	H24	N31°22.1′ E121°50.8′ 017°MAG/25420m FM ARP	24 m	
Pudong VOR/DME	PUD	116.9 MHz CH 116X	H24	N31°10.3′ E121°47.0′ 348°MAG/1090m FM THR17L	15 m	
Shuyuan VOR/DME	XSY	112.7 MHz CH 74X	H24	N30°55.9′ E121°52.4′ 168°MAG/22636m FM THR35R	27 m	
Liuzao VOR/DME	PDL	109.4 MHz CH 31X	H24	N31°07.8′ E121°40.3′	4 m	
LOC 16L ILS CAT I	IHL	111.5 MHz		168°MAG/315m FM end RWY16L		
GP 16L		332.9 MHz		120m W of RCL,313m inward THR16L		Angle 3° , RDH 15 m
DME 16L	IHL	CH 52X (111.5 MHz)			6m	Co-located with GP 16L
LOC 34R ILS CAT I	IPR	108.9 MHz		348°MAG/315m FM end RWY34R		
GP 34R		329.3 MHz		120m W of RCL,313m inward THR34R		Angle 3° , RDH 15 m
DME 34R	IPR	CH 26X (108.9 MHz)			7m	Co-located with GP 34R
MM 16R		75 MHz		348°MAG/1050m FM THR16R		
IM 16R		75 MHz		348°MAG/350m FM THR16R		
LOC 16R ILS CAT I	IZZ	108.7 MHz		168°MAG/288m FM end RWY16R		

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
GP 16R		330.5 MHz		120m E of RCL,312m inward THR16R		Angle 3° , RDH 15 m
DME 16R	IZZ	CH 24X (108.7 MHz)			4m	Co-located with GP 16R
MM 34L		75 MHz		168°MAG/1050m FM THR34L		
IM 34L		75 MHz		168°MAG/350m FM THR34L		
LOC 34L ILS CAT III	IDD	108.3 MHz		348°MAG/288m FM end RWY34L		In operation CAT II/III
GP 34L		334.1 MHz		120m E of RCL,310m inward THR34L		Angle 3° , RDH 15 m In operation CAT II/III
DME 34L	IDD	CH 20X (108.3 MHz)			4m	Co-located with GP 34L
MM 17L		75 MHz		348°MAG/1070m FM THR17L		
IM 17L		75 MHz		348°MAG/313m FM THR17L		
LOC 17L ILS CAT II	IPD	110.7 MHz		168°MAG/295m FM end RWY17L		In operation CAT II
GP 17L		330.2 MHz		120m W of RCL,307m inward THR17L		Angle 3° , RDH 15 m In operation CAT II
DME 17L	IPD	CH 44X (110.7 MHz)			8m	Co-located with GP 17L
MM 35R		75 MHz		168°MAG/1030m FM THR35R		
IM 35R		75 MHz		168°MAG/313m FM THR35R		
LOC 35R ILS CAT II	INN	111.9 MHz		348°MAG/295m FM end RWY35R		In operation CAT II
GP 35R		331.1 MHz		130m W of RCL,314m inward THR35R		Angle 3° , RDH 15 m In operation CAT II

设施名称及类型、磁差、支持运行类别、VOR/ILS 磁偏角 Name and type of aid, VAR,Type of supported OPS, Declination of VOR/ILS	识别 ID	频率、波道 Frequency/ Channel number	工作时间 Hours of operation	发射天线坐标及相对位置 Coordinates of transmitting antenna/ Position	DME 发射天线标高 Elevation of DME transmitting antenna	备注 Remarks
DME 35R	INN	CH 56X (111.9 MHz)			8m	Co-located with GP 35R
LOC 17R ILS CAT I	IKM	111.1 MHz		168°MAG/285m FM end RWY17R		Beyond 32° rightside of front CRS U/S.
GP 17R		331.7 MHz		120m E of RCL,310m inward THR17R		Angle 3° , RDH 15 m
DME 17R	IKM	CH 48X (111.1 MHz)			11m	Co-located with GP 17R
LOC 35L ILS CAT I	IBD	108.1 MHz		348°MAG/285m FM end RWY35L		
GP 35L		334.7 MHz		120m E of RCL,310m inward THR35L		Angle 3° , RDH 15 m
DME 35L	IBD	CH 18X (108.1 MHz)			11m	Co-located with GP 35L

ZSPD AD 2.20 本场规定

1. 机场使用规定

1.1 禁止未安装二次雷达应答机的航空器起降；

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；

1.3 可使用最大机型：A380 及同类机型。

2. 跑道和滑行道的使用

2.1 可以通过地面管制申请引导车和拖车服务；

ZSPD AD 2.20 Local aerodrome regulations

1.Airport operations regulations

1.1 TKOF/LDG of aircraft WO SSR transponder are forbidden;

1.2 Each and EV technical test FLT shall be filed in advance and shall be made only AFT CLR has been obtained FM ATC;

1.3 MAX aircraft to be AVBL: A380 and equivalent.

2. Use of runways and taxiways

2.1 Follow-me vehicle SER and towing SER are AVBL via GND CTL;

2.1.1 专机滑行路线以管制员指令为准；

2.1.1 TAX RTEs of special FLT will be instructed by ATC;

2.1.2 为减少波道占用时间，航空器起飞离地后自动与塔台管制席位脱波（不需要通话脱波），脱波后，航空器应该联系塔台管制指定的频率。
离场航空器应在预计开车前 10min 内联系放行管制，取得放行许可；

2.1.2 In ORD to avoid FREQ congestion, pilot shall LVE TWR FREQ WO radiotelephony instruction FM ATC as soon as airborne and CTC the FREQ assigned by TWR CTL IMT.
DEPing aircraft shall CTC Delivery CTL for delivery CLR WI 10min prior to the start-up;

2.1.3 一组近距跑道的仪表着陆系统同时开放，为防止航空器落错跑道，航空器驾驶员应通过本场自动情报通播系统掌握落地所使用的跑道，在进近过程中，仔细检查管制指令中的落地跑道号，建议将顺序闪光灯作为重要的目视参考。

2.1.3 A set of ILS for CLSD RWYs are SIMUL OPN,in ORD to prevent aircraft LDG on the wrong RWY,pilot shall master the used LDG RWY by ATIS. DRG APCH, pilot shall carefully CK the LDG RWY NR by ATC ORD. It is suggested that use SFL as an important visual references.

2.1.4 平行滑行道使用原则

2.1.4 GEN rules for the use of PARL TWYs:

使用跑道/RWY in use	停靠候机楼/DCKG TML	运行方向/OPR direction	主用滑行道/Mainly via TWY
All RWYs	Nr.1	To S	A
		To N	B
All RWYs	Nr.2		F
DEP FM 17L/35R			A
DEP FM 34L			E
DEP FM 16R			F

2.2 跑道运行规则

2.2 GEN rules for using RWYs

2.2.1 跑道 16L/34R 与 17L/35R 或跑道 16L/34R

2.2.1 RWY 16L/34R & 17L/35R or RWY 16L/34R &

与 17R/35L 或跑道 16R/34L 与 17L/35R 或跑道 16R/34L 与 17R/35L 可实施相关或独立平行进近以及独立平行离场；

17R/35L or RWY 16R/34L & 17L/35R or RWY 16R/34L & 17R/35L can be used for independent or dependent PARL APCHes and independent PARL DEPs;

2.2.2 跑道 17L/35R 主要用于离港，跑道 17R/35L 主要用于进港；

2.2.2 RWY 17L/35R are mainly used for DEP; RWY 17R/35L are mainly used for ARR;

2.2.3 跑道 16R/34L 主要用于离港，跑道 16L/34R 主要用于进港；

2.2.3 RWY 16R/34L are mainly used for DEP; RWY 16L/34R are mainly used for ARR;

2.2.4 当停靠在 3 号货机坪停机位 310-341，346，347 的重型航空器需使用跑道 17R/35L 起飞时，机组应在申请放行许可时向 ATC 申请。

2.2.4 If the HVY-aircraft PRKG at cargo APN Nr.3(stands Nr. 310-341, 346, 347) intends to DEP FM RWY17R/35L, an application shall be made and the permission shall be obtained FM Delivery CTL.

2.2.5 着陆航空器脱离跑道前须在塔台频率保持长守。

2.2.5 FLT crew shall MNT TWR FREQ TIL vacating RWY.

通常情况下，落地航空器接地后占用跑道的时间应控制在 50s 以内，使用第一或第二快速脱离道脱离跑道。如不能执行上述要求时，需要使用最后一条快速脱离道及远道口脱离跑道时，航空器驾驶员应在与塔台管制员建立首次联系时进行通报说明，管制员将根据空中和地面交通情况视情指挥航空器继续进近、落地、中止进近或复飞(湿跑道或污染跑道除外)；

NMLly, all LDG aircraft shall fully vacate RWY via the FST or second rapid exit TWY WI 50s AFT touchdown. If can not fulfill the ABV RQMNTS and need to vacate RWY via further TWY or the last rapid exit TWY, the pilot shall inform TWR on the FST CTC. TWR will CTL aircraft to CONT APCHing, LDG, stopping APCH or missed APCH according to air and GND TFC CONDs(EXC for wet or contaminated RWY);

2.2.6 起飞航空器从等待位置到对正跑道的时间应控制在 60s 以内，如不能满足要求应在进跑道前报告塔台管制员(湿跑道或污染跑道除外)；

2.2.6 DEP aircraft shall finish RWY alignment WI 60s FM HLDG PSN. If FLT crew considers that they can not fulfill the process WI the required time, pilot shall inform TWR BFR entering the RWY(EXC for wet or contaminated RWY);

2.2.7 更换跑道运行方向过程中，当跑道顺风分量超

2.2.7 DRG changing the direction of RWY in use, if

过 3m/s 但不大于 5m/s 时，管制员可以短时指挥航空器顺风起飞或着陆。当航空器驾驶员根据机型性能或者运行手册不能执行顺风跑道起飞或者着陆时，应明确告知管制员。

downwind speed is more than 3m/s and not exceeding 5m/s, ATC may instruct aircraft downwind TKOF or downwind LDG for short time. Pilot shall inform ATC if decide not to TKOF or LDG on downwind RWY allocated according to aircraft PER or operation handbook.

2.2.8 着陆航空器落地许可的最晚发布时机可以在着陆航空器飞越跑道入口前。

2.2.8 The latest time to issue LDG CLR BFR aircrafts FLY over THR is AVBL.

2.2.9 为调整离港航班放飞次序，管制员可以指挥航空器使用 B1、B7、E0、E5、Q1、Q6、J1、J2 联络道进入相对应跑道起飞，若航空器驾驶员不能接受，须在进入上述联络道前主动报告管制员。

2.2.9 ATC may instruct aircraft to enter RWY via TWYL B1, B7, E0, E5, Q1, Q6, J1, J2 for TKOF. If not AVBL, pilots shall inform ATC BFR entering theTWYL.

2.3 穿越跑道规定

2.3 RWY XNG rules:

穿越跑道时使用的滑行道 TWYs used for XNG	FM stands Nr. 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38 to RWY16R/34L for DEP	When northward operation, mainly use TWY P2 for XNG RWY17R/35L, then join TWY D and hold out of TWY P1, and then use TWY P1 for XNG RWY17L/35R then join TWY T2.
		When southward operation, mainly use TWY P4 for XNG RWY17R/35L, then join TWY D and hold out of TWY P6, and then use TWY P6 for XNG RWY17L/35R then join TWY B.
	FM stands Nr. 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38 to	When northward operation, mainly use TWY P2 for XNG

<table>
<tr><td rowspan="5"></td><td>RWY17L/35R for DEP</td><td>RWY17R/35L, then join TWY D and hold out of TWY P1.</td></tr>
<tr><td></td><td>When southward operation, mainly use TWY P4 for XNG RWY17R/35L, then join TWY D and hold out of TWY P6. Aircraft that can not ACPT TWY P6 for DEP, should use TWY P6 for XNG RWY17L/35R, then join TWY A and hold out of TWY B8.</td></tr>
<tr><td>LDG on RWY17R/35L and XNG RWY17L/35R</td><td>Mainly use TWY P1/P6 for XNG, and then join TWY A/B.</td></tr>
<tr><td>LDG on RWY16L/34R to stands Nr. 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38</td><td>Mainly use TWY P2/P4 for XNG RWY 17L/35R & 17R/35L, and then join TWY C.</td></tr>
<tr><td>LDG on RWY16L/34R and XNG RWY16R/34L</td><td>Mainly use TWY R1/R6 for XNG, and then join TWY F/E.</td></tr>
<tr><td>穿越程序
PROCs for XNG</td><td colspan="2">机组在穿越跑道前需向塔台提出穿越申请，收到塔台管制员穿越许可后，需尽快实施穿越并加入相应滑行道；机组应注意完整复诵管制员有关穿越跑道指令。穿越结束后，机组需向塔台报告“已脱离跑道”。
FLT crew shall CTC TWR for XNG CLR; repeat all the ATC instructions for clarity, then put in practice ASAP; finally, REP to TWR 'RWY vacated'.
穿越跑道时，机组必须意监听塔台频率中其他有关跑道的指令或信息通报，并注意观察跑道及附近的活动。
FLT crew must MNT the TWR FREQ and watch the activities on the RWY and around;
当机组观察到跑道上有其他航空器活动时，需再次向管制员证实是否穿越当前跑道。</td></tr>
</table>

	When watching other aircraft moving on the RWY, aircrew should CTC TWR to make sure whether to X. 紧跟在起飞航空器后穿越跑道时，机组自行负责其与起飞航空器之间的距离以免受起飞航空器喷流的影响。 While XNG RWY AFT the TKOF aircraft, FLT crew shall be responsible for the safety DIST with the aircraft to avoid the effect of wake TURB.
穿越限制 Limits for XNG	使用跑道 17L/35R 落地的航空器，不得使用滑行道 P2/P3/P4/P5 向西脱离跑道。 Aircraft LDG on RWY17L/35R are forbidden to vacate to the W via TWY P2/P3/P4/P5. 当跑道 17L/35R，17R/35L 有落地航空器使用时，不得使用滑行道 P1 或 P6 穿越跑道。 Aircraft are forbidden to use TWY P1 or P6 for XNG RWY 17L/35R or 17R/35L where exists LDG aircraft.

2.4 滑行道的滑行限制

2.4.1 航空器在地面滑行期间，航空器驾驶员必须依照管制员指令滑行并加强地面观察，当观察到不明活动情况时应及时通知地面管制。

2.4.2 禁止航空器在滑行道上做 180°转弯；

2.4 TAX limits

2.4.1 When aircraft taxiing, pilot should follow the ATC's instructions and strengthen ground observation. Notify the ground control when unknown activities are observed.

2.4.2 180° turnaround on TWY is strictly forbidden for all aircraft;

滑行道/TWYs	航空器翼展限制（m）/Wing span limits for aircraft(m)
A, A1-A6, B, B1, B3-B6(W of TWY B), B7, B8, C, C1, C2, C5, C6, D, D1, D2, D5, D6, E, E0-E8, F, F1-F4, G, G1-G6, H, H1-H6, J1, J2, L02, L04(S of TWY B4), L09, L15, L18, L23, P1-P3, P4-P6(W of TWY B),	＜80

Q1-Q6, R1-R6, S1, S2(BTN TWY T5&T6), T2-T4, V1, V2, V8, W1, W7	
B2, B3-B6(E of TWY B), L04(N of TWY B4), L08, L16, L17, L17A, L19, L20, L20A, L21, L21A, L22, L24, L25, L25A, L26, L26A, P4-P6(E of TWY B), T1, T5, T6, V3-V7, W2, W3, W4(S of TWY T4), W5(S of TWY T4), W6	＜68.5
C3, C4, D3, D4, L05, L06, L06A, L10-L12, L12A, W4(N of TWY T4), W5(N of TWY T4)	＜52
L03, L03A, L07, S2(S of TWY T5)	＜36
L15B, L15C	＜31
L15D	＜24

2.4.3 在多跑道混合运行模式下，T1、T3 滑为自东向西单向滑行；T2、T4 滑为自西向东单向滑行。T3、T4 滑在 W1 滑设有 1 条单向地面服务车道，机长在通过上述路段时，应注意减速并观察车辆活动。

2.4.3 In multiple RWY operation mode, TWY T1, T3 only AVBL for aircraft FM E to W, TWY T2, T4 only AVBL for aircraft FM W to E. Pilot shall pay ATTN to the GND SER vehicle nearby the intersections of TWYs T3, T4 & W1, and keep SLW speed PSG THRU.

2.4.4 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。

2.4.4 AFT vacating RWY, FLT crew shall REP the RWY vacated and the TWY in use to GND CTL at the FST CTC, especially under low VIS operation.

2.5 A380 本场运行规则

2.5 Operation rules for A380

2.5.1 A380 运行跑道：16L/34R、16R/34L、17R/35L。

2.5.1 RWY for A380: 16L/34R, 16R/34L, 17R/35L.

2.5.2 A380 在 A、B 滑之间调头转弯时须采用偏置滑行方式，若配置机上滑行监视系统须开启。

2.5.2 A380 shall offset TAX when turnaround 180° BTN TWY A & B. A380 TAX Camera System shall turn on.

2.6 B747-8 本场运行规则

2.6 Operation rules for B747-8

2.6.1 使用跑道 17L/35R 进近时，I 类运行须配置并使用航迹保持导航系统直至落地。

2.6.1 For CAT I operation, TR CTL system(TCS) shall be INSTL on aircraft and be used in the APCHes to RWY17L/35R TIL LDG.

2.6.2 L16、L17、L17A 仅限空载时的 B747-8 运行。

2.6.2 TXL L16, L17, L17A only used for unladen WT B747-8.

2.7 An124 本场运行规则

2.7 Operation rules for AN124

2.7.1 使用跑道 17L/35R 进近时，I 类运行须配置并使用航迹保持导航系统直至落地。

2.7.1 For CAT I operation, TR CTL system(TCS) shall be INSTL on aircraft and be used in the APCHes to RWY17L/35R TIL LDG.

2.8 A340 本场运行规则

2.8 Operation rules for A340

2.8.1 A340-600 机型在 A 滑行道滑行，向西转弯进入 P1、B1、B7、B8 滑行道时，需采用“过滑偏置转弯”。

2.8.1 When A340-600 taxiing on TWY A and turning west to TWYs P1, B1, B7, B8, aircraft should use Judgemental Oversteering Method.

2.8.2 A340-600 机型在 B 滑行道滑行，向东转弯进入 B3、B4、P4、B5、P5、B6、P6 滑行道时，需采用“过滑偏置转弯”。

2.8.2 When A340-600 taxiing on TWY B and turning east to TWYs B3-B6, P4-P6, aircraft should use Judgemental Oversteering Method.

2.8.3 A340-600 机型在 P1、B1、B7、B8 滑行道滑行，由西向东滑行转向进入 A 滑行道时，需采用“过滑偏置转弯”。

2.8.3 When A340-600 taxiing on TWYs B1, B7, B8, P1 and entering TWY A from west to east, aircraft should use Judgemental Oversteering Method.

2.8.4 A340-600 机型在 L17 滑行道滑行，向北转弯进入 L16 滑行道时，需采用“过滑偏置转弯”。

2.8.4 When A340-600 taxiing on TWY L17 and turning north to TWY L16, aircraft should use Judgemental Oversteering Method.

2.8.5 A340-600 机型在 L16 滑行道滑行，由北向南滑行转向进入 L17 滑行道时，需采用“过滑偏置转弯”。

2.8.5 When A340-600 taxiing on TWY L16 and entering TWY L17 from north to south, aircraft should use Judgemental Oversteering Method.

2.8.6 A340-600 机型在 B3、B4、P4、B5、P5、B6、P6 滑行道与 L04 滑行道交叉道口滑行时，需采用“过滑偏置转弯”。

2.8.6 When A340-600 taxiing at the intersection of TWYs B3-B6, P4-P6 and TWY L04, aircraft should use Judgemental Oversteering Method.

2.9 机场冲突多发地带运行要求

2.9.1 机动区冲突多发地带位置见 ZSPD AD2.24-1A，2；

2.9.2 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，在机场活动区内运行的航空器需严格按照下述的要求运行：

HS1 ：滑行道 E、F 与 T3、T4 的交叉区域

该区域为进、离港航空器的交汇处，通常情况下，T2 候机楼离港航空器使用 E 滑，在 T4 滑前等待，确认没有冲突后继续滑行。如因疏忽滑错道口，必须立即停止滑行并向管制员报告。

HS2 ：滑行道 A、B 与 T3、T4 的交叉区域

通常情况下，经 T3 滑至跑道 17L/35R、T1 候机楼时，需在 B 滑前等待，确认没有冲突后继续滑行。由于 T3 滑与 A2 快速脱离道相连，在上 A 滑时特别注意观察道口、标志牌，避免连续滑行而误入运行跑道。

HS3 ：频繁穿越跑道区域

P2 与 P4 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，没有收到明确穿越跑道的指令，严禁擅自穿越跑道。

HS4 ：频繁穿越跑道区域

P2 与 P4 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，没有收到明确穿越跑道的指令，严禁擅自穿越跑道。

HS5 ：滑行道 P6 与 A、B 的交叉区域，频繁穿越跑道区域

P6 滑是塔台与机坪之间的重要移交点，出港航空器从 P6 滑上 A 滑时，在此区域应注意观察标志，避免

2.9 Hot spot PROC

2.9.1 REF ZSPD AD2.24-1A, 2;

2.9.2 For the purpose of reducing errors that lead to GND conflicts and RWY incursions, aircraft OPR WI the maneuvering area must follow the RQMNTS BLW:

HS1 :INTs of TWYs E, F & T3, T4

HS1 is the conjunction area of ARR and DEP aircrafts. NMLly, the DEPing aircraft LVE TML Nr.2 shall use TWY E, and hold out of TWY T4 to ensure no conflict BFR go on. If TAX into wrong way by mistake, stop IMT and inform ATC.

HS2 :INTs of TWYs A, B & T3, T4

PCD with extreme CTN when OPR near this area. NMLly, when TAX via TWY T3 to RWY17L/35R and TML Nr.1, aircraft shall hold out of TWY B to ensure no conflict BFR go on. Because TWYs T3 & A2 are connected,

when TAX into TWY A, pay ATTN to TFC situation and TWY guidance signs to avoid RWY incursion.

HS3 :RWY XNG busy area

TWYLs P2 & P4 are the main VER TWYLs for RWY XNG. When XNG RWY, aircraft shall strictly follows the ATC CLR. WO CLR instructions, any kind of RWY XNG operation is forbidden.

HS4 :RWY XNG busy area

TWYLs P2 & P4 are the main VER TWYLs for RWY XNG. When XNG RWY, aircraft shall strictly follows

由于连续滑行误入跑道。P6 滑是穿越跑道的主用联络道，航空器穿越跑道时需特别注意管制指令，如没有收到明确穿越跑道的指令，严禁擅自穿越跑道，P6 滑上穿越航空器穿越跑道后应及时联系下一个管制席位。

HS6 ： 频繁穿越跑道区域

R6 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，如没有收到明确穿越跑道的指令，严禁擅自穿越跑道。使用 F 滑的航空器在 E5 滑前等待，确认没有冲突后继续滑行。向南运行时，此区域为放飞排序的繁忙区域，管制员可以根据运行实际情况灵活使用 E、F 滑进行航空器的调配，加速流量。

HS7 ： 频繁穿越跑道区域

R1 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，如没有收到明确穿越跑道的指令，严禁擅自穿越跑道。

HS8 ： 滑行道 E、F 与联络道 E7 的交叉区域

该区域为进、离港航空器的交汇处，同时也是塔台与机坪之间重要移交点，进港航空器使用 E 滑在 E6 滑前等待，确认没有冲突后继续滑行。出港航空器使用 F 滑在 E7 滑前等待，确认没有冲突后继续滑行。

HS9 ： 滑行道 E、F 与 T1、T2、L19 的交叉区域

该区域为进、离港航空器的交汇处，通常情况下，使用 T2 滑的航空器在 E 滑前等待，确认没有冲突后继续滑行。使用 E 滑加入 T1 滑的航空器在 L19 滑前等待，确认没有冲突后继续滑行。为了避免地面滑行冲突，管制员可以灵活使用 L19 滑。

the ATC CLR. WO CLR instructions, any kind of RWY XNG operation is forbidden.

HS5 :INTs of TWYL P6 & TWYs A, B, RWY XNG busy area

TWYL P6 is important handover point BTN TWR & APN. Aircarft for DEP shall take CTN with guidance signs to avoid RWY incursion when TAX via TWYL P6 into TWY A. TWYL P6 is the main TWYL for RWY XNG. When

XNG RWY, aircraft shall strictly follow the ATC instructions. WO CLR instructions, any kind of RWY XNG operation is forbidden. Aircraft shall CTC the NXT CTL unit IMT AFT XNG RWY via TWYL P6.

HS6 :RWY XNG busy area

TWYL R6 is the main TWYL for RWY XNG. When XNG RWY, aircraft shall strictly follow the ATC instructions. WO CLR instructions, any kind of RWY XNG operation is forbidden. When using TWY F, aircraft shall hold short

of TWY E5 to ensure no conflict BFR go on. HS6 is the aircraft sequencing busy area for TKOF, ATC can use TWY E, F to expedite the flow of TFC, when in southward operation.

HS7 :RWY XNG busy area

TWYL R1 is the main VER TWYL for RWY XNG. When XNG RWY, aircraft shall strictly follow the ATC instructions. WO CLR instructions, any kind of RWY XNG operation is forbidden.

HS10 ：滑行道 P1 与 A、B、T1、T2 的交叉区域，频繁穿越跑道区域

该区域为进、离港航空器的交汇处，通常情况下，使用 T1 滑的航空器在 B 滑前等待，确认没有冲突后继续滑行。P1 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，如没有收到明确穿越跑道的指令，严禁擅自穿越跑道，如 P1 滑有等待穿越的航空器，塔台应该及时空出 P1 滑道口，保证航空器及时穿越，穿越后的航空器在 B 滑前等待，确认没有冲突后继续滑行。为了避免地面滑行冲突，管制员可以灵活使用 L19 滑。

HS11 ：滑行道 R1 与 G 的交叉区域，频繁穿越跑道区域

R1 滑是穿越跑道的主用垂直联络道，航空器穿越跑道时需特别注意管制指令，如没有收到明确穿越跑道的指令，严禁擅自穿越跑道。

HS12 ：滑行道 B8 与 A、B 的交叉区域，频繁进入跑道区域

停机位 301 的航空器机头朝南推出开车时，推出过程中需临时占用 B8 滑，得到管制员许可后，推至 B8 滑后需立刻沿滑行道中线标志拖曳至 B 滑。

HS8 :INTs of TWYs E, F & E7

HS8 is the conjunction area of ARR and DEP aircrafts, and also the handover point BTN TWR & APN. The arriving aircraft shall use TWY E, and hold short of TWY E6 to ensure no conflict BFR go on. The DEPing aircraft shall use TWY F, and hold short of TWY E7 to ensure no conflict BFR go on.

HS9 :INTs of TWYs E, F & T1, T2, TXL L19

HS9 is the conjunction area of ARR and DEP aircrafts. NMLly, when using TWY T2, aircraft shall hold short of TWY E to ensure no conflict BFR go on. When using TWY E to jion TWY T1, aircraft shall hold short of TXL L19

to ensure no conflict BFR go on. ATC can use TXL L19 to avoid TAX conflict.

HS10 :INTs of TWYL P1 & TWYs A, B, T1, T2, RWY XNG busy area

HS10 is the conjunction area of ARR and DEP aircrafts. NMLly, aircraft shall hold short of TWY B to ensure no conflict BFR go on when using TWY T1. TWYL P1 is the main VER TWYL for RWY XNG. When XNG RWY,

aircraft shall strictly follow the ATC instructions. WO CLR instructions, any kind of RWY XNG operation is forbidden. TWR shall ensure TWYL P1 AVBL and instruct the aircraft HLDG short of TWYL P1 X the RWY IMT, aircraft shall hold short of TWY B to ensure no conflict BFR go on, AFT RWY XNG. ATC can use

TXL L19 to avoid TAX conflict.

HS11 :INT of TWYL R1 TWY G, RWY XNG busy area

TWYL R1 is the main VER TWYL for RWY XNG. When XNG RWY, aircraft shall strictly follow the ATC instructions. WO CLR instructions, any kind of RWY XNG operation is forbidden.

HS12 :INTs of TWYL B8 TWYs A, B, RWY entering busy area

When aircraft on stand Nr.301 face to S push-back and start-up, push-back shall TEMPO occupy TWYL B8. Aircraft shall be towed IMT along TWY CL to TWY B with ATC CLR AFT being pushed to TWYL B8.

2.10 ILS 开启模式

2.10.1 CAT-I/HUD-I运行时

17L、35R、17R、35L、16R、34L、16L 和 34R 全部开启。

2.10.2 CAT-II/III运行时

2.10.2.1 向南运行：17L、17R、35L、16R、34L、16L 和 34R 开启，35R 关闭。

2.10.2.2 向北运行：35R、17R、35L、34L、16L 和 34R 开启，17L 和 16R 关闭。

2.10 ILS OPS mode

2.10.1 CAT-I/HUD-I OPS

RWY 17L, 35R, 17R, 35L, 16R, 34L, 16L and 34R OPN.

2.10.2 CAT-II/III OPS

2.10.2.1 LDG to S: RWY 17L, 17R, 35L, 16R, 34L, 16L and 34R OPN, 35R CLSD.

2.10.2.2 LDG to N: RWY 35R, 17R, 35L, 34L, 16L and 34R OPN, 17L and 16R CLSD.

3. 机坪和机位的使用

3.1.1 未经浦东国际机场运行指挥中心同意，严禁航空器利用自身动力倒滑；

3.1.2 所有停靠廊桥机位的航空器必须使用桥载设备，关闭 APU；如需使用 APU，航空公司必须向机电信息保障部客桥调度电话申请（第一航站楼/卫星厅

3. Use of aprons and parking stands

3.1.1 Push-back of aircraft on its own PWR is strictly forbidden WO AOC CLR;

3.1.2 All aircraft PRKG on boarding bridge stands shall turn off APU, and use bridge EQPT. If aircraft require to use APU, airlines shall CTC department of AP EQPT

电话：86-21-68343126/68343195；第二航站楼/卫 星厅 电 话 ：86-21-68343297/68343231），经批准后方可使用。以下特殊情况可使用 APU（无需申请）：a. 桥载设备发生故障，不能提供服务；b. 航空器因启动发动机而需开启 APU；c. 航空器进行 APU 的维修检测；d. 天气预报环境温度超过 35℃；e. 航班过站时间不足 45min。

and INFO (for TML Nr.1/Satellite: 86-21-68343126/68343195, for TML Nr.2/Satellite: 86-21-68343297/68343231) to get apply, and use with permission. In following situations, aircraft can use APU w/o getting permission:a. Bridge EQPT is not AVBL;b. Aircraft need APU to start up ENG;c. APU is under MAINT;d. FCST T is more than 35℃;e. FLT transition time is less than 45min

3.1.3 廊桥机位 24 的桥载设备仅满足翼展小于 65m 航空器的使用需求。

3.1.3 Bridge EQPT for boarding bridge stand Nr.24 is only AVBL for aircraft with wingspan less than 65m.

3.1.4 机坪和机位的使用

3.1.4 Use of aprons and parking stands

3.1.4.1 机坪划分

3.1.4.1 Existing APNs at ZSPD：

机坪名称/APN name	停机位/Stands
APN Nr.1(T1)	Nr. 1-12, 14-32
APN Nr.2	Nr. 201-211
Cargo APN Nr.3	Nr. 301-308, 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38
APN Nr.4(MAINT)	Nr. 401A/B, 402A/B, 403A/B, 404A/B, 405-407, 408A/B, 409A/B, 410A/B, 411-418, 451-453, 458, 459
APN Nr.5	Nr. 501-512, 551-572, 581-586, 589, 590
Cargo APN Nr.6	Nr. 611-626
APN Nr.7(T2)	Nr. 50-65, 67, 69, 71, 73, 75, 77, 79-98
APN Nr.8	Nr. 801-816
Satellite APN	Nr. 101-190

3.1.4.2 停机位使用限制

3.1.4.2 Limits for aircraft PRKG on the following

stands:

停机位/Stands	航空器翼展限制/Wing span limits for aircraft
Nr. 24, 71, 75, 119, 121, 168, 170, 173, 310, 314, 315, 320, 325, 328, 333, 338, 504, 507, 612-614, 616-618	<80m
Nr. 17, 19, 21, 101, 102, 131-140, 148-156, 174, 175, 177, 189, 190, 205, 208, 303, 305, 307, 510, 511, 806, 809, 810, 816	<68.5m
Nr. 6-12, 14-16, 18, 20, 22, 23, 57, 59, 61, 63, 65, 67, 69, 73, 77, 79, 81, 83, 85, 87, 89, 91, 112-118, 120, 122, 125, 130, 166, 167, 169, 204, 206, 209, 210, 301, 302, 304, 306, 311-313, 316-319, 321-324, 326, 327, 329-332, 334-337, 339-341, 346, 347, 406, 407, 411-418, 451, 452, 458, 459, 505, 508, 553, 554, 557, 558, 581-585, 590, 615, 619, 620, 807, 811, 813, 814	<65m
Nr. 1-5, 50, 55, 56, 58, 60, 62, 82, 84, 86, 88, 90, 93, 207, 211, 308, 401A/B, 611, 801, 802, 804, 805	<52m
Nr. 25-32, 51-54, 64, 80, 92, 94-98, 103-111, 123, 124, 126-129, 141-147, 157-165, 171, 172, 176, 178-188, 201-203, 402A/B, 403A/B, 404A/B, 405, 408A/B, 409A/B, 410A/B, 453, 501-503, 506, 509, 512, 551, 552, 555, 556, 559-572, 586, 589, 621-626, 803, 808, 812, 815	<36m
RMK: When A380 PRKG on stand Nr.24, the wing span limit for stand Nr.23 is less than 52m.	

3.1.4.3 3 号货机坪公务机位使用限制

3.1.4.3 Limits for business stands on APN Nr.3(cargo):

停机位/Stands	机身长度限制/Fuselage limits	航空器翼展限制/Wing span limits for aircraft
Nr. Z11-Z16, Z21-Z26	<31m	<31m
Nr. Z31-Z38	<28m	<24m

3.1.5 滑入及滑出停机坪的规定

3.1.5 Rules for entering/exiting APN:

停机坪/APN	停机位/Stands	滑入/Entry by TWY	滑出/Exit by TWY
APN Nr. 7, 8	Nr. 50-54, 56, 58, 60, 62, 64	E7	E6
	Nr. 55, 57, 59, 61, 63, 65, 806-809	R6	E5
	Nr. 67, 69, 71, 73, 75	R5	
	Nr. 77, 79, 81, 83, 85, 87, 89, 91, 93, 810-816	R5	R4
	Nr. 95-98	W7	W6
	Nr. 80, 82, 84, 86, 88, 90, 92, 94	W5	W4
Satellite APN & eastern APN Nr.5	Nr. 174-177, 581-584	E3	L24 face to N
	Nr. 171-173		E2
	Nr. 168-170	E1	
	Nr. 166, 167, 585, 586		L24 face to S
	Nr. 161-165, 589, 590	R3	
Satellite APN & western APN Nr.5	Nr. 112, 113, 501-503	P3	L02 face to N
	Nr. 114-118, 504-506	P2	
	Nr. 119-122, 507-509		L02 face to S

<table>
<tr><td rowspan="2"></td><td>Nr. 123-126</td><td rowspan="2">B2</td><td></td></tr>
<tr><td>Nr. 510-512</td><td>B</td></tr>
<tr><td rowspan="5">Satellite APN & southern APN Nr.5</td><td>Nr. 127-130, 157-160</td><td colspan="2">L19</td></tr>
<tr><td>Nr. 131-135, 137, 139, 567-572</td><td>L21A</td><td rowspan="2">L20A</td></tr>
<tr><td>Nr. 141, 143</td><td>L21A-L20</td></tr>
<tr><td>Nr. 145</td><td>L21-L20</td><td rowspan="2">L20</td></tr>
<tr><td>Nr. 147, 149, 151-156, 556-560</td><td>L21</td></tr>
<tr><td rowspan="5">Satellite APN & northern APN Nr.5</td><td>Nr. 109-111, 178-180</td><td colspan="2">L22</td></tr>
<tr><td>Nr. 101-108, 136, 138, 140, 561-566</td><td>L26A</td><td rowspan="2">L25A</td></tr>
<tr><td>Nr. 142, 144</td><td>L26A-L25</td></tr>
<tr><td>Nr. 146</td><td>L26-L25</td><td rowspan="2">L25</td></tr>
<tr><td>Nr. 148, 150, 181-190, 551-555</td><td>L26</td></tr>
<tr><td rowspan="5">APN Nr. 1, 2, Cargo APN Nr.3</td><td>Nr. 1-10, 201-204</td><td>P6</td><td rowspan="4">follow APN ATC instructions</td></tr>
<tr><td>Nr. 11, 12, 14-17, 205-207</td><td>P5</td></tr>
<tr><td>Nr. 18-22, 208-211</td><td>P4</td></tr>
<tr><td>Nr. 23-32</td><td>B3</td></tr>
<tr><td>Nr. 301-308</td><td>P6/B8</td><td>B7</td></tr>
<tr><td>APN Nr.6</td><td>Nr. 611-626</td><td>L18 face to N</td><td>E8</td></tr>
<tr><td colspan="4">RMKs:
1. Pilot shall keep observing TFCs outside DRG the whole period of TAX.
2. Aircraft is forbidden to enter APN by TWY R5 while A380 is PRKG on or being pushed back FM stand Nr.75.
3. If aircraft are TAX on the TXL BTN TWY R5 & TXL L08, A380 is forbidden to be pushed back FM stand Nr.75</td></tr>
</table>

or TAX into stand Nr.75 via TXL L09.

4. A380 PRKG on stand Nr.75 shall be pushed back to TXL L09 and start up AFT the aircraft tail has passed the nose-in lane of stand Nr.75, then exit APN by TXL L09 & TWY E5.

5. A380 shall enter/exit stand Nr.24 via TWY W1; when pushed back, face to S.

6. Aircraft PRKG on stand Nr.64 shall be pushed back along with 'push-back line' to the 'push-back HLDG point'. Aircraft change into stand Nr.64 FM other stands shall be towed face to S along with 'stand alignment line' to the stand.

7. Aircraft PRKG on stand Nr.80 shall be pushed back along with 'push-back line' to the 'push-back HLDG point'. Aircraft change into stand Nr.80 FM other stands shall be towed face to N along with 'stand alignment line' to the stand.

8. When TWY A(B8 is not included) CLSD and aircraft PRKG on stand Nr.301 need be pushed back and start-up face to S, pilot shall apply for CLR in advance.

9. A380 can TEMPO park on stand Nr.810. In this situation, GND support activities such as PAX embarking and disembarking, refueling, cargo loading and unloading is forbidden on stand Nr.810.

10. Aircraft shall follow follow-me vehicle when TAX in/out APN Nr. 7, 8, Satellite APN & eastern APN Nr.5, and follow APN ATC instruction.

11. Aircraft shall follow follow-me vehicle when TAX in Satellite APN & southern, northern APN Nr.5, and follow APN ATC instruction.

12. Aircraft TAX in and out Cargo APN Nr.3 shall be guided by follow-me vehicle and pushed back on TXL L15 to start-up.

13. When TAX in/out APN Nr.4, aircraft shall follow follow-me vehicle and same orientation principle applied, TAX-in via TXL L16-L17A and TAX-out via TWY V2.

14. A380 locating at Satellite APN & eastern APN Nr.5 shall TAX into PRKG stand Nr.168 via TWY E1 and TAX into stand Nr.170 via TWY E1 & TXL L23.

15. A380 locating at Satellite APN & eastern APN Nr.5 shall start ENG on TXL L23 and TAX out via TWY E2. For A380 PRKG at boarding bridge stand Nr.173, its nose shall face N when pushed back and starting ENG; For A380 PRKG at boarding bridge stand Nr.168, its nose shall face S when pushed back and starting ENG; For aircraft PRKG at boarding bridge stand Nr.170, push-back direction shall be instructed by ATC. Any aircraft TAX

out via TWY E2 is forbidden when A380 PRKG at stands Nr. 168, 170, 173 is pushing back.

3.1.6 7、8 号机坪设有 9 个机坪等待点 AH01-AH09，5 个滑出等待点 HP01-HP05。在卫星厅机坪及 5 号机坪东侧设有 2 个机坪等待点 AH10、AH11，3 个滑出等待点 HP06-HP08。参见 ZSPD AD2.24-2。

3.1.6 For APN Nr. 7, 8, there are 9 HLDG points(AH01-AH09) used for entering APN and 5 HLDG points(HP01-HP05) used for exiting APN. For Satellite APN eastern APN Nr.5, there are 2 HLDG points(AH10, AH11) used for entering APN and 3 HLDG points(HP06-HP08) used for exiting APN. REF ZSPD AD2.24-2.

等待位置/HLDG point	滑行方向/TAX direction	机坪等待位置/APN HLDG point	滑行方向/TAX direction
HP01-HP03, HP07	W to E	AH01-AH03, AH05, AH10, AH11	E to W
HP04, HP05, HP08	N to S	AH04, AH06-AH09	S to N
HP06	S to N		

3.2 航空器进出停机位的特殊要求：

3.2.1 相邻停机位禁止两架航空器同时运行，包括同时进入、同时推出或滑出（自滑停机位）、同时一进一出。

3.2.2 进港航空器和引导车应在停机位滑行通道（或滑行道）上转入停机位引入线之前停止，观察确认无安全运行风险的情况下，减速慢行入位。

3.2.3 停靠 T1 候机楼 1-12、14-32；T2 候机楼 50-65、67、69、71、73、75、77、79-89、91-94、97、98；卫星厅 101-110、112-123、125-129、131-156、158、

3.2 RQMNTS for aircraft into and out of stands:

3.2.1 On ADJ PRKG stands, two aircrafts are forbidden to MOV (including TAX into/out by own PWR, pushed back) SIMUL.

3.2.2 ARR aircraft and follow-me vehicle shall stop on TWYs BFR turning into stands lead-in lines, then OBS and keep SLW speed to stands.

3.2.3 Aircraft PRKG on TML Nr. 1(stands NR.1-12, 14-32), TML Nr.2(stands Nr.50-65, 67, 69,71, 73, 75, 77, 79-89, 91-94, 97, 98) and Satellite(101-110, 112,

159、161-177、179-190 停机位的航空器须由目视停靠引导系统引导滑进停机位，并由牵引车推出；停靠 2 号机坪、3 号货机坪、4 号维修机坪、5 号机坪、6 号机坪、8 号机坪各停机位的航空器则由人工指挥滑入，并由牵引车推出。

113, 125-129, 131-156, 158, 159, 161-177, 179-190) shall be guided by Visual DCKG Guidance Systems for entry (stands Nr. 90, 95, 96, 111, 124, 130, 157, 160, 178 should by marshalling assistance) and pushed back by tow tractor; aircraft PRKG on APN Nr. 2, 3(cargo), 4(MAINT), 5, 6, 8 shall be guided by marshalling assistance for entry and pushed back by tow tractor;

3.2.4 进港航空器机组发现地面引导车后关闭滑行灯，跟随地面滑行引导车滑行。离港航空器由机坪管制发布推出和开车指令，机组收到滑出指令后，必须和地面机务确认航空器后方无其它安全隐患后，方可打开滑行灯。

3.2.4 Arriving aircraft turn off TAX LGTs when follow-me vehicle in sight and follow follow-me vehicle. APN CTL release push-back and start-up, then DEP aircraft turn on TAX LGTs AFT receiving TAX instruction and CFMing with GND crew that no potential security menace in the rear of the aircraft.

3.2.5 A380 滑入 71 或 75 号停机位使用 R5、L09。E5 至 R5 间的 L08 有航空器活动时，进位的 A380 需在 E 滑或 F 滑的 R5 道口前平行等待，禁止转入 R5，在 A380 滑入 71 号或 75 号停机位前，禁止任何航空器经 R5 滑入停机坪。

3.2.5 The A380 shall taxi into stands Nr.71, 75 through R5, L09. When aircraft taxiing on taxiline L08(BTN E5 & R5), the arrival A380 must hold parallel before R5 on TWYs E or F and is prohibited from taxiing into R5. Before the A380 taxiing into stands Nr.71 or 75, any aircraft is prohibited from entering the apron through R5.

3.2.6 A380 推出开车须在 L09 上进行，其中停靠在 71 或 75 号停机位的 A380 推出后，牵引到机尾处于停机位 75 滑入线以北开车，滑出使用 L09、E5。R5 至 E5 间的 L08 滑行线有航空器活动时，禁止停靠在 71 或 75 号停机位的 A380 推出，在 71 或 75 号停机位的 A380 推出过程中，进位的航空器须在 E 滑或 F 滑的 R5 道口前平行等待，禁止任何航空器经 R5 滑入停机坪。

3.2.6 The pushback and engine start procedures for A380 must be conducted on L09. After pushback from stands Nr.71 or 75, the A380 shall be towed to tail and start up at noth of stand Nr.75 taxiline, and taxi out through L09, E5. When aircraft taxiing on taxiline L08(BTN R5 & E5), the A380 parking on stands Nr.71, 75 are prohibited push back. During the pushback of A380 parked on stands Nr.71 or 75, the arrival aircraft

	must hold parallel before R5 on TWYs E or F, any aircraft are prohibited from entering the apron through R5.
3.2.7 停机位 810 可以临时停放 A380。停放期间，禁止上下客、加油、装卸货物等地面保障作业。	3.2.7 Stand Nr.810 can temporarily park A380. During the parking period, it is forbidden to pick up and drop off passenger, refuel, load and unload goods and other ground support work.
3.2.8 当 A380 由停机位 71 或 75 拖曳至 810 时，使用“A380 拖曳专用线”，机头朝南推出至专用线，然后拖曳到停机位 810。L09 或 L08 滑行线（R5 至 E5 之间）有航空器滑行时，禁止拖曳 A380 至停机位 810。在 A380 拖曳至停机位 810 过程中，进位的航空器须在 E 滑或 F 滑的 R5 道口前平行等待，禁止任何航空器经 R5 滑入停机坪或占用 L09。	3.2.8 When an A380 is going to be towed from the stands Nr.71 or 75 to the stand Nr.810, use the A380 towing line. A380 shall be pushback to the dedicated line with nose facing south, then be towed to the stand Nr.810. When aircrafts taxiing on apron taxiline L09 or L08(BTN R5 & E5), it is forbidden to tow A380 to the stand Nr.810. During towing an A380 to the stand Nr.810, other arrival aircraft must hold parallel before R5 on TWYs E or F, and it is forbidden for any aircraft to taxi into the apron through R5 or occupy L09.
3.2.9 当 A380 由停机位 810 拖曳至 71 或 75 时，机头朝南推至专用线，然后沿专用线拖曳至停机位 71 或 75。L09 或 L08 滑行线（R5 至 E5 之间）有航空器滑行时，禁止拖曳 A380 至停机位 71 或 75。在 A380 拖曳至停机位 71 或 75 过程中，进位的航空器须在 E 滑或 F 滑的 R5 道口前平行等待，禁止任何航空器经 R5 滑入停机坪或占用 L09。	3.2.9 When the A380 is going to be towed from stand Nr.810 to stands Nr.71 or 75, it shall be pushback to the dedicated line with nose facing south, then be towed to the stands Nr.71 or 75. When aircrafts taxiing on apron taxiline L09 or L08(BTN R5 or E5), it is forbidden to tow an A380 to stands Nr.71 or 75. During towing an A380 to the stands Nr.71 or 75, other arrival aircraft must hold parallel before R5 on TWYs E or F, and it is forbidden for any aircraft to taxi into the apron through R5 or occupy L09.
3.2.10 “A380 拖曳专用线”为蓝色虚线。	3.2.10 The A380 towing line is blue dotted line.

