

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

ZYMD/MDG-牡丹江/海浪 MUDANJIANG/Hailang

**ZYMD 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	N44°31.4' E129°34.2' Center of RWY
2	机场基准点与城市的位置关系 Direction and distance from city	215° GEO, 7km from the railway station
3	机场标高、基准温度、低温均值 ELEV/Reference temperature/Mean low temperature	269.6 m/27.9°C(JUL)/-22.6°C(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	10°W/-
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	Mudanjiang Hailang Airport Authority Hailang Airport, Mudanjiang 157021, Heilongjiang province, China Post code:157021 TEL:86-453-6882866 FAX:86-453-6481022 AFS:ZYMDZPZX
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/4C
9	备注 Remarks	Nil

**ZYMD AD 2.3 工作时间 Operational hours**

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

6	气象服务讲解室 MET Briefing Office	HS or O/R
7	空中交通服务 Air Traffic Service	HS or O/R
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	HS or O/R
12	备注 Remarks	Nil

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

1	货物装卸设施 Cargo-handling facilities	Trucks up to 10 tonnes
2	燃油牌号 Fuel types	Jet Fuel No.3
3	滑油牌号 Oil types	Nil
4	加油设施/能力 Fuelling facilities & Capacity	Refueling truck (6000 litres): 10 litres/ sec
5	除冰设施 De-icing facilities	de-icer
6	过站航空器机库 Hangar space for visiting aircraft	Nil
7	过站航空器的维修设施 Repair facilities for visiting aircraft	Ground service available on request.
8	备注 Remarks	Nil

#### ZYMD AD 2.5 旅客设施 Passenger facilities

1	宾馆 Hotels	In the city
2	餐饮 Restaurants	At AD and in the city
3	交通工具 Transportation	Passenger's coaches, taxis

4	医疗设施 Medical facilities	First aid and 1 ambulance at AD, hospitals in the city
5	银行和邮局 Bank and Post Office	At AD
6	旅行社 Tourist Office	In the city TEL: 86-453-6916775
7	备注 Remarks	Nil

**ZYMD 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 7
2	援救设备 Rescue equipment	Primary foam tender, heavy-load foam tender, illumination truck, logistics truck, command car
3	搬移受损航空器的能力 Capability for removal of disabled aircraft	MTWA up to A321 Removal facilities: traction hanging device, moving surface, crosstie, steel wire rope, steel plate, dinas.
4	备注 Remarks	Nil

**ZYMD 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 ploughs, snow sweeping tractor
2	扫雪顺序 Clearance priorities	RWY, TWY, Apron
3	备注 Remarks	Nil

**ZYMD 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 690/R/A/W/T : Stand Nr.2 PCR 560/R/A/W/T : Stand Nr.3, Stand Nr.4 PCR 520/R/A/W/T : Stand Nr.1
2	滑行道宽度、道面和强度 Taxiway width, surface and strength	宽度 Width	23m : F 18m : A, D
		道面 Surface	ASPH : F(APSH) CONC : A, D, F(CONC)
		强度 Strength	PCR 740/R/B/W/T : A(RWY04 TWYL) PCR 690/R/A/W/T : D

			PCR 680/R/A/W/T : A(RWY22 TWYL) PCR 580/R/C/W/T : A(Main) PCR 540/R/C/W/T : F
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	

### ZYMD 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. Aircraft stand identification sign boards at all stands. Guide lines at all TWYs. Guide lines at all aprons. Marshalling assistance for all 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, REDL, RCLL, RENL
		滑行道标志 TWY markings	Edge line, center line, RWY holding position
		滑行道灯光 TWY lights	Edge line lights
3	停止排灯和跑道警戒灯 Stop bars and runway guard lights	Runway guard lights	
4	其它跑道保护措施 Other runway protection measures	Nil	
5	备注 Remarks	Taxiing guidance signs at all intersections of TWY AND APRON Blue apron edge line lights.	

### ZYMD AD 2.10 机场障碍物 Aerodrome obstacles

半径 15 千米内主要障碍物 (相对 04/22 跑道中心)

Obstacles within a circle with a radius of 15km (centered on the center of RWY 04/22)

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
STACK 001	STACK	007/2100	(33)		
MT 002	MT	024/14735	(248.4)		RWY22 NDB initial approach, VOR/DME final approach , NDB/DME final approach, RWY22 NDB final approach
Antenna 003	Antenna	029/1029	(10.5)		RWY22 ILS/DME final approach
NATURAL_HIG HPOINT 004	NATURA L_HIGHP OINT	029/14956	(192.4)		RWY22 GP INOP final approach
Trees 005	Trees	030/1377	(1.7)		RWY04 departure RWY22 approach
Trees 006	Trees	030/1392	(1.5)		RWY22 approach
Trees 007	Trees	030/1392	(4.5)		RWY04 departure
Trees 008	Trees	032/1855	(1.7)		RWY04 Take-off path
BLDG 009	BLDG	032/6519	(79.1)		RWY04 Take-off path
BLDG 010	BLDG	032/6551	(79.2)		
TOWER 011	TOWER	038/7230	(105.4)		RWY22 GP INOP final approach, VOR/DME final approach, NDB/DME final approach; RWY04 Take-off path
Trees 012	Trees	042/2019	(4.4)		RWY04 Take-off path
BLDG 013	BLDG	043/6343	(60.2)		RWY04 Take-off path
SIGN 014	SIGN	201/2390	(29.2)		

半径 15 千米内主要障碍物 (相对 04/22 跑道中心)					
Obstacles within a circle with a radius of 15km (centered on the center of RWY 04/22)					
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
MT 015	MT	209/6784	(73.1)		RWY22 Take-off path
Antenna 016	Antenna	214/1704	(7.5)		RWY22 Take-off path
Trees 017	Trees	214/1712	(7.8)		RWY22 Take-off path
Pole 018	Pole	216/2205	(17.2)		RWY22 Take-off path
TOWER 019	TOWER	217/12153	(129.4)		
Pole 020	Pole	218/1531	(5.3)		RWY22 Take-off path
STACK 021	STACK	221/1513	(4)		RWY22 Take-off path
Pole 022	Pole	223/3289	(31.1)		RWY22 Take-off path
MT 023	MT	239/5363	(240.6)		RWY04 VOR/DME final approach
MT 024	MT	246/4377	(209.7)		RWY04/22 Circling(A)
TOWER 025	TOWER	247/6273	(298.8)		RWY04 NDB/DME final approach; RWY 22 RNP APCH final approach; RWY04/22 Circling(B, C, D)
半径 15 千米-50 千米内主要障碍物 (相对 04/22 跑道中心)					
Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 04/22)					
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

半径 15 千米-50 千米内主要障碍物 (相对 04/22 跑道中心)

Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 04/22)

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
MT 026	MT	004/19292	678		RWY22 Holding
MT 027	MT	009/24149	722		RWY22 ILS/DME initial approach, VOR/DME initial approach, NDB/DME initial approach
MT 028	MT	015/23992	699		RWY22 ILS/DME intermediate approach, VOR/DME intermediate approach, NDB/DME intermediate approach
MT 029	MT	027/16334	508		RWY22 ILS/DME intermediate approach
NATURAL_HIG HPOINT 030	NATURA L_HIGHP OINT	029/20511	486		
MT 031	MT	059/24881	626		RWY22 ILS/DME initial approach, NDB initial approach
MT 032	MT	085/47272	872		
Pole 033	Pole	138/33052	1144		RWY04 Holding; MSA
MT 034	MT	161/16425	574		RWY04 Holding
MT 035	MT	164/63218	1010		
MT 036	MT	193/59273	945		
MT 037	MT	227/24441	483		RWY04 VOR/DME intermediate approach, NDB/DME intermediate approach
MT 038	MT	248/23769	665		RWY04/22 Holding

半径 15 千米-50 千米内主要障碍物 (相对 04/22 跑道中心)					
Obstacles between two circles with the radius of 15km and 50km (centered on the center of RWY 04/22)					
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
MT 039	MT	285/59495	942		
MT 040	MT	290/72379	1304		
MT 041	MT	305/40993	849		MSA
MT 042	MT	328/61189	1106		
MT 043	MT	333/48438	935		MSA
MT 044	MT	333/69704	1141		
Remarks:					