3.2.11 A380 停靠停机位 24 时，停机位 23 只能停放翼展 52m 以下的航空器。	3.2.11 When the A380 parked on stand Nr.24, stand Nr.23 is only AVBL for aircraft with wingspan less than 52m.
3.2.12 A380 使用 W1 滑入停机位 24；推出时，需机头朝南，使用 W1 滑出。	3.2.12 The A380 taxi into/out stand Nr.24 through W1, and when push back, the aircraft nose faces south.
3.2.13 A380 滑入停机位 168 使用 E1 道口进入机坪；A380 滑入停机位 170 使用 E1、L23 进入机坪。	3.2.13 The A380 taxi into stand Nr.168 through E1 and stand Nr.170 through E1, L23.
3.2.14 卫星厅机坪及 5 号机坪东侧 A380 推出开车须在 L23 上进行，均使用 E2 滑出；其中停靠停机位 173 的 A380 推出开车时机头朝北，停靠停机位 168 的 A380 推出开车时机头朝南，停靠停机位 170 的航空器推出开车朝向根据管制员指令执行。在停靠停机位 168、170、173 的 A380 推出时，禁止任何航空器使用 E2 滑出。	3.2.14 The pushback and engine start procedures for A380 parked on Satellite Apron or Apron Nr.5 must be conducted on L23, and taxi out through E2. When an A380 parked on stand Nr.173 is pushed out, the nose is facing noth, when an A380 parked on stand Nr.168 is pushed out, the nose is facing south, the nose direction of the aircraft parked on stand Nr.170 shall be in accordance with the instructions of the ATC. When the A380 parked on stands Nr.168, 170, 173 push back, it is forbidden for any aircraft to use E2.
3.2.15 停机位 64 的航空器推出时必须沿“航空器推出线”推行，鼻轮不得推过“推出等待点”；其他停机位的航空器调整至该停机位时，必须机头朝南沿“航空器停机位引入线”拖曳至停机位，不允许推行至该停机位。	3.2.15 When the aircraft of stand Nr.64 is pushed back, it must be towed along the aircraft push-back line, the nosegear must not push over the push-back holding point. When other aircraft are adjusted to stand Nr.64, it must be towed to the stand along the aircraft stand lead-in line with nose facing south, and it is not allowed to be pushed to the stand.
3.2.16 停机位 80 的航空器推出时必须沿“航空器推出线”推行，鼻轮不得推过“推出等待点”；其他停机位的航空器调整至该停机位时，必须机头朝北沿“航空器停机位引入线”拖曳至停机位，不允许推行至该停	3.2.16 When the aircraft of stand Nr.80 is pushed back, it must be towed along the aircraft push-back line, the nosegear must not push over the push-back holding point. When other aircraft are adjusted to stand Nr.80, it

机位。

must be towed to stand along the aircraft stand lead-in line with nose facing north, and it is not allowed to be pushed to the stand.

3.2.17 正常情况下，停机位 301 的航空器需机头朝北推出。在 A 滑关闭（不含 B8）情况下，停机位 301 的航空器推出需机头朝南开车，机组在推出申请时需通报管制员“推出过程中需临时占用 B8 滑行道”，得到管制员许可后机组才能通知地面机务人员开始推出；推至 B8 道口后，需立刻沿地面滑行线将航空器拖曳至 B 滑开车，不得长时间占用 B8。

3.2.17 Normally, aircraft parked on stand Nr.301 are required to push back with the nose facing north. When TWY A(TWY B8 exclusive) close, aircraft parked on stand Nr.301 are required to push back with the nose facing south and start engines in this direction, when applying for push back, the crew must notify the controller that "temporary occupation of TWY B8 is required during the push back procedure", only after obtaining the controller's clearance, the crew can notify the ground maintenance personnel to commence the push back. After pushing the aircraft to B8, immediately tow it along the ground taxiline to TWY B, and must not occupy B8 for a long time.

3.2.18 在 3 号货运公务机停机区东侧 L15 上有航空器活动时，禁止滑入、滑出停机位 Z11、Z12、Z21、Z22、Z31、Z32。

3.2.18 When aircraft MOV on TXL L15, other aircraft are forbidden to TAX in/out on stands Nr. Z11, Z12,Z21, Z22, Z31, Z32.

3.2.19 机场地面管制向塔台管制移交航空器时，管制员将使用“守听”或“联系”两种管制指令。

3.2.19 CTL instructions "MNT" or "CTC" will be used when aircraft transfered FM GND CTL to TWR CTL.

3.2.20 目视停靠引导系统的使用规定：详见 ZSPD AD2.24-2V01/2V02；

3.2.20 OPR provisions for Visual DCKG Guidance System: REF ZSPD AD2.24-2V01/2V02 for details;

3.3 试车限制

3.3 ENG run-ups limits

3.3.1 在未得到批准的情况下，严禁航空器在停机位上进行任何类型的发动机试车工作，试车工作应有足够的安全保护措施，试车时严格按照有关规定程序进行。

3.3.1 ENG run-ups on stands are strictly forbidden without permission. There should be sufficient safety protection measures in ENG run-ups, and ENG run-ups should be carried out in strict accordance with the

relevant regulations and procedures.

3.3.2 凡需试车的航空器，试车前必须向机场运行指挥中心 AOC 提出申请，由其给出试车机位，再报机坪管制同意后，方可牵引（滑行）到指定机位。慢车测试及冷转测试的试车，经机场运行指挥中心 AOC 和机坪管制批准后，可在指定机位进行。

3.3.2 ENG run-ups are SUBJ AOC CLR, test stands given by AOC and approval by APN CTL, and may only be carried out at a designated LCA. AFT approval by AOC and APN CTL, ENG idle test and cool running test may be carried out at designated stands.

3.3.3 4 号机坪的停机位 418 为航空器试大车机位：使用时，一般为机头朝北放置；当吹南风，且风速≥5m/s 时，可向运行指挥中心 AOC 提出申请并得到批准后，可以机头向东放置，同时停机位 417 不能停有航空器。

3.3.3 Stands Nr.418 on APN Nr.4 can be used to conduct fast ENG run-ups: aircraft shall face to N in NML situation; when the S WSPD more than 5m/s, aircraft shall face to E AFT getting a permission of AOC, while stand Nr.417 shall not be used.

3.4 当停放在近机位的航空器 APU 发生故障推出时，在廊桥处于回位状态下，航空器可以在近机位启动发动机，地面保障人员必须严格按规定程序操作，禁止地面保障人员和各类保障车辆在预推出航空器后侧穿行。

3.4 If aircraft APU is not AVBL, aircrew may start the ENG when boarding bridge is retracted. GND staff shall OPR according to specific PROCs. GND staff and security vehicles are forbidden to go THRU the rear of the aircraft.

3.5 除冰规则

需要除冰的航空器应及早向公司代理申请除冰车在停机位或于指定除冰机位除防冰，除冰开始前需要向机坪管制申请；浦东机场实行全天候定点除防冰，除霜同于除冰。其中，除冰机位分别为 510-512、585、586、589、590。

3.5 Rules for deicing

CTC the agent of airline as early as POSS for deicing WI the stand or designated stand, CTC APN CTL BFR starting the progress; Pudong AP implements all-day F-point deicing, defrost equals deicing. Stands Nr. 510-512, 585, 586, 589, 590 are deicing stands.

3.5.1 机组应严格遵守机坪管制和机务代表的指令实施各项操作，保持与除冰航空器的安全距离。

3.5.1 FLT crew shall strictly follow APN CTL and aircraft MAINT instructions to carry out various OPS and keep a certain DIST FM the deicing aircraft for safety.

3.6 本场实施机坪运行管制。机坪管制职责：负责该区域航空器的推出、开车、滑行和其他涉及航空器运

3.6 APN operation CTL implemented. APN CTL duties: Responsible for aircraft push back, ENG on, TAX and

行的指挥工作。

3.6.1 机场机坪管制责任区域范围：详见 ZSPD AD2.24-1A，2，具体管制移交点及移交方式听从管制员指令执行。

3.6.2 离场航空器应在推出开车前联系机坪管制，取得开车许可并在 5min 内执行，否则，重新申请此许可；

3.6.3 航空器滑入、滑出卫星厅东机坪时，需跟随地面引导车滑行，推出时均需推到 L24 滑行线上开车。

3.6.4 卫星厅北港湾使用 L26/L26A 进入机坪，使用 L25/L25A 滑出机坪；卫星厅机坪南港湾使用 L21/L21A 进入机坪，使用 L20/L20A 滑出机坪；停靠卫星厅机坪南北港湾的航空器进出机坪根据管制员指令跟随引导车滑行。

3.6.5 本场共设立 10 个滑行强制等待点，航空器滑行至该点前必须等待，并通报地面管制员。参见航图 ZSPD AD2.24-2。

other OPS in the area.

3.6.1 机场机坪管制责任区域范围：详见 ZSPD AD2.24-1A，2，具体管制移交点及移交方式听从管制员指令执行。

3.6.2 BFR push-back and start-up, DEPing aircraft shall CTC APN CTL for push-back and start-up CLR and conduct WI 5min, otherwise, apply the CLR once more;

3.6.3 Aircraft TAX in and out Satellite eastern APN shall be guided by follow-me vehicle and pushed back on TXL L24 to start-up.

3.6.4 Aircraft use TXL L26/L26A entering and TXL L25/L25A exiting Satellite northern APN; aircraft use TXL L21/L21A entering and TXL L20/L20A exiting Satellite southern APN; aircraft PRKG on Satellite northern/southern APN shall be guided by follow-me vehicle.

3.6.5 There are 10 compulsory HLDG points established for TAX, FLT crew shall hold BFR these points and CTC GND CTL. REF ZSPD AD2.24-2.

<table>
<tr><th>强制等待位置
/Compulsory HLDG point
(TWY-TWY)</th><th>滑自/TAX on TWY</th><th>滑行方向/TAX direction</th><th>止于/HLDG BFRTWY</th></tr>
<tr><td>A-T3</td><td>A</td><td rowspan="2">S to N</td><td rowspan="2">T3</td></tr>
<tr><td>B-T3</td><td rowspan="2">B</td></tr>
<tr><td>B-T4</td><td>N to S</td><td>T4</td></tr>
<tr><td>T3-B</td><td>T3</td><td>E to W</td><td>B</td></tr>
</table>

W1-T4	W1	N to S	T4
T4-E	T4	W to E	E
E-T4	E	N to S	T4
E-T3		S to N	T3
F-T4	F	N to S	T4
F-T3		S to N	T3

4. 低能见度运行

4.1 低能见度运行（II/IIIA 类）

4.1.1 低能见度运行程序的准备、实施和结束

4.1.1.1 当跑道视程 RVR 数值降至 1000m 且气象预报能见度呈下降趋势，或者云底高降至 90m 且气象
预报云底高呈下降趋势时，浦东塔台宣布启动低能见度运行准备程序；

4.1.1.2 当跑道视程 RVR 小于 550m，或云底高小于 60m 时，经确认机场和空管具备低能见度运行条件，浦东塔台通过 D-ATIS 宣布正式实施低能见度运行（II/IIIA 类）；

4.1.1.3 当跑道视程 RVR 大于等于 550m 且气象预报呈好转趋势，或云底高大于等于 60m 且气象预报呈好转趋势时，或机场或空管不具备低能见度运行条件，浦东塔台结束低能见度运行。

4.1.2 跑道的使用

4.1.2.1 跑道的运行等级

4. Low visibility operation

4.1 LVP OPS(CAT II/IIIA)

4.1.1 Preparation, implement and closure of LVP OPS

4.1.1.1 When RVR is FCST to DES 1000m and FCST show a decrease trend, or CIG is FCST to DES 90m and FCST show a decrease trend, LVP OPS will be implemented.

4.1.1.2 When RVR＜550m or CIG＜60m, AD and ATC satisfy the RQMNTS of LVP OPS, CAT II/IIIA OPS will be implemented.

4.1.1.3 When RVR≥550m and FCST show a IMPR trend, or CIG≥60m and FCST show a IMPR trend, or AD or ATC cannot satisfy the RQMNTS of LVP OPS, LVP OPS CLSD.

4.1.2 GEN rules for using RWYs

4.1.2.1 The operation grade of RWY:

Operation standard	RWY

ILS CAT II	17L/35R, 34L
ILS CAT IIIA	34L
Low Visibility DEP	17L/35R, 34L

4.1.2.2 跑道的运行模式

4.1.2.2 The operation mode of RWY:

Operation direction	RWY
Northward	34L mainly used for ARR, 35R mainly used for DEP
Southward	17L for DEP and ARR

4.1.2.3 浦东机场实施低能见度运行时，A380 应听从 ATC 指令使用跑道 34L。

4.1.2.3 When LVP OPS implemented, RWY34L is AVBL for A380, instructions by ATC.

4.1.3 低能见度运行区域

II类/IIIA 类运行区域：跑道 16R/34L（含）与 17L/35R（含）之间区域；跑道 17L/35R 以西的 P2、P4、L15 滑。

4.1.3 LVP OPS area

CAT II/IIIA OPS area: The area BTN RWY16R/34L(include RWY16R/34L) and RWY17L/35R(include RWY17L/35R); TWY P2, P4,TXL L15(W of RWY17L/35R).

4.2 低能见度程序和护卫

4.2 LVP OPS and protection

4.2.1 进场航空器

4.2.1 ARR aircraft:

RWY	TAX RTE
17L	rapid exit TWY A1/A2/A3 or TWY B1/P1→TWY B
34L	rapid exit TWY F3/F4 or TWY R5/E5/R6→TWY F
RMKs: 1. Follow ATC instructions for practical TAX RTE; 2. Aircraft TAX on rapid exit TWY shall REP the ATC "aircraft already vacate RWY" AFT into the PARL TWYs.	

4.2.2 离场航空器

4.2.2 DEP aircraft:

RWY	TAX RTE
17L	TWY A→TWY B7/B8→RWY17L
35R	TWY B→TWY P1/B1→RWY35R
RMK: When CAT II/IIIA OPR, DEP aircraft shall follow ATC instructions.	

4.2.3 低能见度地面滑行路线：详见ZSPD AD2.24-2R01/2R02，2R03/2R04，2R05/2R06，2R07。

4.2.3 LVP OPS TAX RTE: REF ZSPD AD2.24-2R01/2R02, 2R03/2R04, 2R05/2R06, 2R07.

4.3 飞行员应该获得如下信息：

4.3 Aircrew shall acquire INFO as follow:

4.3.1 气象预报

4.3.1 WX FCST;

4.3.2 低能见度程序正在实施

4.3.2 LVP OPS are implementing.

4.4 准备实施II/IIIA 类进近的机组应在与进近管制的首次联系中提出申请。

4.4 Aircrew prepared for CAT II/IIIA APCH shall apply to APP at the FST CTC.

5. 直升机飞行限制，直升机停靠区

5. Helicopter operation restrictions and helicopter parking/docking area

无

Nil

6. 警告

6. Warning

当飞越上海市限制区时，应严格按限制区飞行高度执行，即 QNH1500m(含)以上。

Aircraft FLY over Shanghai Restricted Area(REF AD2.17) shall keep ALT QNH1500m or ABV.

ZSPD AD 2.21 减噪程序

ZSPD AD 2.21 Noise abatement procedures

1 噪音限制规定

1 Noise restrictions

1.1 航空器起飞减噪操作程序，用于起飞爬升阶段，目的是在确保飞行安全的前提下，尽量减少噪音对地面的影响。

1.1 Aircraft TKOF NADP is used for TKOF and climbing phase. The purpose is to minimize the impact of noise on GND in the permise of ensuring FLT safety.

1.2 浦东机场采用国际民航组织制定的消噪声离场程

1.2 Pudong AP adopts the ICAO NADP-1 to reduce

序 1（NADP-1），旨在降低起飞跑道末端附近区域的噪音。

noise in the area near DER.

2 减噪程序

2 NADP

2.1 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。

2.1 In COND of complying with the RQMNTS of OBST CLR and climb gradient required by FLT PROC, the following NADP shall be implemented.

2.1.1 在航空器起飞性能允许的情况下，尽可能使用减推力起飞；

2.1.1 The derated TKOF is strongly recommended if the TKOF PER of aircraft permit;

2.1.2 在高度 450m(1500ft)时，调整和保持发动机爬升功率/推力，保持爬升速度 V2+20km/h(10kt)，保持起飞襟翼和缝翼继续爬升；

2.1.2 At ALT 450m(1500ft), adjust ENG PWR/thrust to climb PWR/thrust and MNTN it, MNTN climbing speed at V2+20km/h(10kt) with flaps and slats in the TKOF configuration;

2.1.3 高度 910m(3000ft)以上时，转为正常航路爬升速度并按规定收襟翼/缝翼。

2.1.3 ABV ALT 910m(3000ft), MNTN a positive ROC, accelerate to NML en-route climb speed and retract flaps/slats on SKED.

2.2 由于非管制原因不执行减噪飞行操作程序，飞行员须在起飞前告知 ATC 并说明理由（校验飞行等特殊飞行除外）。

2.2 If the PROCs can not be implemented due to any reason EXC ATC, pilot shall inform ATC with a reasonable explanation (EXC for special FLT such as CLBR FLT).

ZSPD AD 2.22 飞行程序

ZSPD AD 2.22 Flight procedures

1. 总则

1. General

1.1 本场以 RNAV-1 飞行程序为主用程序（仅提供水平引导），传统飞行程序为备份程序，航空公司原则上只能执行 RNAV-1 飞行程序。

1.1 RNAV-1 FLT PROCs are PRI PROCs(only horizontal guidance AVBL), pilot shall execute these PROCs WO special reasons. Traditional PROCs are SRY PROCs.

1.2 除经上海进近或浦东塔台（适用时）特殊许可外，在上海进近管制区和浦东机场管制地带的飞行，均须

1.2 FLTs WI Shanghai APP Area and Pudong TWR CTL Area shall OPR under IFR unless special CLR has been

按照仪表飞行规则进行。

obtained FM Shanghai APP or Pudong TWR(if AVBL) CTL.

2. 起落航线

17R/35L 起落航线在跑道西侧进行，16L/34R 起落航线在跑道东侧进行；C、D 类航空器高度 QNH450m，A、B 类航空器高度 QNH300m。

2. Traffic circuits

TFC circuits shall be made to the W of RWY17R/35L and to the E of RWY16L/34R, at ALT 450m for aircraft CAT C/D, and ALT 300m for aircraft CAT A/B.

3. 仪表飞行程序

3.1 严格按照航图中公布的进、离场程序和进近程序飞行。当 ATC 指令高度与进离场程序中各类限制高度有冲突时，以 ATC 部门的指令高度为准。

3. IFR flight procedures

3.1 Strict adherence is required to the relevant ARR/DEP/APCH PROCs published in the aeronautical charts. Follow ATC instructions when the instructions have a conflict with the ALT limits in the charts.

3.2 上海进近管制区和浦东机场管制地带内的 IFR 飞行程序

在上海/杭州进近管制区内严格按 ATC 指挥飞行；如有需要，航空器由 ATC 部门指挥在指定的航路、导航台或点上空等待或做机动飞行。

3.2 IFR FLT PROCs WI Shanghai APP Area and Pudong TWR CTL Area

FLTs WI Shanghai/Hangzhou APP Area shall strictly follow ATC instructions. Aircraft may, if necessary, hold or maneuver on an AWY, over a NAV facility or a fix designated by ATC.

4. 雷达程序和/或 ADS-B 程序

4.1 上海进近管制区域内实施雷达管制。航空器最小水平间隔为 6km；

4. Radar procedures and/or ADS-B procedures

4.1 Radar CTL WI Shanghai APP has been implemented. The MNM horizontal radar separation is 6km;

4.2 距进近跑道末端 18.5km（10NM）范围内，向同一跑道做最后进近的航空器之间无尾流间隔要求且接地后能在 50s 内脱离跑道时，航空器之间的最小雷达间隔缩短为 5km（湿跑道或污染跑道除外）；

4.2 WI 18.5km(10NM) FM APCHing RWY end, if there is no wake TURB BTN two aircrafts APCHing to the same RWY in FNA, and the preceding aircraft is able to vacate RWY WI 50s AFT touchdown, the MNM radar separation can be reduced to 5km (EXC for wet or contaminated RWY);

通常情况下航空器接地后占用跑道的时间应控制在50s 以内。如不能执行上述要求，驾驶员应在不晚于接地前 5min 通报管制员，管制员将根据空中和地面交通情况视情指挥航空器中止进近或复飞(湿跑道或污染跑道除外)；

The RWY occupation time for aircraft AFT touchdown should be WI 50s. If can not meet such STDs, pilot should inform ATC no later than 5min BFR touchdown. ATC will direct the aircraft to abort APCH or go around according to actual TFC situation(EXC for wet or contaminated RWY);

4.4 通常，航空器从庵东 VOR(AND)、SASAN、横沙 VOR(HSH)等报告点得到雷达引导和排序，直至最后进近航迹(ILS、PAR、VOR/DME)，以加速空中交通流量。考虑到航空器的性能，按需要发出雷达引导和飞行高度层/高度指令，使航空器之间有一定的距离，以保持正确的着陆间隔。

速度调控：实施 RNAV ILS/DME 进近时，机组应当严格遵守速度限制。机组应尽可能准确地执行所有的速度限制。如果航空器不能执行上述速度限制，机组应及时通知 ATC 可用的速度。

4.4 NMLly, aircraft will be vectored and sequenced FM Andong VOR 'AND', SASAN and Hengsha VOR 'HSH' to the appropriate FNA TR(ILS, PAR, VOR/DME), so as to ensure an expeditious flow of TFC. Instructions ABT radar vectors and FLT LVL/ALT will be issued, as required, for spacing and separating the aircraft so that correct LDG intervals are MNTNed, taking into account aircraft characteristics.

Speed CTL: When OPR RNAV ILS/DME APCH, aircrew should execute at all speed limit. If can not, they shall inform ATC of AVBL speed IMT.

4.5 最低监视引导高度图

参见上海/虹桥机场 ZSSS AD2.22 飞行程序中第 4.4 节以及 ZSPD AD2.24-6B。

4.5 Surveillance MNM ALT SECTs

REF SHANGHAI/Hongqiao ZSSS AD2.22 item 4.4, and ZSPD AD2.24-6B.

5. 无线电通信失效程序

5. Radio communication failure procedures

5.1 航空器单向通信失效

5.1 Aircraft COM partly failure

5.1.1 如果航空器只具有信号接收能力，根据接收到的管制指令继续飞行，同时管制员将向沿途有关管制单位发送有关通信失效的情报；

5.1.1 If the RDO REC AVBL, aircraft shall follow the instruction to FLY, ATC should inform the concerned ATC unit at the same time.

5.1.2 如果航空器只具有信号发送能力，航空器驾驶员应立即将飞行意图告知管制员，并及时报告位置和高度信息，管制员根据航空器驾驶员报告的意图迅速

5.1.2 If the RDO TRANS AVBL, aircraft pilot shall notify her/his FLT intention to ATC and REP aircraft PSN. ATC will conduct the TFC accordingly. If POSS,

调配其他飞机避让，如有可能，管制员将通知航空器运营人使用其内部通信方式与该航空器联系。

ATC shall CTC the AO to establish inner COM with the aircraft.

5.2 航空器双向通信失效

5.2 Aircraft COM totally failure

5.2.1 航空器进场

5.2.1 ARR for ZSPD

5.2.1.1 如果本场不具备落地条件,航空器驾驶员可自行决定返航或备降。

5.2.1.1 When COND of AD not AVBL for LDG, the aircraft can decide to RTN or ALTN.

5.2.1.2 收到管制员进港程序指令的航空器,按照程序飞行和下降，之后根据最后收到的通播选择就近的跑道着陆;

5.2.1.2 Aircraft with ATC ARR instruction shall follow the PROC to FLY and descend, choose LDG RWY according to the last RECd ATIS.

5.2.1.3 未收到管制员进港程序指令的航空器,按照现行飞行计划航路飞至上海浦东机场提供服务的定位点，在该定位点等待直到按照或尽可能接近于最后确认收到的预计进近时刻开始下降，并按照规定的程序和根据最后收到的通播选择就近的跑道着陆。

5.2.1.3 Aircraft WO ATC ARR instruction shall follow FPL RTE FLY to the fix in SER WI AD. HLDG at the fix TIL the last RECd EAT as nearly as POSS, descend and follow the PROC to land. RWY choosing shall according to the last RECd ATIS.

5.2.2 航空器离场

5.2.2 DEP FM ZSPD

Nil

5.2.2.1 航空器应按照最后接收到的管制指令（程序）继续离场，管制员将迅速组织其它航空器进行避让;

5.2.2.1 Aircraft shall follow the last RECd instruction(PROC) to DEP, others should IMT give way to this aircraft by ATC;

5.2.2.2 如航空器驾驶员选择返回起飞机场飞行,则应按照标准仪表离场(SID)至少飞至 SID 终点，之后根据最后收到的通播中着陆跑道选择标准仪表进场(STAR)和落地跑道，并从 STAR 起点加入程序。

5.2.2.2 If the aircraft decide to RTN, shall follow SID TIL the end, then choose STAR and RWY to land according to the last RECd ATIS. Aircraft shall join the STAR FM the start.

End of SID	PIKAS	SASAN	NXD	AND	HSN	ADBAS	MIGOL	LAMEN	SURAK	ODULO
Start of	SASAN		AND				DUMET			MATN

STAR(recommended)				U

5.2.2.3 如果航空器驾驶员判断无法继续实施离场飞行，且需至放油区放油的，可在放油完成后，自行根据当时的运行方向选择进近着陆方法，管制员将迅速组织其它航空器进行避让。

5.2.2.3 If DEP is unsustainable and aircraft need to dump fuel in the fuel dumping area, the FLT crew can choose way to APCH and land AFT dumping fuel. Others should IMT give way to this aircraft by ATC.

5.2.3 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讯联系时，航空器应联系上一管制单位，并按照接收管制单位的管制指令继续飞行；

5.2.3 AD COM failure

If aircraft cannot establish COM with the AD CTL unit, aircraft shall CTC the previous CTL unit, and follow the instruction to CONT;

5.2.4 无线电通信恢复

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

5.2.4 RDO COM RTN to NML

It is AVBL to resume activities when the aircraft that lose touch via COM CH has landed or get in touch AGN. Inform the ATC office IMT.

6. 目视飞行程序

6. Procedures for VFR flights

6.1 航空器得到仪表进近的指令后，应根据机载设备或目视监控周边航空器的运行状态，并尽最大可能建立目视间隔；同时在管制员通报其它航空器的相对位置时，向管制员报告已建立目视间隔。若飞行员不能目视相关航空器，管制员将视情况指挥该航空器中止进近或复飞。

6.1 Upon receipt of APCH CLR, pilot shall MNT the OPR situations of other aircraft in the VCY using airborne EQPT or visual and establish the visual separation as practicable, then REP 'visual separation established' when ATC notifies the relative PSNs of other aircraft. If pilot can not visual the relative aircraft, ATC will direct the aircraft to abort APCH or go around according to actual TFC situation.

6.2 机场实施多跑道目视进近，实施目视进近的航空器应控制表速，预计飞行航迹距接地点 7NM 时速度 180kt，如机组不能按照上述速度执行时，应及时通知

6.2 PARL RWYs visual APCH implemented in AP. Pilot shall CTL IAS, and IAS shall be 180kt when the DIST of projected FLT path to touchdown is 7NM. If speed

管制员。航空器应遵守目视间隔飞行规定。

RQMNTS cannot implemented, pilot shall inform ATC. Pilot shall obey separation of VFR.

6.3 当浦东机场能见度不小于 5km，云底高不低于 300m 时，将实施目视进近和目视间隔。

6.3 If VIS is no less than 5km and CIG is no less than 300m, visual APCH and visual separation will be implemented.

6.4 浦东机场实施目视进近和目视间隔前，航空器驾驶员需向管制员报告是否看到机场、跑道或者前续落地的航空器。

6.4 BFR implementation of visual APCH and visual separation, pilot shall REP to ATC whether visual the AP, the RWY or the preceding aircraft.

6.5 当实施目视进近的航空器驾驶员明确表示能够目视另一架航空器并接受目视间隔时，航空器驾驶员应当负以下职责：

6.5 When pilot implementing the visual APCH indicates that another aircraft is in sight and ACPTs the visual separation, the pilot shall take the following responsibilities:

6.5.1 始终保持对相关航空器的目视监控，并保持与相关航空器间的安全间隔；

6.5.1 MNTN visual surveillance and safe separation continously with relevant aircrafts.

6.5.2 为保持与相关航空器的安全间隔作必要的调速、机动飞行及避开尾流影响区域；

6.5.2 Necessary speed adjustment, maneuvering and avoiding the wake TURB affected area.

6.5.3 当无法目视相关航空器或为保持与相关航空器间的安全间隔所采取的各种措施必须及时通报管制员，以便重新为其配备其他的安全间隔。

6.5.3 Notify ATC IMT of UNA to visual relevant aircrafts or take measures to MNTN the safety separation with relevant aircrafts then wait for new separation assignment.

6.6 在仪表进近程序的最后进近阶段使用目视间隔时，航空器驾驶员应按照仪表程序进近，并保持目视判断与其他相关航空器间的安全间隔。

6.6 When visual separation is applied DRG the FNA of IAP, pilot should follow the PROC and MNTN visual judgement ABT the safety separation with other relevant aircrafts.

6.6.1 当航空器进近至决断高度时，会遇到在同一跑道上前面着陆的航空器正在着陆滑跑，或者正在起飞的航空器即将离地的情况。当航空器驾驶员认为必要时，随时可以复飞并立即通报管制员。

6.6.1 hen aircraft DES DA, some situations may be OBS, such as the preceding aircraft is rolling out the same RWY, or the DEP aircraft is lifting off. Under such situation, pilot can make a missed APCH at any moment

if it is considered to be necessary and notify ATC IMT.

6.6.2 近距跑道运行时，当航空器进近至决断高度时，会遇到相邻近距跑道上的航空器正在起飞滑跑，航空器驾驶员需加强目视观察。当航空器驾驶员认为必要时，随时可以复飞并立即通报管制员。

6.6.2 When aircraft DES DA, some situations may be OBS, such as the preceding aircraft is vacating the ADJ RWY, or the DEP aircraft FM the ADJ RWY is lifting off. Under such situation, pilot shall be careful and can make a missed APCH at any moment if it is considered to be necessary and notify ATC IMT.

7. 目视飞行航线

无

7. VFR route

Nil

8. 其它规定

8.1 机组收到进入跑道指令后，必须在确保安全的前提下，在前机滑跑后，立即按照标准运行程序从等待位置滑行至跑道内正确位置。

8. Other regulations

8.1 Upon receiving the instruction of entering RWY and observing the preceding aircraft start to roll, pilot shall make sure the safety DIST with the preceding aircraft and TAX FM the HLDG PSN to the right place of the RWY following the STD OPR PROC IMT.

8.2 如果接到立即起飞指令，飞行员必须向 ATC 确认是否可以执行立即起飞。

8.2 Upon receiving the instruction of TKOF IMT, pilot must CFM whether IMT TKOF can be implemented.

ZSPD AD 2.23 其它资料

ZSPD AD 2.23 Other information

鸟情资料

Bird's information

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。鸟的活动情况如下：

Activities of bird flocks are found all the year round, AD Authority resorts to dispersal methods to reduce bird activities. The details of bird activities as follows:

Bird name	ACT time	Residence type	FLT HGT(m)	Characteristic
Pheasant	The whole year	Resident	0-10	Solitary and in group
Dove			0-20	

Night heron			0-80	
Chinese Pond Heron	Apr.—Oct.		0-20	Solitary
Common Kestrel	Mar.—Oct.	Migrant	0-30	
Common Buzzard	Oct.—Mar.(next year)		0-50	
Barn Swallow	Apr.—Sep.		0-30	In group
Charadriiformes	Oct.—May(next year)			
Egret	Mar.—Sep.		0-50	
Cattle Egret	Jun.—Sep.			
Grey-headed Lapwing	Aug.—Feb.(next year)			
Anatidae	Nov.—Mar.(next year)		0-100	

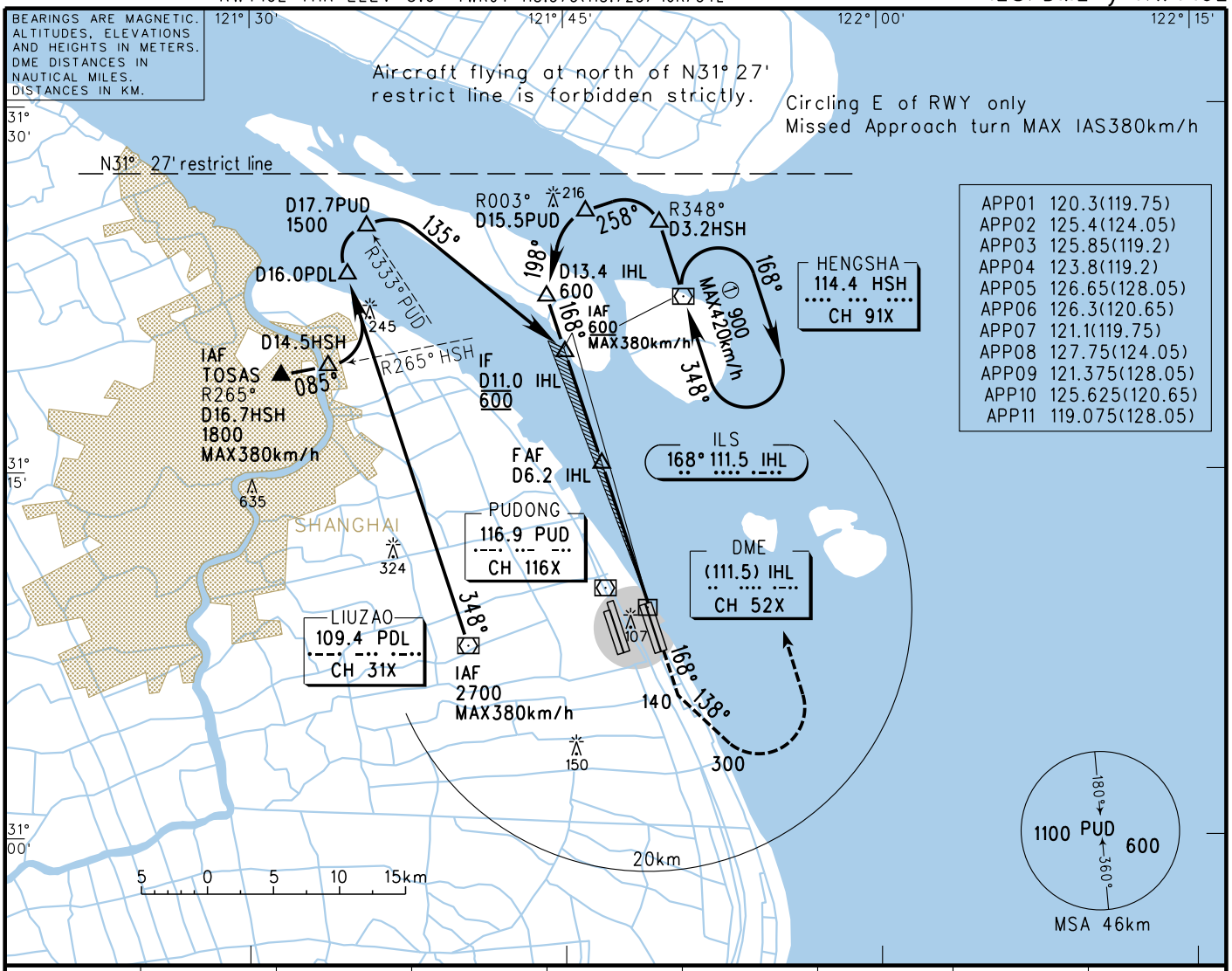
Migratory Season		Area of migration ACT	FLT HGT(m)
Spring	FM Mar. to May	Around the AP	0-150
		High ALT migration	800-3000
Summer	FM Jun. to Aug.	Around the AP	0-150
Autumn	FM Sep. to Nov.	Around the AP	0-150
		High ALT migration	800-3000
Winter	FM Dec. to Feb.(next year)	Around the AP	0-300
		High ALT migration	800-3000

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY16L THR ELEV 3.6

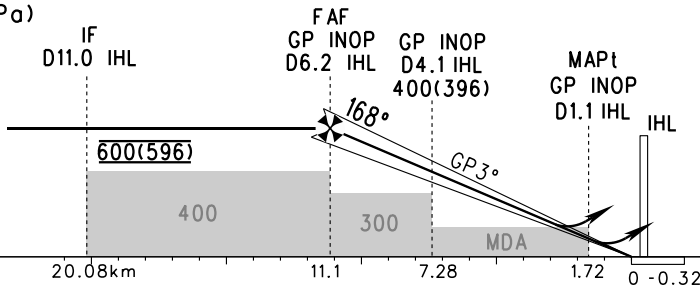
D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
ILS/DME y RWY16L



GP INOP	DME (IHL) (NM)	7	6	5	4	3	2	1
	ALT (m)		584	487	390	293	196	

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH
Climb straight ahead to 140, turn LEFT on track 138° to 300, then turn LEFT to HSH at 600, approach again or join the holding pattern, follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ800/800			
GP INOP MDA(H) VIS	140(136) 1800		140(136) 2000	140(136) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 9.38km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	3:48	3:02	2:32	2:10	1:54	1:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

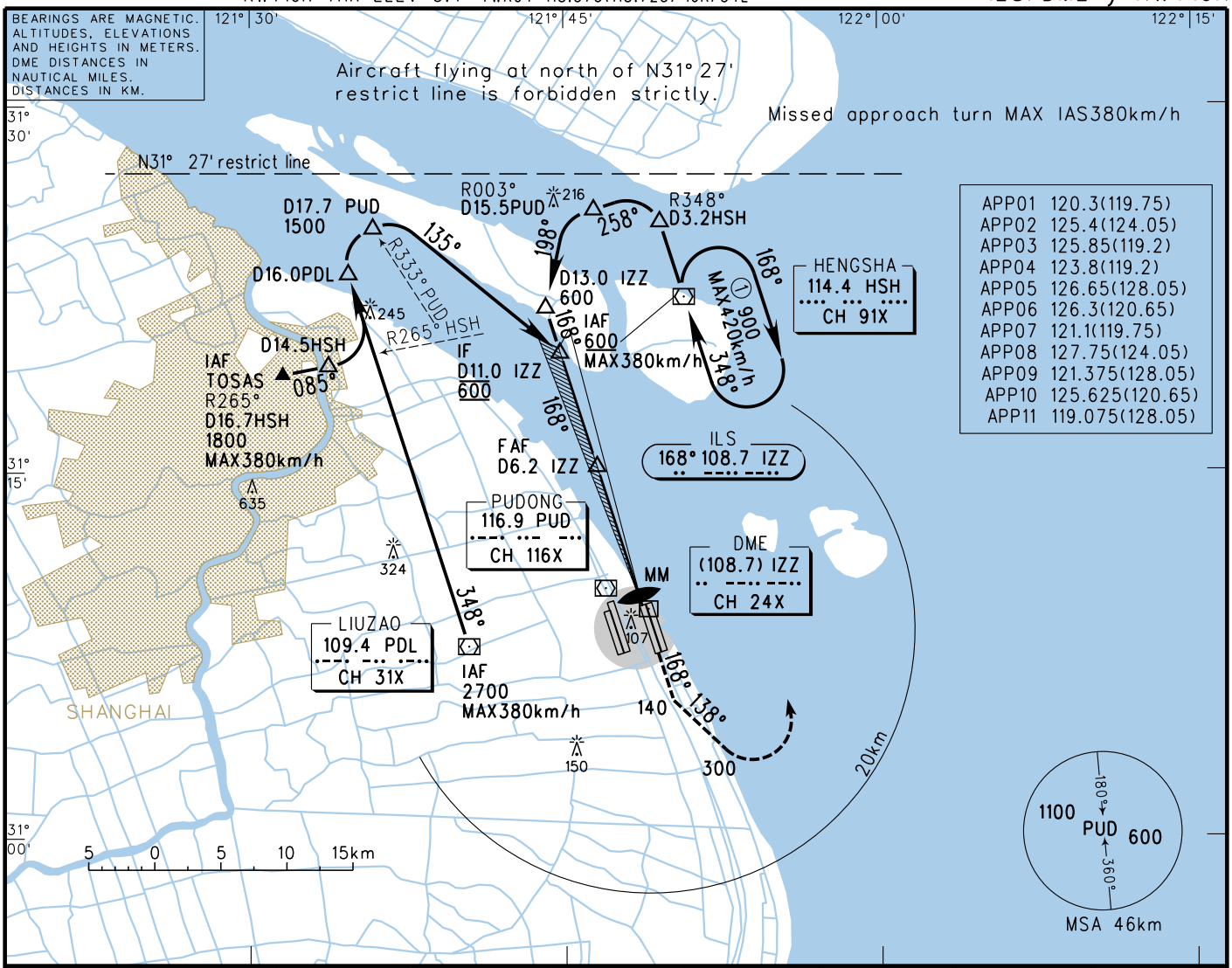
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY16R THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

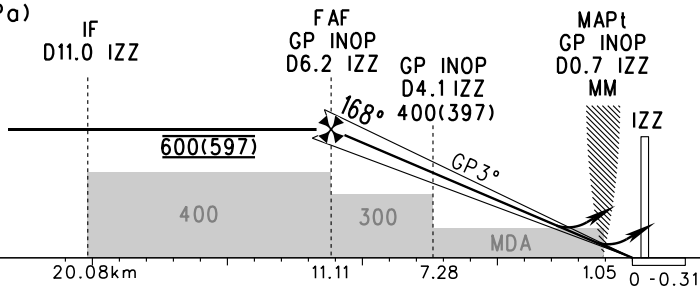
ZSPD SHANGHAI/Pudong

ILS/DME y RWY16R



GP INOP	DME (IZZ) (NM)	8	7	6	5	4	3	2
	ALT (m)			585	488	391	294	197

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH

Climb straight ahead to 140, turn LEFT on track 138° to 300, then turn LEFT to HSH at 600, approach again or join the holding pattern, follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) 550/800			
GP INOP MDA(H) VIS	140(137) 1800		140(137) 2000	140(137) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 10.06km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	4:04	3:16	2:43	2:20	2:02	1:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

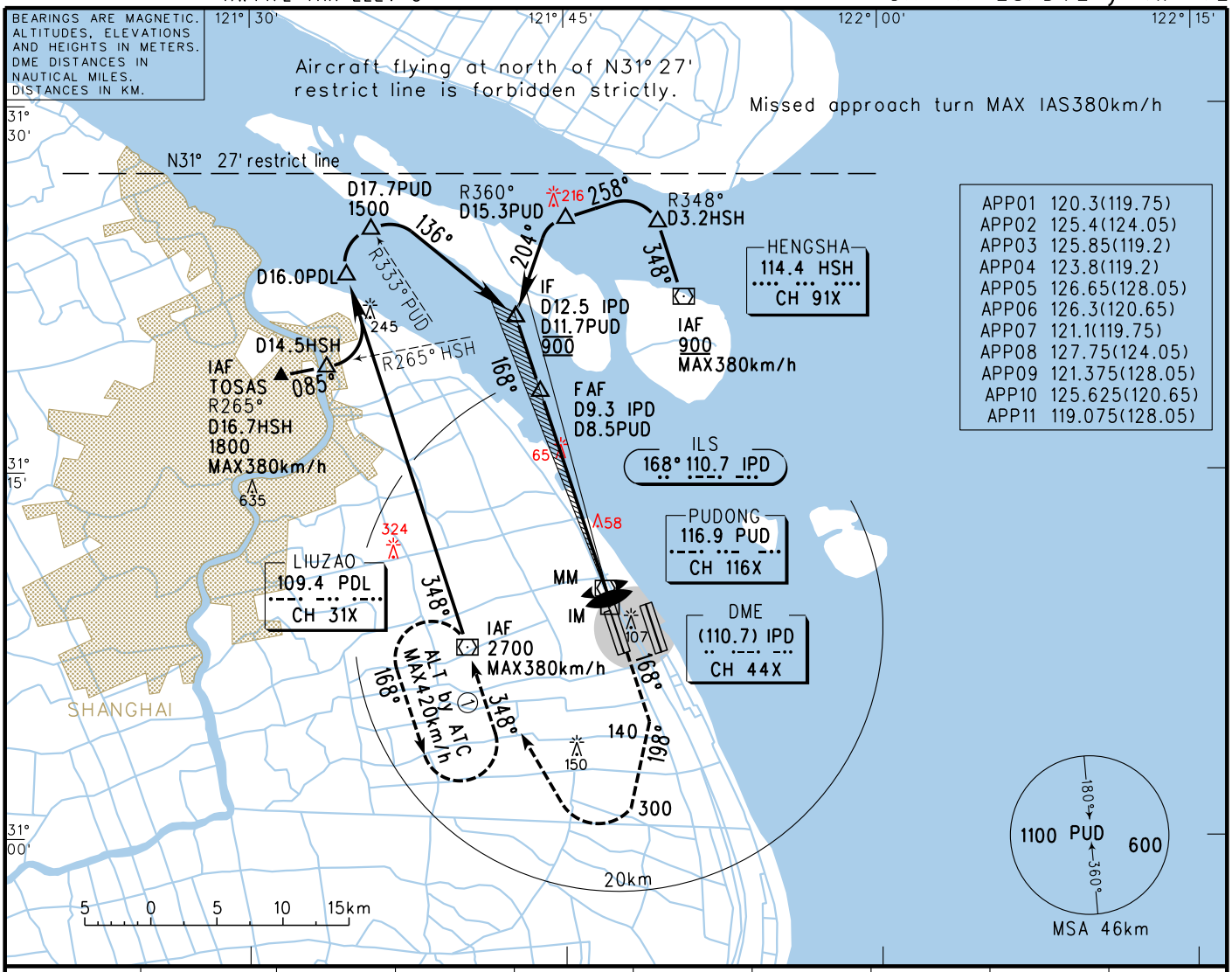
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY17L THR ELEV 3

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

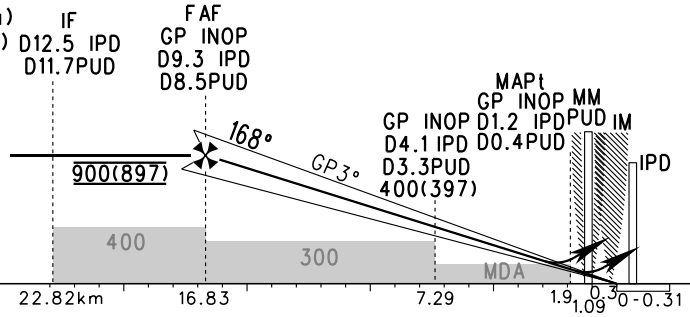
CAT-I/II ILS/DME y RWY17L



APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)
APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

GP INOP	DME (IPD) (NM)	9	8	7	6	5	4	3	2
	ALT (m)	875	778	680	583	486	389	292	195

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH

Climb straight ahead to 140,turn RIGHT on track 198° to 300, then turn RIGHT to PDL at 900, approach again or join the holding pattern,follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	63(60) 550/800			
GP INOP MDA(H) VIS	140(137) 1800		140(137) 2000	140(137) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

ILS CAT II

Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

FAF-MAPt(GP INOP) 14.93km

GS in kt	80	100	120	140	160	180
GS in km/h	150	185	220	260	295	335
Time min:sec	6:03	4:50	4:02	3:27	3:01	2:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

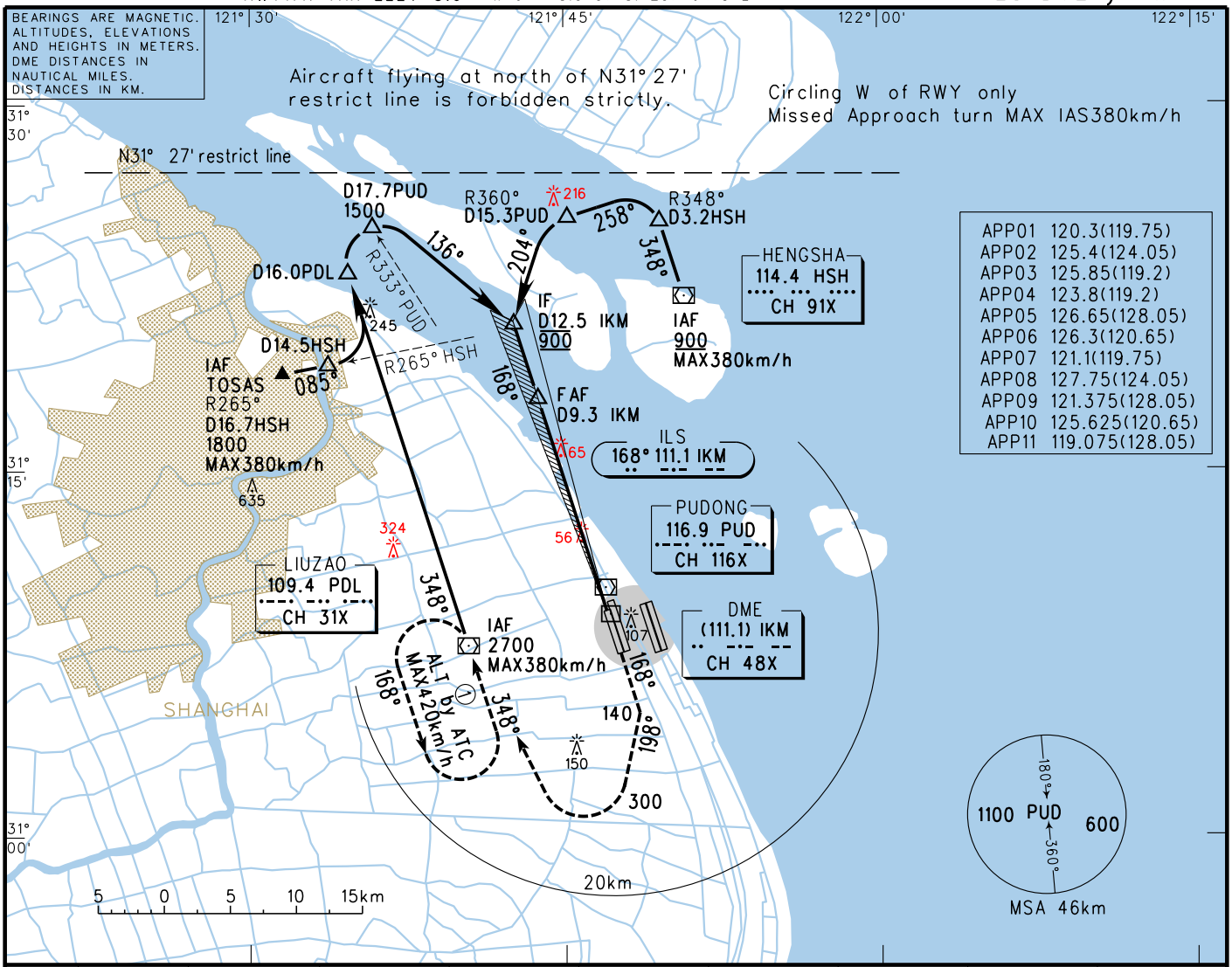
Changes: OBST.