## ZYMD AD 2.11 提供的气象情报、气象观测和报告

## Meteorological information provided &amp; 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	Mudanjiang Aerodrome 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	HO
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	Mudanjiang Aerodrome MET Office;9h
4	趋势预报及发布间隔 Trend forecast/Interval of issuance	Nil
5	所提供的讲解或咨询服务 Briefing/Consultation provided	Briefing provided: P
6	飞行文件及其使用语言 Flight documentation/Language(s) used	Chart, international MET codes, abbreviated plain language text;Ch,En
7	讲解或咨询服务时可利用的图表和其它信息	Briefing provided: Synoptic charts, significant weather charts, upper W/T



	Charts and other information available for briefing or consultation	charts, satellite and radar material, AWOS real-time data
8	提供气象情报的辅助设备 Supplementary equipment available for providing information	FAX
9	提供气象情报的空中交通服务单位 ATS units provided with information	TWR
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	Hourly 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: 128m E of RCL,310m inward THR04 B: 128m E of RCL,1340m inward THR22 C: 128m E of RCL,385m inward THR22 SFC wind sensors 128m E of RCL, 1300m inward THR22 Ceilometer RWY04: on the extension of RCL, 840m outward THR04 RWY22: on the extension of RCL, 970m outward THR22
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

**ZYMD 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
04	026° GEO 036° MAG	2600×45	PCR 570/R/B/W/T ASPH/-	Nil	THR 269.6m	-0.20%
22	206° GEO 216° MAG	2600×45	PCR 570/R/B/W/T ASPH/-	Nil	THR 264.5m	0.20%
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
04	Nil	Nil	2720×210	240×210	Nil	Nil
22	Nil	Nil	2720×210	240×210	Nil	Nil
Remarks:						

## ZYMD 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
04	2600	2600	2600	2600	Nil
22	2600	2600	2600	2600	Nil

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

跑道 号码 RWY Desig nator	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

跑道 号码 RWY Desig nator	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
04	SALS 420 m LIH	GREEN Nil	PAPI LEFT 350m inward THR04 3° 15.3m	Nil	2600 m spacing 30m 0-1700m, WHITE 1700-2300m, RED/WHITE 2300-2600m, RED LIH	2600 m spacing 60m 0-2000m, WHITE 2000-2600m, YELLOW LIH	RED	Nil
22	PALS CAT I 900 m LIH	GREEN Nil	PAPI RIGHT 350m inward THR22 3° 15.8m	Nil	2600 m spacing 30m 0-1700m, WHITE 1700-2300m, RED/WHITE 2300-2600m, RED LIH	2600 m spacing 60m 0-2000m, WHITE 2000-2600m, YELLOW LIH	RED	Nil
Remarks:								

**ZYMD 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	LDI: RWY22:Left of RWY, with light.
3	滑行道边灯和滑行道中线灯 TWY edge and center line lighting	All TWYs: blue edge line lights
4	备份电源及转换时间 Secondary power supply/Switch-over time	Secondary power supply available/ 3min
5	备注 Remarks	Nil

**ZYMD 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
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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

**ZYMD 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
Mudanjiang tower control area	by ATC	by ATC				
Altimeter setting region and TL/TH	by ATC	TL 3600m				

**ZYMD 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
TWR	Mudanjiang Tower	130.0 (118.6)			HO	

**ZYMD 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
Mudanjiang VOR/DME	MDJ	117.1 MHz CH 118X	H24	N44°30.9' E129°33.8'	278 m	
LM 22	X	251 kHz		N44°32.5' E129°34.8' 036° MAG/ 950m FM THR RWY 22		
LOC 22 ILS CAT I	IQM	108.9 MHz		216° MAG/400m FM end RWY 22		022° leftside and 025° rightside of front course U/S
GP 22		329.3 MHz		120m E of RCL, 300m FM THR22		Angle 3° RDH 15.8m
DME 22	IQM	CH 26X (108.9 MHz)		129m E of RCL, 300m FM THR22	263m	Co-located with GP 22

**ZYMD AD 2.20 本场规定**

**ZYMD AD 2.20 Local aerodrome regulations**

**1. 机场使用规定**

**1. Airport operations regulations**

1.1 本场仅供 100t (含) 以下机型使用;

1.1 Local AD is only available for aircraft not more than 100 tonnes;

1.2 所有技术试飞须事先申请, 并在得到空中交通管制部门批准后方可进行。

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

1.3 本场最大机型限制为 B737-800。

1.3 Maximum aircraft to be available: B737-800 and equivalent.

**2. 跑道和滑行道的使用**

**2. Use of runways and taxiways**

禁止 A321 系列航空器满载运行, 限制 B737 系列航

ACFT in series A321 fully loaded operation is

空器满载运行。

forbidden, ACFT in series B737 fully loaded operation is limited.