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY17R THR ELEV 3.6

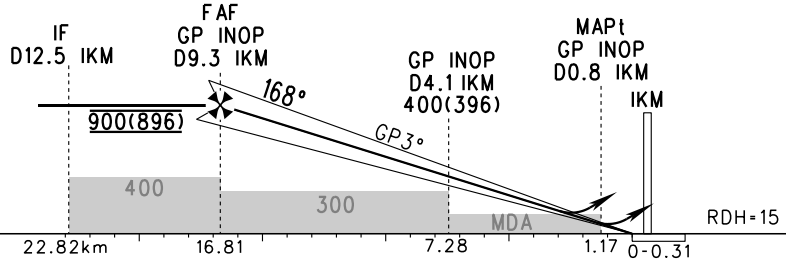
D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
ILS/DME y RWY17R



GP INOP	DME (IKM) (NM)	9	8	7	6	5	4	3	2
	ALT (m)	876	778	681	584	487	390	293	196

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH
Climb straight ahead to 140, turn RIGHT on track 198° to 300, then turn RIGHT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ800/800			
GP INOP MDA(H) VIS	140(136) 1800		140(136) 2000	140(136) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 15.64km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:20	5:04	4:13	3:37	3:10	2:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

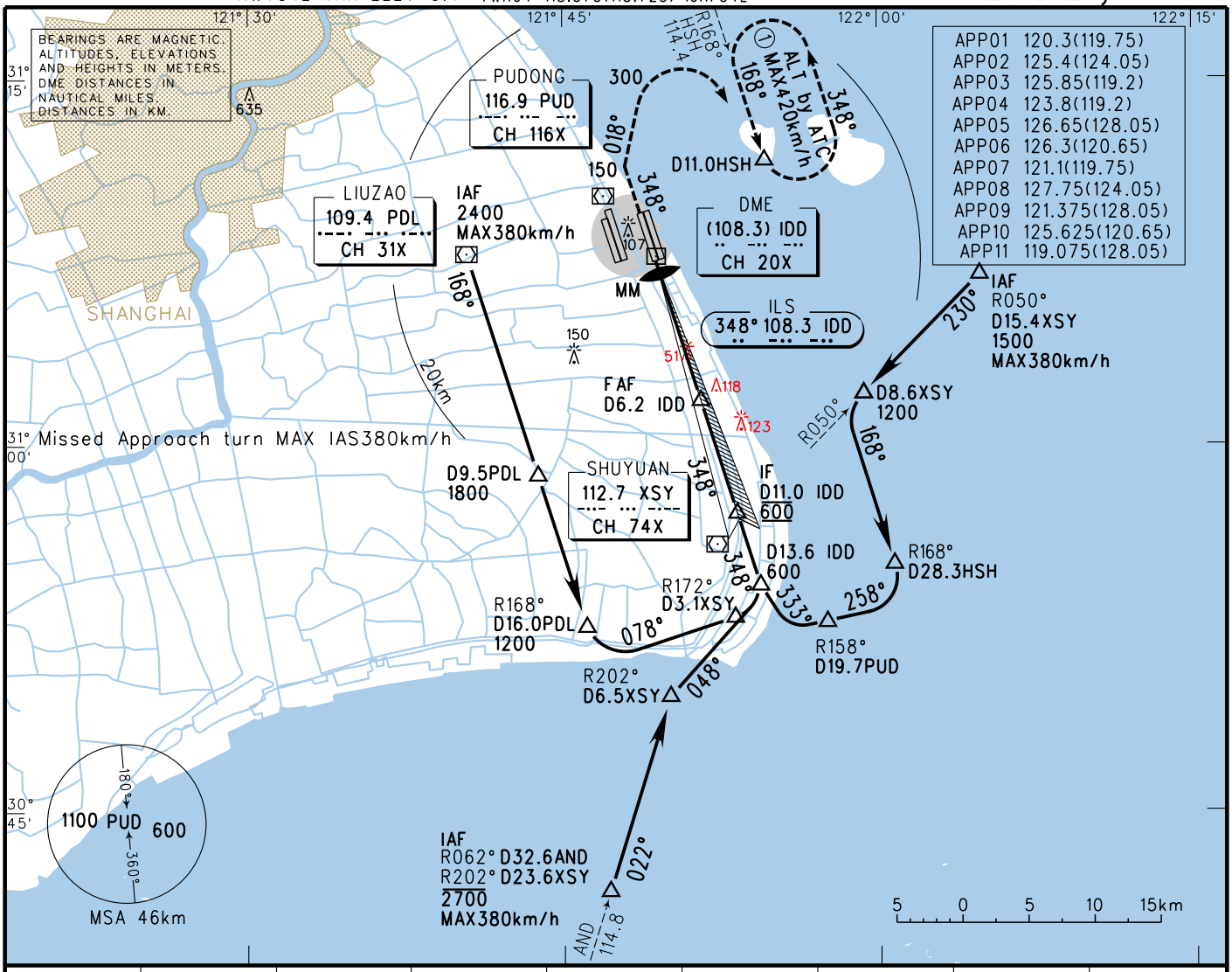
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34L THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

ILS/DME y RWY34L

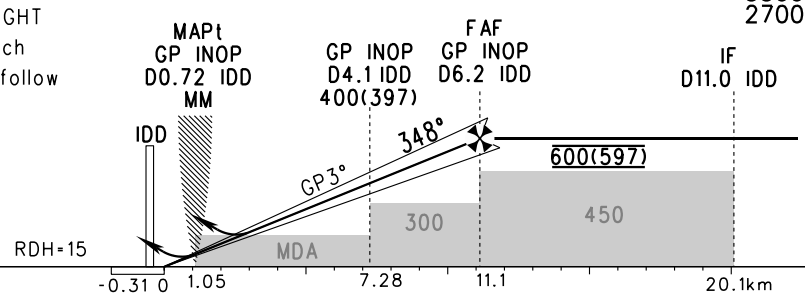


GP INOP	DME (IDD) (NM)	1	2	3	4	5	6	7
	ALT (m)		196	292	389	486	583	

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to R168°/D11.0HSH at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) 550/800			
GP INOP MDA(H) VIS	150(147) 2000		150(147) 2200	150(147) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 10.05km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	4:04	3:15	2:43	2:20	2:02	1:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

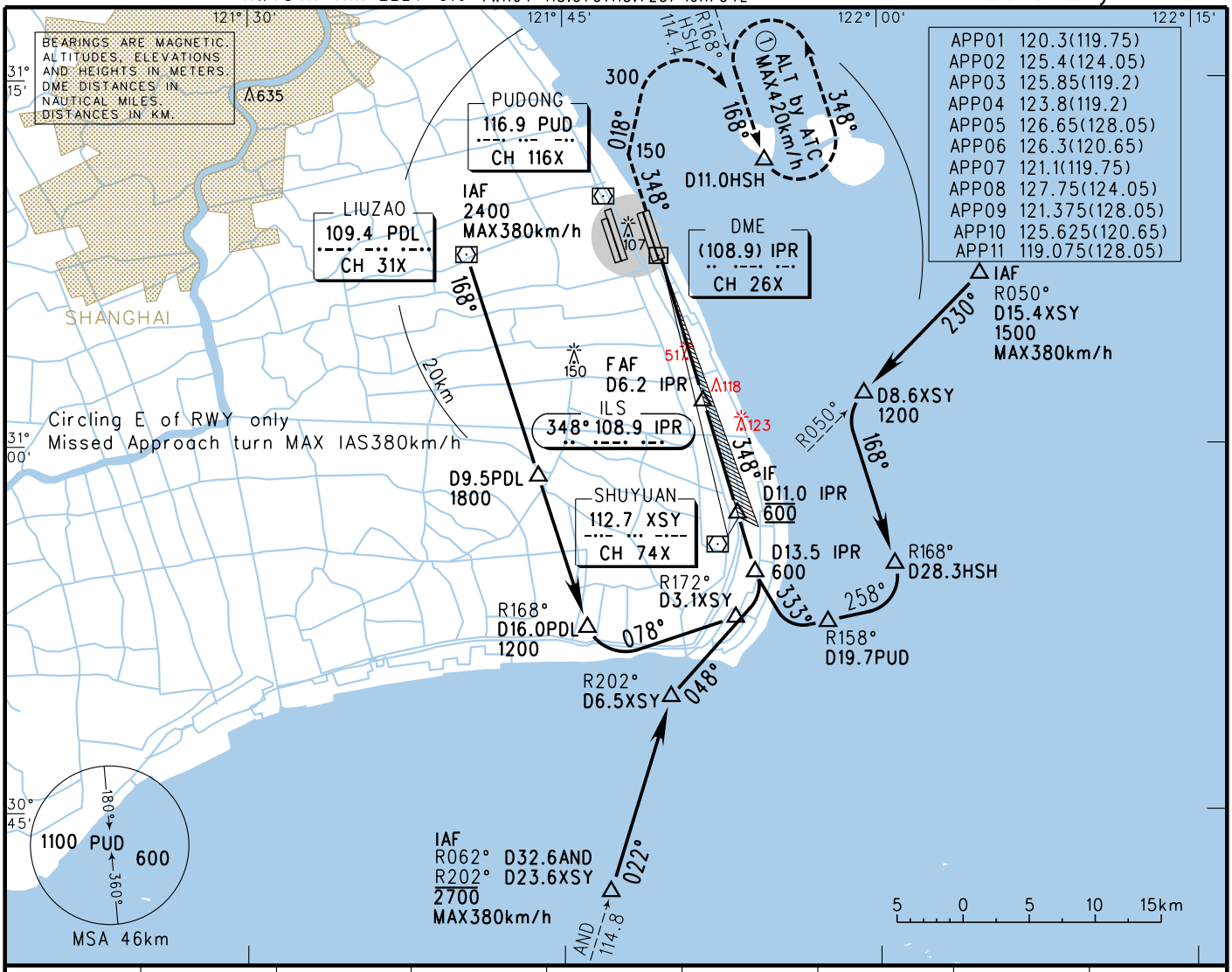
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34R THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

ILS/DME y RWY34R

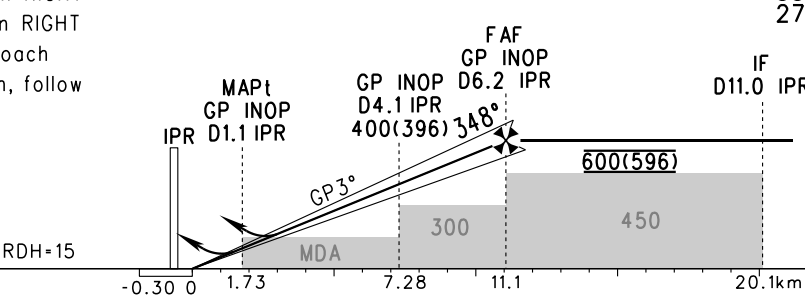


GP INOP	DME (IPR) (NM)	1	2	3	4	5	6	7
	ALT (m)		196	293	390	487	584	

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to R168°/D11.0HSH at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ 800/800			
GP INOP MDA(H) VIS	150(146) 2000		150(146) 2200	150(146) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 9.37km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	3:48	3:02	2:32	2:10	1:54	1:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

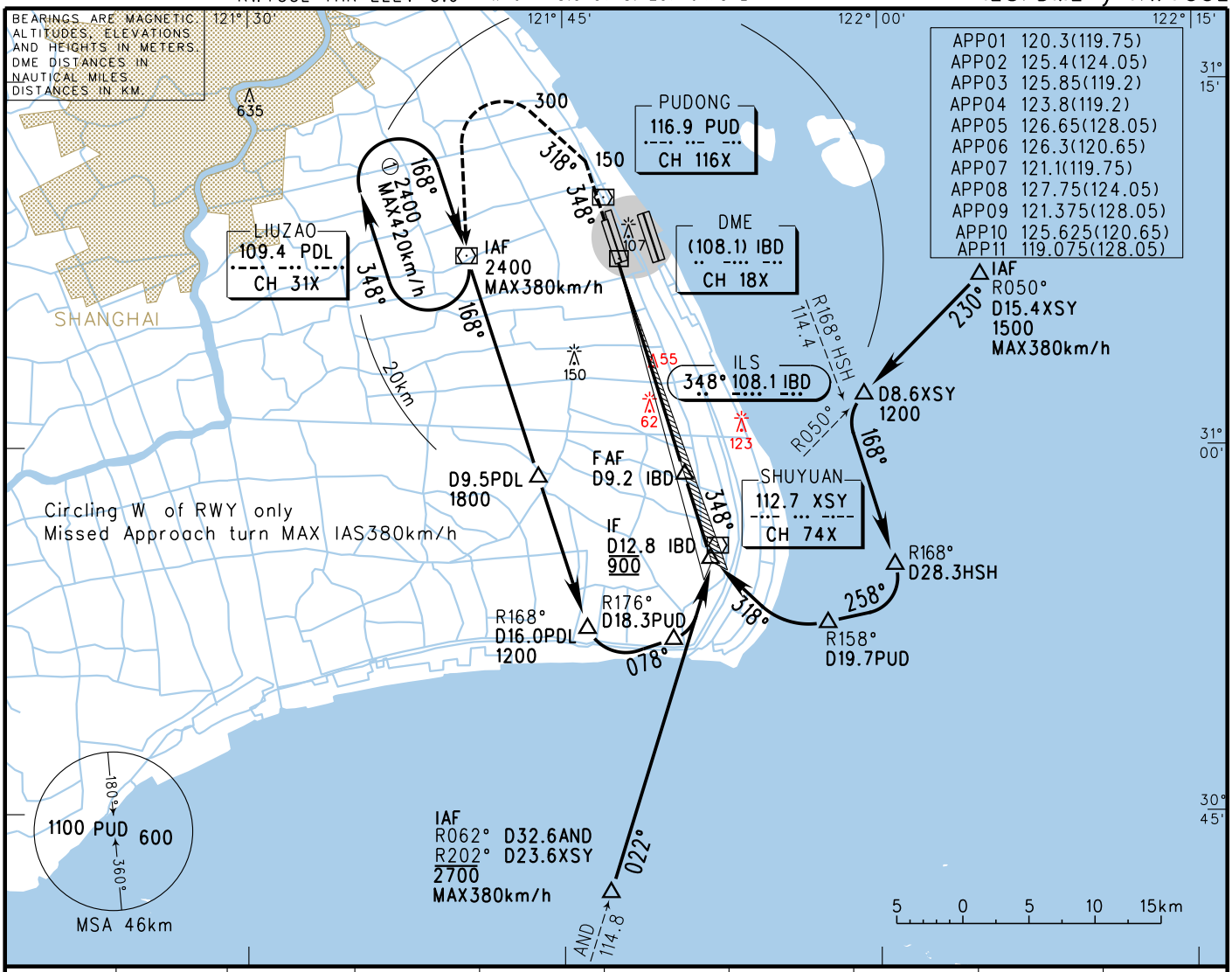
Ⓐ HUD Special CAT I: (DH)(45),(RA)(48),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY35L THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
ILS/DME y RWY35L

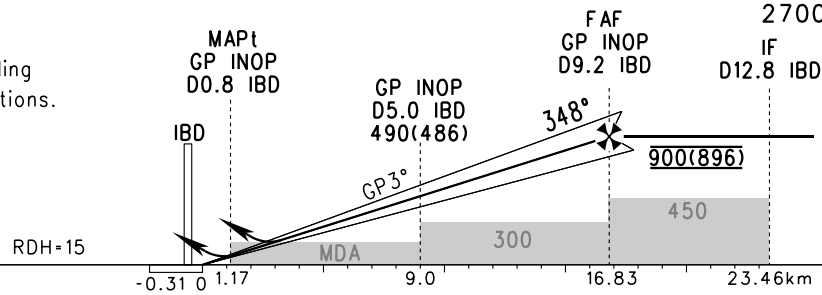


GP INOP	DME (IBD) (NM)	2	3	4	5	6	7	8	9
	ALT (m)	196	293	390	490	584	681	777	875

MISSED APPROACH

Climb straight ahead to 150, turn LEFT on track 318° to 300, then turn LEFT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH ≥ 1031hPa)
2700(QNH ≤ 979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ 800/800			
GP INOP MDA(H) VIS	150(146) 2000		150(146) 2200	150(146) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 15.66km

GS in kt	80	100	120	140	160	180
GS in km/h	150	185	220	260	295	335
Time min:sec	6:21	5:04	4:14	3:37	3:10	2:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

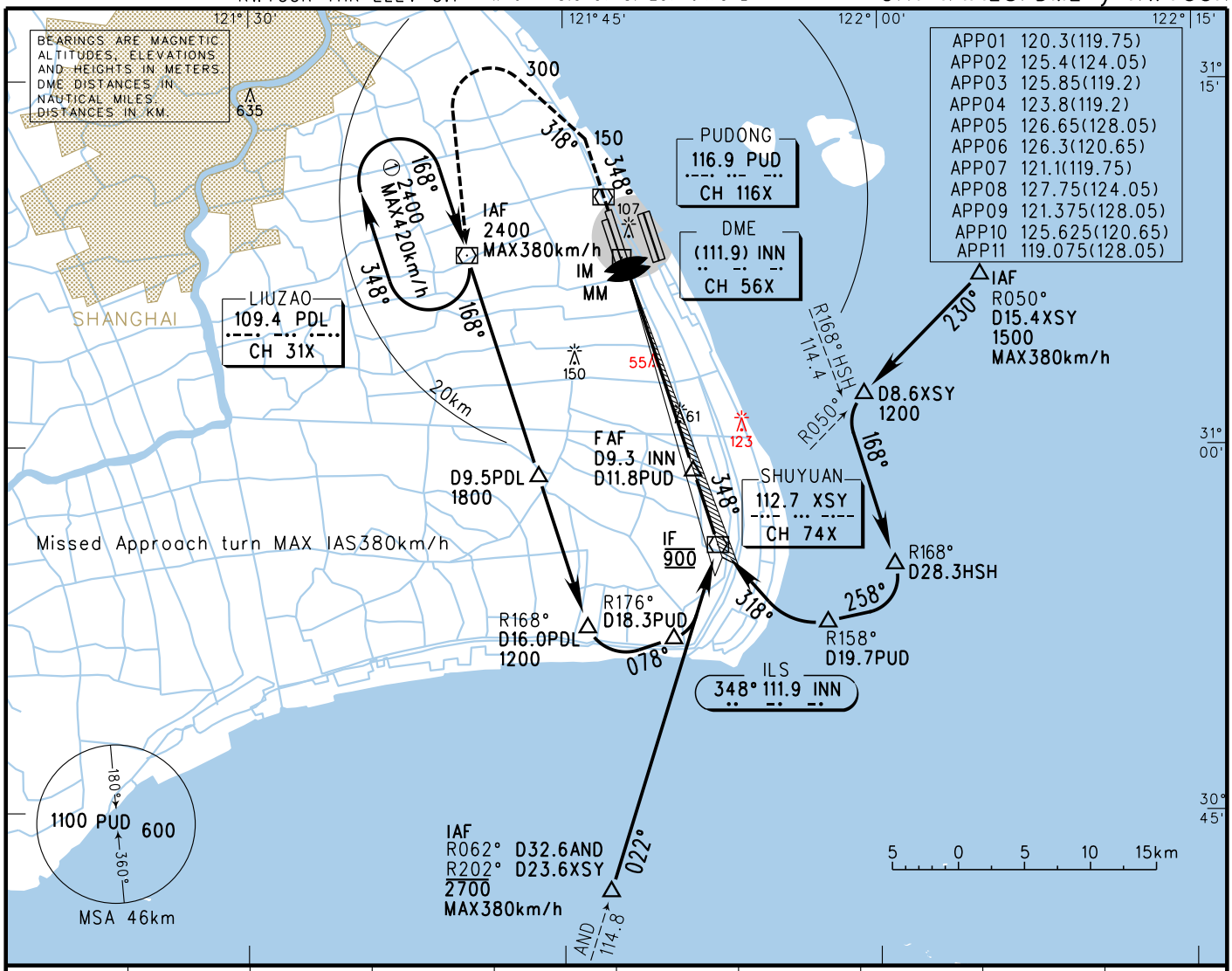
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY35R THR ELEV 3.1

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

CAT-I/II ILS/DME y RWY35R

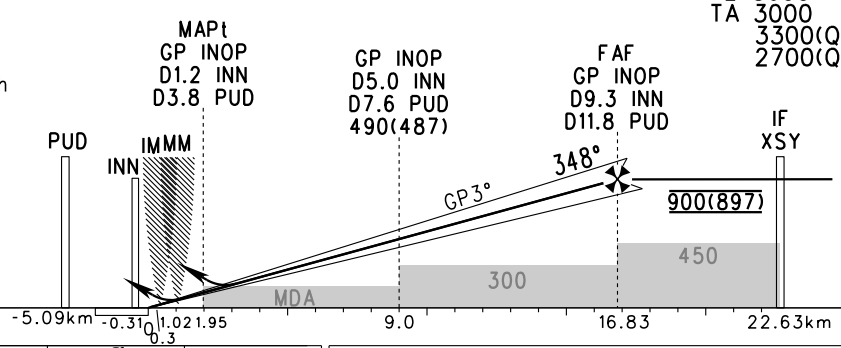


GP INOP	DME (INN) (NM)	2	3	4	5	6	7	8	9
	ALT (m)	196	293	390	490	584	681	778	875

MISSED APPROACH

Climb straight ahead to 150, turn LEFT on track 318° to 300, then turn LEFT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



		A	B	C	D
ILS/DME	DA(H) RVR/VIS Ⓐ	64(60) 550/800			
GP INOP	MDA(H) VIS	150(147) 2000		150(147) 2200	150(147) 2400
CIRCLING	MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

ILS CAT II

Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

FAF-MAPt(GP-INOP) 14.88km

GS in	kt	80	100	120	140	160	180
	km/h	150	185	220	260	295	335
Time	min:sec	6:02	4:49	4:01	3:27	3:01	2:41
Rate of descent m/s		2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

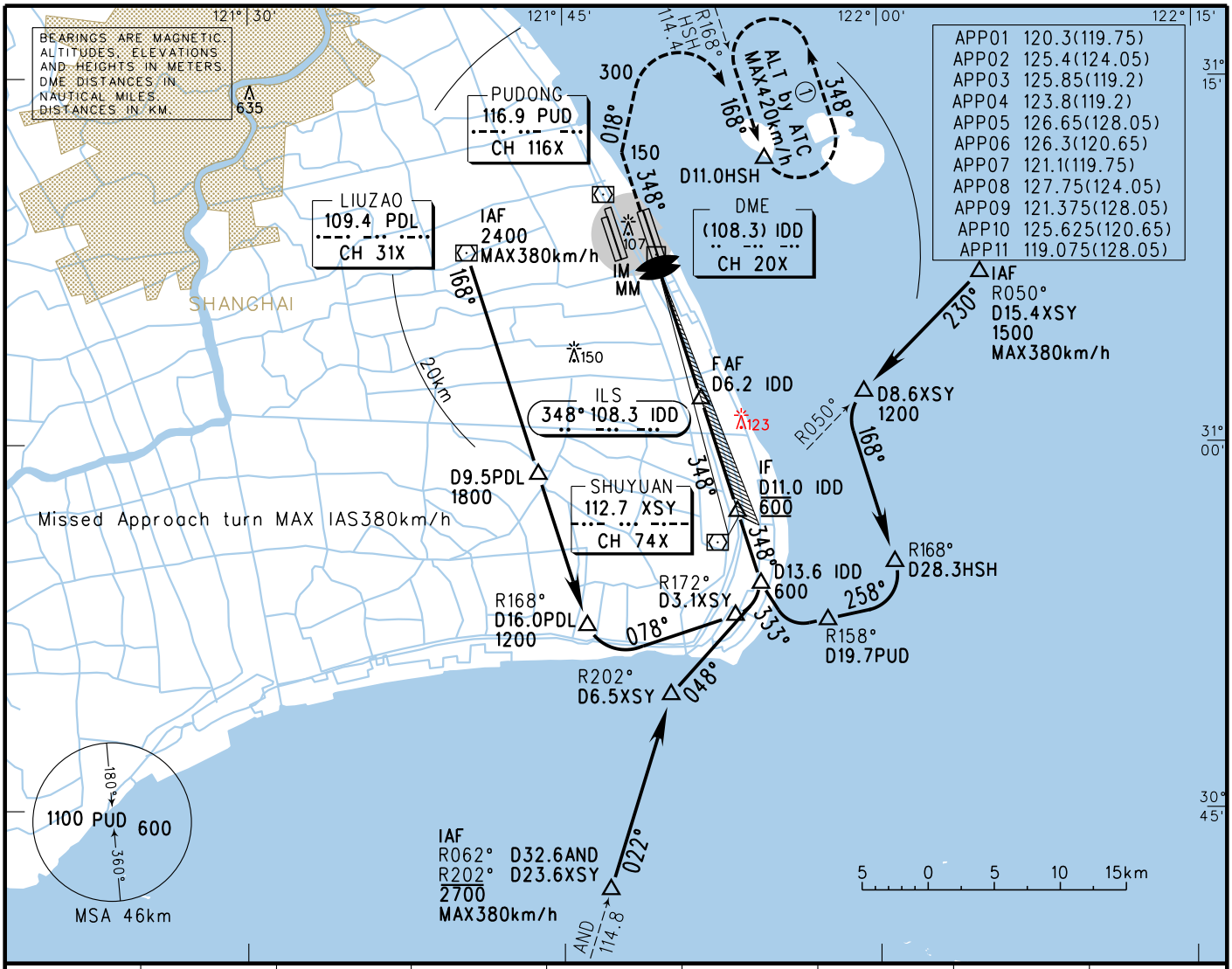
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34L THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

CAT-II/IIIA ILS/DME w RWY34L

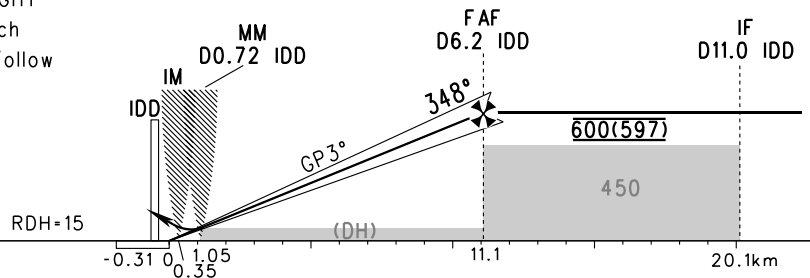


GP INOP								
	DME (NM)							
	ALT (m)							

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to R168°/D11.0HSH at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



ILS CAT II				
Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

ILS CAT IIIA			
Aircraft type	Decision height (DH)	Radio altimeter	RVR
A,B,C,D	(15)	(15)	RVR175

FAF-THR 11.1km

GS in kt / km/h	80 / 150	100 / 185	120 / 220	140 / 260	160 / 295	180 / 335
Time min:sec	4:30	3:36	3:00	2:34	2:15	2:00
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

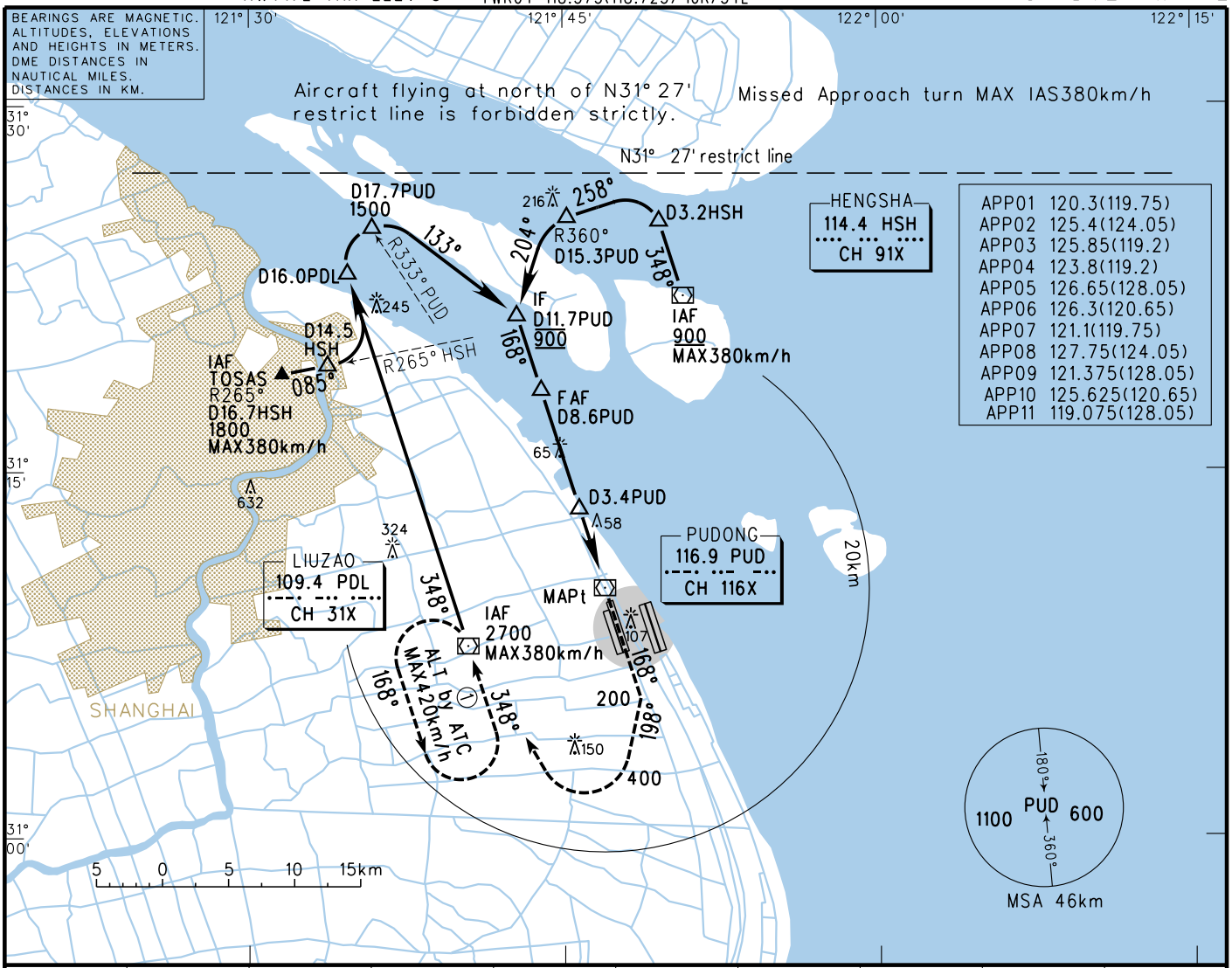
Changes: OBST.

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY17L THR ELEV 3

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
VOR/DME RWY17L

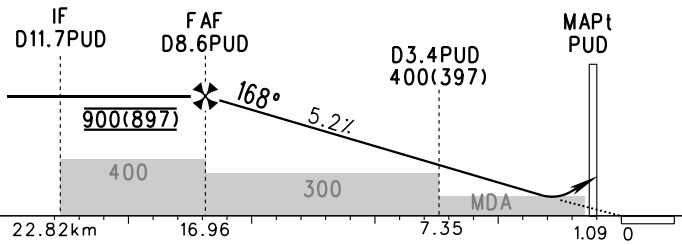


DME (PUD) (NM)		8	7	6	5	4	3	2	1
ALT (m)		843	747	651	555	459	363	267	170

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

MISSED APPROACH

Climb straight ahead to 200, turn RIGHT on track 198° to 400, then turn RIGHT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.



	A	B	C	D
VOR/DME MDA(H) VIS	140(137) 1800		140(137) 2000	140(137) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt 15.87km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:26	5:08	4:17	3:40	3:13	2:51
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

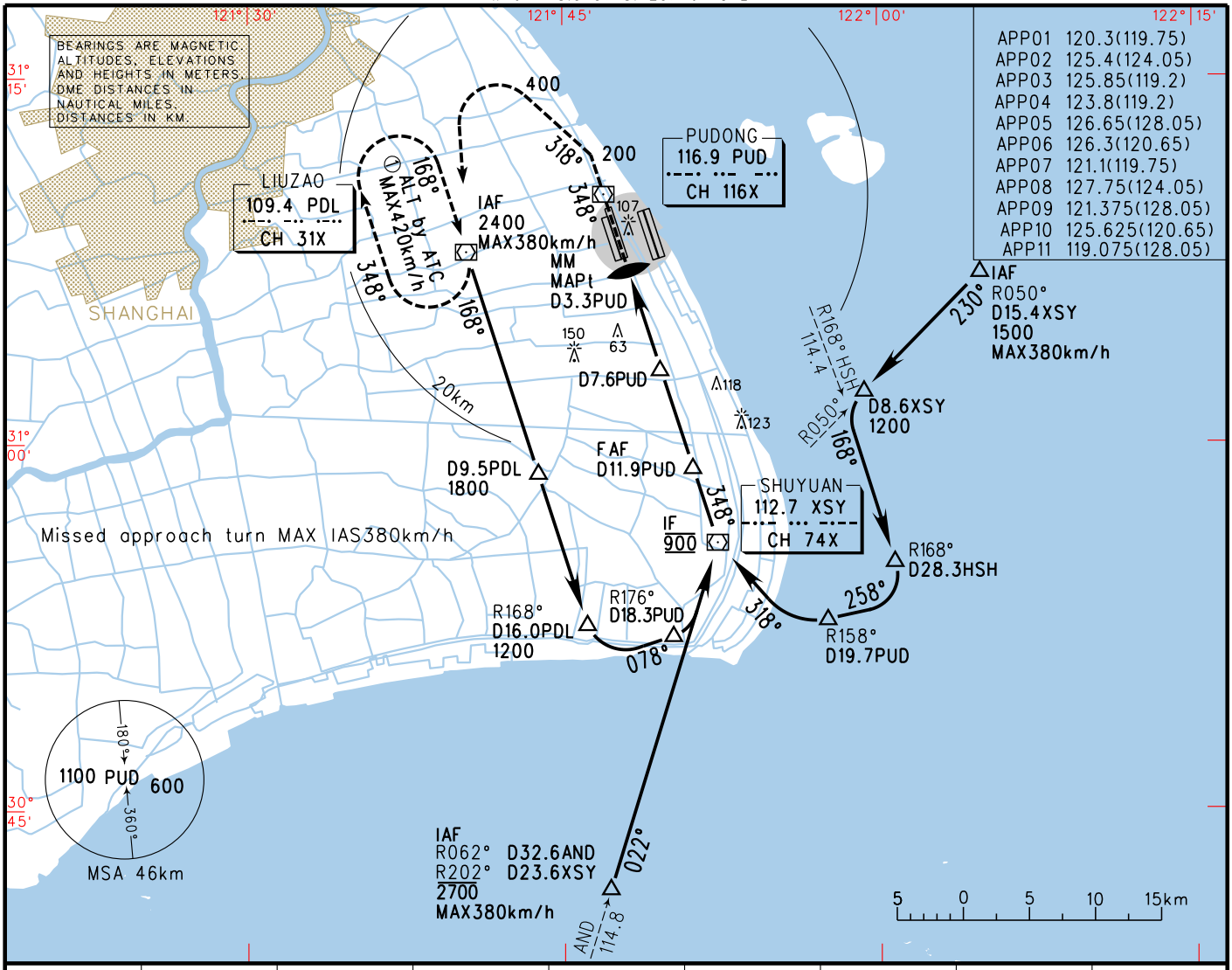
Changes: Nil.

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY35R THR ELEV 3.1

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
VOR/DME RWY35R

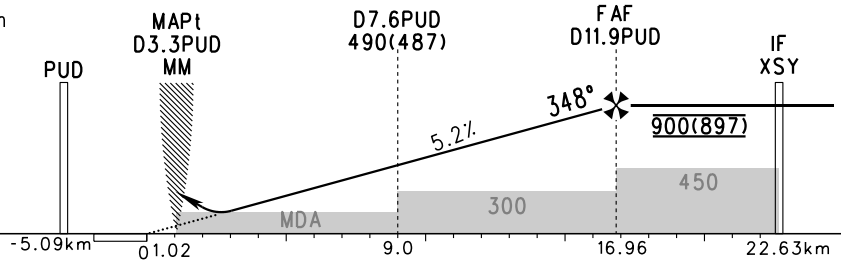


DME (PUD) (NM)	5	6	7	8	9	10	11	12
ALT (m)	234	331	427	523	619	715	811	

MISSED APPROACH

Climb straight ahead to 200, turn LEFT on track 318° to 400, then turn LEFT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)



	A	B	C	D
VOR/DME MDA(H) VIS	150(147) 2000		150(147) 2200	150(147) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt 15.94km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:27	5:10	4:18	3:41	3:14	2:52
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.8

Changes: Graticules.

AERODROME CHART

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

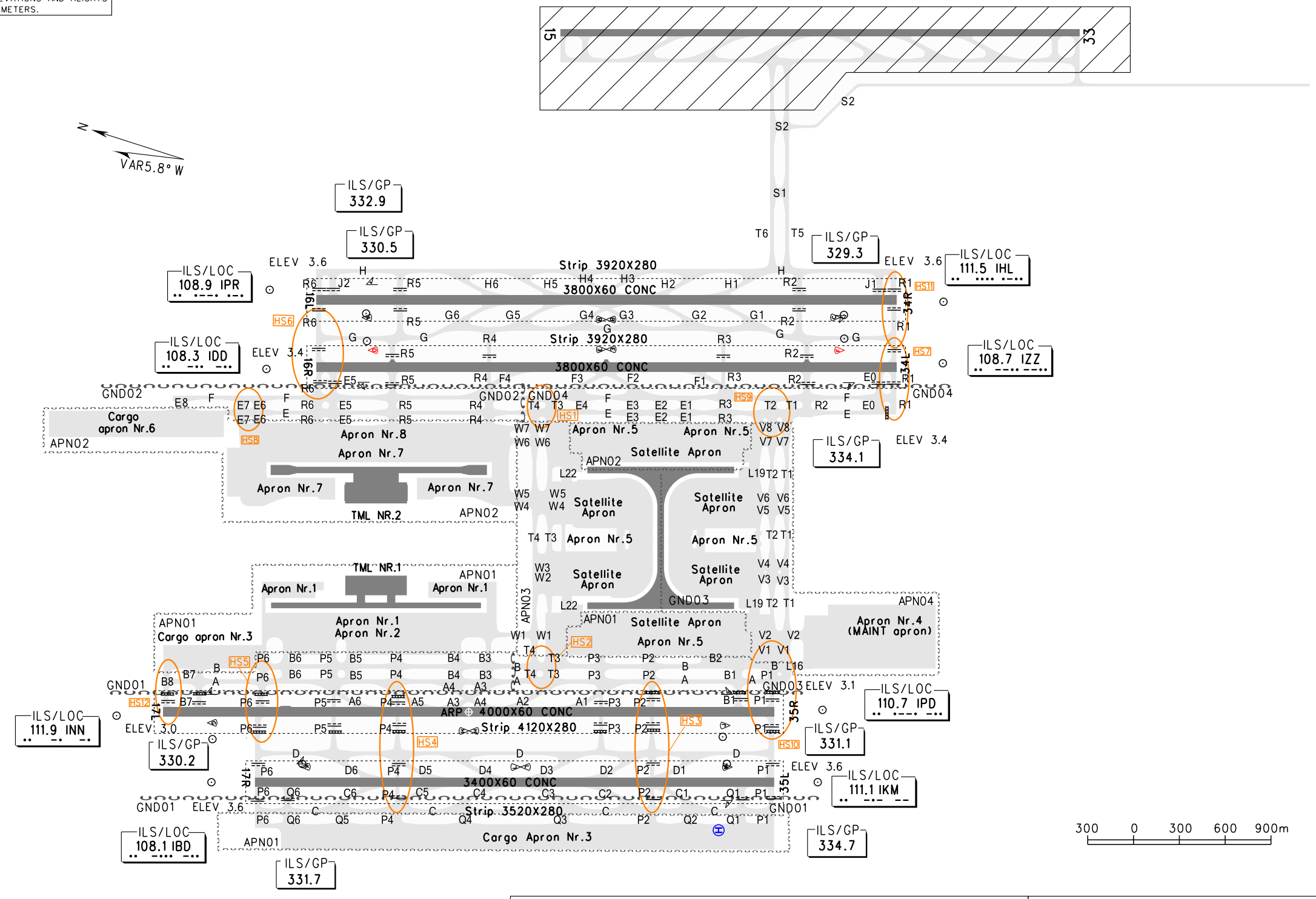
APN01: 121.65(122.125)
APN02: 121.975(122.125)
APN03: 122.7(122.125)
APN04: 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625
Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong

N31° 08.7'E121° 47.6' ELEV 3.8m

BEARINGS ARE MAGNETIC.
ALTITUDES, DISTANCES, ELEVATIONS AND HEIGHTS IN METERS.



Legend:

HS1-HS12 : Hot spot.

Ⓗ : Helicopter take off and landing area

: Construction area.

TAKE-OFF MINIMA(WITH RELIABLE ALTN)(m)						LIGHTS	
ACFT Type		LVP in force 17L/35R/34L		RWY16L/34R,16R/34L 17L/35R,17R/35L		16L/34R, 17R/35L	17L/35R, 16R/34L
		REDL&RCLL&RVRs	REDL&RCLL	REDL&RCLM	NIL(Day only)	PALS CAT I SFL PAPI REDL RCLL RENL	PALS CAT II/III SFL PAPI REDL RCLL RTZL RENL
2 TURB ENG or 3&4 ENG	A B C	RVR150	RVR200	RVR400 VIS800	RVR500 VIS800		
	D	RVR200	RVR250				

Changes: Location of RVR.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

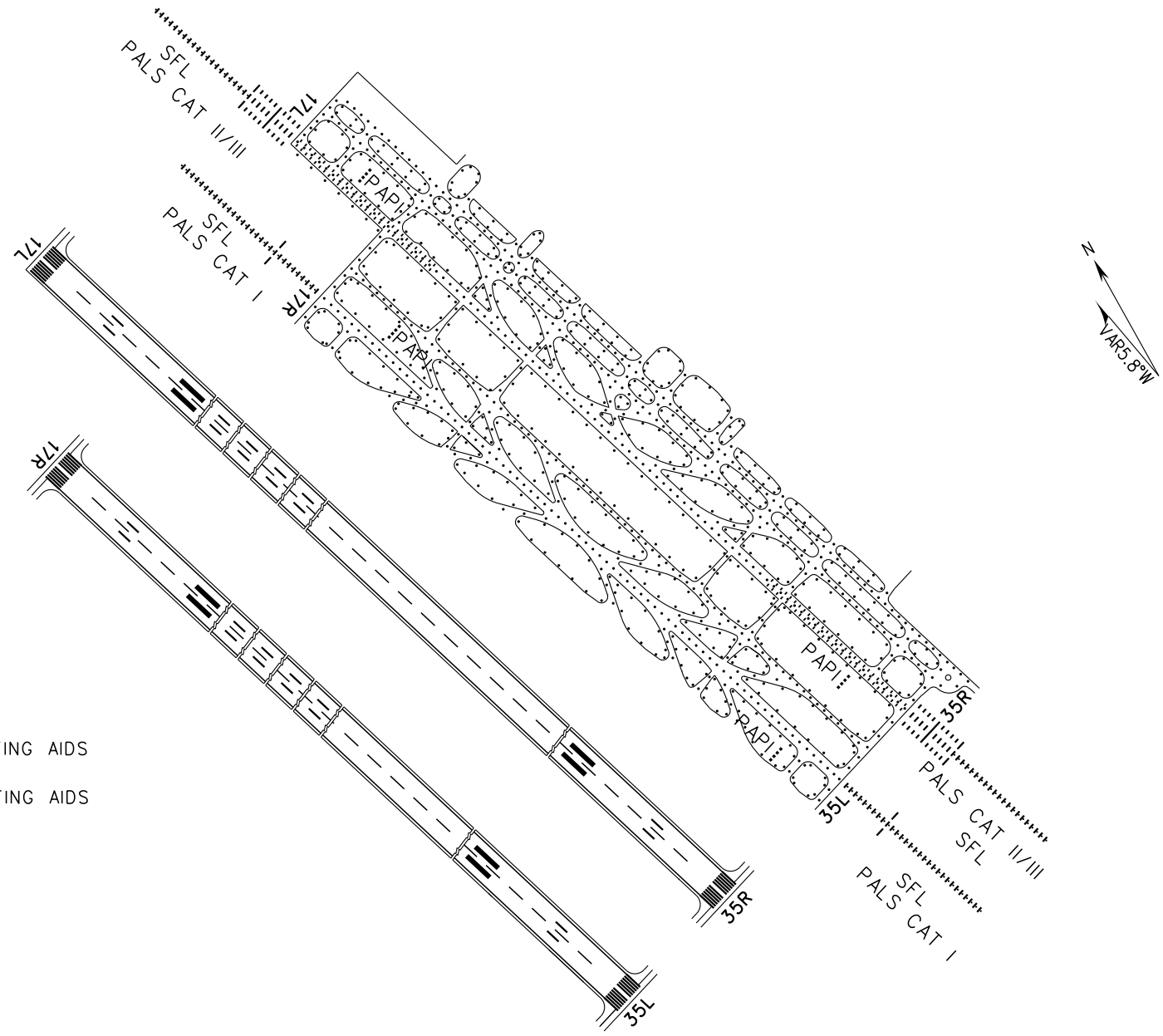
TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01 121.7
GND02 121.8
GND03 121.875
GND04 121.625
Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong

N31° 08.7'E121° 47.6' ELEV 3.8m



Note:
RWY 16R/34L MARKING AND LIGHTING AIDS SIMILAR TO RWY 17L/35R.
RWY 16L/34R MARKING AND LIGHTING AIDS SIMILAR TO RWY 17R/35L.
ARP at center of RWY 17L/35R.

RWY	Direction	RWY and TWY bearing strength		
16L/ 16R/ 17L/ 17R	168°	PCR 980/R/B/W/T: RWY16L/34R CONC PCR 960/R/B/W/T: RWY16R/34L CONC PCR 890/R/A/W/T: RWY17L/35R CONC PCR 930/R/A/W/T: RWY17R/35L CONC	PCR 1780/F/C/X/T: TWY P1(BTN TWY D & RWY17L/35R), P2-P6(BTN TWY A&D) PCR 1680/F/C/X/T: TWY R1(BTN TWY G & RWY16R/34L), R2(BTN TWY G & RWY16R/34L), R3(E of TWY F), R4(E of TWY F), R5(BTN TWY G & RWY16R/34L), R6(BTN TWY G & RWY16R/34L) PCR 1620/F/C/X/T: TWY G(N of TWY G6 exit & S of TWY G1 exit) PCR 1100/R/A/W/T: TWY B7 PCR 1030/R/B/W/T: TWY S1, S2, T5, T6 PCR 1000/R/A/W/T: TWY A1-A4 PCR 980/R/A/W/T: TWY B2-B6, F1-F4 PCR 960/R/A/W/T: TWY B8 PCR 950/R/A/W/T: TWY B1, C1, C2, C5, C6, D1, D2, D5, D6 PCR 940/R/A/W/T: TWY A5, A6 PCR 910/R/A/W/T: TWY A, B PCR 900/R/A/W/T: TWY P1(BTN TWY B & RWY17L/35R) PCR 890/R/A/W/T: TWY H1-H6, J1, J2 PCR 880/R/A/W/T: TWY Q1-Q6	PCR 870/R/A/W/T: TWY E0-E8, W1-W7 PCR 860/R/A/W/T: TWY G2-G5 PCR 850/R/A/W/T: TWY G1, G6 PCR 840/R/A/W/T: TWY P3(E of TWY A), P4(E of TWY A & W of TWY D) PCR 820/R/A/W/T: TWY H, P2(E of TWY A & W of TWY D), P5(E of TWY A) PCR 810/R/A/W/T: TWY C3, C4, D3, D4, R2(E of TWY G & W of RWY16R/34L), R3(W of TWY F), R4(W of TWY F), R5(E of TWY G & W of RWY16R/34L) PCR 790/R/A/W/T: TWY C, D, E, F, T3, T4, V3-V8 PCR 780/R/A/W/T: TWY G(BTN TWY G1&G6 exit) PCR 770/R/A/W/T: TWY P6(E of TWY A & W of TWY D) PCR 750/R/A/W/T: TWY R1(E of TWY G & W of RWY16R/34L), R6(E of TWY G & W of RWY16R/34L) PCR 740/R/A/W/T: TWY P1(W of TWY D), T1, T2, V1, V2
34R/ 34L/ 35R/ 35L	348°			

Changes: Nil.

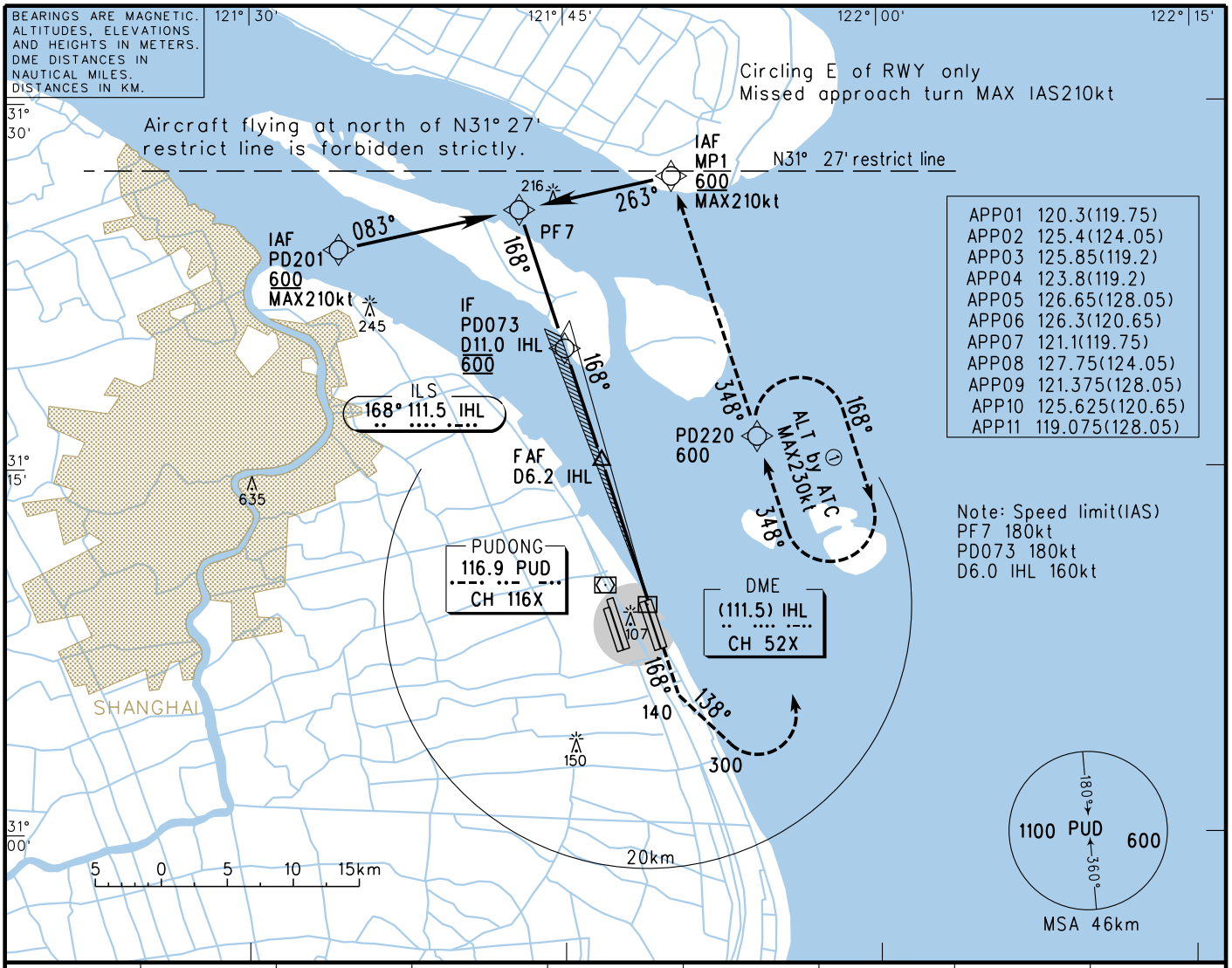
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY16L THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

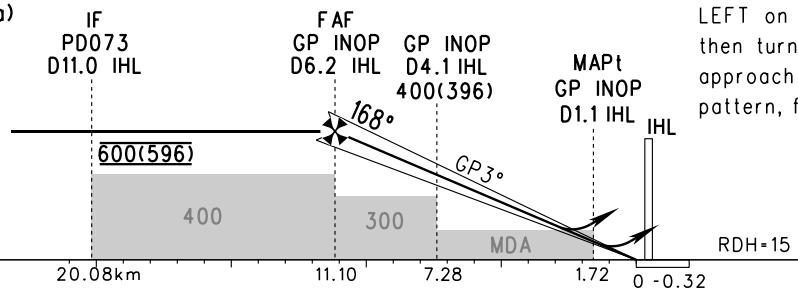
ZSPD SHANGHAI/Pudong

RNAV ILS/DME z RWY16L



GP INOP	DME (IHL) (NM)	7	6	5	4	3	2	1
	ALT (m)		584	487	390	293	196	

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH

Climb straight ahead to 140, turn LEFT on track 138° to 300, then turn LEFT to PD220 at 600, approach again or join the holding pattern, follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ 800/800			
GP INOP MDA(H) VIS	140(136) 1800		140(136) 2000	140(136) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 9.38km

GS in kt	80	100	120	140	160	180
GS in km/h	150	185	220	260	295	335
Time min:sec	3:48	3:02	2:32	2:10	1:54	1:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

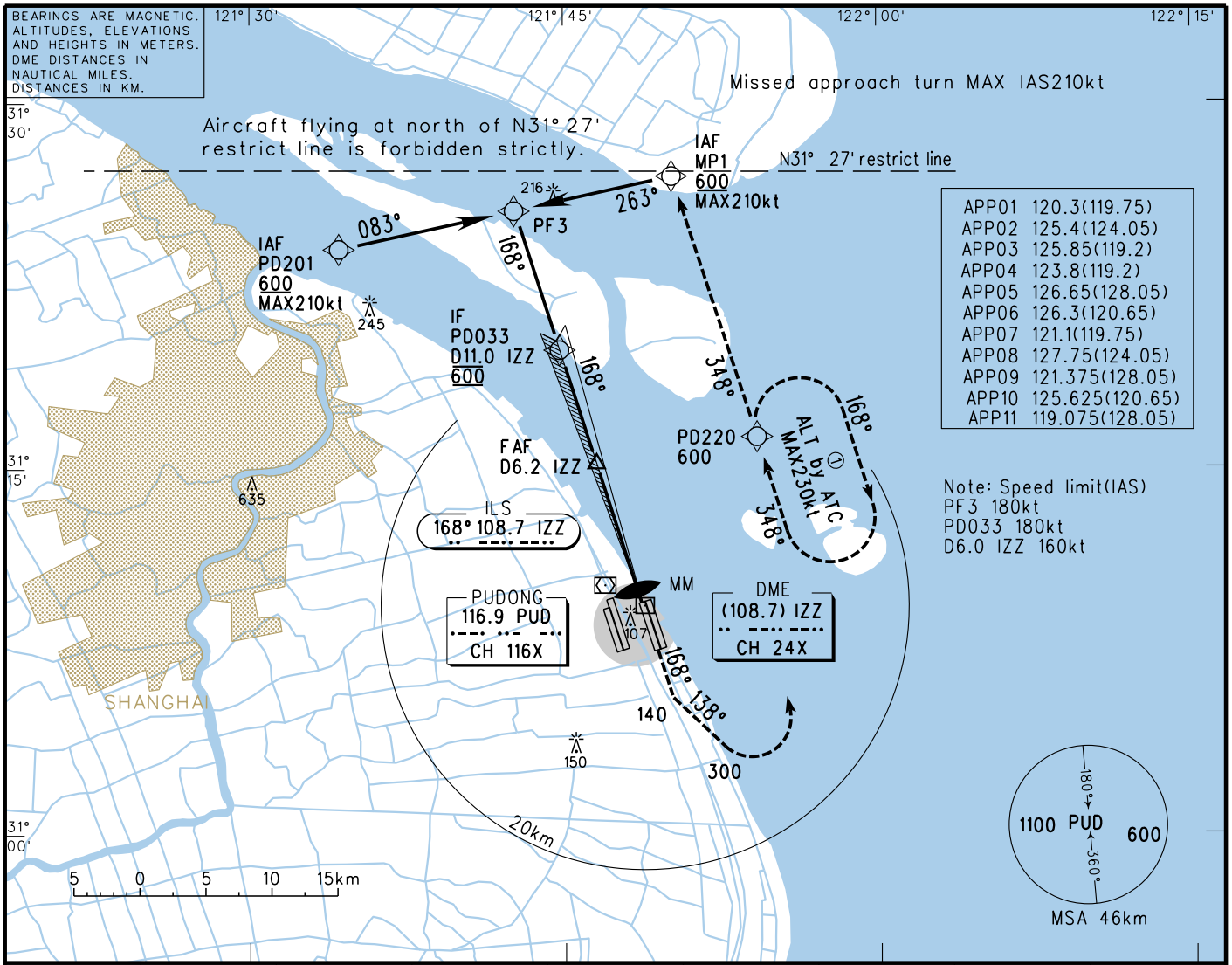
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY16R THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

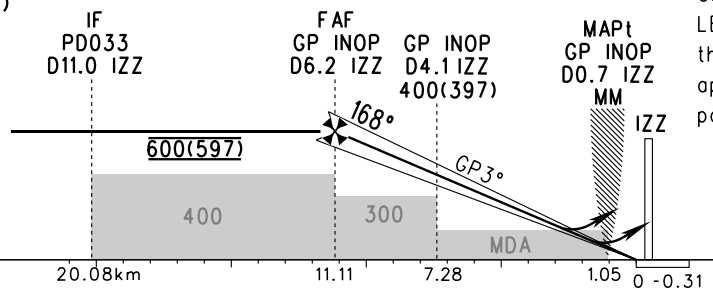
ZSPD SHANGHAI/Pudong

RNAV ILS/DME z RWY16R



GP INOP	DME (IZZ) (NM)	7	6	5	4	3	2	1
	ALT (m)		585	488	391	294	196	

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH

Climb straight ahead to 140, turn LEFT on track 138° to 300, then turn LEFT to PD220 at 600, approach again or join the holding pattern, follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) 550/800			
GP INOP MDA(H) VIS	140(137) 1800		140(137) 2000	140(137) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 10.06km

GS in kt	80	100	120	140	160	180
GS in km/h	150	185	220	260	295	335
Time min:sec	4:04	3:16	2:43	2:20	2:02	1:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

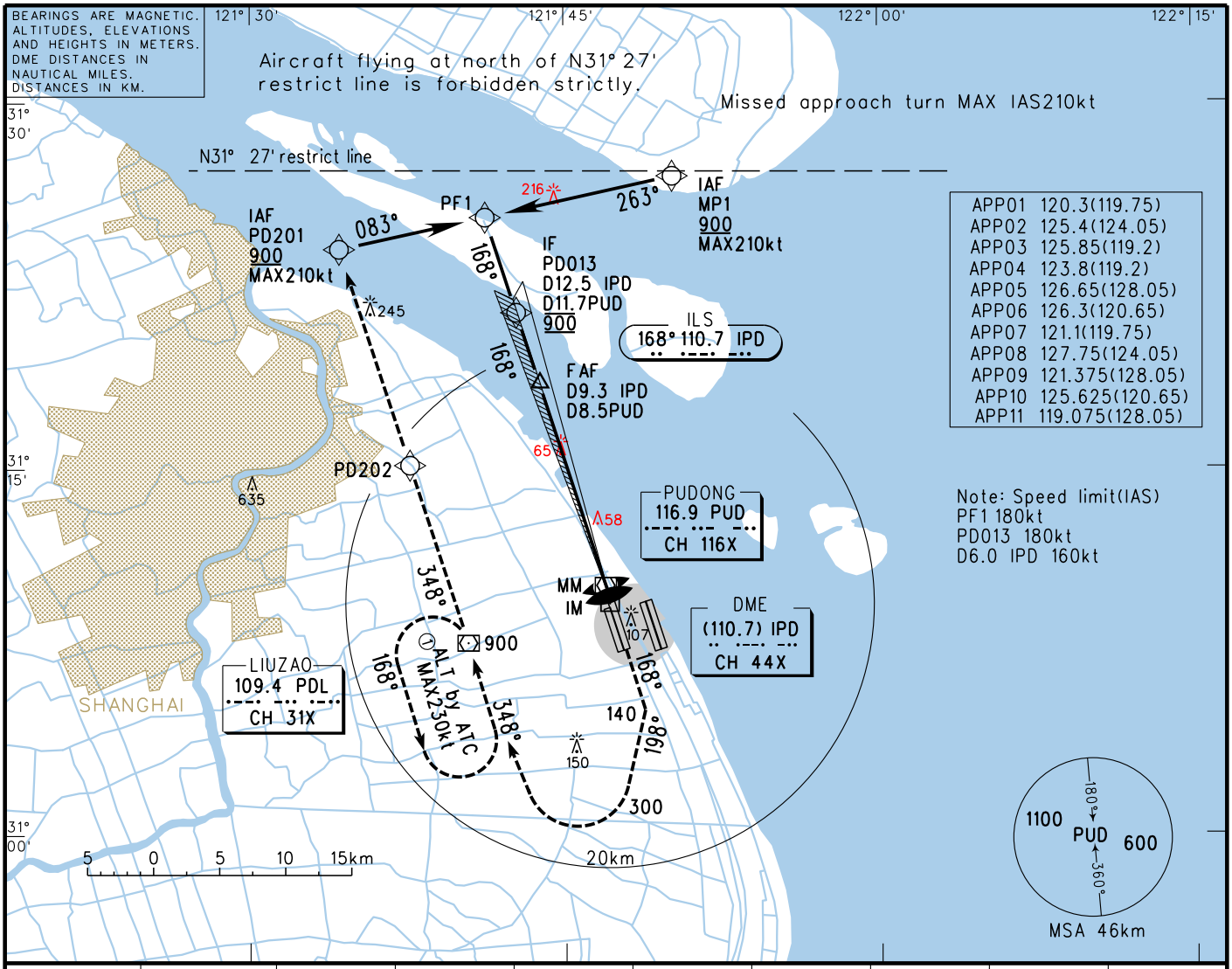
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY17L THR ELEV 3

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

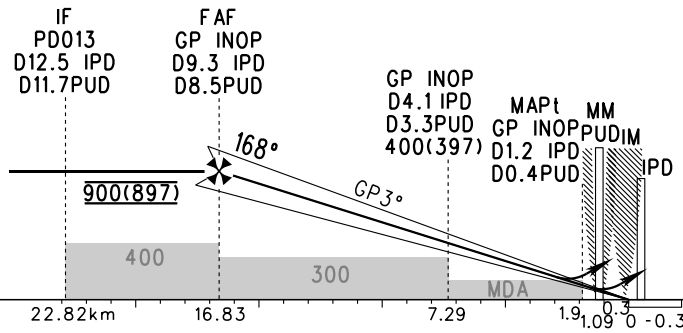
ZSPD SHANGHAI/Pudong

RNAV CAT-I/II ILS/DME z RWY17L



GP INOP	DME (IPD) (NM)	9	8	7	6	5	4	3	2
	ALT (m)	875	778	680	583	486	389	292	195

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)



MISSED APPROACH

Climb straight ahead to 140,turn RIGHT on track 198° to 300, then turn RIGHT to PDL at 900, approach again or join the holding pattern,follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	63(60) 550/800			
GP INOP MDA(H) VIS	140(137) 1800		140(137) 2000	140(137) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

ILS CAT II

Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

FAF-MAPt(GP INOP) 14.93km

GS in kt	80	100	120	140	160	180
GS in km/h	150	185	220	260	295	335
Time min:sec	6:03	4:50	4:02	3:27	3:01	2:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

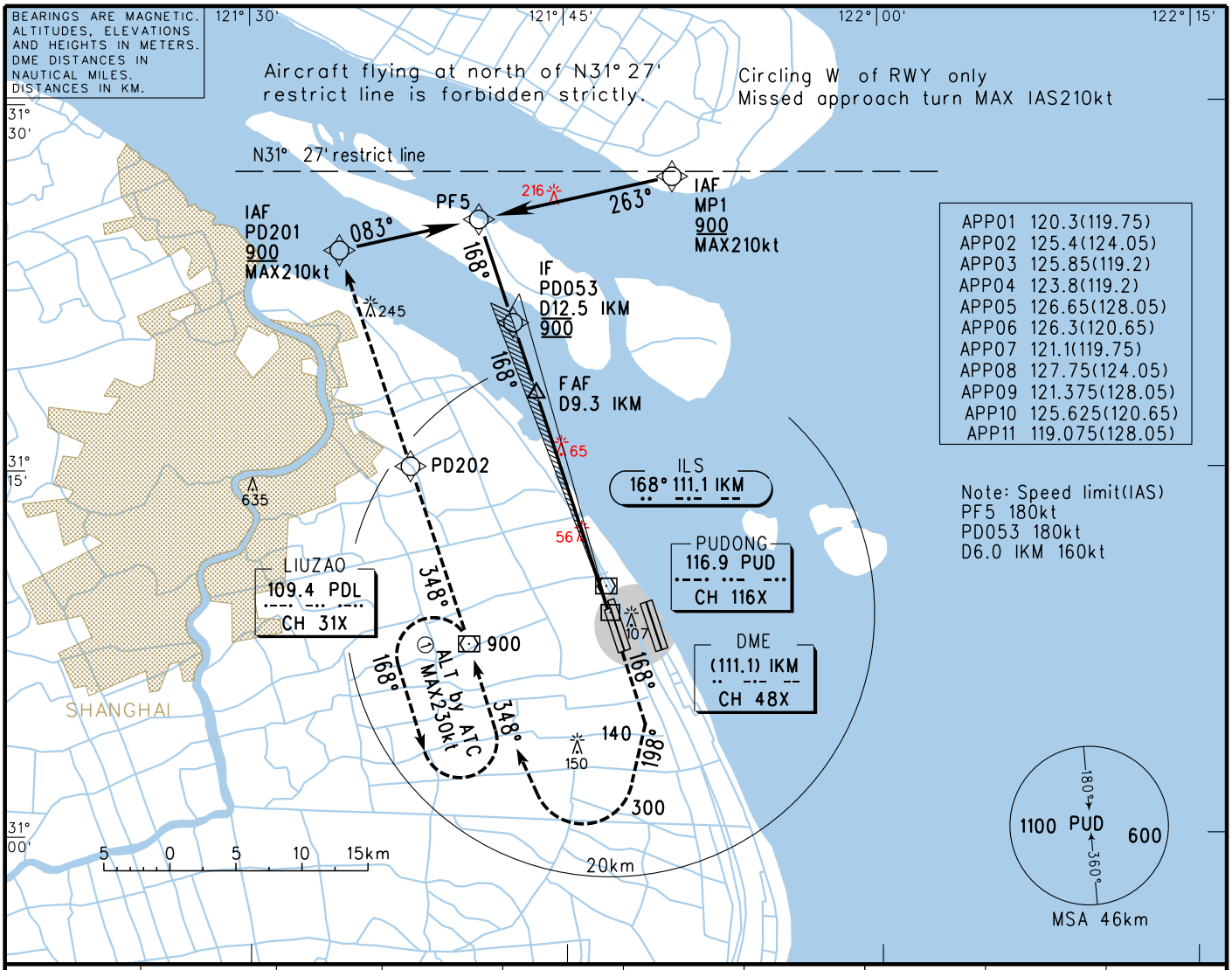
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY17R THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

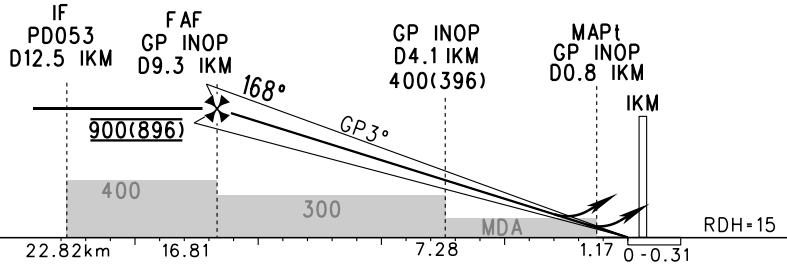
ZSPD SHANGHAI/Pudong

RNAV ILS/DME z RWY17R



GP INOP	DME (IKM) (NM)	9	8	7	6	5	4	3	2
	ALT (m)	876	778	681	584	487	390	293	196

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



MISSED APPROACH

Climb straight ahead to 140, turn RIGHT on track 198° to 300, then turn RIGHT to PDL at 900, approach again or join the holding pattern,follow the ATC instructions.

	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ 800/800			
GP INOP MDA(H) VIS	140(136) 1800		140(136) 2000	140(136) 2200
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP)15.64km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:20	5:04	4:13	3:37	3:10	2:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

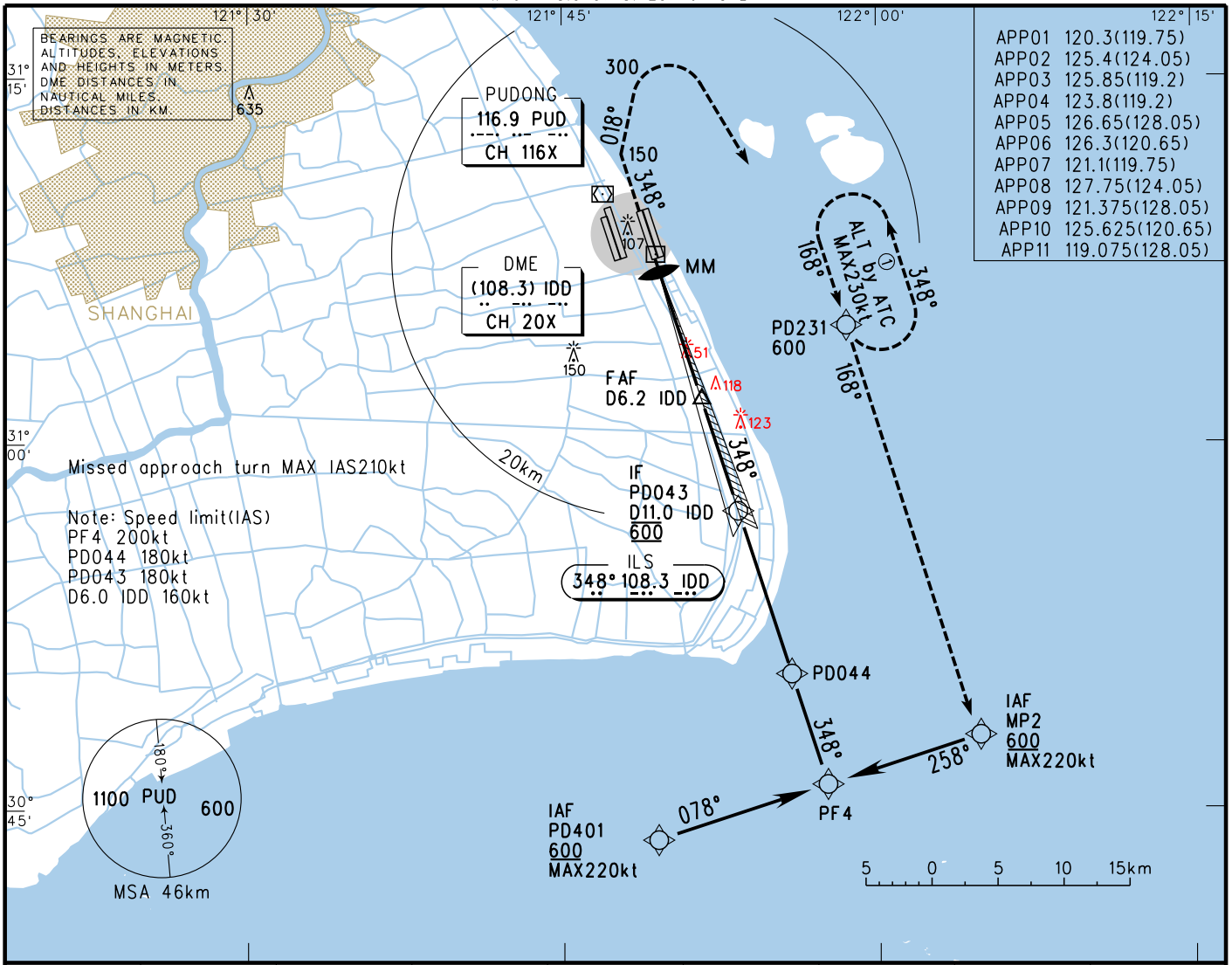
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34L THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

RNAV ILS/DME z RWY34L

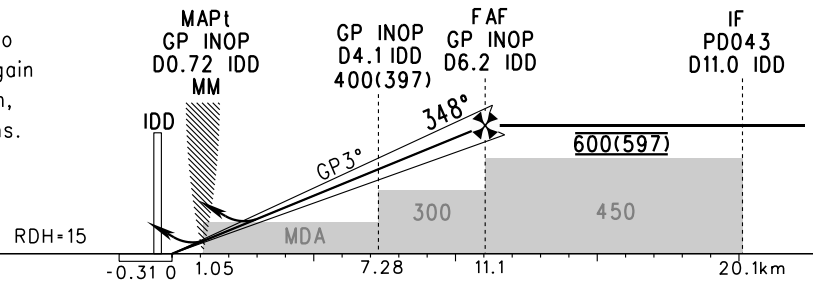


GP INOP	DME (IDD) (NM)	1	2	3	4	5	6	7
	ALT (m)		196	292	389	486	583	

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to PD231 at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) 550/800			
GP INOP MDA(H) VIS	150(147) 2000		150(147) 2200	150(147) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 10.05km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	4:04	3:15	2:43	2:20	2:02	1:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

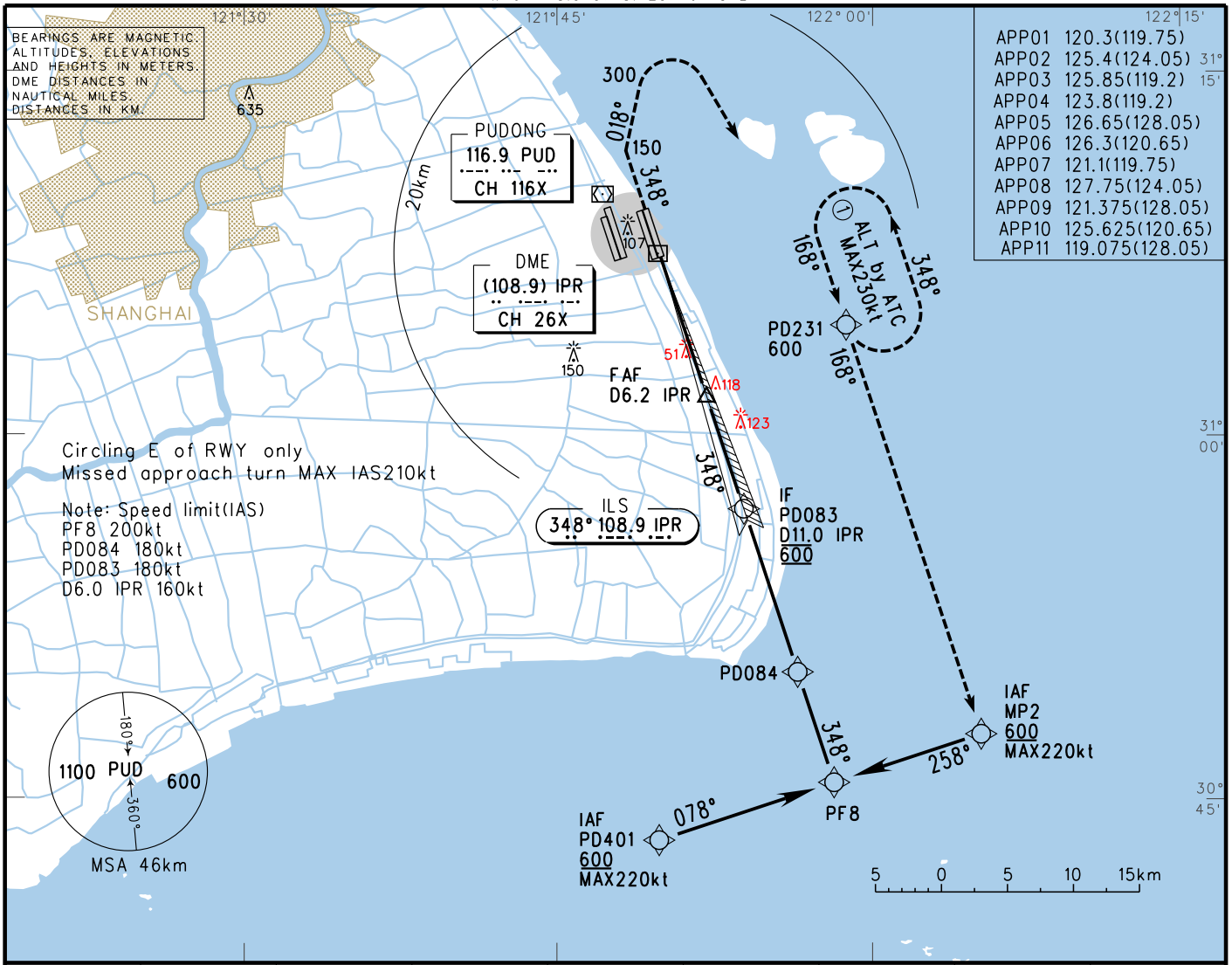
Changes: OBST.

INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34R THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
RNAV ILS/DME z RWY34R

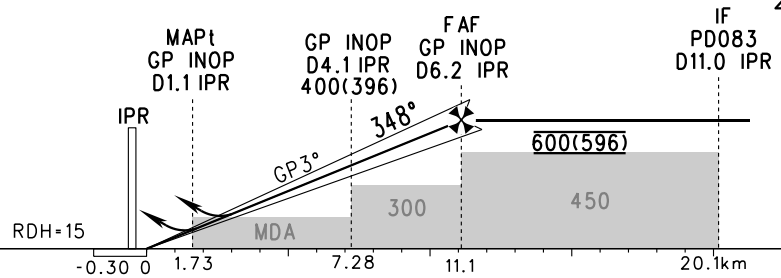


GP INOP	DME (IPR) (NM)	1	2	3	4	5	6	7
	ALT (m)		196	293	390	487	584	

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to PD231 at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ800/800			
GP INOP MDA(H) VIS	150(146) 2000		150(146) 2200	150(146) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 9.37km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	3:48	3:02	2:32	2:10	1:54	1:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(48),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

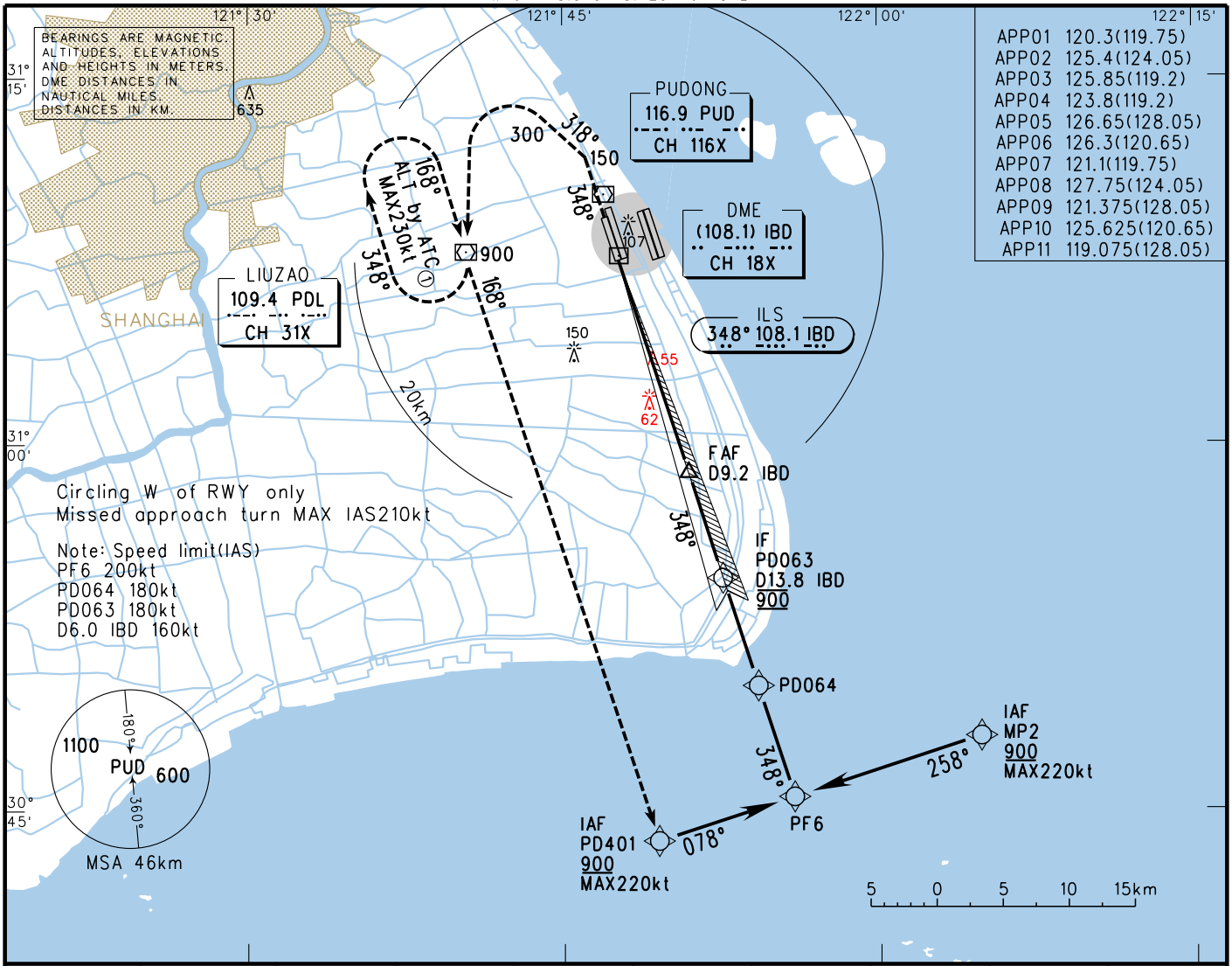
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY35L THR ELEV 3.6

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

RNAV ILS/DME z RWY35L

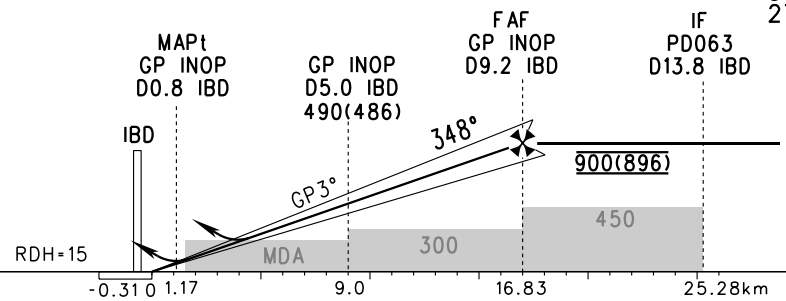


GP INOP	DME (IBD) (NM)	2	3	4	5	6	7	8	9
	ALT (m)	196	293	390	490	584	681	777	875

MISSED APPROACH

Climb straight ahead to 150, turn LEFT on track 318° to 300, then turn LEFT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



	A	B	C	D
ILS/DME DA(H) RVR/VIS Ⓐ	64(60) Ⓑ 800/800			
GP INOP MDA(H) VIS	150(146) 2000		150(146) 2200	150(146) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

FAF-MAPt(GP INOP) 15.66km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:21	5:04	4:14	3:37	3:10	2:49
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Ⓐ HUD Special CAT I: (DH)(45),(RA)(46),RVR450
Ⓑ RVR 550m can be implemented when using approved HUD or AP or FD for ILS/DME approach.

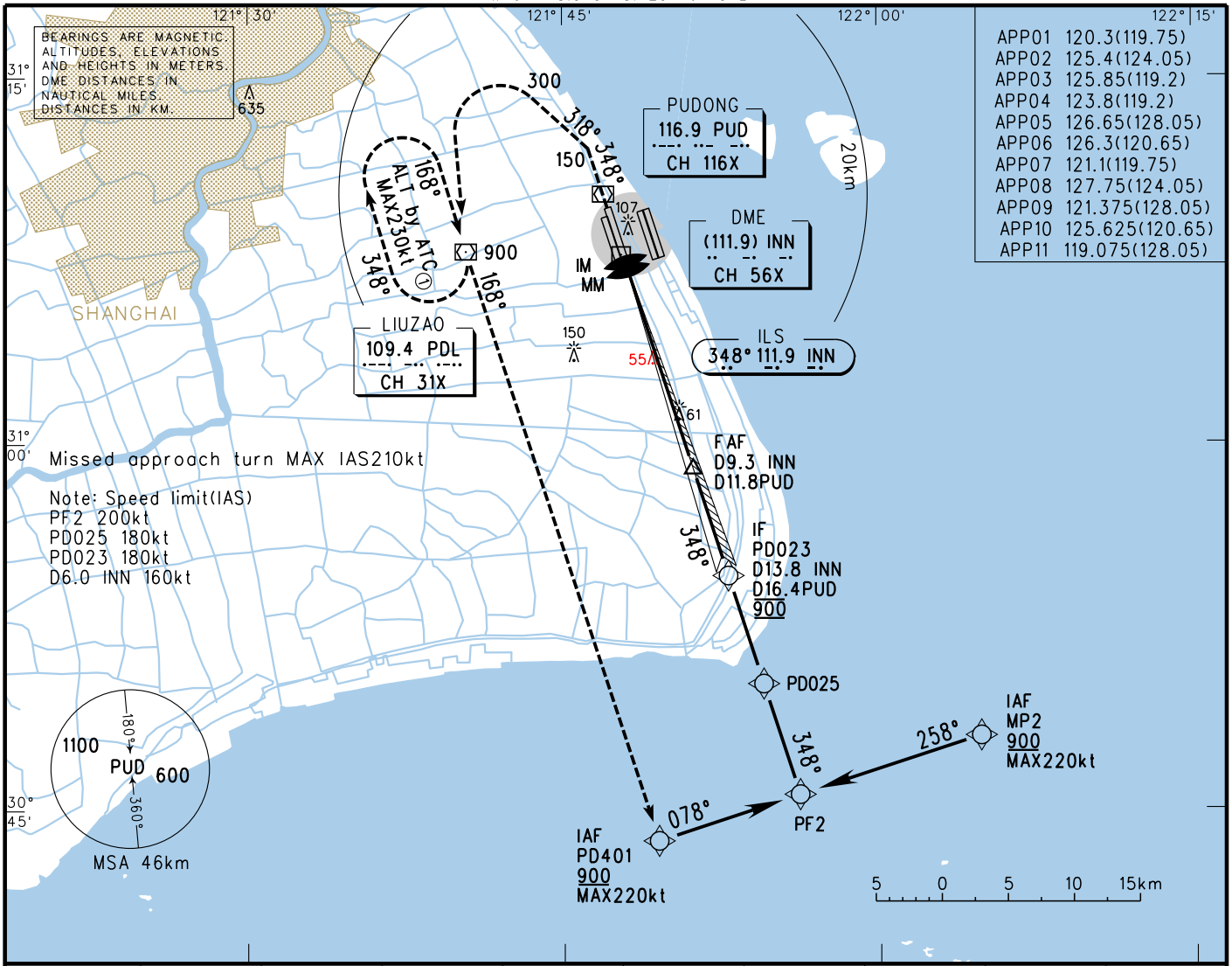
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY35R THR ELEV 3.1

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

RNAV CAT-I/II ILS/DME z RWY35R

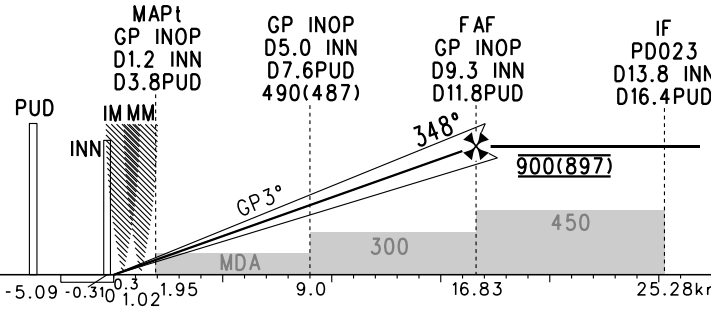


APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)
APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

GP INOP	DME (INN) (NM)	2	3	4	5	6	7	8	9
	ALT (m)	196	293	390	490	584	681	778	875

MISSED APPROACH

Climb straight ahead to 150, turn LEFT on track 318° to 300, then turn LEFT to PDL at 900, approach again or join the holding pattern, follow the ATC instructions.



	A	B	C	D
ILS/DME DA(H) RVR/VIS ❹	64(60) 550/800			
GP INOP MDA(H) VIS	150(147) 2000		150(147) 2200	150(147) 2400
CIRCLING MDA(H) VIS	210(206) 2800	210(206) 3200	240(236) 4400	280(276) 4800

ILS CAT II

Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

FAF-MAPt(GP INOP) 14.88km

GS in kt / km/h	80 150	100 185	120 220	140 260	160 295	180 335
Time min:sec	6:02	4:49	4:01	3:27	3:01	2:41
Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

❹ HUD Special CAT I: (DH)(45),(RA)(46),RVR450

Changes: OBST.

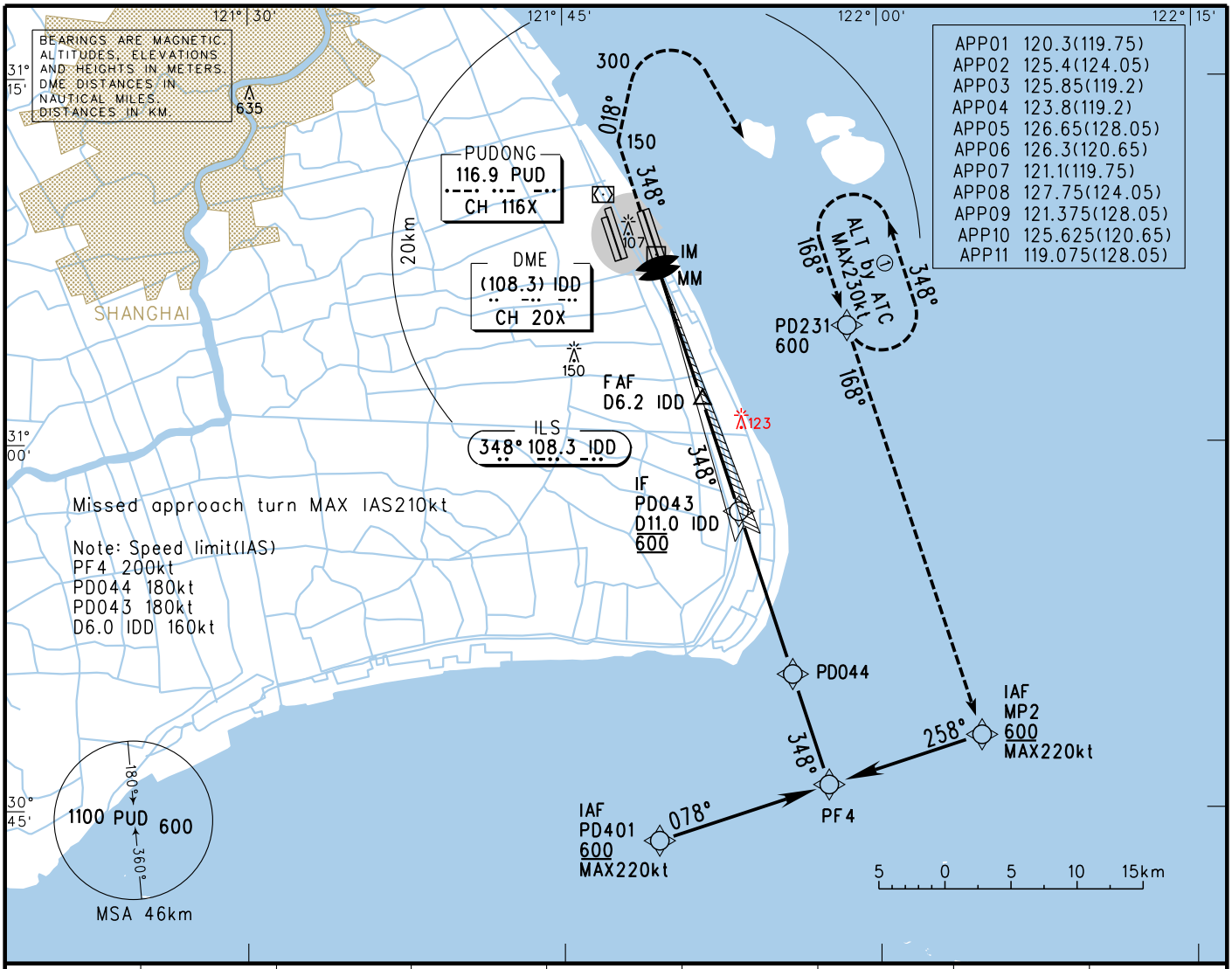
INSTRUMENT APPROACH CHART-ICAO

VAR5.8° W
AERODROME ELEV 3.8
RWY34L THR ELEV 3.4

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong

RNAV CAT-II/IIIA ILS/DME x RWY34L

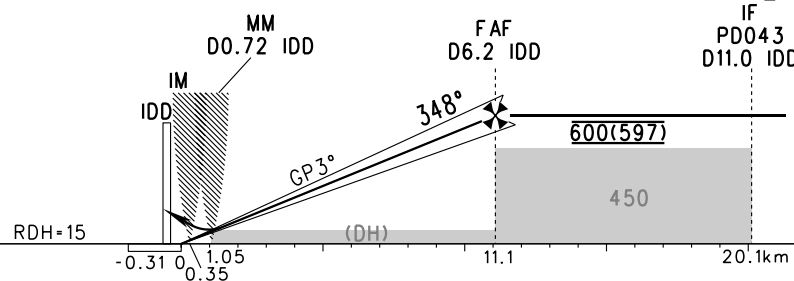


GP INOP	DME (NM)							
	ALT (m)							

MISSED APPROACH

Climb straight ahead to 150, turn RIGHT on track 018° to 300, then turn RIGHT to PD231 at 600, approach again or join the holding pattern, follow the ATC instructions.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



ILS CAT II				
Aircraft type	Decision height (DH)	Radio altimeter	Autopilot to DH and below	Manual operation below DH
A,B,C	(30)	(31)	RVR300	RVR300
D				RVR350

ILS CAT IIIA			
Aircraft type	Decision height (DH)	Radio altimeter	RVR
A,B,C,D	(15)	(15)	RVR175

FAF-THR 11.1km							
GS in	kt	80	100	120	140	160	180
	km/h	150	185	220	260	295	335
Time	min:sec	4:30	3:36	3:00	2:34	2:15	2:00
Rate of descent m/s		2.2	2.7	3.2	3.8	4.3	4.9

Changes: OBST.

AIRCRAFT PARKING CHART-ICAO

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

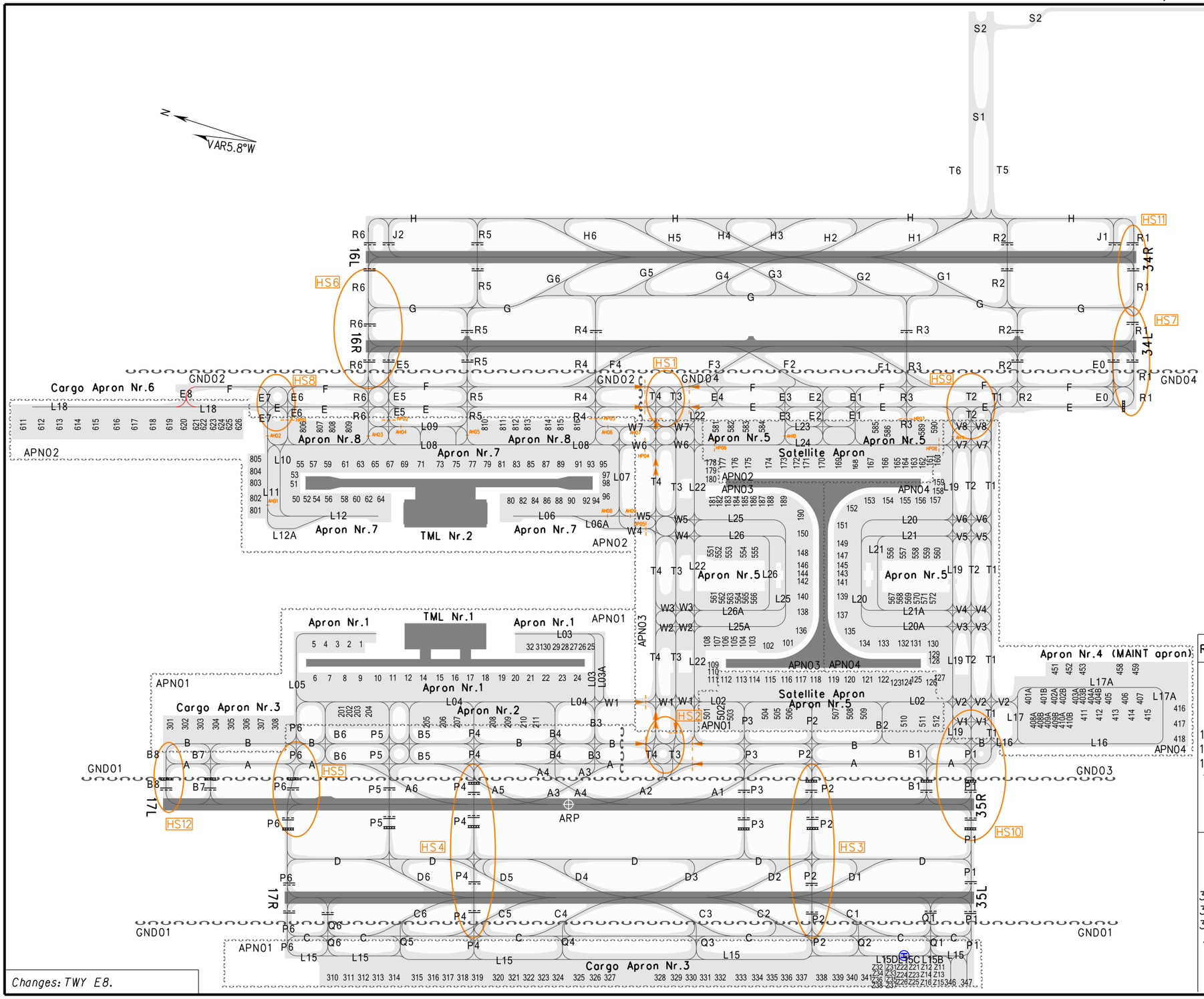
TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong



Legend:

- AH : Apron holding point for entering apron.
- HP : Holding point for exitting apron.
- : Compulsory holding point
- : Taxiing directions.
- HS1 - HS12 : Hot spot.
- : APN control area boundary.
- : GND control area boundary.
- Ⓗ : Helicopter take off and landing area

RWY	Direction	Apron bearing strength
16L/ 16R/ 17L/ 17R	168°	PCR 1060/R/B/W/T:Stands 50-65, 67, 69, 71, 73, 75, 77, 79-98, 801-816 PCR 990/R/A/W/T:Stands 501-509 PCR 990/R/B/W/T:Stands 611-626 PCR 960/R/A/W/T:Stands 301-308 PCR 940/R/A/W/T:Stands 6-12, 14-24 PCR 930/R/A/W/T:Stands 201-211 PCR 920/R/B/W/T:Stands 310-341, 346, 347, Z11-Z16, Z21-Z26, Z31-Z38
34R/ 34L/ 35R/ 35L	348°	PCR 790/R/A/W/T:Stands 1-5, 25-32 PCR 770/R/A/W/T:Stands 101-190 PCR 750/R/A/W/T:Stands 581-586, 589, 590, 551-572 PCR 740/R/A/W/T:Stands 510-512 PCR 710/R/A/W/T:Stands 401A/B, 402A/B, 403A/B, 404A/B, 405-407,408A/B, 409A/B, 410A/B, 411-418,451-453, 458, 459

Changes: TWY E8.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

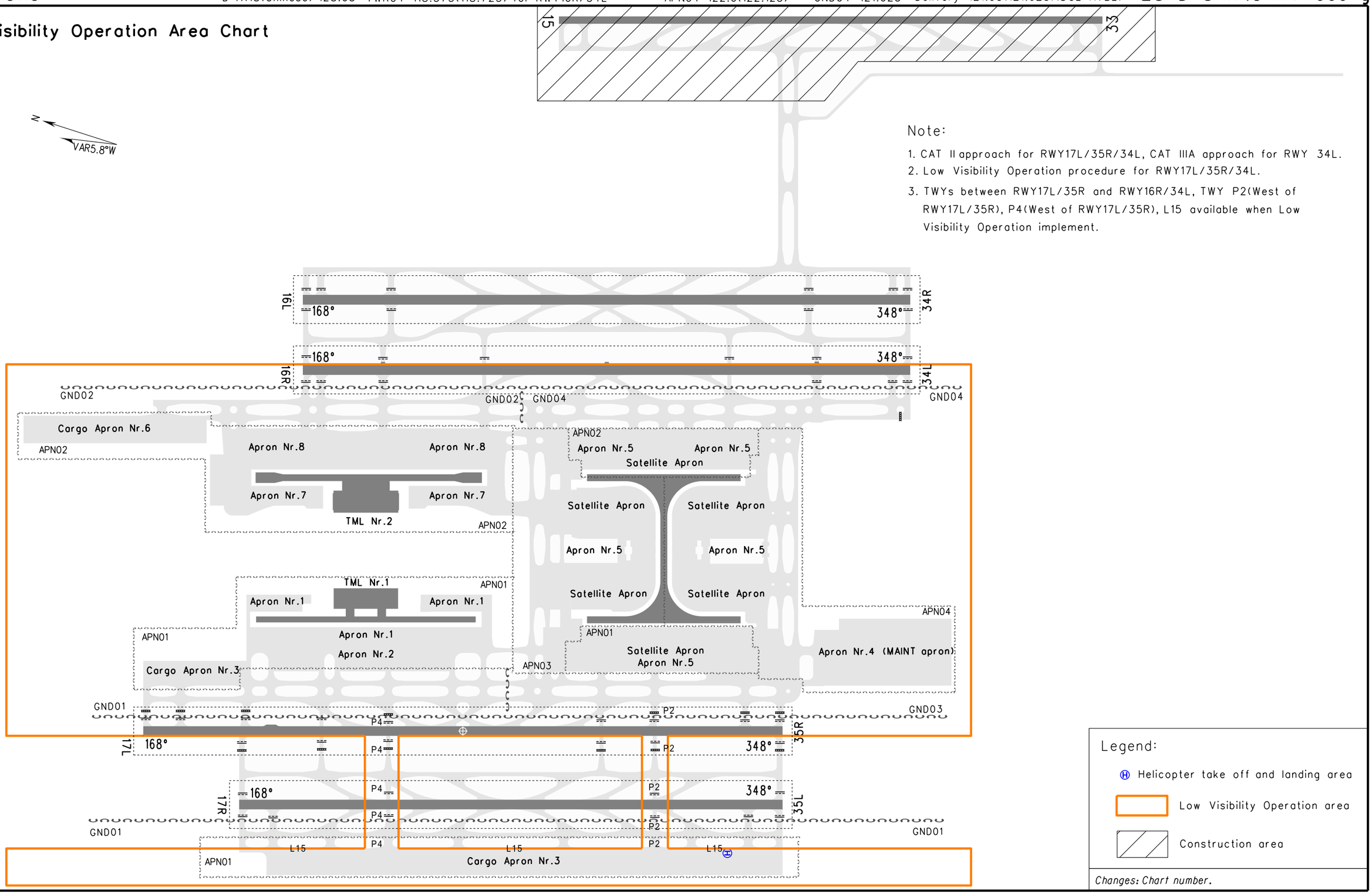
TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

Low Visibility Operation Area Chart



Note:

1. CAT II approach for RWY17L/35R/34L, CAT IIIA approach for RWY 34L.
2. Low Visibility Operation procedure for RWY17L/35R/34L.
3. TWYs between RWY17L/35R and RWY16R/34L, TWY P2(West of RWY17L/35R), P4(West of RWY17L/35R), L15 available when Low Visibility Operation implement.

Legend:

- Helicopter take off and landing area
- Low Visibility Operation area
- Construction area

Changes: Chart number.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

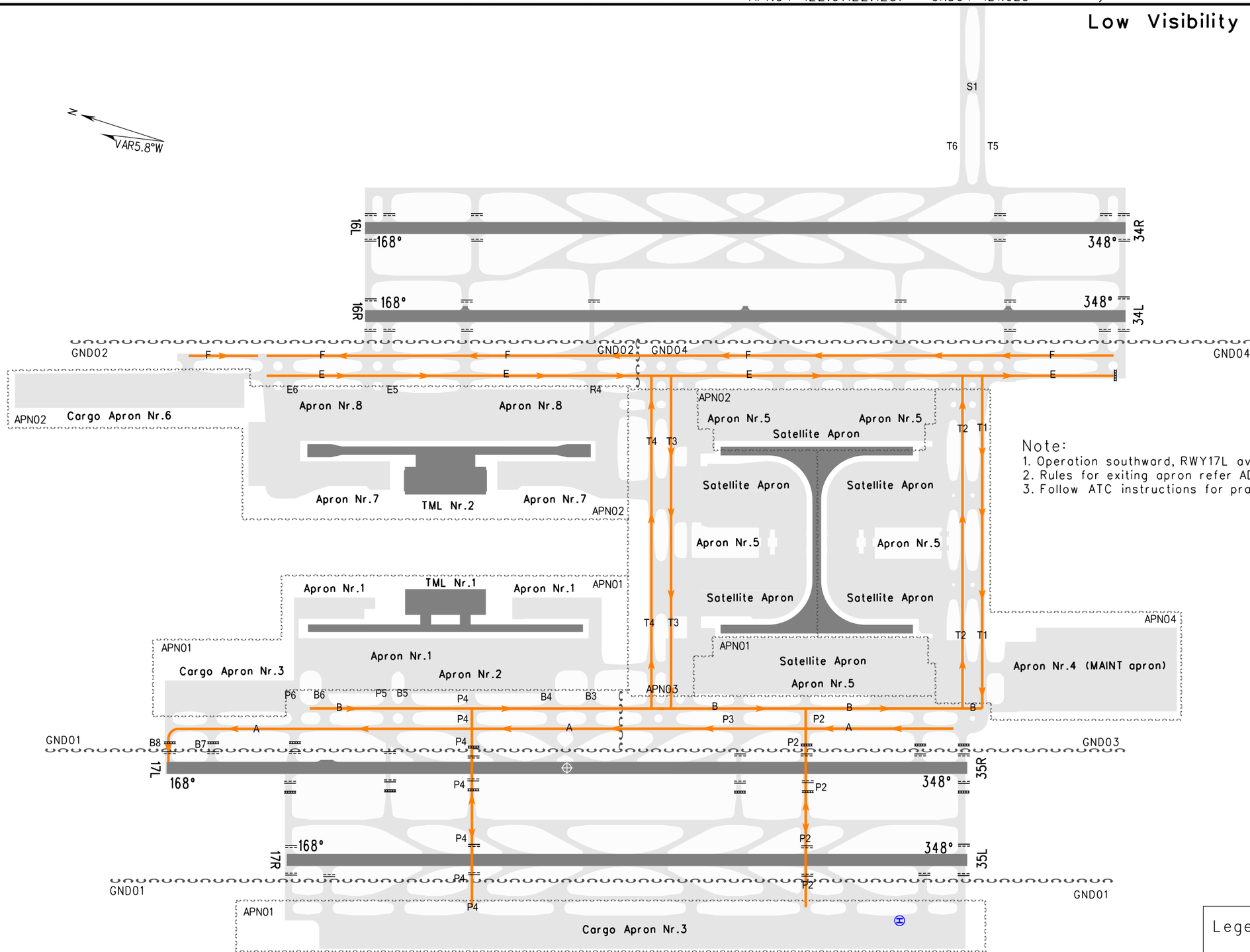
APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong
(RWY17L Departure)

Low Visibility Operation Route Chart



Note:
1. Operation southward, RWY17L available only.
2. Rules for exiting apron refer AD2.20 3.9.
3. Follow ATC instructions for practical taxiing route.

Legend:
- ROUTE
- Helicopter take off and landing area

Changes: Chart number.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

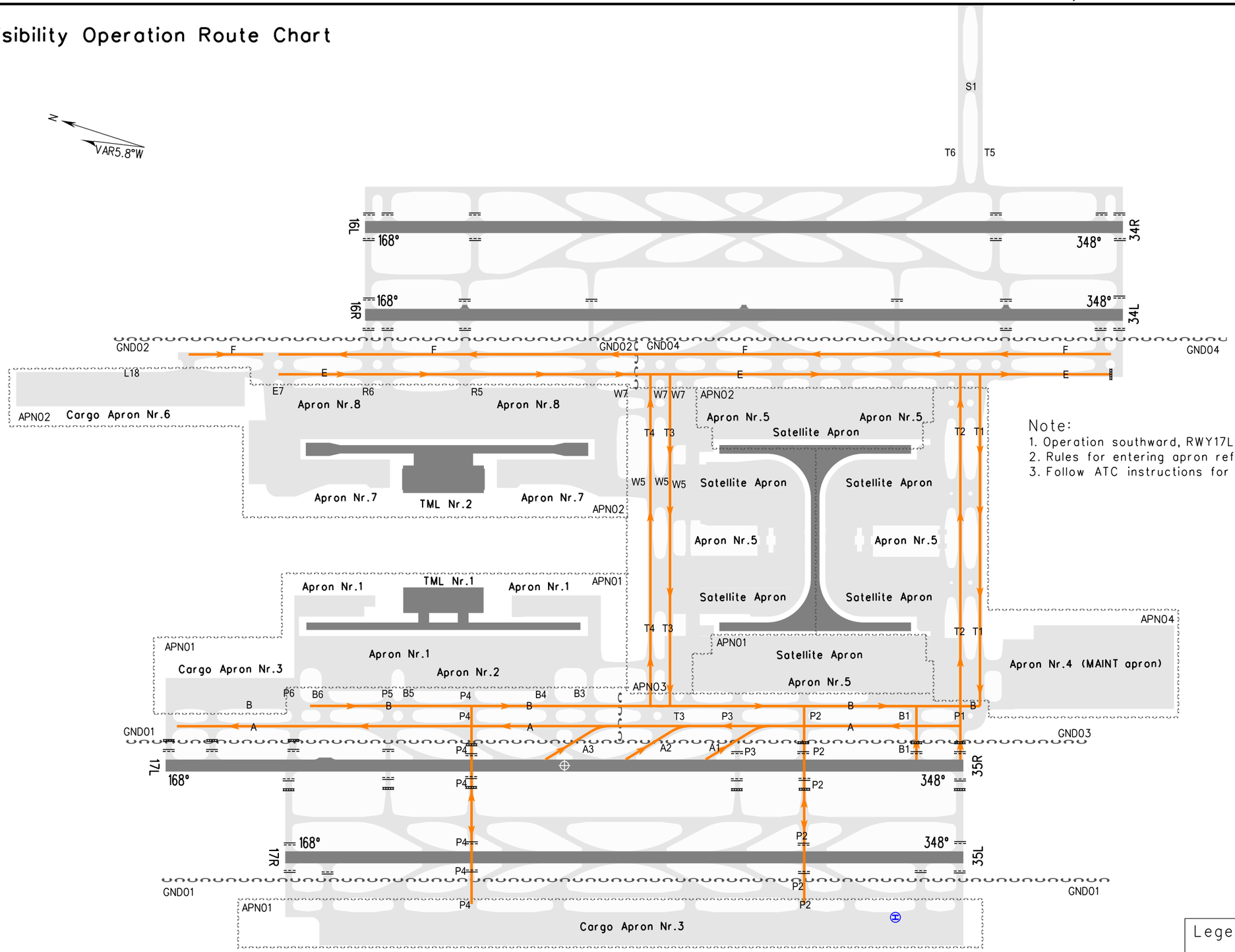
APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong
(RWY17L Arrival)

Low Visibility Operation Route Chart



Note:
1. Operation southward, RWY17L available only.
2. Rules for entering apron refer AD2.20 3.9.
3. Follow ATC instructions for practical taxiing route.

Legend:
- ROUTE
- Ⓗ Helicopter take off and landing area

Changes: Chart number.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

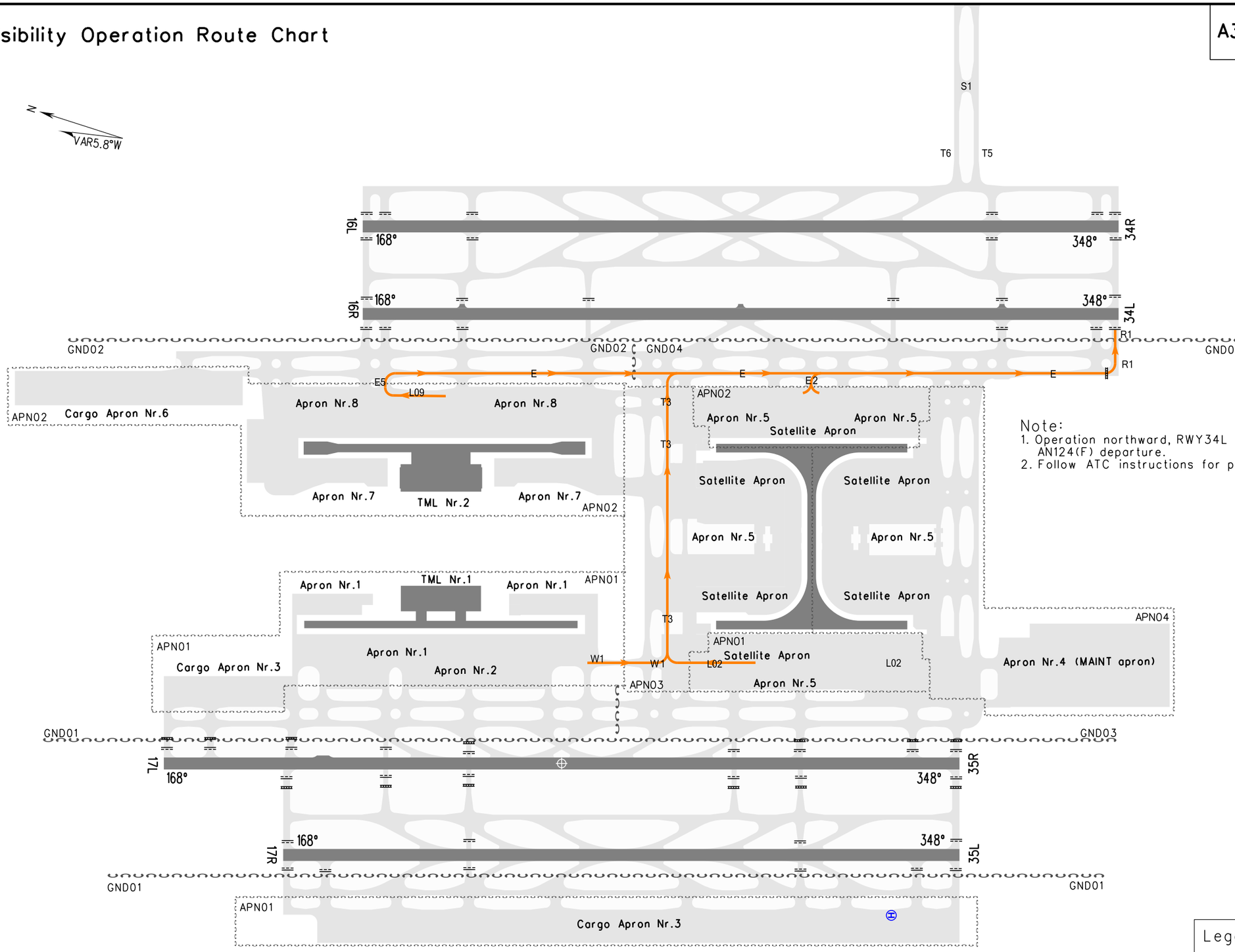
GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong
(RWY34L Departure)

Low Visibility Operation Route Chart

A380, AN124(F) available only



Note:
1. Operation northward, RWY34L for A380, AN124(F) departure.
2. Follow ATC instructions for practical taxiing route.

Legend:
- ROUTE
- Ⓗ Helicopter take off and landing area

Changes: Chart number.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

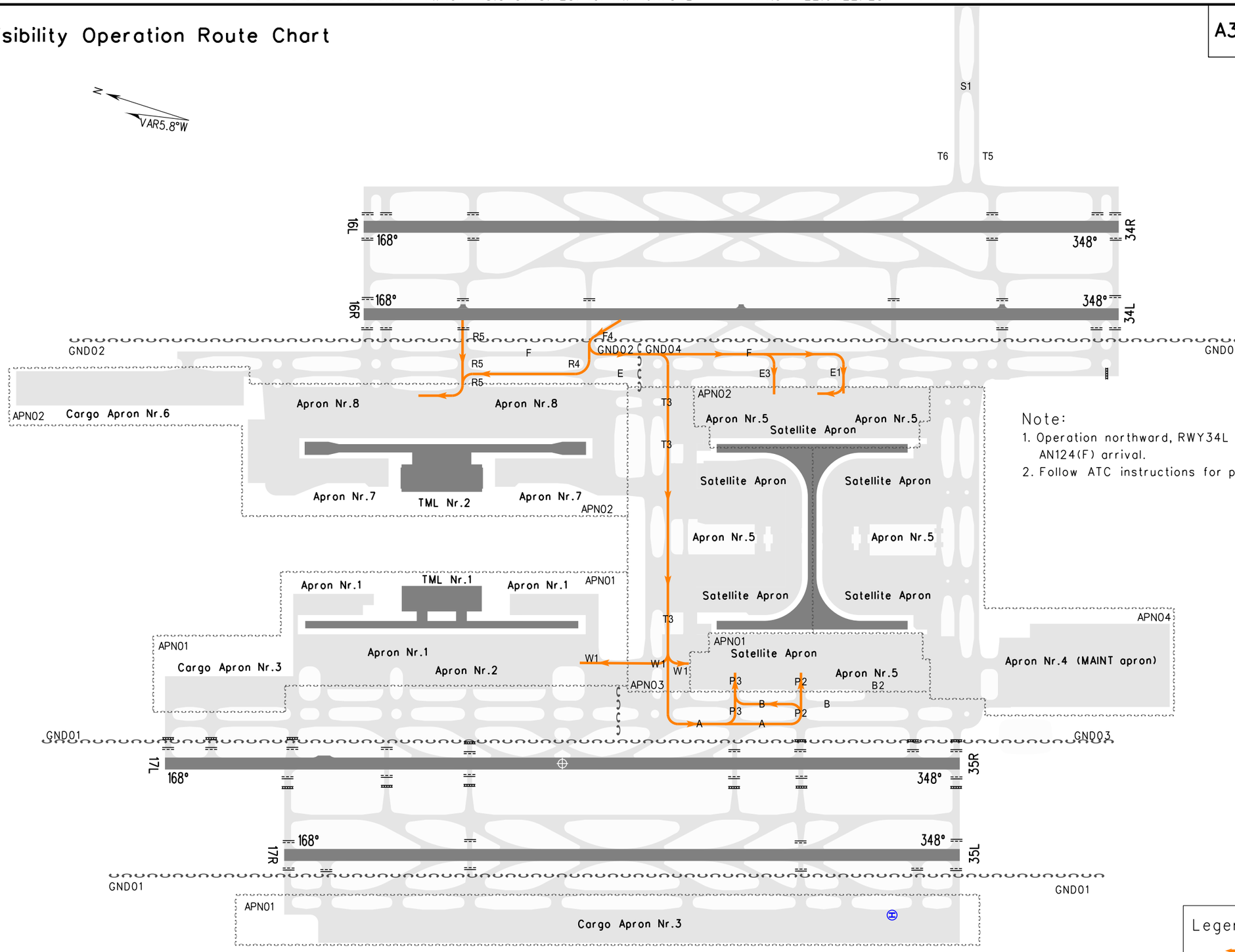
Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong

(RWY34L Arrival)

Low Visibility Operation Route Chart

A380, AN124(F) available only



Note:
1. Operation northward, RWY34L for A380, AN124(F) arrival.
2. Follow ATC instructions for practical taxiing route.

Legend:
- ROUTE
- Ⓗ Helicopter take off and landing area

Changes: Delete the route on TWY B south of TWY P2, chart number.

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

TWR01 118.8(118.325) for RWY17L/35R, 17R/35L
TWR02 118.4(118.725) for RWY16L/34R, 16R/34L
TWR03 124.35(118.325) for RWY17L/35R
TWR04 118.575(118.725) for RWY16R/34L

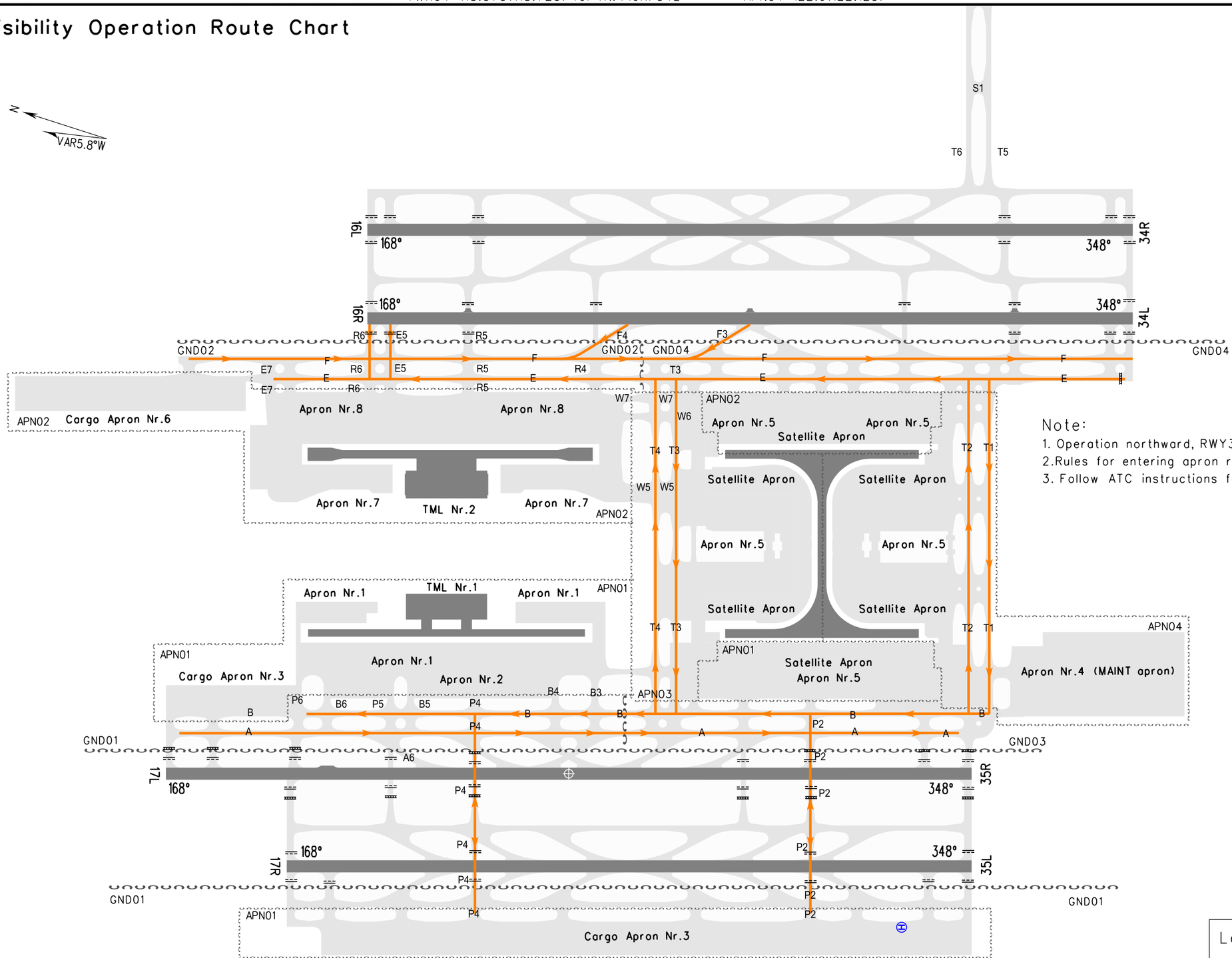
APN01 121.65(122.125)
APN02 121.975(122.125)
APN03 122.7(122.125)
APN04 122.6(122.125)

GND01: 121.7
GND02: 121.8
GND03: 121.875
GND04: 121.625

Delivery: 121.95(121.625)(DCL AVBL)

ZSPD SHANGHAI/Pudong
(RWY34L Arrival)

Low Visibility Operation Route Chart

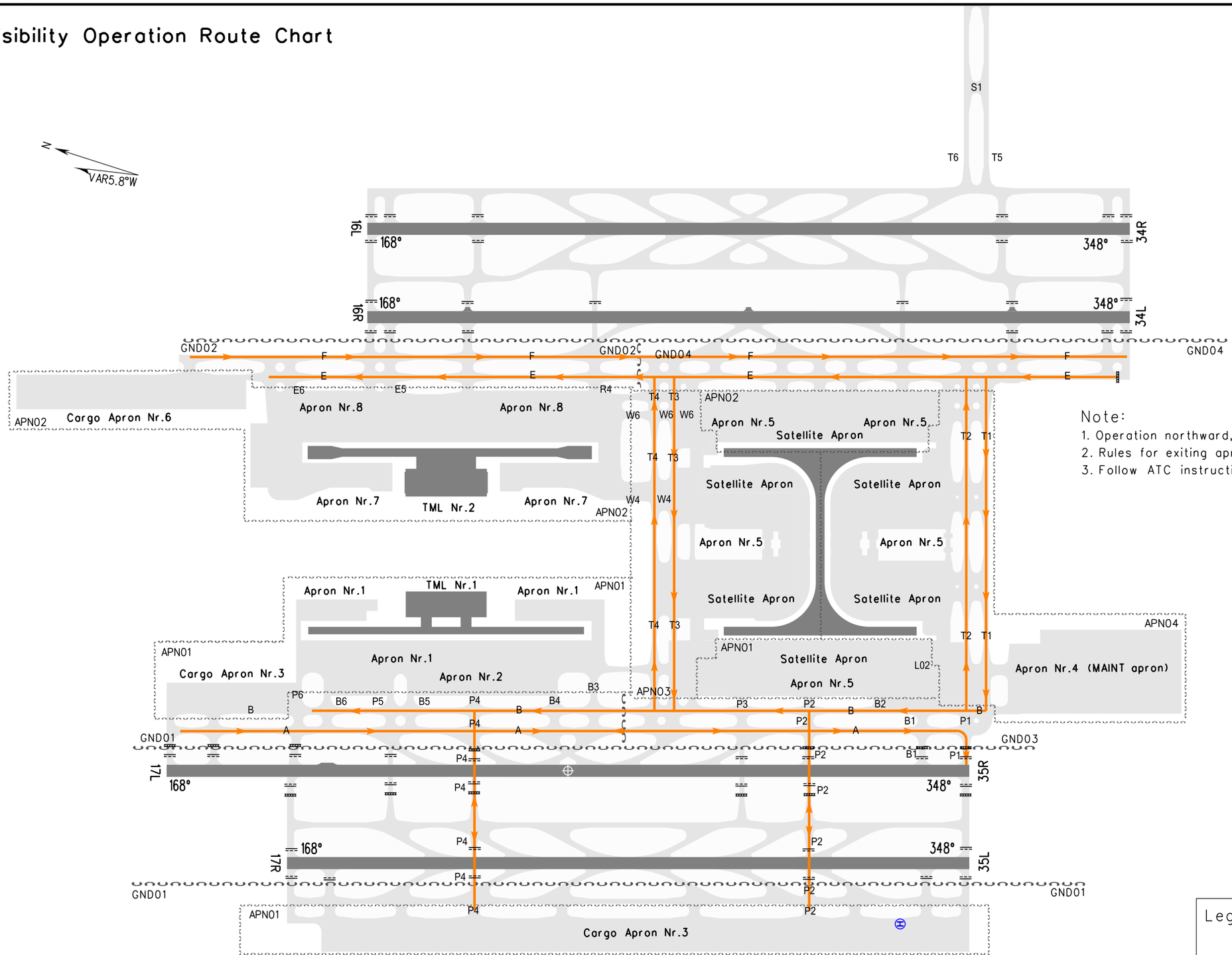


Note:
1. Operation northward, RWY34L mainly used for arrival.
2.Rules for entering apron refer AD2.20 3.9.
3. Follow ATC instructions for practical taxiing route.

Legend:
- ROUTE
- Ⓗ Helicopter take off and landing area

Changes: Chart number.

Low Visibility Operation Route Chart



Note:

1. Operation northward, RWY35R mainly used for departure.
2. Rules for exiting apron refer AD2.20 3.9.
3. Follow ATC instructions for practical taxiing route.

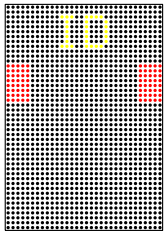
Legend:

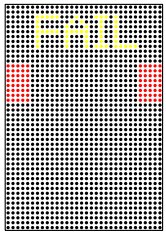
- ROUTE
- Ⓗ Helicopter take off and landing area

Changes: Chart number.

1.停止滑行，由引导员引导滑行

Stop taxiing, marshalled by marshaller



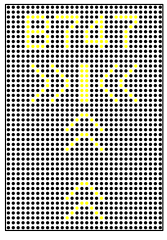


航空器必须在距停止线20m前被系统识别，
否则，系统将先显示'STOP'，然后显示'ID FAIL'。
同时，系统方位指示区域显示2个红色矩形停止排灯。

The aircraft must be identified at least 20m before the correct stop position. Otherwise, the system will display 'STOP' and then 'ID FAIL' with two red rectangular fields being lighted.

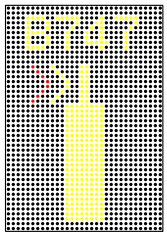
2.航空器沿滑行引导线滑行

Follow the lead-in line



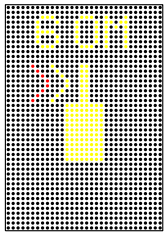
显示正确的航空器型号，滚动箭头表明系统处于工作状态。

The correct aircraft type is displayed. The scrolling arrows indicate that the system is activated.



当系统显示一条垂直黄色接近速率光带时，表明系统的扫描装置已捕捉到航空器。此时，扫描装置正检测航空器的几何特征并显示方位引导信息，以保证停靠安全。闪烁的红色箭头和稳定的黄色箭头提供方位引导，闪烁的红色箭头方向表示应该修正偏差的方向。

When the solid yellow closing rate field appears, the aircraft has been caught by the scanning unit. The scanning unit now checks the aircraft geometric for safety purposes and the display provides azimuth guidance information. Look for the flashing red arrow and solid yellow arrow, which provide azimuth guidance information. The flashing red arrow shows which direction to steer.



当航空器滑行至距停止线30m，系统显示接近速率信息。

When the aircraft is 30m from the stop position, closing rate information is given.

30 to 3m	每1m梯级显示	1m steps
3m to stop position	每0.1m梯级显示(1号机坪所有停机位，卫星厅机坪所有停机位（停机位111、124、130、157、160、178除外));	0.1m steps (All stands of Apron Nr.1 and Satellite Apron(EXC Stands Nr. 111, 124, 130, 157, 160, 178))

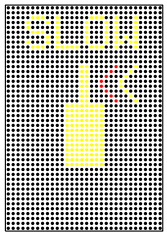
当航空器滑行至距停止线20m，系统显示接近速率信息。

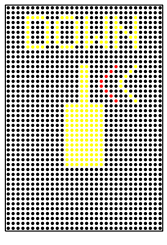
When the aircraft is 20m from the stop position, closing rate information is given.

20 to 2m	每1m梯级显示	1m steps
2m to stop position	每0.2m梯级显示(7号机坪所有停机位(停机位90、95、96除外));	0.2m steps (Apron Nr.7(EXC Stands Nr. 90, 95, 96));

航空器每前进0.5m，黄色接近速率光带的发光二极管灭灯一行。

Each one half meter the aircraft advances toward the stop position, one row of LEDs in the closing rate field goes out.

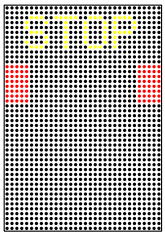




在整个停靠过程中，如果航空器滑行速度超过4m/s(7.7kt)(7号机坪所有停机位(停机位90、95、96除外))；3m/s(5.8kt)(1号机坪所有停机位，卫星厅机坪所有停机位(停机位111、124、130、157、160、178除外))系统会显示'SLOW DOWN'，以防止航空器超越停机线。

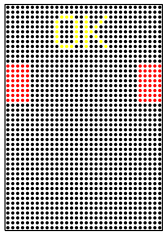
The system also displays a 'SLOW DOWN' sign when the aircraft exceeds the speed of 4m/s(7.7kt) (Apron Nr.7(EXC Stands Nr. 90, 95, 96))and 3m/s(5.8kt) (Apron Nr.1; Satellite Apron(EXC Stands Nr. 111, 124, 130, 157, 160, 178)). This is to minimize instances of aircraft overshooting the stopbar.

3.显示指示
Display indicating



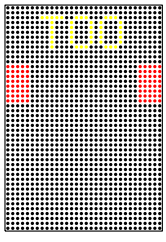
当航空器到达停机线时，系统显示'STOP'的同时，在方位显示区域显示2个红色矩形停止指示排灯，而黄色接近速率光带消失。

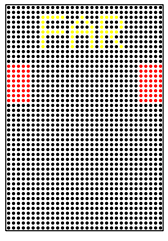
When the correct stop position is reached, all of the LEDs for the closing rate field will be off, the word 'STOP' will appear in the display and two red rectangular fields will be lighted in the azimuth guidance area of the display.



航空器停靠在正确位置几秒后，系统将显示'OK'。

If the aircraft stops in the correct position, 'OK' will be displayed after a few seconds.





若航空器超越停止线1.5m(7号机坪所有停机位(停机位90、95、96除外))；1m(1号机坪所有停机位，卫星厅机坪所有停机位(停机位111、124、130、157、160、178除外))以外时，系统将显示'TOO FAR'。

If the aircraft has gone past the correct stop position more than 1.5m(Apron Nr.7(EXC Stands Nr. 90, 95, 96)) and 1m(Apron Nr.1; Satellite Apron(EXC Stands Nr. 111, 124, 130, 157, 160, 178)), the display will show 'TOO FAR'.

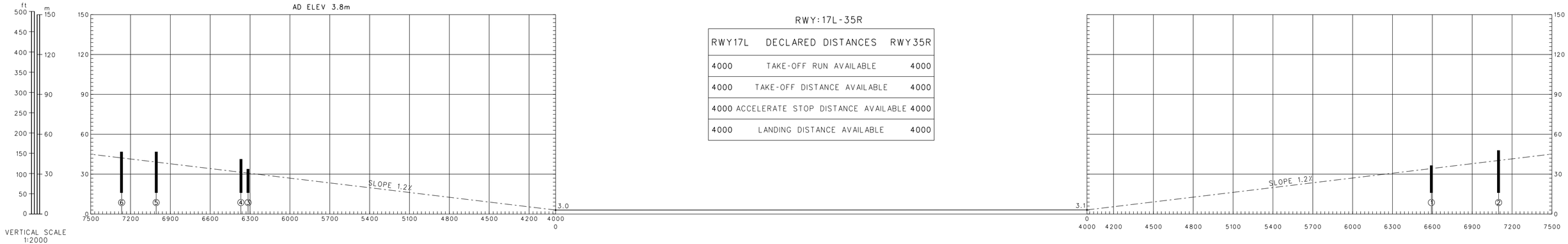
注 **Note:**

1. 当系统显示的机型错误时，驾驶员应立即停止航空器滑行。
   On seeing a wrong aircraft type displayed on the system, the pilot should stop the aircraft immediately.
2. 当使用该系统进行停靠时，航空器应沿滑行引导中线滑行，以最低滑行速度进入停机位。
   When using the docking system, aircraft should follow taxi centerline into the stand at minimum operating speed.
3. 为防止航空器超越停止线，航空器应缓慢接近停止线，驾驶员应注意接近速率信息。当系统显示'STOP'或地面引导员发出停止信号时，驾驶员应立即停止航空器滑行。
   To avoid overshooting, pilots are advised to approach the stop position slowly and observe the closing rate information. Pilots should stop the aircraft immediately when seeing the 'STOP' display, or when given the stop sign by the aircraft marshaller.
4. 系统在识别航空器的过程中，当显示'WAIT'时，航空器必须停止前进，等待系统对航空器进行再次识别；识别成功后，航空器方可在系统引导下继续停靠。否则，系统将显示'STOP'，航空器必须立即停止停靠。
   When the system is identifying and display 'WAIT', the aircraft must stop and wait for the system identifying it over again. If the aircraft is identified successfully by the system, then the aircraft can continue docking, otherwise 'STOP' will appear and the pilot must brake the aircraft immediately.
5. 驾驶员在无法确定系统所显示的引导信息时，应立即停止滑行并等待进一步的停靠指示。
   If the pilot is unsure of the informatin being shown on the DGS display unit, he must immediately stop the aircraft and obtain further informatin.

AERODROME OBSTACLE CHART-ICAO

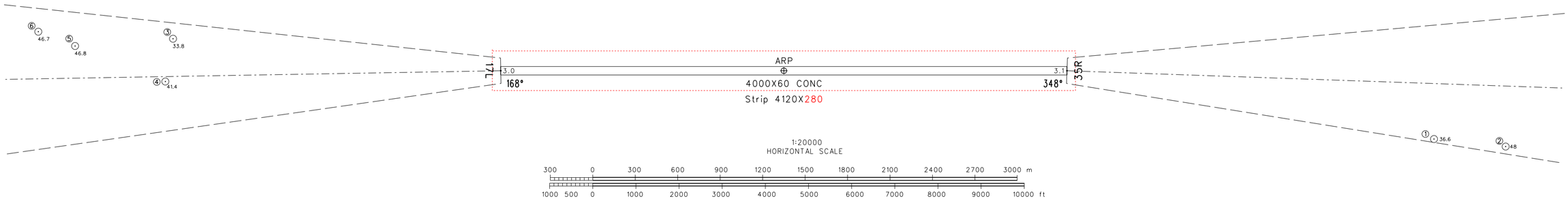
TYPE A(OPERATING LIMITATIONS)

MAGNETIC VARIATION 5.8° W



RWY:17L-35R

RWY17L	DECLARED DISTANCES	RWY35R
4000	TAKE-OFF RUN AVAILABLE	4000
4000	TAKE-OFF DISTANCE AVAILABLE	4000
4000	ACCELERATE STOP DISTANCE AVAILABLE	4000
4000	LANDING DISTANCE AVAILABLE	4000



LEGEND	
①	OBST NR
⊙	POLE

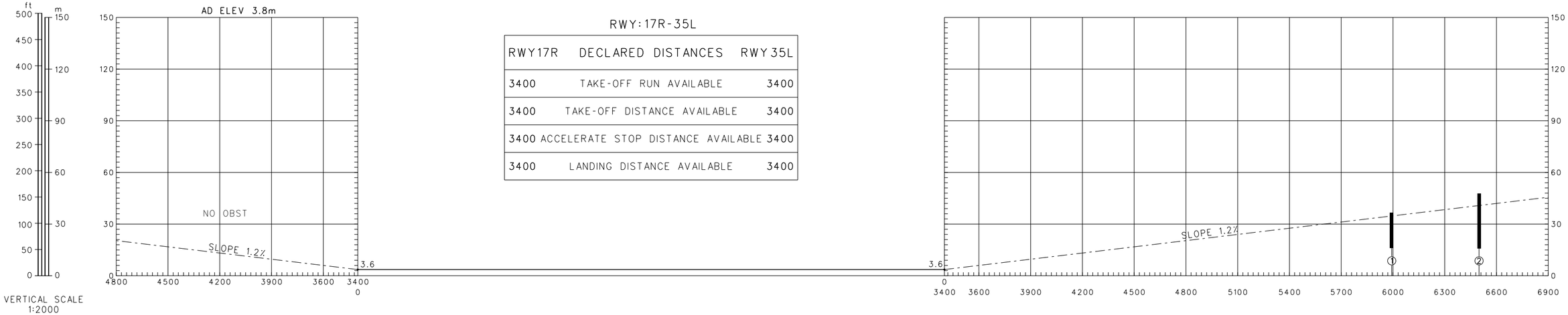
AMENDMENT RECORD		
NR	DATE	ENTERED BY

Changes: Strip.

AERODROME OBSTACLE CHART-ICAO

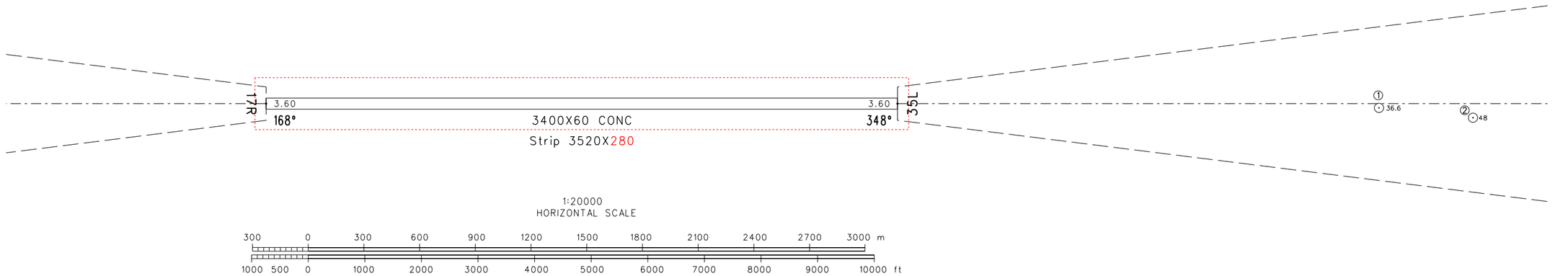
TYPE A(OPERATING LIMITATIONS)

MAGNETIC VARIATION 5.8° W



RWY:17R-35L

RWY17R	DECLARED DISTANCES	RWY35L
3400	TAKE-OFF RUN AVAILABLE	3400
3400	TAKE-OFF DISTANCE AVAILABLE	3400
3400	ACCELERATE STOP DISTANCE AVAILABLE	3400
3400	LANDING DISTANCE AVAILABLE	3400



LEGEND	
①	OBST NR
⊙	POLE

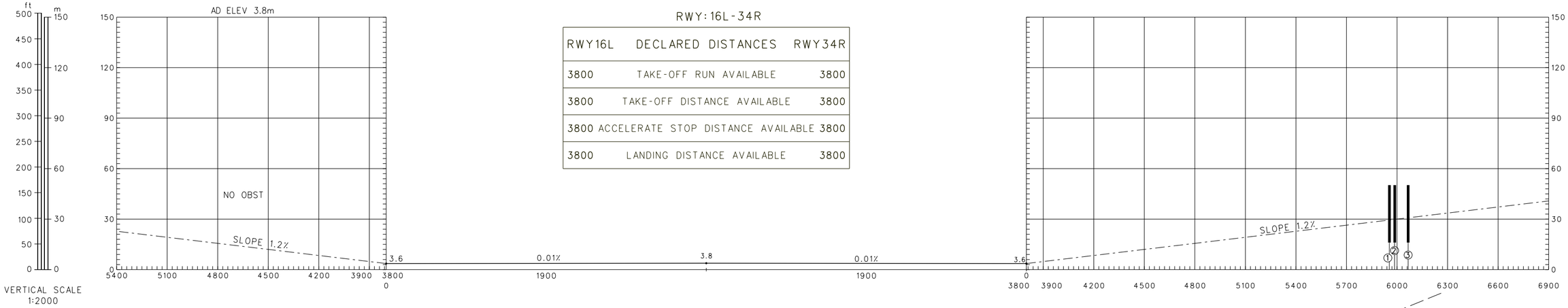
AMENDMENT RECORD		
NR	DATE	ENTERED BY

Changes: Strip.

AERODROME OBSTACLE CHART-ICAO

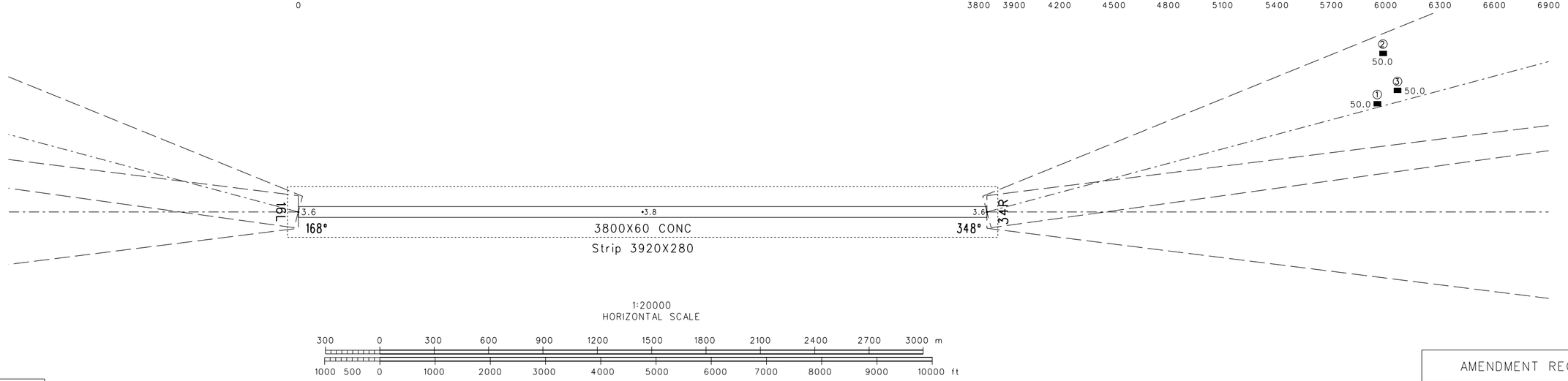
TYPE A(OPERATING LIMITATIONS)

MAGNETIC VARIATION 5.8° W



RWY:16L-34R

RWY16L	DECLARED DISTANCES	RWY34R
3800	TAKE-OFF RUN AVAILABLE	3800
3800	TAKE-OFF DISTANCE AVAILABLE	3800
3800	ACCELERATE STOP DISTANCE AVAILABLE	3800
3800	LANDING DISTANCE AVAILABLE	3800



LEGEND	
①	OBST NR
■	BUILD OR LARGE STRUCTURE

AMENDMENT RECORD		
NR	DATE	ENTERED BY

Changes: New chart.

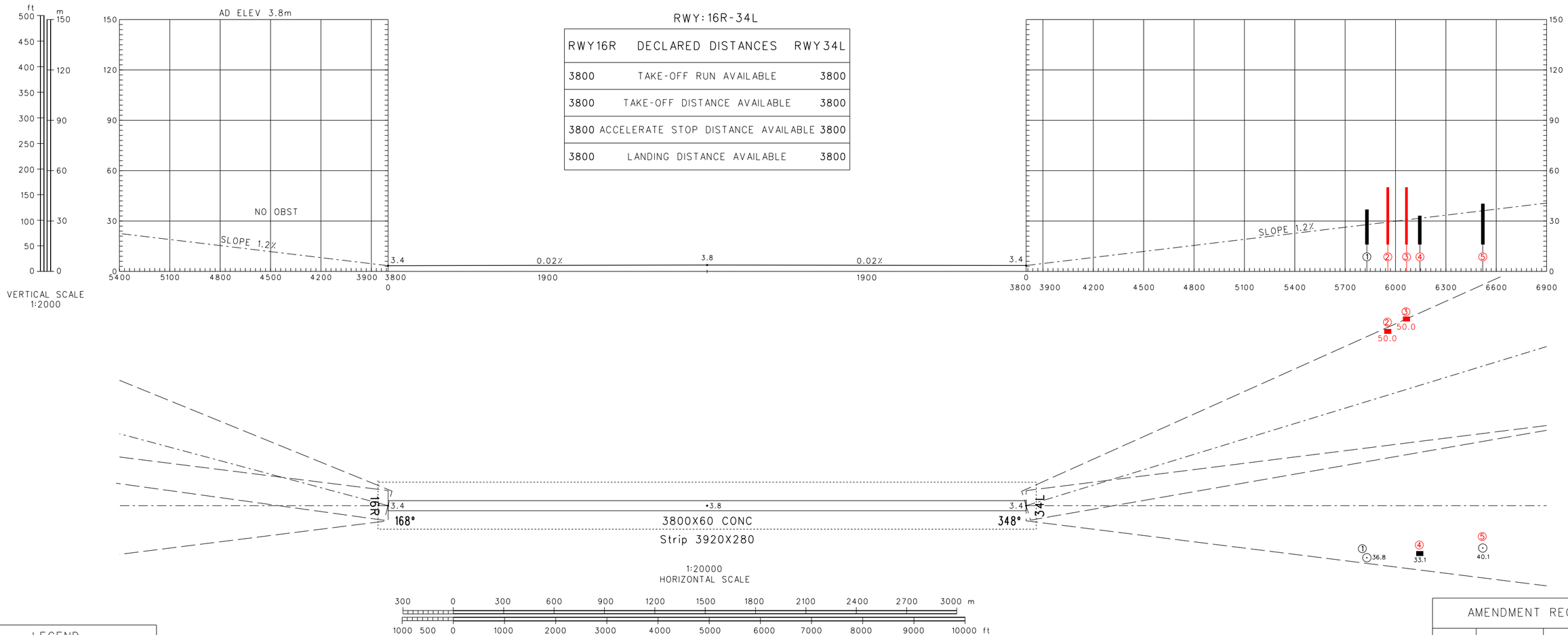
DIMENSIONS AND ELEVATIONS IN METERS BEARINGS ARE MAGNETIC

AERODROME OBSTACLE CHART-ICAO

TYPE A(OPERATING LIMITATIONS)

ZSPD SHANGHAI/Pudong
RWY 16R/34L

MAGNETIC VARIATION 5.8° W



LEGEND	
①	OBST NR
⊙	POLE
■	BUILD OR LARGE STRUCTURE

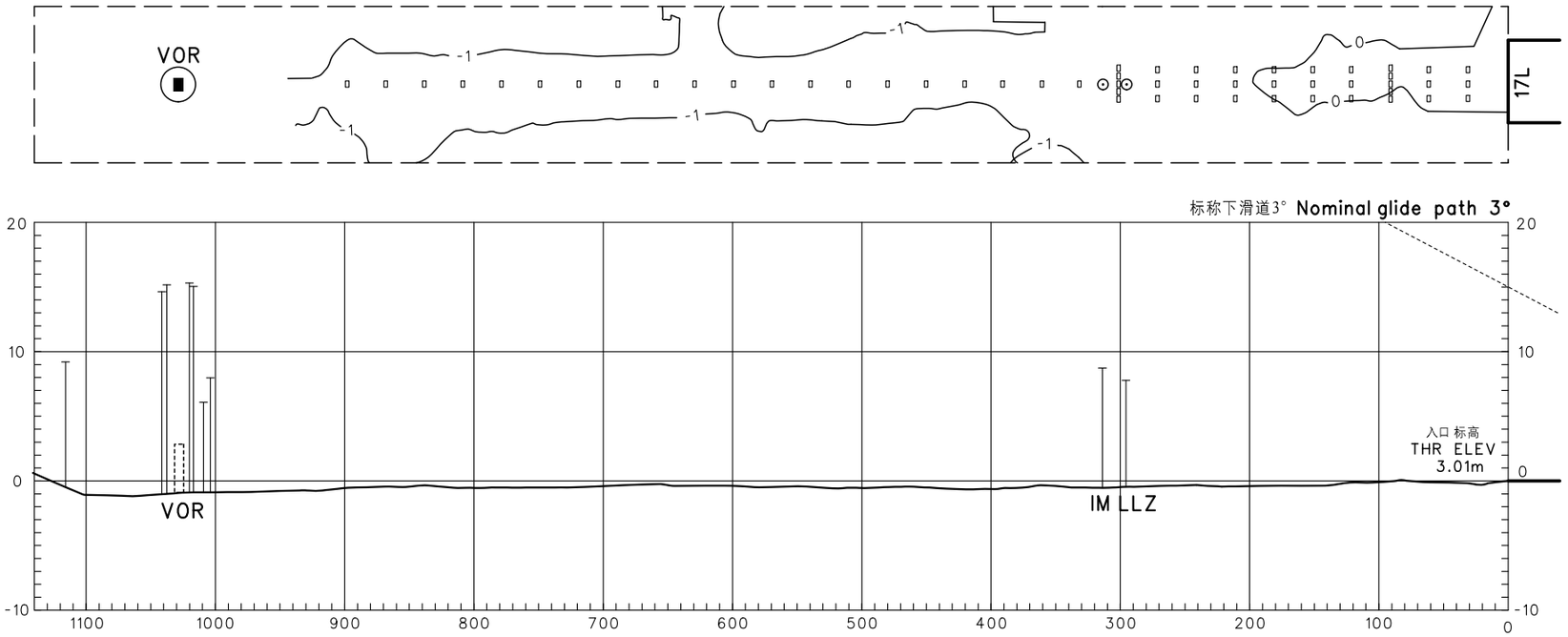
AMENDMENT RECORD		
NR	DATE	ENTERED BY

Changes: Obstacles, Chart number.

PRECISION APPROACH TERRAIN CHART-ICAO

ZSPD SHANGHAI/Pudong
RWY17L/35R

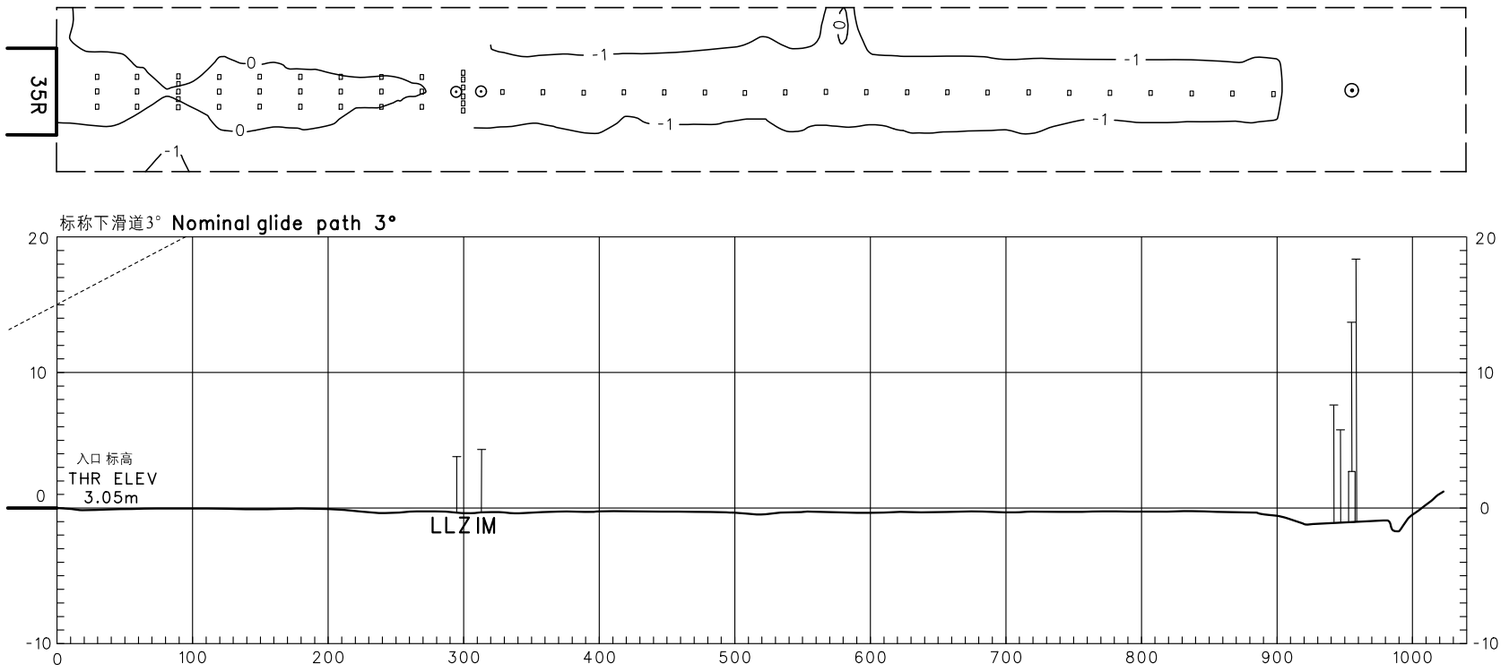
DISTANCES AND HEIGHTS IN METERS



水平比例尺 HORIZONTAL SCALE 1:5000

垂直比例尺 VERTICAL SCALE 1:500

等高线和高相对于跑道入口 标高
Contours and heights are related to elevation of RWY THR

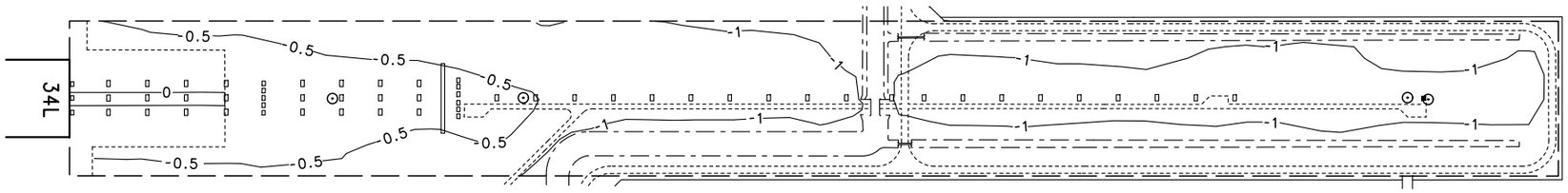


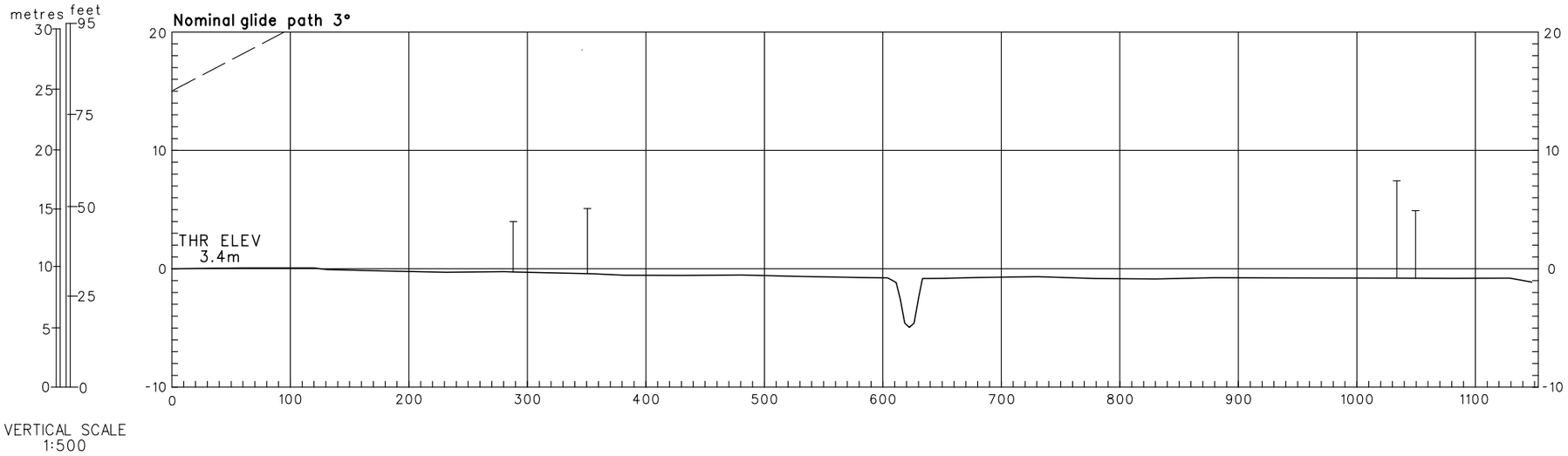
图例 Legend	
▫	进近灯 APP Light
	剖面中线 Profile of extended RWY C/L
⊙ |	电杆. 天线 Antenna, Pole
0	等高线 Contour
■	建筑物 Buildings

修正记录 Amendment Record		
编号 Nr.	日期 Date	修正人 Entered by

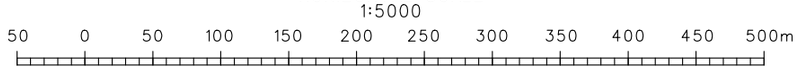
PRECISION APPROACH TERRAIN CHART-ICAO

DISTANCES AND HEIGHTS IN METRES





HORIZONTAL SCALE
1:5000

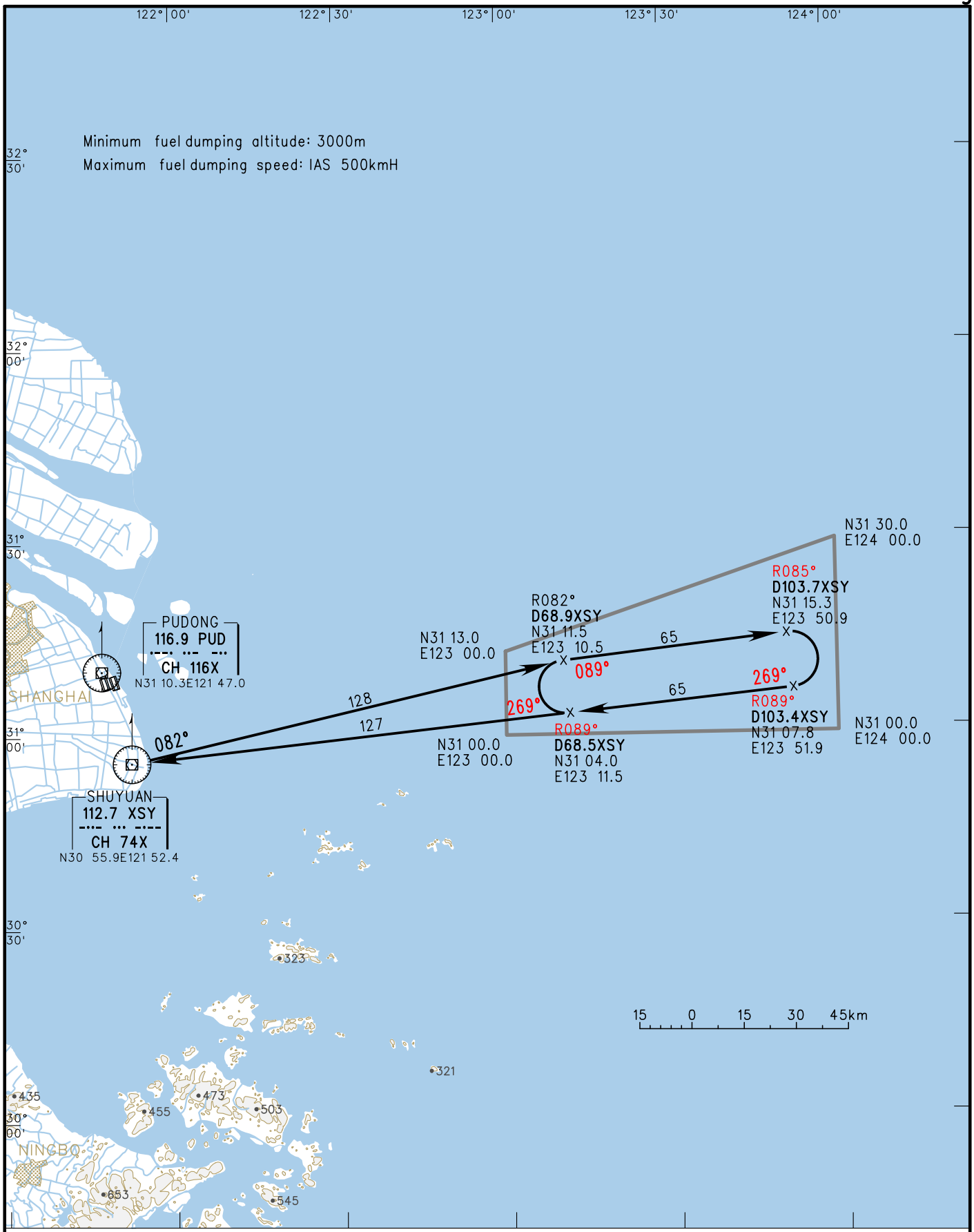


CONTOURS AND HEIGHTS ARE
RELATED TO ELEV OF RWY THR

LEGEND	
▭	APP Light
	Profile of extended RWY C/L
	Water Ditch
⊙ T	Antenma . Pole
0.5	Contour
	Road
	Boundary
■	Building

AMENDMENT RECORD		
Nr	DATE	ENTERED BY

Changes: New chart.



Changes: Angle.

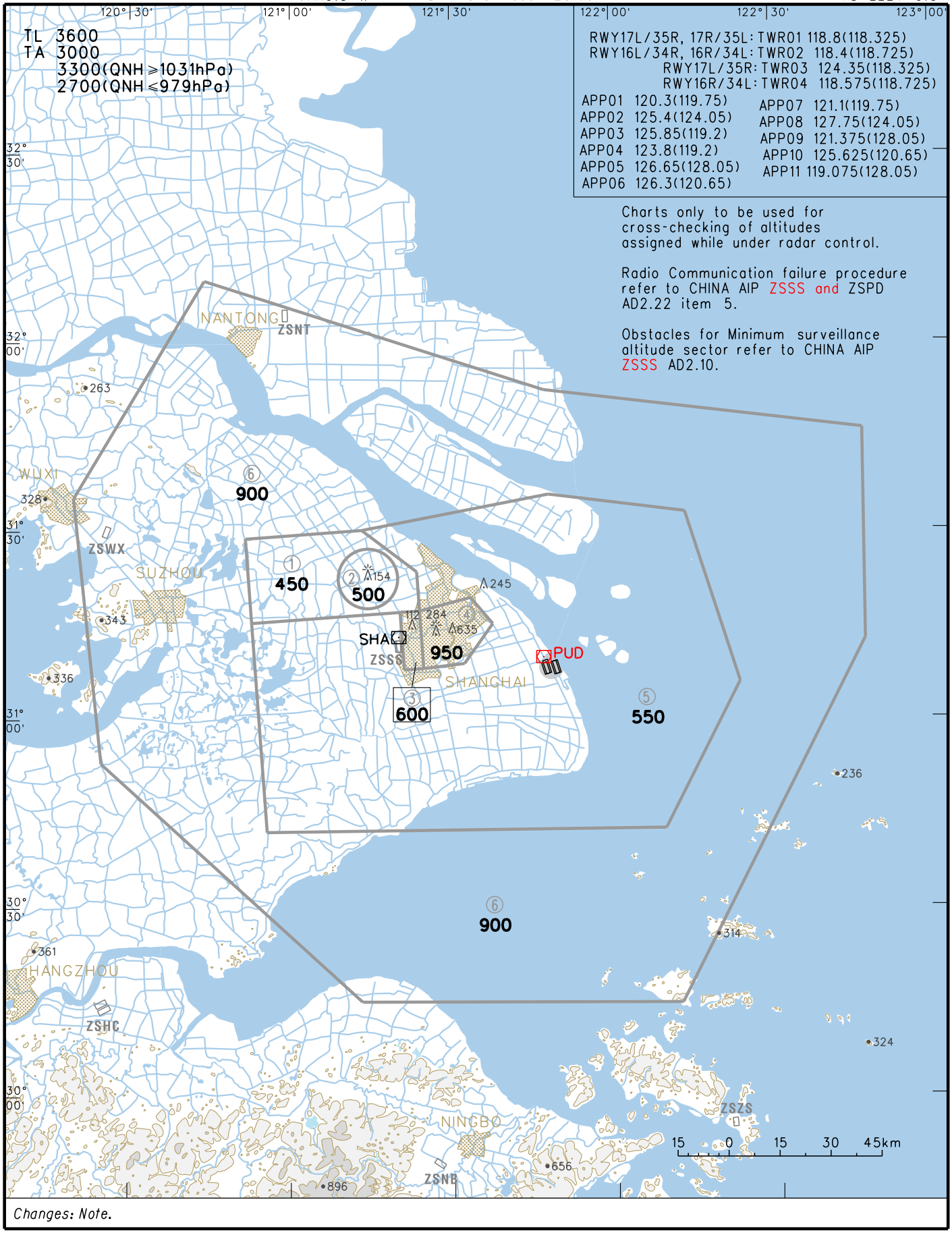
ATC SURVEILLANCE MINIMUM ALTITUDE CHART

VAR5.8° W

D-ATIS(English) 127.85
D-ATIS(Chinese) 128.65

ZSPD SHANGHAI/Pudong

AD ELEV 3.8m



Changes: Note.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RWY16L/16R/17L/17R
(AND/HSN/LAMEN/MIGOL/SURAK)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

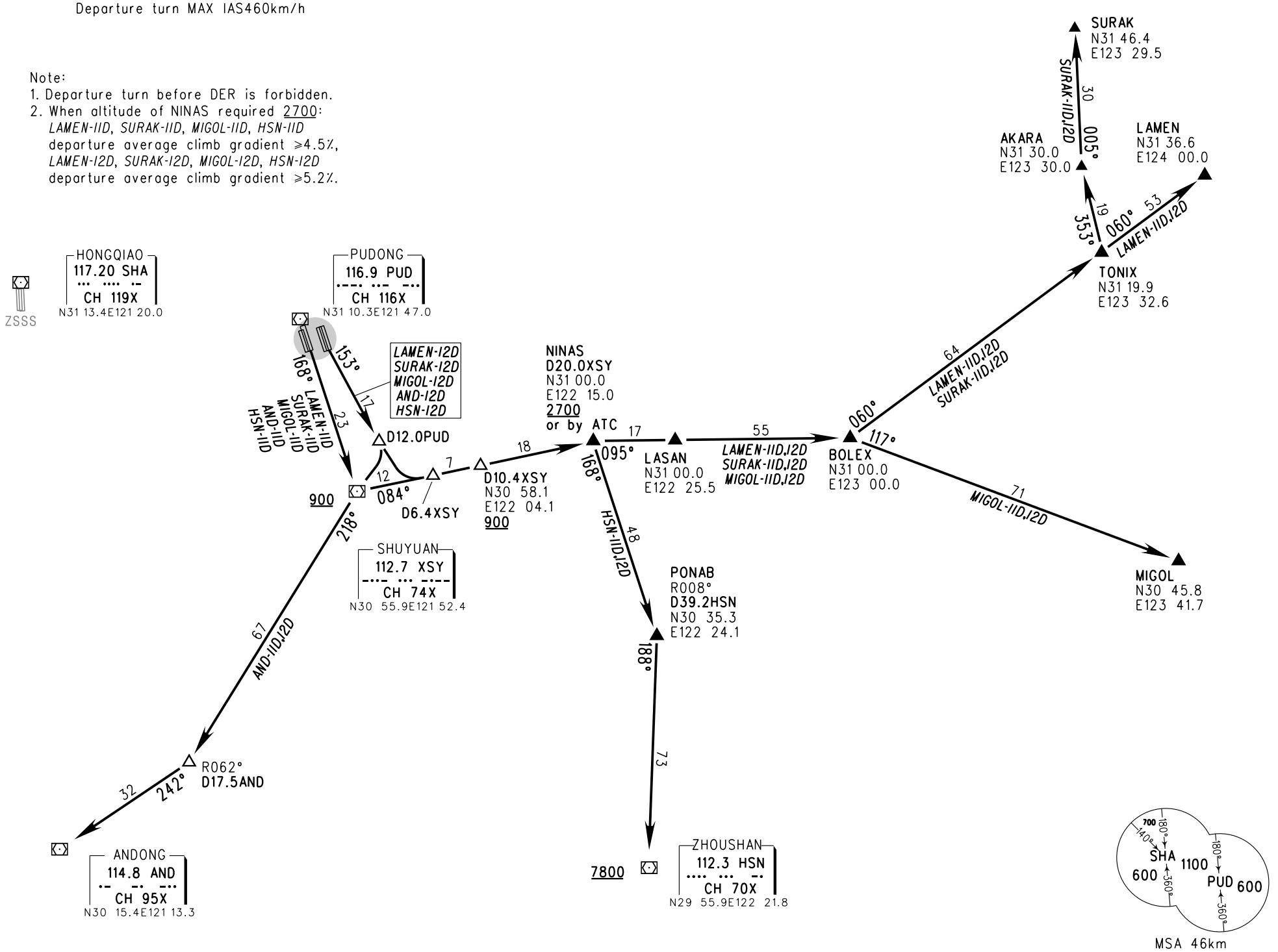
TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

NOT TO SCALE

Departure turn MAX IAS460km/h

Note:
1. Departure turn before DER is forbidden.
2. When altitude of NINAS required 2700:
LAMEN-IID, *SURAK-IID*, *MIGOL-IID*, *HSN-IID*
departure average climb gradient ≥4.5%,
LAMEN-I2D, *SURAK-I2D*, *MIGOL-I2D*, *HSN-I2D*
departure average climb gradient ≥5.2%.



Changes: Chart symbols.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01 120.3(119.75)	APP07 121.1(119.75)
APP02 125.4(124.05)	APP08 127.75(124.05)
APP03 125.85(119.2)	APP09 121.375(128.05)
APP04 123.8(119.2)	APP10 125.625(120.65)
APP05 126.65(128.05)	APP11 119.075(128.05)
APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RWY16L/16R/17L/17R
(NXD/SASAN/ADBAS)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

NOT TO SCALE

Departure turn MAX IAS 460km/h

Note:Departure turn before DER is forbidden.

SASAN
N31 35.4
E120 19.2

ZSWX

79
SASAN-IID,I2D

295°

EKIMU
D18.2JTN
N31 21.1
E121 06.6

PK115°

NANXIANG
208 PK
N31 17.0E121 19.8

34

325°

ZSSS

HONGQIAO
117.20 SHA
CH 119X
N31 13.4E121 20.0

PUDONG
116.9 PUD
CH 116X
N31 10.3E121 47.0

R259°
D11.5JTN

21

259°

11

D5.8JTN
D23.9XSY
N31 05.1
E121 26.6
1200

20

298°

NXD-IID
SASAN-IID
ADBAS-IID(by ATC)

168°6

153°

17

D6.0PUD
14

271°

D12.0PUD

LURMA
N30 58.5
E120 44.9

38
NXD-IID,I2D
ADBAS-IID,I2D(by ATC)

JIUTING
109.6 JTN
CH 33X
N31 07.4E121 20.5

R225°
D11.9PUD
R298°
D13.1XSY

24

298°

NXD-I2D
SASAN-I2D
ADBAS-I2D(by ATC)

900

259°

32
NXD-IID,I2D

3900

220°

NANXUN
116.5 NXD
CH 112X
N30 53.8E120 25.8

SHUYUAN
112.7 XSY
CH 74X
N30 55.9E121 52.4

84
ADBAS-IID,I2D(by ATC)

ADBAS
N30 20.6
E120 16.0

700
180°
140°
SHA 1100
600
360°
180°
PUD 600
360°

MSA 46km

Changes: Procedure.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)
APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RWY16L/16R/17L/17R
(ODULO/PIKAS)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

Note:Departure turn before DER is forbidden.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

NOT TO SCALE

Departure turn MAX IAS460km/h

PIKAS
N32 10.0
E120 44.0

NANTONG
115.6 NTG
CH 103X
N32 05.8E120 58.7
ZSNT

ODULO
N33 15.2
E121 37.2

UDOXI
D30.5HSH
N31 52.6
E121 47.1

IBEGI
N31 49.4
E122 16.6

ALDAP
D30.8HSH
N31 37.5
E122 22.2

D8.6HSH
2500
or by ATC

POMOK
D22.8JTN
N31 27.0
E121 07.0

HENGSHA
114.4 HSH
CH 91X
N31 22.1E121 50.8

HONGQIAO
117.20 SHA
CH 119X
N31 13.4E121 20.0
ZSSS

PUDONG
116.9 PUD
CH 116X
N31 10.3E121 47.0

JIUTING
109.6 JTN
CH 33X
N31 07.4E121 20.5

R118°
D5.8JTN
D23.9XSY
N31 05.1
E121 26.6
1200

D6.0PUD

R225°
D11.9PUD
R298°
D13.1XSY

D12.0PUD

R154°
D22.0HSH

D10.4XSY
N30 58.1
E122 04.1
900

084° D6.4XSY

900

SHUYUAN
112.7 XSY
CH 74X
N30 55.9E121 52.4

Ⓐ ODULO-12D, ODULO-14D(by ATC), PIKAS-12D, PIKAS-14D(by ATC);

Ⓑ PIKAS-13D(by ATC), ODULO-11D, ODULO-13D(by ATC)。

MSA 46km

Changes: D-ATIS.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65		APP01 120.3(119.75)	APP07 121.1(119.75)
TWR01 118.8(118.325)	17L/35R, 17R/35L	APP02 125.4(124.05)	APP08 127.75(124.05)
TWR02 118.4(118.725)	16L/34R, 16R/34L	APP03 125.85(119.2)	APP09 121.375(128.05)
TWR03 124.35(118.325)	17L/35R	APP04 123.8(119.2)	APP10 125.625(120.65)
TWR04 118.575(118.725)	16R/34L	APP05 126.65(128.05)	APP11 119.075(128.05)
		APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RWY34L/34R/35L/35R

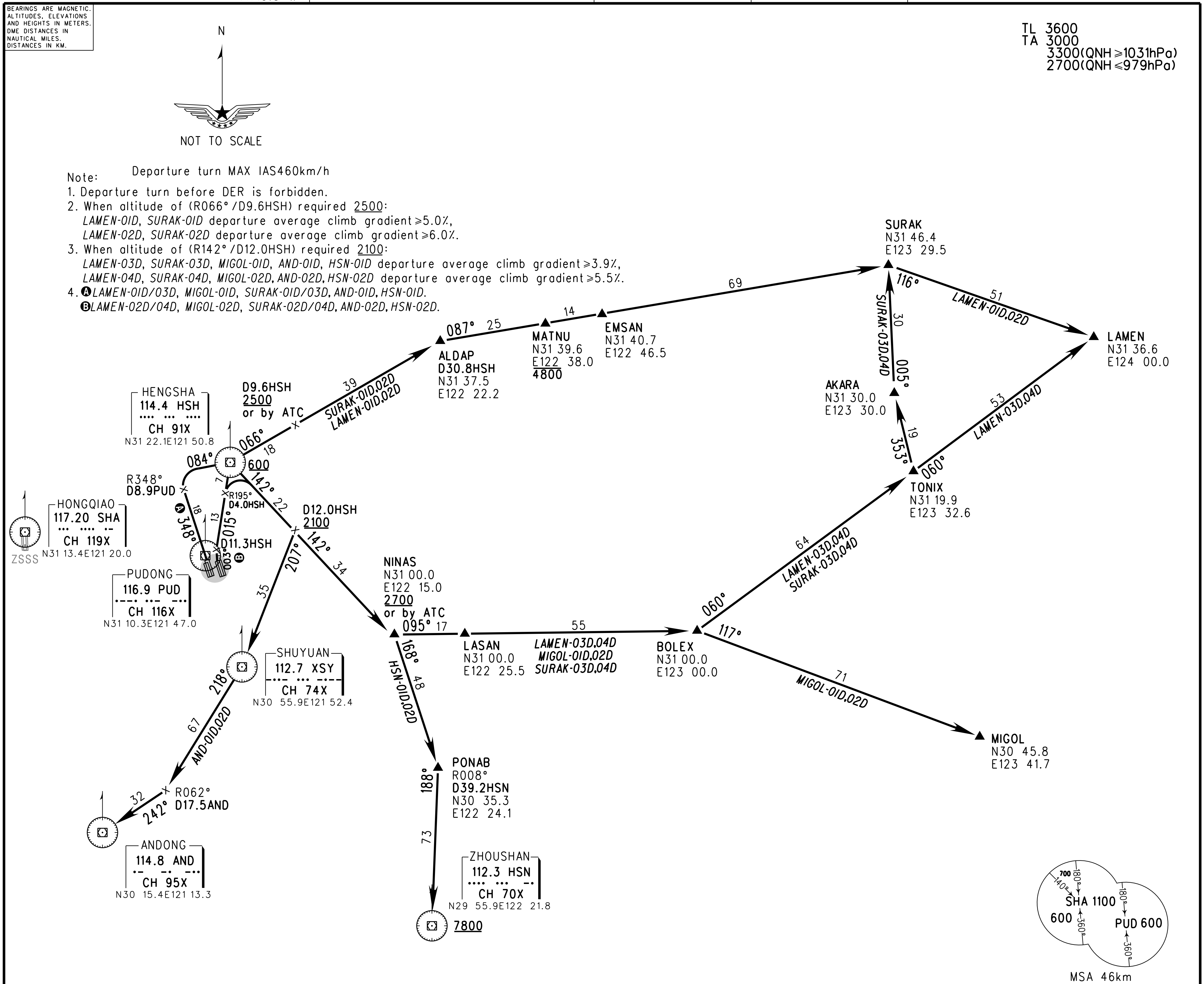
(AND/HSN/LAMEN/MIGOL/SURAK)

BEARINGS ARE MAGNETIC. ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS. DME DISTANCES IN NAUTICAL MILES. DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)

Departure turn MAX IAS460km/h

Note:
1. Departure turn before DER is forbidden.
2. When altitude of (R066°/D9.6HSH) required 2500:
   LAMEN-01D, SURAK-01D departure average climb gradient ≥5.0%,
   LAMEN-02D, SURAK-02D departure average climb gradient ≥6.0%.
3. When altitude of (R142°/D12.0HSH) required 2100:
   LAMEN-03D, SURAK-03D, MIGOL-01D, AND-01D, HSN-01D departure average climb gradient ≥3.9%,
   LAMEN-04D, SURAK-04D, MIGOL-02D, AND-02D, HSN-02D departure average climb gradient ≥5.5%.
4. Ⓐ*LAMEN-01D/03D, MIGOL-01D, SURAK-01D/03D, AND-01D, HSN-01D.*
   Ⓑ*LAMEN-02D/04D, MIGOL-02D, SURAK-02D/04D, AND-02D, HSN-02D.*



Changes: *D-ATIS.*

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RWY34L/34R/35L/35R
(NXD/SASAN/ADBAS)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

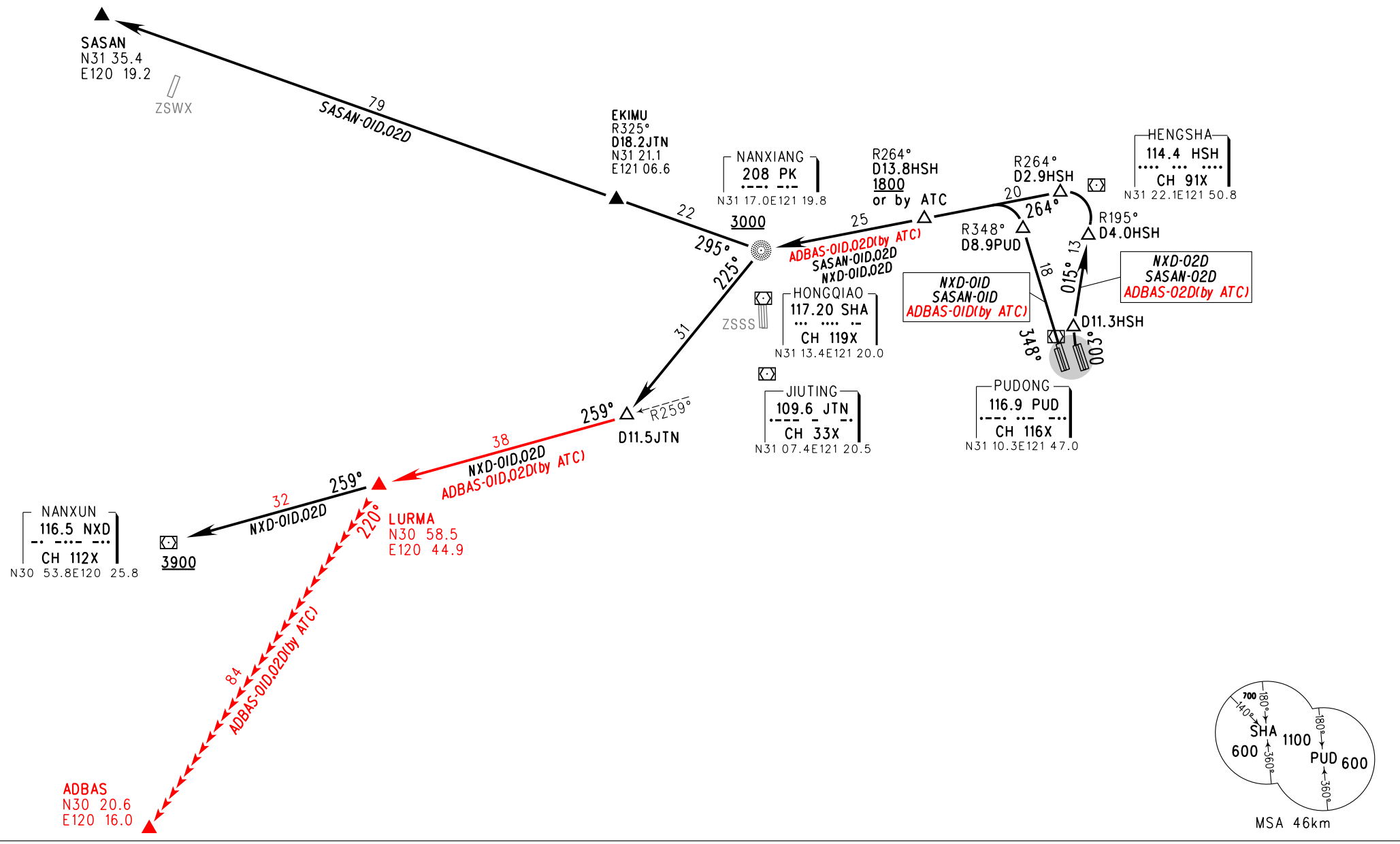
TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

NOT TO SCALE

Departure turn MAX IAS460km/h

Note:
1. Departure turn before DER is forbidden.
2. When altitude of (R264° / D13.8HSH) required 1800:
SASAN-01D, NXD-01D, ADBAS-01D departure average climb gradient≥5.5%,
SASAN-02D, NXD-02D, ADBAS-02D departure average climb gradient≥4.0%.



Changes: Procedure.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

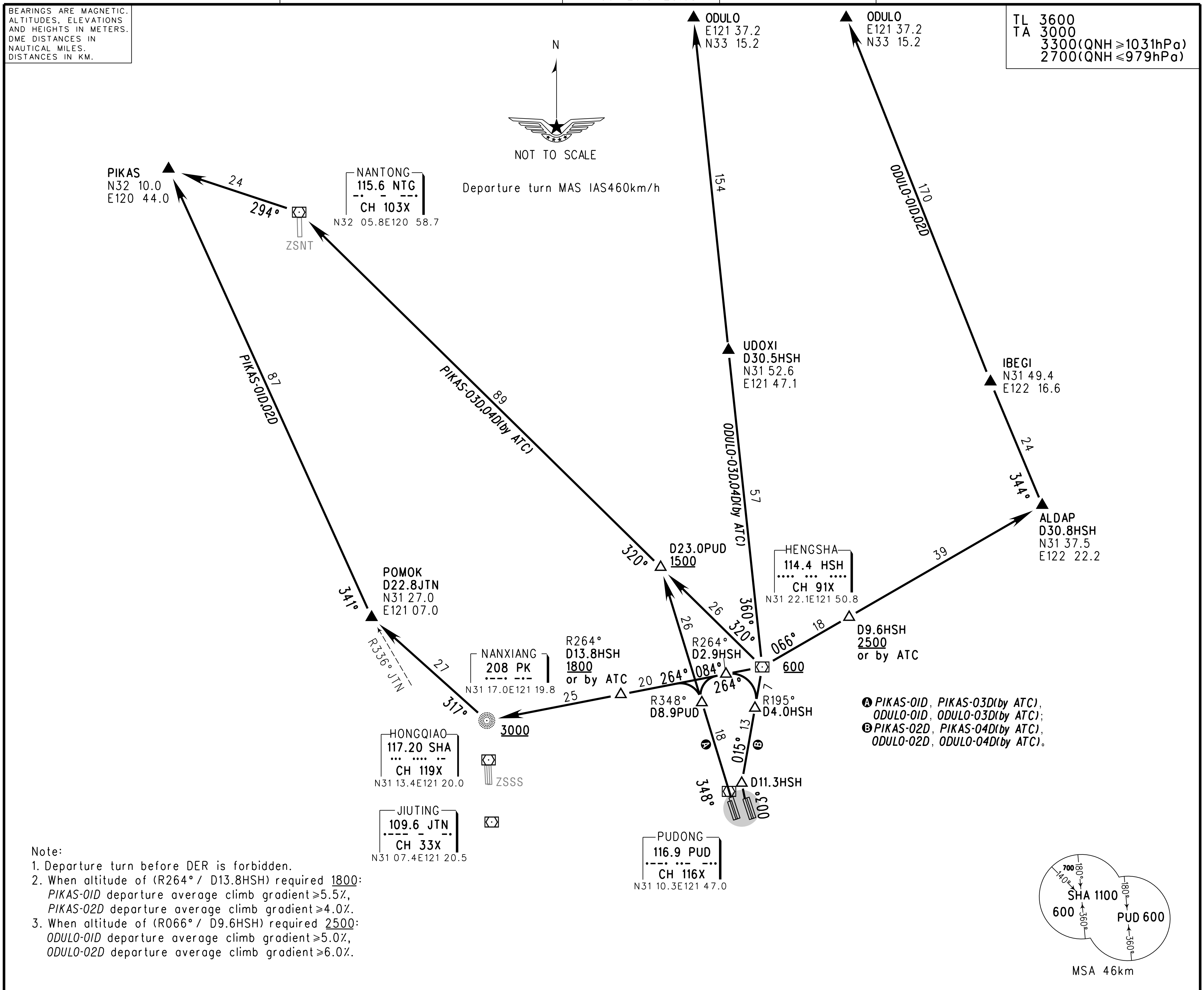
D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65	APP01 120.3(119.75)	APP07 121.1(119.75)
TWR01 118.8(118.325) 17L/35R, 17R/35L	APP02 125.4(124.05)	APP08 127.75(124.05)
TWR02 118.4(118.725) 16L/34R, 16R/34L	APP03 125.85(119.2)	APP09 121.375(128.05)
TWR03 124.35(118.325) 17L/35R	APP04 123.8(119.2)	APP10 125.625(120.65)
TWR04 118.575(118.725) 16R/34L	APP05 126.65(128.05)	APP11 119.075(128.05)
	APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RWY34L/34R/35L/35R (ODULO/PIKAS)

BEARINGS ARE MAGNETIC. ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS. DME DISTANCES IN NAUTICAL MILES. DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)



Note:
1. Departure turn before DER is forbidden.
2. When altitude of (R264°/ D13.8HSH) required 1800:
PIKAS-01D departure average climb gradient ≥5.5%,
PIKAS-02D departure average climb gradient ≥4.0%.
3. When altitude of (R066°/ D9.6HSH) required 2500:
ODULO-01D departure average climb gradient ≥5.0%,
ODULO-02D departure average climb gradient ≥6.0%.

Changes: Chart symbol.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

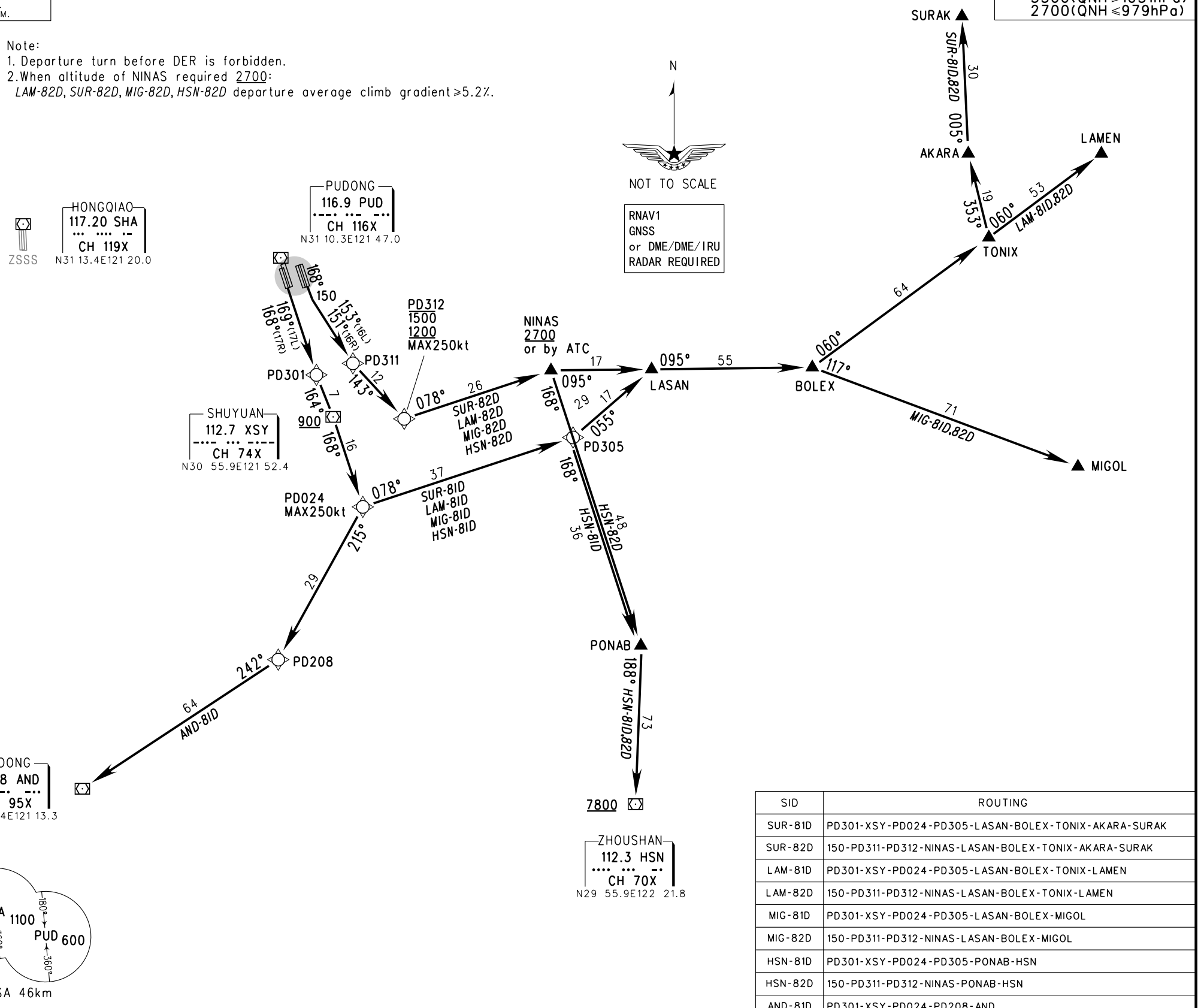
APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong
RNAV RWY16L/16R/17L/17R
(AND/HSN/LAMEN/MIGOL/SURAK)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)

Note:
1. Departure turn before DER is forbidden.
2. When altitude of NINAS required 2700:
LAM-82D, SUR-82D, MIG-82D, HSN-82D departure average climb gradient ≥5.2%.



SID	ROUTING
SUR-81D	PD301-XSY-PD024-PD305-LASAN-BOLEX-TONIX-AKARA-SURAK
SUR-82D	150-PD311-PD312-NINAS-LASAN-BOLEX-TONIX-AKARA-SURAK
LAM-81D	PD301-XSY-PD024-PD305-LASAN-BOLEX-TONIX-LAMEN
LAM-82D	150-PD311-PD312-NINAS-LASAN-BOLEX-TONIX-LAMEN
MIG-81D	PD301-XSY-PD024-PD305-LASAN-BOLEX-MIGOL
MIG-82D	150-PD311-PD312-NINAS-LASAN-BOLEX-MIGOL
HSN-81D	PD301-XSY-PD024-PD305-PONAB-HSN
HSN-82D	150-PD311-PD312-NINAS-PONAB-HSN
AND-81D	PD301-XSY-PD024-PD208-AND

Changes: Nil.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RNAV RWY16L/16R/17L/17R (NXD/SASAN/ADBAS)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

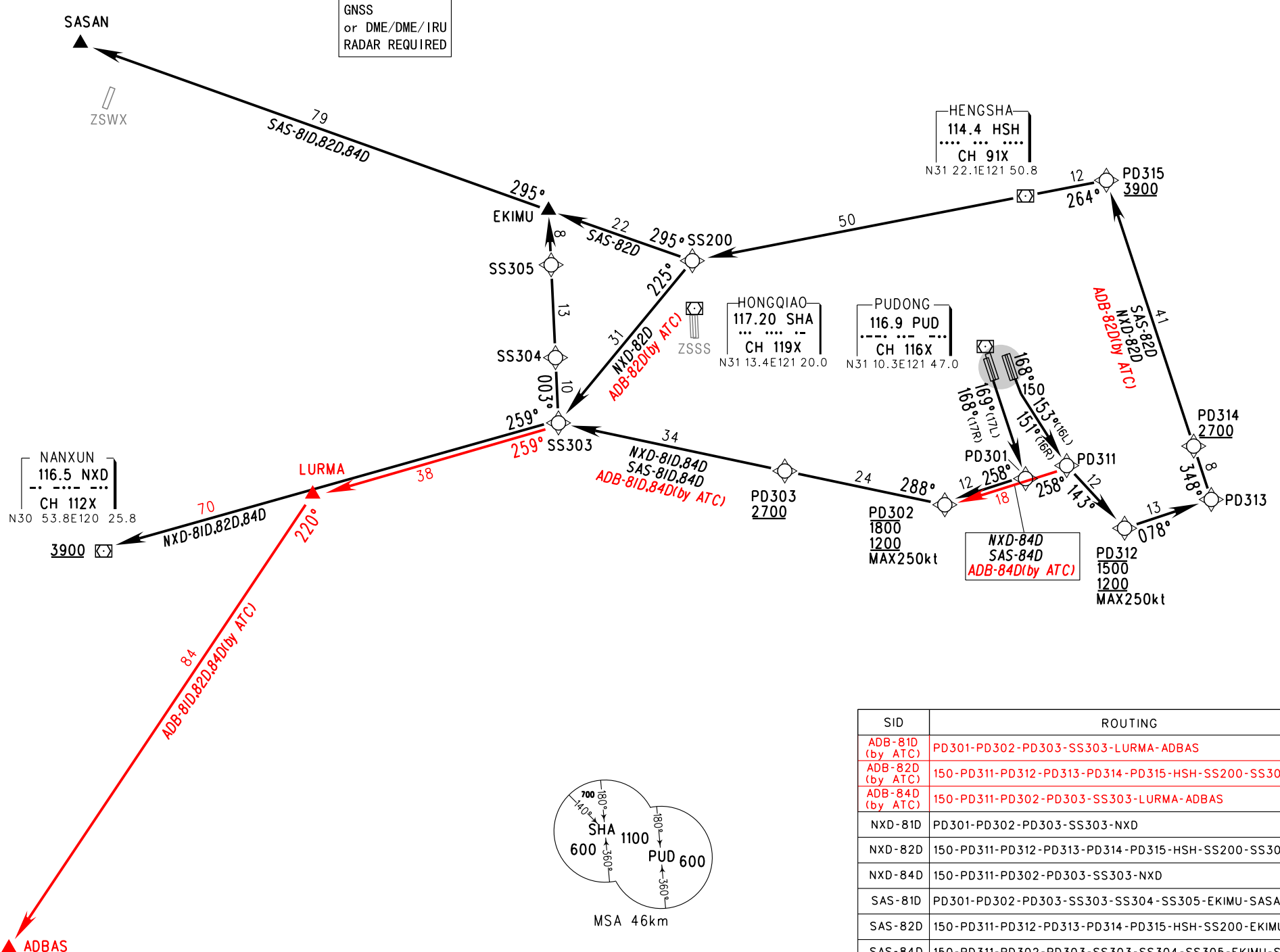
TL 3600
TA 3000
3300(QNH ≥ 1031hPa)
2700(QNH ≤ 979hPa)

N

NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED

Note:
1. Departure turn before DER is forbidden.
2. When altitude of PD303 required 2700:
   NXD-81D, *SAS-81D*, *ADB-81D* departure average climb gradient ≥5.3%,
   NXD-84D, *SAS-84D*, *ADB-84D* departure average climb gradient ≥4.7%.
3. When altitude of PD314 required 2700:
   NXD-82D, *SAS-82D*, *ADB-82D* departure average climb gradient ≥5.6%.



SID	ROUTING
ADB-81D (by ATC)	PD301-PD302-PD303-SS303-LURMA-ADBAS
ADB-82D (by ATC)	150-PD311-PD312-PD313-PD314-PD315-HSH-SS200-SS303-LURMA-ADBAS
ADB-84D (by ATC)	150-PD311-PD302-PD303-SS303-LURMA-ADBAS
NXD-81D	PD301-PD302-PD303-SS303-NXD
NXD-82D	150-PD311-PD312-PD313-PD314-PD315-HSH-SS200-SS303-NXD
NXD-84D	150-PD311-PD302-PD303-SS303-NXD
SAS-81D	PD301-PD302-PD303-SS303-SS304-SS305-EKIMU-SASAN
SAS-82D	150-PD311-PD312-PD313-PD314-PD315-HSH-SS200-EKIMU-SASAN
SAS-84D	150-PD311-PD302-PD303-SS303-SS304-SS305-EKIMU-SASAN

Changes: Procedure.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01 120.3(119.75)	APP07 121.1(119.75)
APP02 125.4(124.05)	APP08 127.75(124.05)
APP03 125.85(119.2)	APP09 121.375(128.05)
APP04 123.8(119.2)	APP10 125.625(120.65)
APP05 126.65(128.05)	APP11 119.075(128.05)
APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RNAV RWY16L/16R/17L/17R (ODULO/PIKAS)

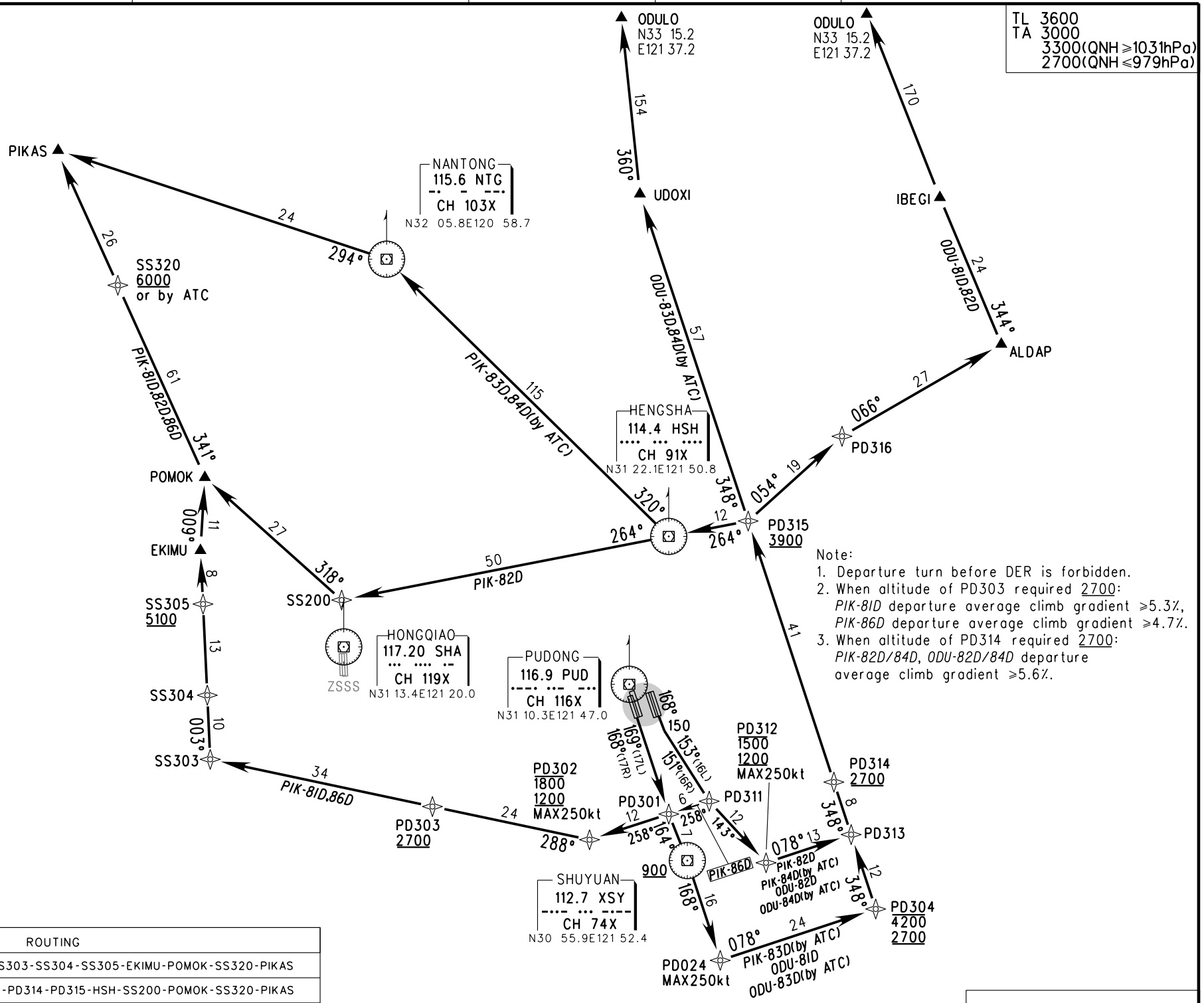
BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH ⩾1031hPa)
2700(QNH ⩽979hPa)

N

NOT TO SCALE

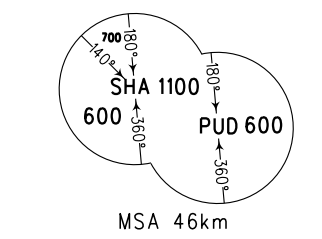
RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED



Note:
1. Departure turn before DER is forbidden.
2. When altitude of PD303 required 2700:
   PIK-81D departure average climb gradient ⩾5.3%,
   PIK-86D departure average climb gradient ⩾4.7%.
3. When altitude of PD314 required 2700:
   PIK-82D/84D, ODU-82D/84D departure average climb gradient ⩾5.6%.

SID	ROUTING
PIK-81D	PD301-PD302-PD303-SS303-SS304-SS305-EKIMU-POMOK-SS320-PIKAS
PIK-82D	150-PD311-PD312-PD313-PD314-PD315-HSH-SS200-POMOK-SS320-PIKAS
PIK-83D	PD301-XSY-PD024-PD304-PD313-PD314-PD315-HSH-NTG-PIKAS
PIK-84D	150-PD311-PD312-PD313-PD314-PD315-HSH-NTG-PIKAS
PIK-86D	150-PD311-PD302-PD303-SS303-SS304-SS305-EKIMU-POMOK-SS320-PIKAS
ODU-81D	PD301-XSY-PD024-PD304-PD313-PD314-PD315-PD316-ALDAP-IBEGI-ODULO
ODU-82D	150-PD311-PD312-PD313-PD314-PD315-PD316-ALDAP-IBEGI-ODULO
ODU-83D	PD301-XSY-PD024-PD304-PD313-PD314-PD315-UDOXI-ODULO
ODU-84D	150-PD311-PD312-PD313-PD314-PD315-UDOXI-ODULO

Changes: D-ATIS.



MSA 46km

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01 120.3(119.75)	APP07 121.1(119.75)
APP02 125.4(124.05)	APP08 127.75(124.05)
APP03 125.85(119.2)	APP09 121.375(128.05)
APP04 123.8(119.2)	APP10 125.625(120.65)
APP05 126.65(128.05)	APP11 119.075(128.05)
APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RNAV RWY34L/34R/35L/35R (AND/HSN/LAMEN/MIGOL/SURAK)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

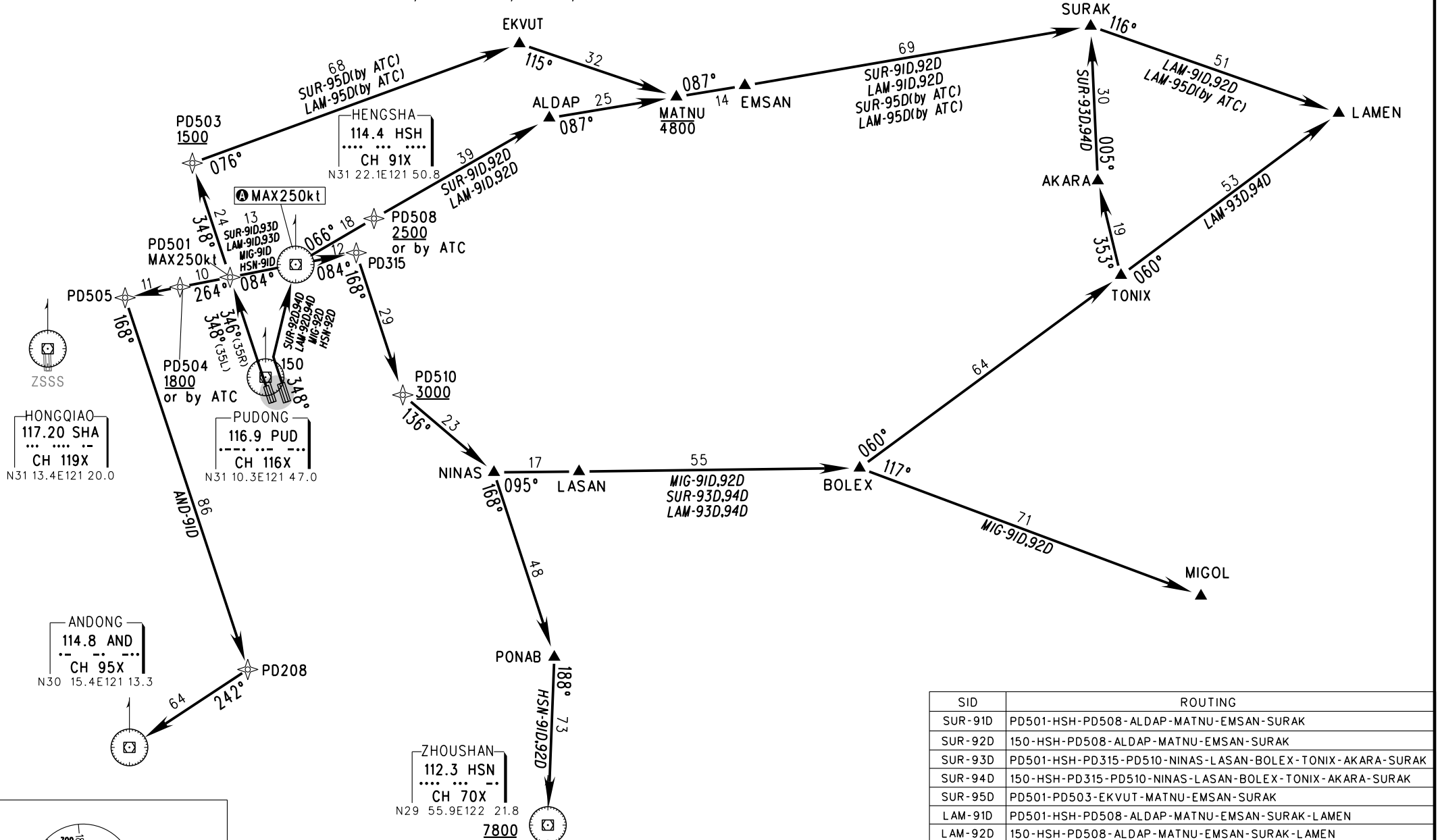
Note:
1. Departure turn before DER is forbidden.
2. When altitude of PD508 required 2500:
   LAM-91D, *SUR-91D* departure average climb gradient≥4.8%,
   LAM-92D, *SUR-92D* departure average climb gradient≥6.0%.
3. When altitude of PD510 required 3000:
   LAM-93D, *SUR-93D*, *MIG-91D*, *HSN-91D* departure average climb gradient≥3.9%,
   LAM-94D, *SUR-94D*, *MIG-92D*, *HSN-92D* departure average climb gradient≥4.6%.
4. When altitude of PD504 required 1800:
   AND-91D departure average climb gradient≥5.6%.
5. Ⓐlimit MAX250kt for *SUR-92D/94D*, *LAM-92D/94D*, *MIG-92D*, *HSN-92D*.

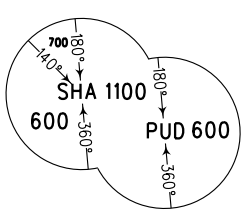
N

NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)





SID	ROUTING
SUR-91D	PD501-HSH-PD508-ALDAP-MATNU-EMSAN-SURAK
SUR-92D	150-HSH-PD508-ALDAP-MATNU-EMSAN-SURAK
SUR-93D	PD501-HSH-PD315-PD510-NINAS-LASAN-BOLEX-TONIX-AKARA-SURAK
SUR-94D	150-HSH-PD315-PD510-NINAS-LASAN-BOLEX-TONIX-AKARA-SURAK
SUR-95D	PD501-PD503-EKVUT-MATNU-EMSAN-SURAK
LAM-91D	PD501-HSH-PD508-ALDAP-MATNU-EMSAN-SURAK-LAMEN
LAM-92D	150-HSH-PD508-ALDAP-MATNU-EMSAN-SURAK-LAMEN
LAM-93D	PD501-HSH-PD315-PD510-NINAS-LASAN-BOLEX-TONIX-LAMEN
LAM-94D	150-HSH-PD315-PD510-NINAS-LASAN-BOLEX-TONIX-LAMEN
LAM-95D	PD501-PD503-EKVUT-MATNU-EMSAN-SURAK-LAMEN
MIG-91D	PD501-HSH-PD315-PD510-NINAS-LASAN-BOLEX-MIGOL
MIG-92D	150-HSH-PD315-PD510-NINAS-LASAN-BOLEX-MIGOL
HSN-91D	PD501-HSH-PD315-PD510-NINAS-PONAB-HSN
HSN-92D	150-HSH-PD315-PD510-NINAS-PONAB-HSN
AND-91D	PD501-PD504-PD505-PD208-AND

Changes: D-ATIS.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)
APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RNAV RWY34L/34R/35L/35R (NXD/SASAN/ADBAS)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

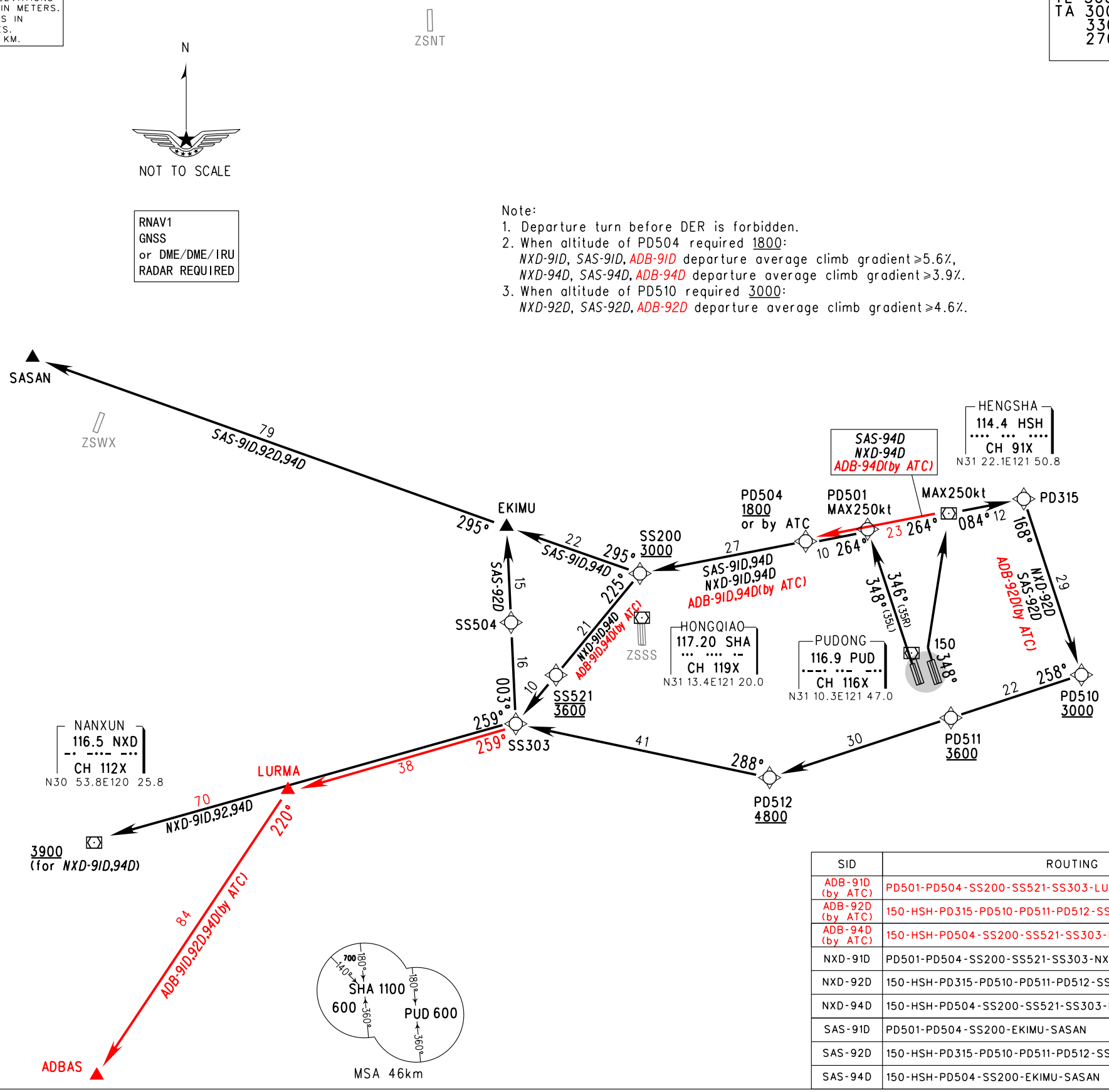
TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED

Note:
1. Departure turn before DER is forbidden.
2. When altitude of PD504 required 1800:
   NXD-91D, *SAS-91D*, *ADB-91D* departure average climb gradient≥5.6%,
   NXD-94D, *SAS-94D*, *ADB-94D* departure average climb gradient≥3.9%.
3. When altitude of PD510 required 3000:
   NXD-92D, *SAS-92D*, *ADB-92D* departure average climb gradient≥4.6%.



SID	ROUTING
ADB-91D (by ATC)	PD501-PD504-SS200-SS521-SS303-LURMA-ADBAS
ADB-92D (by ATC)	150-HSH-PD315-PD510-PD511-PD512-SS303-LURMA-ADBAS
ADB-94D (by ATC)	150-HSH-PD504-SS200-SS521-SS303-LURMA-ADBAS
NXD-91D	PD501-PD504-SS200-SS521-SS303-NXD
NXD-92D	150-HSH-PD315-PD510-PD511-PD512-SS303-NXD
NXD-94D	150-HSH-PD504-SS200-SS521-SS303-NXD
SAS-91D	PD501-PD504-SS200-EKIMU-SASAN
SAS-92D	150-HSH-PD315-PD510-PD511-PD512-SS303-SS504-EKIMU-SASAN
SAS-94D	150-HSH-PD504-SS200-EKIMU-SASAN

Changes: Procedure.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65		
TWR01 118.8(118.325)	17L/35R, 17R/35L	
TWR02 118.4(118.725)	16L/34R, 16R/34L	
TWR03 124.35(118.325)	17L/35R	
TWR04 118.575(118.725)	16R/34L	
APP01 120.3(119.75)	APP07 121.1(119.75)	
APP02 125.4(124.05)	APP08 127.75(124.05)	
APP03 125.85(119.2)	APP09 121.375(128.05)	
APP04 123.8(119.2)	APP10 125.625(120.65)	
APP05 126.65(128.05)	APP11 119.075(128.05)	
APP06 126.3(120.65)		

ZSPD SHANGHAI/Pudong

RNAV RWY34L/34R/35L/35R (ODULO/PIKAS)

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

BEARINGS ARE MAGNETIC. ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS. DME DISTANCES IN NAUTICAL MILES. DISTANCES IN KM.

N

NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED

Note:
1. Departure turn before DER is forbidden.
2. When altitude of PD508 required 2500:
   ODU-91D departure average climb gradient≥4.8%,
   ODU-92D departure average climb gradient≥6.0%.
3. When altitude of PD504 required 1800:
   PIK-91D departure average climb gradient≥5.6%,
   PIK-98D departure average climb gradient≥3.9%.
4. When altitude of PD510 required 3000:
   PIK-92D departure average climb gradient≥4.6%.
5. Ⓐlimit MAX250kt for *ODU-92D/94D*, *PIK-92D/94D/96D/98D*.

ZSWX

SID	ROUTING
PIK-91D	PD501-PD504-SS200-POMOK-SS320-PIKAS
PIK-92D	150-HSH-PD315-PD510-PD511-PD512-SS303 -SS504-EKIMU-POMOK-SS320-PIKAS
PIK-93D	PD501-PD502-POMOK-SS320-PIKAS
PIK-94D	150-HSH-VEBNI-PD502-POMOK-SS320-PIKAS
PIK-95D	PD501-PD502-PD503-NTG-PIKAS
PIK-96D	150-HSH-PD503-NTG-PIKAS
PIK-98D	150-HSH-PD504-SS200-POMOK-SS320-PIKAS
ODU-91D	PD501-HSH-PD508-ALDAP-IBEGI-ODULO
ODU-92D	150-HSH-PD508-ALDAP-IBEGI-ODULO
ODU-93D	PD501-PD503-UDOXI-ODULO
ODU-94D	150-HSH-UDOXI-ODULO

Changes: Chart symbols.

STANDARD DEPARTURE CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)	APP07	121.1(119.75)
APP02	125.4(124.05)	APP08	127.75(124.05)
APP03	125.85(119.2)	APP09	121.375(128.05)
APP04	123.8(119.2)	APP10	125.625(120.65)
APP05	126.65(128.05)	APP11	119.075(128.05)
APP06	126.3(120.65)		

ZSPD SHANGHAI/Pudong

RNAV RWY16L/16R/34L/34R (LAMEN)

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

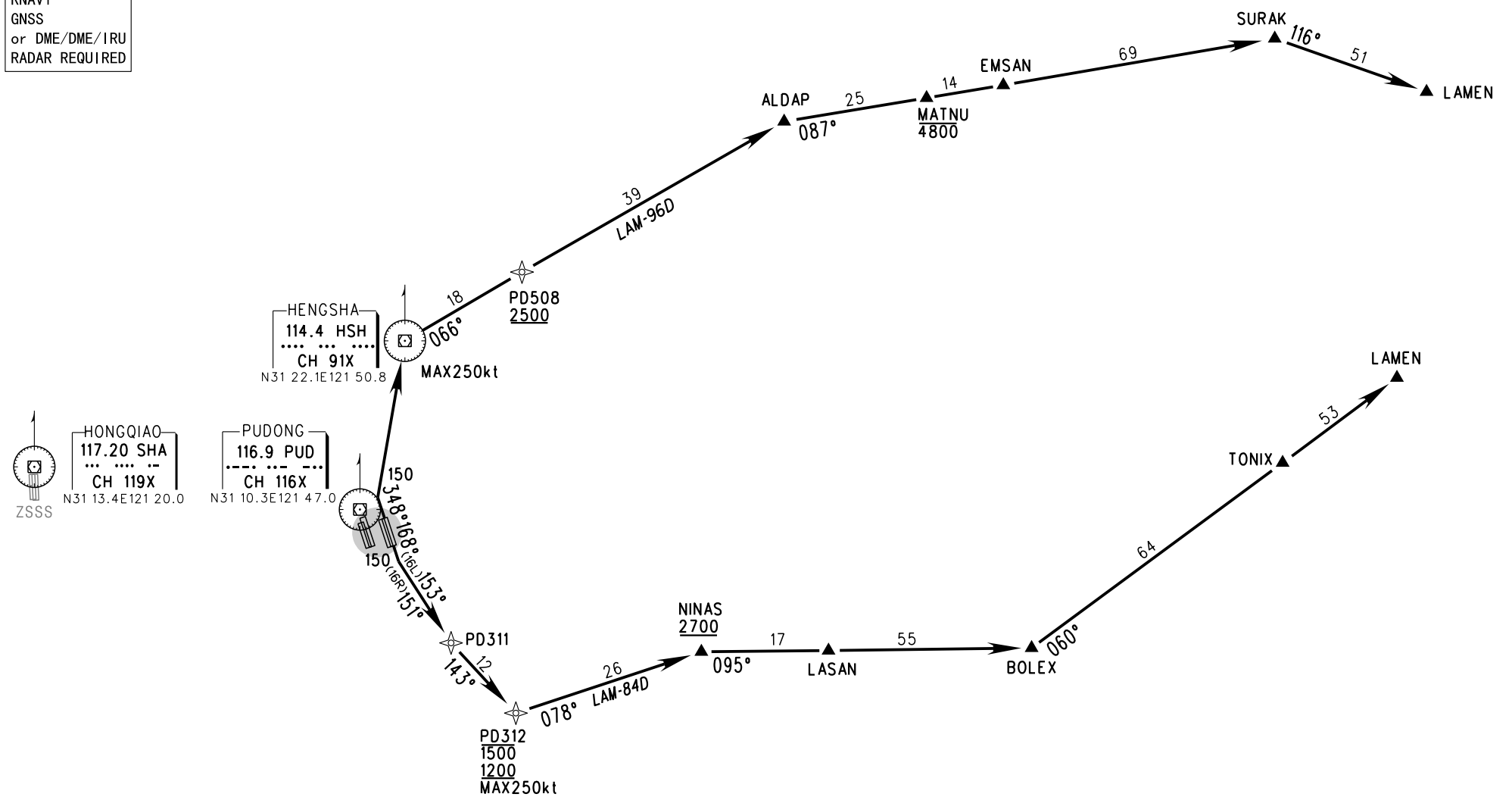
Only used for CCO

N

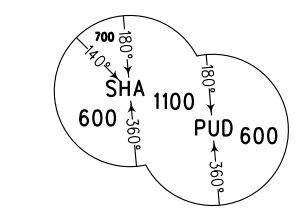
NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED

Note:
1. Using this chart need ATC permission.
2. Departure turn before DER is forbidden.
3. When altitude of NINAS required 2700:
LAM-84D departure average climb gradient ≥5.2%.
4. When altitude of PD508 required 2500:
LAM-96D departure average climb gradient ≥6.0%.



SID	ROUTING
LAM-84D	150-PD311-PD312-NINAS-LASAN-BOLEX-TONIX-LAMEN
LAM-96D	150-HSH-PD508-ALDAP-MATNU-EMSAN-SURAK-LAMEN



Changes: D-ATIS.

STANDARD ARRIVAL CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

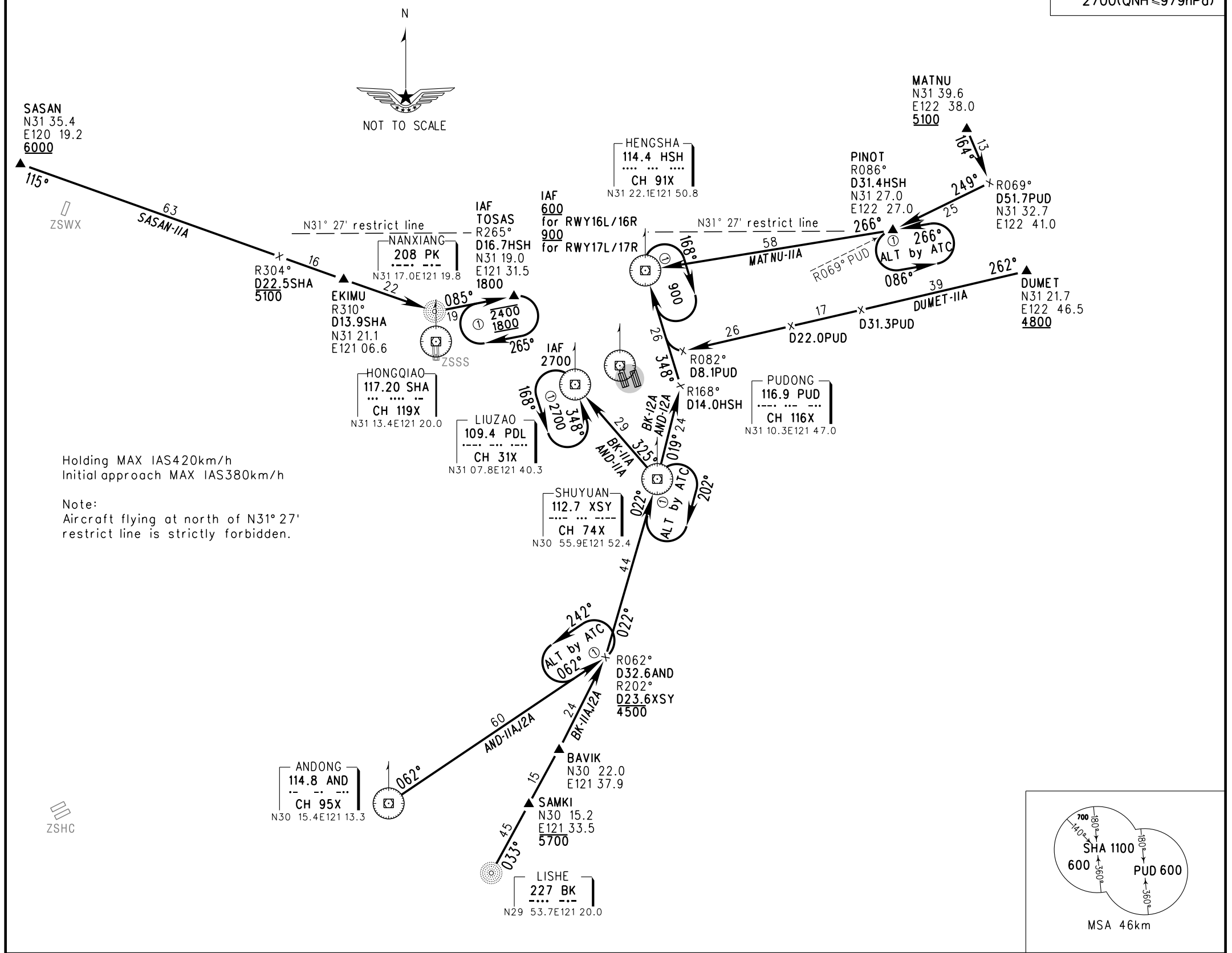
APP01 120.3(119.75)	APP07 121.1(119.75)
APP02 125.4(124.05)	APP08 127.75(124.05)
APP03 125.85(119.2)	APP09 121.375(128.05)
APP04 123.8(119.2)	APP10 125.625(120.65)
APP05 126.65(128.05)	APP11 119.075(128.05)
APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RWY16L/16R/17L/17R

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)



Holding MAX IAS420km/h
Initial approach MAX IAS380km/h

Note:
Aircraft flying at north of N31° 27' restrict line is strictly forbidden.

Changes: D-ATIS.

STANDARD ARRIVAL CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RWY34L/34R/35L/35R

BEARINGS ARE MAGNETIC.
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS.
DME DISTANCES IN NAUTICAL MILES.
DISTANCES IN KM.

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

ZSNT

N

NOT TO SCALE

Holding MAX IAS420km/h
Initial approach MAX IAS380km/h

SASAN
N31 35.4
E120 19.2
6000

115°
79
SASAN-01A

ZSWX

EKIMU
R325°
D18.2JTN
N31 21.1
E121 06.6

145°
34

HONGQIAO
117.20 SHA
CH 119X
N31 13.4E121 20.0

LIUZAO
109.4 PDL
CH 31X
N31 07.8E121 40.3

PUDONG
116.9 PUD
CH 116X
N31 10.3E121 47.0

274°
ZSSS
ALT by ATC ①
094°
094°
32
168°
① 2400
348°
IAF
2400

JIUTING
109.6 JTN
CH 33X
N31 07.4E121 20.5

SHUYUAN
112.7 XSY
CH 74X
N30 55.9E121 52.4

MATNU
N31 39.6
E122 38.0
5100

164°
13

PINOT
R050°
D42.9XSY
N31 27.0
E122 27.0

230°
25
249°
R069°
D51.7PUD
N31 32.7
E122 41.0

R069° PUD
① ALT by ATC
050°

R050°
D27.1XSY
N31 15.6
E122 14.2

29
MATNU-01A 230°
39
262°
DUMET-01A

D31.3PUD
⑮ 5100 2400
082° by ATC

DUMET
R082°
D52.3PUD
N31 21.7
E122 46.5
4800

R082° PUD
13
22
230°
R050°
IAF
D15.4XSY
1500

ZSHC

242°
① ALT by ATC
062°
24
BK-01A
IAF
R062°
D32.6AND
R202°
D23.6XSY
2700

ANDONG
114.8 AND
CH 95X
N30 15.4E121 13.3

062°
60
AND-01A

15
BAVIK
N30 22.0
E121 37.9

45
033°
SAMKI
N30 15.2
E121 33.5
5700

LISHE
227 BK
N29 53.7E121 20.0

700
140°
180°
SHA 1100
600
360°
180°
PUD 600
360°

MSA 46km

Changes: D-ATIS.

STANDARD ARRIVAL CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85	D-ATIS(Chinese) 128.65
TWR01 118.8(118.325)	17L/35R, 17R/35L
TWR02 118.4(118.725)	16L/34R, 16R/34L
TWR03 124.35(118.325)	17L/35R
TWR04 118.575(118.725)	16R/34L

APP01	120.3(119.75)
APP02	125.4(124.05)
APP03	125.85(119.2)
APP04	123.8(119.2)
APP05	126.65(128.05)
APP06	126.3(120.65)

APP07	121.1(119.75)
APP08	127.75(124.05)
APP09	121.375(128.05)
APP10	125.625(120.65)
APP11	119.075(128.05)

ZSPD SHANGHAI/Pudong

RNAV RWY16L/16R/17L/17R

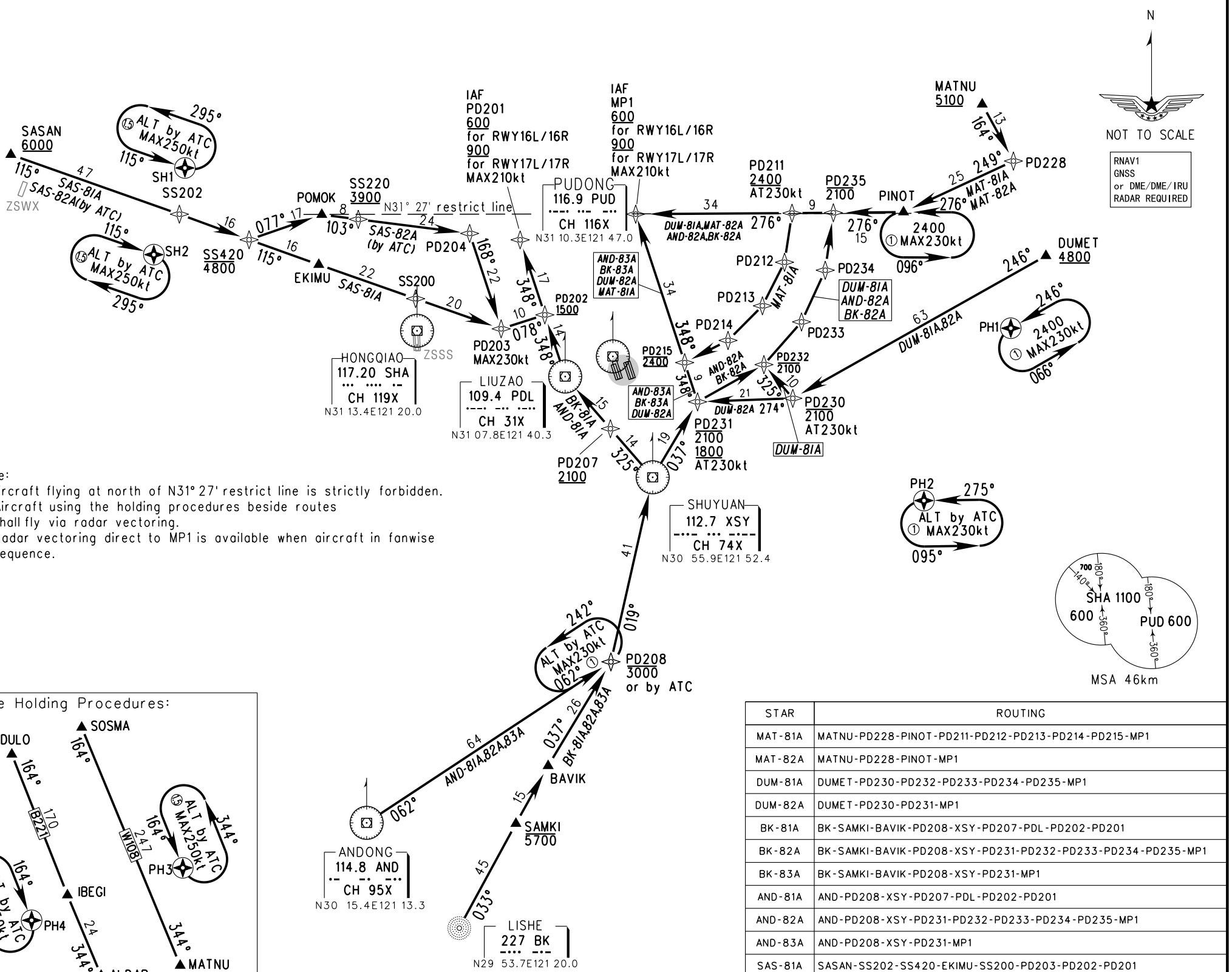
BEARINGS ARE MAGNETIC
ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS
DME DISTANCES IN NAUTICAL MILES
DISTANCES IN KM

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

N

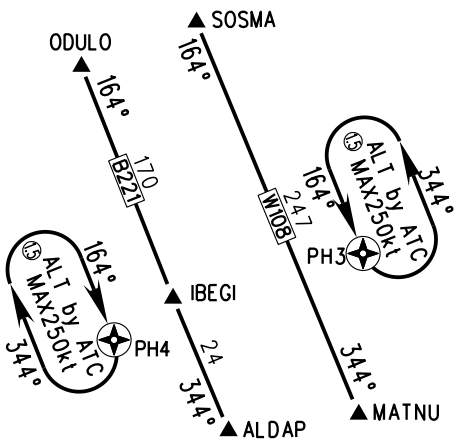
NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED



Note:
1. Aircraft flying at north of N31°27' restrict line is strictly forbidden.
2. Aircraft using the holding procedures beside routes shall fly via radar vectoring.
3. Radar vectoring direct to MP1 is available when aircraft in fanwise sequence.

Outside Holding Procedures:



STAR	ROUTING
MAT-81A	MATNU-PD228-PINOT-PD211-PD212-PD213-PD214-PD215-MP1
MAT-82A	MATNU-PD228-PINOT-MP1
DUM-81A	DUMET-PD230-PD232-PD233-PD234-PD235-MP1
DUM-82A	DUMET-PD230-PD231-MP1
BK-81A	BK-SAMKI-BAVIK-PD208-XSY-PD207-PDL-PD202-PD201
BK-82A	BK-SAMKI-BAVIK-PD208-XSY-PD231-PD232-PD233-PD234-PD235-MP1
BK-83A	BK-SAMKI-BAVIK-PD208-XSY-PD231-MP1
AND-81A	AND-PD208-XSY-PD207-PDL-PD202-PD201
AND-82A	AND-PD208-XSY-PD231-PD232-PD233-PD234-PD235-MP1
AND-83A	AND-PD208-XSY-PD231-MP1
SAS-81A	SASAN-SS202-SS420-EKIMU-SS200-PD203-PD202-PD201
SAS-82A	SASAN-SS202-SS420-POMOK-SS220-PD204-PD203-PD202-PD201

Changes: D-ATIS.

STANDARD ARRIVAL CHART-INSTRUMENT

VAR5.8° W

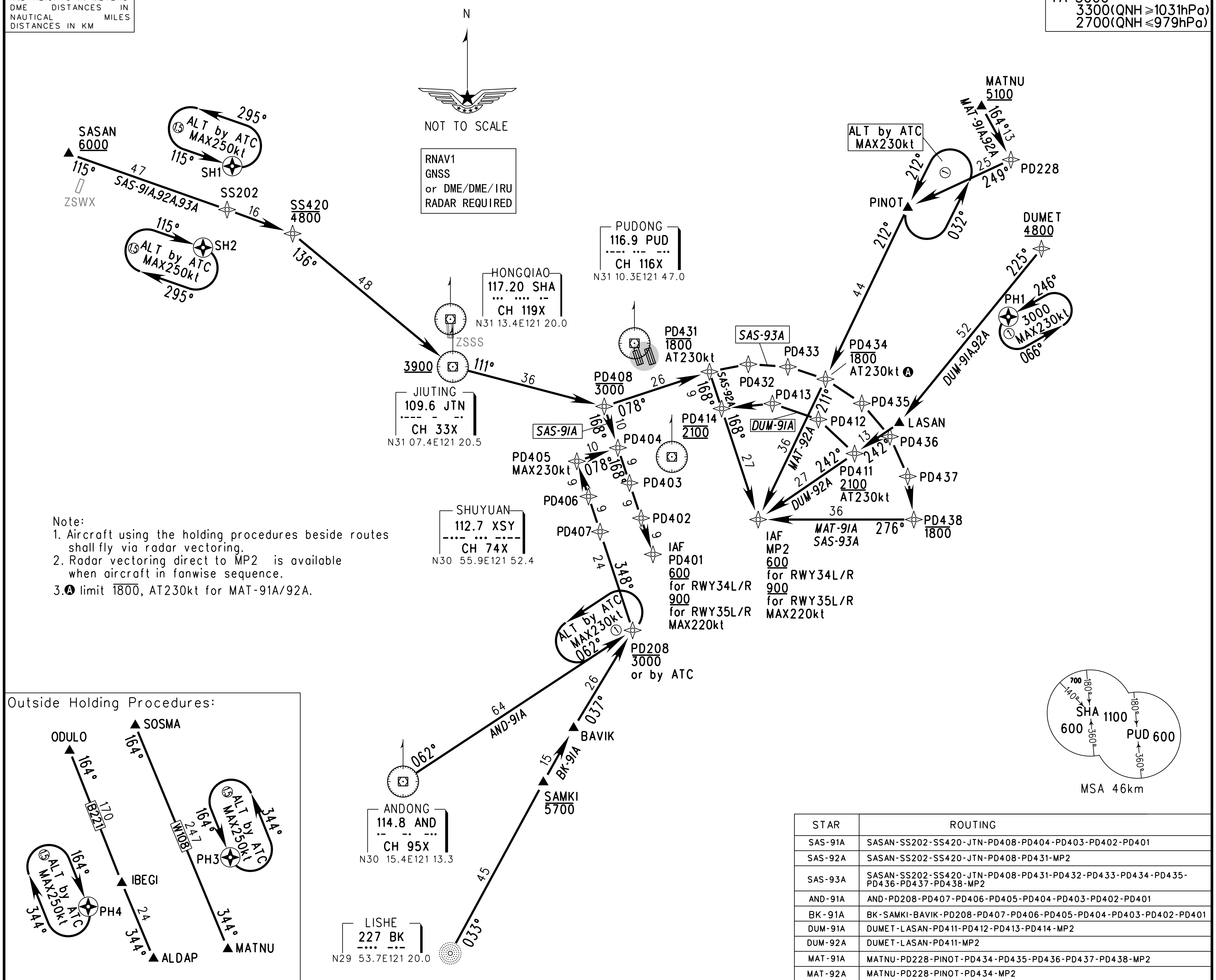
D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65		APP01 120.3(119.75)	APP07 121.1(119.75)
TWR01 118.8(118.325)	17L/35R, 17R/35L	APP02 125.4(124.05)	APP08 127.75(124.05)
TWR02 118.4(118.725)	16L/34R, 16R/34L	APP03 125.85(119.2)	APP09 121.375(128.05)
TWR03 124.35(118.325)	17L/35R	APP04 123.8(119.2)	APP10 125.625(120.65)
TWR04 118.575(118.725)	16R/34L	APP05 126.65(128.05)	APP11 119.075(128.05)
		APP06 126.3(120.65)	

ZSPD SHANGHAI/Pudong

RNAV RWY34L/34R/35L/35R

BEARINGS ARE MAGNETIC ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS DME DISTANCES IN NAUTICAL MILES DISTANCES IN KM

TL 3600
TA 3000
3300(QNH ≥1031hPa)
2700(QNH ≤979hPa)



Note:
1. Aircraft using the holding procedures beside routes shall fly via radar vectoring.
2. Radar vectoring direct to MP2 is available when aircraft in fanwise sequence.
3. Ⓐ limit 1800, AT230kt for MAT-91A/92A.

STAR	ROUTING
SAS-91A	SASAN-SS202-SS420-JTN-PD408-PD404-PD403-PD402-PD401
SAS-92A	SASAN-SS202-SS420-JTN-PD408-PD431-MP2
SAS-93A	SASAN-SS202-SS420-JTN-PD408-PD431-PD432-PD433-PD434-PD435-PD436-PD437-PD438-MP2
AND-91A	AND-PD208-PD407-PD406-PD405-PD404-PD403-PD402-PD401
BK-91A	BK-SAMKI-BAVIK-PD208-PD407-PD406-PD405-PD404-PD403-PD402-PD401
DUM-91A	DUMET-LASAN-PD411-PD412-PD413-PD414-MP2
DUM-92A	DUMET-LASAN-PD411-MP2
MAT-91A	MATNU-PD228-PINOT-PD434-PD435-PD436-PD437-PD438-MP2
MAT-92A	MATNU-PD228-PINOT-PD434-MP2

Changes: D-ATIS.

STANDARD ARRIVAL CHART-INSTRUMENT

VAR5.8° W

D-ATIS(English) 127.85 D-ATIS(Chinese) 128.65
TWR01 118.8(118.325) 17L/35R, 17R/35L
TWR02 118.4(118.725) 16L/34R, 16R/34L
TWR03 124.35(118.325) 17L/35R
TWR04 118.575(118.725) 16R/34L

ZSPD SHANGHAI/Pudong
RNAV RWY16L/16R/34L/34R
(DUMET)

BEARINGS ARE MAGNETIC. ALTITUDES, ELEVATIONS AND HEIGHTS IN METERS. DME DISTANCES IN NAUTICAL MILES. DISTANCES IN KM.

APP01 120.3(119.75)	APP07 121.1(119.75)
APP02 125.4(124.05)	APP08 127.75(124.05)
APP03 125.85(119.2)	APP09 121.375(128.05)
APP04 123.8(119.2)	APP10 125.625(120.65)
APP05 126.65(128.05)	APP11 119.075(128.05)
APP06 126.3(120.65)	

TL 3600
TA 3000
3300(QNH≥1031hPa)
2700(QNH≤979hPa)

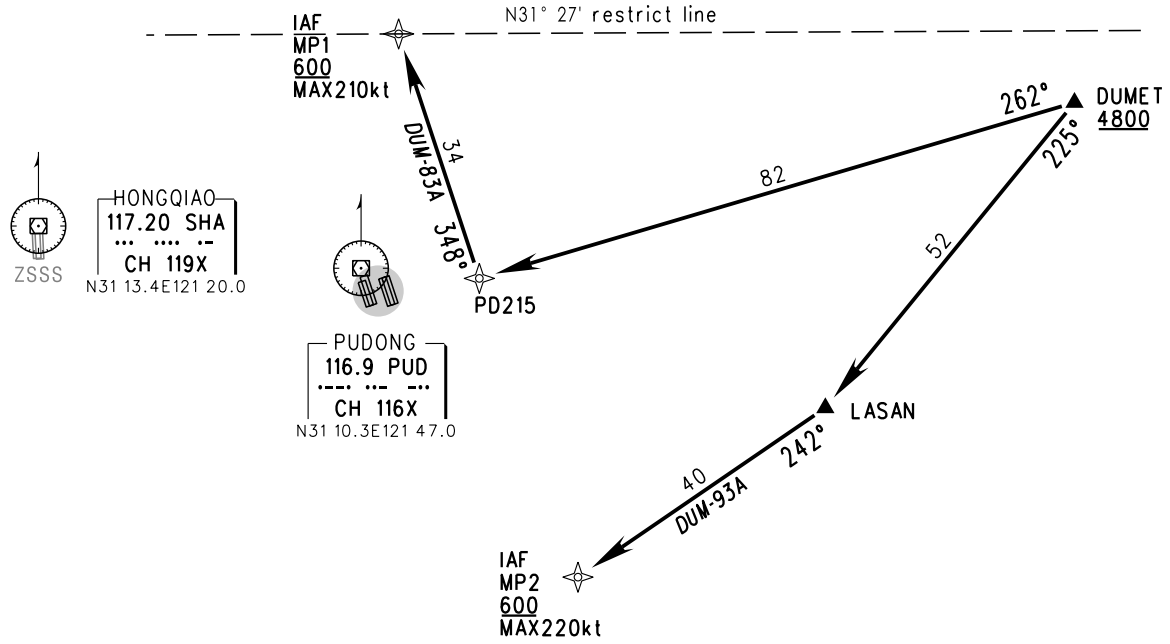
Only used for CDO

Note:
1. Using this chart need ATC permission.
2. Aircraft flying at north of N31° 27' restrict line is strictly forbidden.

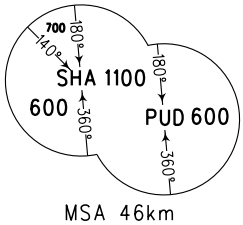
N

NOT TO SCALE

RNAV1
GNSS
or DME/DME/IRU
RADAR REQUIRED



STAR	ROUTING
DUM-83A	DUMET-PD215-MP1
DUM-93A	DUMET-LASAN-MP2



MSA 46km

Changes: D-ATIS.

WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES
MP1	N31° 27'00"E121° 50'10"	PD053	N31° 21'02"E121° 42'33"	PD235	N31° 27'00"E122° 17'21"
MP2	N30° 48'02"E122° 04'49"				
		PD063	N30° 54'31"E121° 52'34"	PD301	N30° 59'44"E121° 50'36"
PF1	N31° 25'19"E121° 41'14"	PD064	N30° 50'06"E121° 54'14"	PD302	N30° 57'41"E121° 43'09"
PF2	N30° 45'38"E121° 56'12"			PD303	N31° 00'24"E121° 28'25"
PF3	N31° 25'35"E121° 42'38"	PD073	N31° 19'57"E121° 45'03"	PD304	N30° 51'57"E122° 09'57"
PF4	N30° 46'01"E121° 57'33"			PD305	N30° 53'58"E122° 17'14"
PF5	N31° 25'16"E121° 40'56"	PD083	N30° 57'19"E121° 53'36"		
PF6	N30° 45'33"E121° 55'56"	PD084	N30° 50'37"E121° 56'07"	PD311	N31° 00'45"E121° 54'24"
PF7	N31° 25'38"E121° 42'54"			PD312	N30° 55'45"E121° 59'42"
PF8	N30° 46'05"E121° 57'49"	PD201	N31° 24'01"E121° 34'16"	PD313	N30° 57'59"E122° 07'42"
		PD202	N31° 15'10"E121° 37'38"	PD314	N31° 02'14"E122° 06'07"
PH1	N31° 13'10"E122° 41'33"	PD203	N31° 13'32"E121° 31'38"	PD315	N31° 23'23"E121° 58'13"
PH2	N30° 52'58"E122° 29'23"	PD204	N31° 24'47"E121° 27'20"	PD316	N31° 30'11"E122° 07'07"
PH3	N31° 55'44"E122° 39'05"	PD207	N31° 01'43"E121° 46'34"		
PH4	N31° 46'31"E122° 07'55"	PD208	N30° 34'14"E121° 46'30"	PD401	N30° 43'45"E121° 49'30"
				PD402	N30° 48'18"E121° 47'48"
SH1	N31° 32'27"E120° 48'09"	PD211	N31° 27'00"E122° 11'40"	PD403	N30° 52'43"E121° 46'08"
SH2	N31° 22'13"E120° 43'56"	PD212	N31° 21'13"E122° 10'35"	PD404	N30° 57'08"E121° 44'28"
		PD213	N31° 16'06"E122° 07'30"	PD405	N30° 55'28"E121° 38'29"
PD013	N31° 21'25"E121° 42'43"	PD214	N31° 12'03"E122° 02'45"	PD406	N30° 51'03"E121° 40'10"
		PD215	N31° 09'28"E121° 56'47"	PD407	N30° 46'37"E121° 41'50"
PD023	N30° 54'36"E121° 52'50"			PD408	N31° 02'20"E121° 42'30"
PD024	N30° 47'53"E121° 55'21"	PD220	N31° 16'19"E121° 54'13"		
PD025	N30° 50'10.2"E121° 54'29.6"	PD228	N31° 32'52"E122° 41'12"	PD411	N30° 56'13"E122° 18'55"
				PD412	N31° 00'32"E122° 13'41"
PD033	N31° 19'53"E121° 44'48"	PD230	N31° 05'10"E122° 11'34"	PD413	N31° 02'34"E122° 07'00"
		PD231	N31° 04'50"E121° 58'31"	PD414	N31° 01'59"E121° 59'36"
PD043	N30° 57'14"E121° 53'20"	PD232	N31° 09'10"E122° 07'39"		
PD044	N30° 50'33"E121° 55'51"	PD233	N31° 14'10"E122° 12'51"	PD431	N31° 06'37"E121° 57'52"
		PD234	N31° 20'14"E122° 16'10"	PD432	N31° 07'32"E122° 03'32"

Changes: Nil.

WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES
PD433	N31° 07'10"E122° 09'18"	SS504	N31° 12'54"E121° 07'04"	PIKAS	N32° 10'00"E120° 44'00"
PD434	N31° 05'35"E122° 14'46"			PINOT	N31° 27'00"E122° 27'00"
PD435	N31° 02'30"E122° 20'02"	SS521	N31° 08'24"E121° 11'33"	POMOK	N31° 27'00"E121° 07'00"
PD436	N30° 58'18"E122° 24'05"			PONAB	N30° 35'16"E122° 24'04"
PD437	N30° 53'17"E122° 26'37"	BK	N29° 53.7'E121° 20.0'	SAMKI	N30° 15'12"E121° 33'30"
PD438	N30° 47'52"E122° 27'26"	AND	N30° 15.4'E121° 13.3'	SASAN	N31° 35'22"E120° 19'10"
		HSH	N31° 22.1'E121° 50.8'	SURAK	N31° 46'24"E123° 29'30"
PD501	N31° 20'51"E121° 42'37"	HSN	N29° 55.9'E122° 21.8'	TONIX	N31° 19'56"E123° 32'38"
PD502	N31° 27'00"E121° 40'16"	JTN	N31° 07.4'E121° 20.5'	UDOXI	N31° 52'37"E121° 47'06"
PD503	N31° 32'58"E121° 38'00"	NTG	N32° 05.8'E120° 58.7'	VEBNI	N31° 27'00"E121° 45'02"
PD504	N31° 19'50"E121° 36'26"	NXD	N30° 53.8'E120° 25.8'		
PD505	N31° 18'43"E121° 29'39"	PDL	N31° 07.8'E121° 40.3'		
PD508	N31° 27'00"E122° 00'26"	XSY	N30° 55.9'E121° 52.4'		
PD510	N31° 08'17"E122° 03'51"	ADBAS	N30° 20'36"E120° 16'02"		
PD511	N31° 04'40"E121° 50'50"	AKARA	N31° 30'00"E123° 30'00"		
PD512	N30° 59'36"E121° 32'47"	ALDAP	N31° 37'31"E122° 22'14"		
		BAVIK	N30° 22'00"E121° 37'54"		
SS200	N31° 17'06"E121° 19'54"	BOLEX	N31° 00'00"E123° 00'00"		
SS202	N31° 27'00"E120° 47'25"	DUMET	N31° 21'39"E122° 46'30"		
		EKIMU	N31° 21'06"E121° 06'36"		
SS220	N31° 26'27"E121° 12'01"	EKVUT	N31° 45'25"E122° 18'37"		
		EMSAN	N31° 40'43"E122° 46'30"		
SS303	N31° 04'13"E121° 07'33"	IBEGI	N31° 49'25"E122° 16'33"		
SS304	N31° 09'24"E121° 07'16"	LAMEN	N31° 36'36"E124° 00'00"		
SS305	N31° 16'46"E121° 06'51"	LASAN	N31° 00'00"E122° 25'28"		
		LURMA	N30° 58'30"E120° 44'55"		
SS320	N31° 57'00"E120° 51'00"	MATNU	N31° 39'36"E122° 38'00"		
		MIGOL	N30° 45'46"E123° 41'39"		
SS420	N31° 24'01"E120° 57'01"	NINAS	N31° 00'00"E122° 15'00"		
		ODULO	N33° 15'09"E121° 37'14"		

Changes: Add ADBAS, LURMA.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY16L SID Transition								
VA			168		150			RNAV1
CF	PD311		153	L				RNAV1
RWY16R SID Transition								
VA			168		150			RNAV1
CF	PD311		151	L				RNAV1
RWY16L/16R SID SUR-82D								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	NINAS				2700 or by ATC			RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY16L/16R SID LAM-82D								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	NINAS				2700 or by ATC			RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1
RWY16L/16R SID LAM-84D(CCO Operation)								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	NINAS				2700			RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1
RWY16L/16R SID MIG-82D								
IF	PD311							RNAV1

Changes:

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD312				1500 1200	MAX250		RNAV1
TF	NINAS				2700 or by ATC			RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY16L/16R SID HSN-82D								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	NINAS				2700 or by ATC			RNAV1
TF	PONAB							RNAV1
TF	HSN				7800			RNAV1
RWY16L/16R SID SAS-82D								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	SS200							RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY16L/16R SID SAS-84D								
IF	PD311							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1
TF	SS305							RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY16L/16R SID NXD-82D								
IF	PD311							RNAV1

Changes:

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	SS200							RNAV1
TF	SS303							RNAV1
TF	NXD				3900			RNAV1
RWY16L/16R SID NXD-84D								
IF	PD311							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	NXD				3900			RNAV1
RWY16L/16R SID ADB-82D(by ATC)								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	SS200							RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY16L/16R SID ADB-84D(by ATC)								
IF	PD311							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY16L/16R SID PIK-82D								
IF	PD311							RNAV1
This procedure is unfinished.								
Changes: Procedure.								

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	SS200							RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY16L/16R SID PIK-84D(by ATC)								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	NTG							RNAV1
TF	PIKAS							RNAV1
RWY16L/16R SID PIK-86D								
IF	PD311							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1
TF	SS305				5100			RNAV1
TF	EKIMU							RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY16L/16R SID ODU-82D								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	PD316							RNAV1
TF	ALDAP							RNAV1
TF	IBEGI							RNAV1
TF	ODULO							RNAV1
RWY16L/16R SID ODU-84D(by ATC)								
IF	PD311							RNAV1
TF	PD312				1500 1200	MAX250		RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	UDOXI							RNAV1
TF	ODULO							RNAV1
RWY17L SID Transition								
CF	PD301		169					RNAV1
RWY17R SID Transition								
CF	PD301		168					RNAV1
RWY17L/17R SID SUR-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD305							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY17L/17R SID LAM-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD305							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY17L/17R SID MIG-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD305							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY17L/17R SID HSN-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD305							RNAV1
TF	PONAB							RNAV1
TF	HSN				7800			RNAV1
RWY17L/17R SID AND-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD208							RNAV1
TF	AND							RNAV1
RWY17L/17R SID SAS-81D								
IF	PD301							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1
TF	SS305							RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY17L/17R SID NXD-81D								
IF	PD301							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	NXD				3900			RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY17L/17R SID ADB-81D(by ATC)								
IF	PD301							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY17L/17R SID PIK-81D								
IF	PD301							RNAV1
TF	PD302				1800 1200	MAX250		RNAV1
TF	PD303				2700			RNAV1
TF	SS303							RNAV1
TF	SS304							RNAV1
TF	SS305				5100			RNAV1
TF	EKIMU							RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY17L/17R SID PIK-83D(by ATC)								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD304				4200 2700			RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	HSH							RNAV1
TF	NTG							RNAV1
TF	PIKAS							RNAV1
RWY17L/17R SID ODU-81D								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD304				4200 2700			RNAV1

Changes: Procedure.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	PD316							RNAV1
TF	ALDAP							RNAV1
TF	IBEGI							RNAV1
TF	ODULO							RNAV1
RWY17L/17R SID ODU-83D(by ATC)								
IF	PD301							RNAV1
TF	XSY				900			RNAV1
TF	PD024					MAX250		RNAV1
TF	PD304				4200 2700			RNAV1
TF	PD313							RNAV1
TF	PD314				2700			RNAV1
TF	PD315				3900			RNAV1
TF	UDOXI							RNAV1
TF	ODULO							RNAV1
RWY34L/34R SID Transition								
VA			348		150			RNAV1
DF	HSH			R		MAX250		RNAV1
RWY34L/34R SID LAM-92D								
IF	HSH					MAX250		RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
TF	LAMEN							RNAV1
RWY34L/34R SID LAM-94D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY34L/34R SID LAM-96D(CCO Operation)								
IF	HSH					MAX250		RNAV1
TF	PD508				2500			RNAV1
TF	ALDAP							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
TF	LAMEN							RNAV1
RWY34L/34R SID SUR-92D								
IF	HSH					MAX250		RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
RWY34L/34R SID SUR-94D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY34L/34R SID MIG-92D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY34L/34R SID HSN-92D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PONAB							RNAV1
TF	HSN				7800			RNAV1
RWY34L/34R SID SAS-92D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	PD511				3600			RNAV1
TF	PD512				4800			RNAV1
TF	SS303							RNAV1
TF	SS504							RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY34L/34R SID SAS-94D								
IF	HSH					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY34L/34R SID NXD-92D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	PD511				3600			RNAV1
TF	PD512				4800			RNAV1
TF	SS303							RNAV1
TF	NXD							RNAV1
RWY34L/34R SID NXD-94D								
IF	HSH					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	SS521				3600			RNAV1
TF	SS303							RNAV1
TF	NXD				3900			RNAV1
RWY34L/34R SID ADB-92D(by ATC)								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1

Changes: Procedure.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD511				3600			RNAV1
TF	PD512				4800			RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY34L/34R SID ADB-94D(by ATC)								
IF	HSH					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	SS521				3600			RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY34L/34R SID PIK-92D								
IF	HSH					MAX250		RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	PD511				3600			RNAV1
TF	PD512				4800			RNAV1
TF	SS303							RNAV1
TF	SS504							RNAV1
TF	EKIMU							RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY34L/34R SID PIK-94D(by ATC)								
IF	HSH					MAX250		RNAV1
TF	VEBNI							RNAV1
TF	PD502				1200			RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY34L/34R SID PIK-96D(by ATC)								
IF	HSH					MAX250		RNAV1
TF	PD503				1500			RNAV1
TF	NTG							RNAV1

Changes: Procedure.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PIKAS							RNAV1
RWY34L/34R SID PIK-98D								
IF	HSH					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY34L/34R SID ODU-92D								
IF	HSH					MAX250		RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1
TF	IBEGI							RNAV1
TF	ODULO							RNAV1
RWY34L/34R SID ODU-94D(by ATC)								
IF	HSH					MAX250		RNAV1
TF	UDOXI							RNAV1
TF	ODULO							RNAV1
RWY35L SID Transition								
CF	PD501		348			MAX250		RNAV1
RWY35R SID Transition								
CF	PD501		346			MAX250		RNAV1
RWY35L/35R SID LAM-91D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
TF	LAMEN							RNAV1
RWY35L/35R SID LAM-93D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD315							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	LAMEN							RNAV1
RWY35L/35R SID LAM-95D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD503				1500			RNAV1
TF	EKVUT							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
TF	LAMEN							RNAV1
RWY35L/35R SID SUR-91D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1
TF	MATNU				4800			RNAV1
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
RWY35L/35R SID SUR-93D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	TONIX							RNAV1
TF	AKARA							RNAV1
TF	SURAK							RNAV1
RWY35L/35R SID SUR-95D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD503				1500			RNAV1
TF	EKVUT							RNAV1
TF	MATNU				4800			RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	EMSAN							RNAV1
TF	SURAK							RNAV1
RWY35L/35R SID MIG-91D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	LASAN							RNAV1
TF	BOLEX							RNAV1
TF	MIGOL							RNAV1
RWY35L/35R SID AND-91D								
IF	PD501					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	PD505							RNAV1
TF	PD208							RNAV1
TF	AND							RNAV1
RWY35L/35R SID HSN-91D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD315							RNAV1
TF	PD510				3000			RNAV1
TF	NINAS							RNAV1
TF	PONAB							RNAV1
TF	HSN				7800			RNAV1
RWY35L/35R SID SAS-91D								
IF	PD501					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	EKIMU							RNAV1
TF	SASAN							RNAV1
RWY35L/35R SID NXD-91D								
IF	PD501					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	SS521				3600			RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	SS303							RNAV1
TF	NXD				3900			RNAV1
RWY35L/35R SID ADB-91D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	SS521				3600			RNAV1
TF	SS303							RNAV1
TF	LURMA							RNAV1
TF	ADBAS							RNAV1
RWY35L/35R SID PIK-91D								
IF	PD501					MAX250		RNAV1
TF	PD504				1800 or by ATC			RNAV1
TF	SS200				3000			RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY35L/35R SID PIK-93D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD502				1200			RNAV1
TF	POMOK							RNAV1
TF	SS320				6000 or by ATC			RNAV1
TF	PIKAS							RNAV1
RWY35L/35R SID PIK-95D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD502				1200			RNAV1
TF	PD503				1500			RNAV1
TF	NTG							RNAV1
TF	PIKAS							RNAV1
RWY35L/35R SID ODU-91D								
IF	PD501					MAX250		RNAV1
TF	HSH							RNAV1
TF	PD508				2500 or by ATC			RNAV1
TF	ALDAP							RNAV1

Changes: Procedure.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	IBEGI							RNAV1
TF	ODULO							RNAV1
RWY35L/35R SID ODU-93D(by ATC)								
IF	PD501					MAX250		RNAV1
TF	PD503				1500			RNAV1
TF	UDOXI							RNAV1
TF	ODULO							RNAV1
RWY16L/16R/17L/17R STAR SAS-81A								
IF	SASAN				6000			RNAV1
TF	SS202							RNAV1
TF	SS420				4800			RNAV1
TF	EKIMU							RNAV1
TF	SS200							RNAV1
TF	PD203					MAX230		RNAV1
TF	PD202				1500			RNAV1
TF	PD201				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR SAS-82A(by ATC)								
IF	SASAN				6000			RNAV1
TF	SS202							RNAV1
TF	SS420				4800			RNAV1
TF	POMOK							RNAV1
TF	SS220				3900			RNAV1
TF	PD204							RNAV1
TF	PD203					MAX230		RNAV1
TF	PD202				1500			RNAV1
TF	PD201				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR MAT-81A								
IF	MATNU				5100			RNAV1
TF	PD228							RNAV1
TF	PINOT							RNAV1
TF	PD211				2400	AT230		RNAV1
TF	PD212							RNAV1
TF	PD213							RNAV1
TF	PD214							RNAV1
TF	PD215				2400			RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR MAT-82A								
IF	MATNU				5100			RNAV1
TF	PD228							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PINOT							RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR DUM-81A								
IF	DUMET				4800			RNAV1
TF	PD230				2100	AT230		RNAV1
TF	PD232				2100			RNAV1
TF	PD233							RNAV1
TF	PD234							RNAV1
TF	PD235				2100			RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR DUM-82A								
IF	DUMET				4800			RNAV1
TF	PD230				2100	AT230		RNAV1
TF	PD231				2100 1800	AT230		RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R STAR DUM-83A(CDO Operation)								
IF	DUMET				4800			RNAV1
TF	PD215							RNAV1
TF	MP1				600	MAX210		RNAV1
RWY16L/16R/17L/17R STAR BK-81A								
IF	BK							RNAV1
TF	SAMKI				5700			RNAV1
TF	BAVIK							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
TF	PD207				2100			RNAV1
TF	PDL							RNAV1
TF	PD202				1500			RNAV1
TF	PD201				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR BK-82A								
IF	BK							RNAV1
TF	SAMKI				5700			RNAV1
TF	BAVIK							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
This procedure is unfinished.								
Changes: Format adjustment.								

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD231				2100 1800	AT230		RNAV1
TF	PD232				2100			RNAV1
TF	PD233							RNAV1
TF	PD234							RNAV1
TF	PD235				2100			RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR BK-83A								
IF	BK							RNAV1
TF	SAMKI				5700			RNAV1
TF	BAVIK							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
TF	PD231				2100 1800	AT230		RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR AND-81A								
IF	AND							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
TF	PD207				2100			RNAV1
TF	PDL							RNAV1
TF	PD202				1500			RNAV1
TF	PD201				600 or 900	MAX210		RNAV1
RWY16L/16R/17L/17R STAR AND-82A								
IF	AND							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
TF	PD231				2100 1800	AT230		RNAV1
TF	PD232				2100			RNAV1
TF	PD233							RNAV1
TF	PD234							RNAV1
TF	PD235				2100			RNAV1
TF	MP1				600 or 900	MAX210		RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
RWY16L/16R/17L/17R STAR AND-83A								
IF	AND							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	XSY							RNAV1
TF	PD231				2100 1800	AT230		RNAV1
TF	MP1				600 or 900	MAX210		RNAV1
RWY16L Approach Transition PD201								
IF	PD201				600	MAX210		RNAV1
TF	PF7							RNAV1
TF	PD073				600			RNAV1
RWY16L Approach Transition MP1								
IF	MP1				600	MAX210		RNAV1
TF	PF7							RNAV1
TF	PD073				600			RNAV1
RWY16R Approach Transition PD201								
IF	PD201				600	MAX210		RNAV1
TF	PF3							RNAV1
TF	PD033				600			RNAV1
RWY16R Approach Transition MP1								
IF	MP1				600	MAX210		RNAV1
TF	PF3							RNAV1
TF	PD033				600			RNAV1
RWY17L Approach Transition PD201								
IF	PD201				900	MAX210		RNAV1
TF	PF1							RNAV1
TF	PD013				900			RNAV1
RWY17L Approach Transition MP1								
IF	MP1				900	MAX210		RNAV1
TF	PF1							RNAV1
TF	PD013				900			RNAV1
RWY17R Approach Transition PD201								
IF	PD201				900	MAX210		RNAV1
TF	PF5							RNAV1
TF	PD053				900			RNAV1
RWY17R Approach Transition MP1								
IF	MP1				900	MAX210		RNAV1
TF	PF5							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD053				900			RNAV1
RWY16L/16R Missed Approach Holding(Outbound Time:1min)								
HM	PD220	Y	348	R	ALT by ATC	MAX230		RNP1
RWY17L/17R Missed Approach Holding(Outbound Time:1min)								
HM	PDL	Y	348	L	ALT by ATC	MAX230		RNP1
RWY16L/16R/17L/17R Holding(Outbound Time:1min)								
HM	PD208	Y	062	L	ALT by ATC	MAX230		RNAV1
HM	PH1	Y	246	L	2400	MAX230		RNAV1
HM	PH2	Y	275	L	ALT by ATC	MAX230		RNAV1
HM	PINOT	Y	276	L	2400	MAX230		RNAV1
RWY16L/16R/17L/17R Holding(Outbound Time:1.5min)								
HM	SH1	Y	115	L	ALT by ATC	MAX250		RNAV1
HM	SH2	Y	115	R	ALT by ATC	MAX250		RNAV1
HM	PH3	Y	164	L	ALT by ATC	MAX250		RNAV1
HM	PH4	Y	164	R	ALT by ATC	MAX250		RNAV1
RWY34L/34R/35L/35R STAR SAS-91A								
IF	SASAN				6000			RNAV1
TF	SS202							RNAV1
TF	SS420				4800			RNAV1
TF	JTN				3900			RNAV1
TF	PD408				3000			RNAV1
TF	PD404							RNAV1
TF	PD403							RNAV1
TF	PD402							RNAV1
TF	PD401				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR SAS-92A								
IF	SASAN				6000			RNAV1
TF	SS202							RNAV1
TF	SS420				4800			RNAV1
TF	JTN				3900			RNAV1
TF	PD408				3000			RNAV1
TF	PD431				1800	AT230		RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR SAS-93A								
IF	SASAN				6000			RNAV1
TF	SS202							RNAV1
TF	SS420				4800			RNAV1
TF	JTN				3900			RNAV1
TF	PD408				3000			RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD431				1800	AT230		RNAV1
TF	PD432							RNAV1
TF	PD433							RNAV1
TF	PD434							RNAV1
TF	PD435							RNAV1
TF	PD436							RNAV1
TF	PD437							RNAV1
TF	PD438				1800			RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR AND-91A								
IF	AND							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	PD407							RNAV1
TF	PD406							RNAV1
TF	PD405					MAX230		RNAV1
TF	PD404							RNAV1
TF	PD403							RNAV1
TF	PD402							RNAV1
TF	PD401				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR BK-91A								
IF	BK							RNAV1
TF	SAMKI				5700			RNAV1
TF	BAVIK							RNAV1
TF	PD208				3000 or by ATC			RNAV1
TF	PD407							RNAV1
TF	PD406							RNAV1
TF	PD405					MAX230		RNAV1
TF	PD404							RNAV1
TF	PD403							RNAV1
TF	PD402							RNAV1
TF	PD401				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR DUM-91A								
IF	DUMET				4800			RNAV1
TF	LASAN							RNAV1
TF	PD411				2100	AT230		RNAV1
TF	PD412							RNAV1
TF	PD413							RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PD414				2100			RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR DUM-92A								
IF	DUMET				4800			RNAV1
TF	LASAN							RNAV1
TF	PD411				2100	AT230		RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L/34R STAR DUM-93A(CDO Operation)								
IF	DUMET				4800			RNAV1
TF	LASAN							RNAV1
TF	MP2				600	MAX220		RNAV1
RWY34L/34R/35L/35R STAR MAT-91A								
IF	MATNU				5100			RNAV1
TF	PD228							RNAV1
TF	PINOT							RNAV1
TF	PD434				1800	AT230		RNAV1
TF	PD435							RNAV1
TF	PD436							RNAV1
TF	PD437							RNAV1
TF	PD438				1800			RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L/34R/35L/35R STAR MAT-92A								
IF	MATNU				5100			RNAV1
TF	PD228							RNAV1
TF	PINOT							RNAV1
TF	PD434				1800	AT230		RNAV1
TF	MP2				600 or 900	MAX220		RNAV1
RWY34L Approach Transition PD401								
IF	PD401				600	MAX220		RNAV1
TF	PF4							RNAV1
TF	PD044							RNAV1
TF	PD043				600			RNAV1
RWY34L Approach Transition MP2								
IF	MP2				600	MAX220		RNAV1
TF	PF4							RNAV1
TF	PD044							RNAV1
TF	PD043				600			RNAV1
RWY34R Approach Transition PD401								
IF	PD401				600	MAX220		RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
TF	PF8							RNAV1
TF	PD084							RNAV1
TF	PD083				600			RNAV1
RWY34R Approach Transition MP2								
IF	MP2				600	MAX220		RNAV1
TF	PF8							RNAV1
TF	PD084							RNAV1
TF	PD083				600			RNAV1
RWY35L Approach Transition PD401								
IF	PD401				900	MAX220		RNAV1
TF	PF6							RNAV1
TF	PD064							RNAV1
TF	PD063				900			RNAV1
RWY35L Approach Transition MP2								
IF	MP2				900	MAX220		RNAV1
TF	PF6							RNAV1
TF	PD064							RNAV1
TF	PD063				900			RNAV1
RWY35R Approach Transition PD401								
IF	PD401				900	MAX220		RNAV1
TF	PF2							RNAV1
TF	PD025							RNAV1
TF	PD023				900			RNAV1
RWY35R Approach Transition MP2								
IF	MP2				900	MAX220		RNAV1
TF	PF2							RNAV1
TF	PD025							RNAV1
TF	PD023				900			RNAV1
RWY34L/34R Missed Approach Holding(Outbound Time:1min)								
HM	PD231	Y	168	L	ALT by ATC	MAX230		RNP1
RWY35L/35R Missed Approach Holding(Outbound Time:1min)								
HM	PDL	Y	168	R	ALT by ATC	MAX230		RNP1
RWY34L/34R/35L/35R Holding(Outbound Time:1min)								
HM	PD208	Y	062	L	ALT by ATC	MAX230		RNAV1
HM	PH1	Y	246	L	3000	MAX230		RNAV1
HM	PINOT	Y	212	L	ALT by ATC	MAX230		RNAV1
RWY34L/34R/35L/35R Holding(Outbound Time:1.5min)								
HM	SH1	Y	115	L	ALT by ATC	MAX250		RNAV1
HM	SH2	Y	115	R	ALT by ATC	MAX250		RNAV1

Changes: Format adjustment.

Path Terminator	Waypoint ID	Fly over	Magnetic Course(°)	Turn Direction	Altitude (m)	IAS (kt)	VPA/TCH	Navigation Specification
HM	PH3	Y	164	L	ALT by ATC	MAX250		RNAV1
HM	PH4	Y	164	R	ALT by ATC	MAX250		RNAV1

Changes: Format adjustment.