### 3. 机坪和机位的使用

### 3. Use of aprons and parking stands

3.1 发动机试车，需经塔台许可，并在指定的地点进行。严禁在客机坪试大车。

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

3.2 禁止 A321 系列航空器满载运行。

3.2 ACFT in series A321 fully loaded operation is forbidden.

### 4. 低能见度运行

### 4. Low visibility operation

无

Nil

### 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

无

Nil

## ZYMD AD 2.21 减噪程序

## ZYMD AD 2.21 Noise abatement procedures

无

Nil

## ZYMD AD 2.22 飞行政程序

## ZYMD AD 2.22 Flight procedures

### 1. 总则

### 1. General

除经塔台特殊许可外，在塔台管制区内的飞行，必须按照仪表飞行规则进行。

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

### 2. 起落航线

### 2. Traffic circuits

起落航线在跑道两侧均可，西侧高（600）m，东侧高（500）m。

Traffic circuits shall be made to both sides of RWY, at the height of (600)m on west side, and (500)m on east side.

### 3. 仪表飞行程序

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

#### 3.2 低温修正程序

3.2.1 牡丹江海浪机场仪表飞行程序低温修正阈值为 $-23^{\circ}\text{C}$ （按程序飞行使用），扇区最低安全高度低温修正阈值为 $-23^{\circ}\text{C}$ （机动飞行使用）。

3.2.2 在低于低温修正阈值时，管制员应及时提醒机组进行低温修正，合理配备航空器间隔，确保飞行运行安全。

3.2.3 航空器位于FAF之后至复飞航段或目视机动盘旋进近时，飞行机组自行决定是否执行低温修正。

### 4. 雷达程序和/或 ADS-B 程序

无

### 5. 无线电通信失效程序

### 3. IFR flight procedures

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

#### 3.2 Cold temperature altitude correction procedure

3.2.1 Cold temperature altitude correction threshold for the Instrument Flight Procedures (IFP) at MUDANJIANG/Hailang Aerodrome is  $-23^{\circ}\text{C}$  (applicable to procedure flights), and the cold temperature altitude correction threshold for Minimum Sector Altitude (MSA) is  $-23^{\circ}\text{C}$  (applicable to maneuvering flights).

3.2.2 When the temperature is below the cold temperature altitude correction threshold, ATC shall promptly remind the flight crews to perform cold temperature altitude correction procedure. Additionally, ATC shall adjust the separation reasonably to ensure flight operation safety.

3.2.3 Flight crews can make own decision if or not perform cold temperature altitude correction at final approach, missed approach, or visual manoeuvring circling approach phases.

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

Nil

### 5. Radio communication failure procedures

参见 AIP GEN3.4.5 中的仪表飞行规则航空器地空双向无线电通信失效通用程序。

Refer to AIP GEN3.4.5 general procedures for aircraft under instrument flight rule with air-ground two-way radio communication failure.

#### 6. 目视飞行程序

无

#### 6. Procedures for VFR flights

Nil

#### 7. 目视飞行航线

无

#### 7. VFR route

Nil

#### 8. 其它规定

无

#### 8. Other regulations

Nil

### ZYMD AD 2.23 其它资料

### ZYMD AD 2.23 Other information

#### 鸟情资料

#### Bird's information

机场附近全年有鸟类活动，夏秋季节较多。每天在日出后和日落前 1 至 2h 活动频繁，高约为 600m 以下。机场管制部门会尽可能将鸟类活动及估计的离地高通知驾驶员。建议驾驶员在上述期间内，在机场塔台管制区内起飞爬升、进近着陆过程中打开着陆灯。机场当局采取了驱赶措施，以减少鸟群活动。

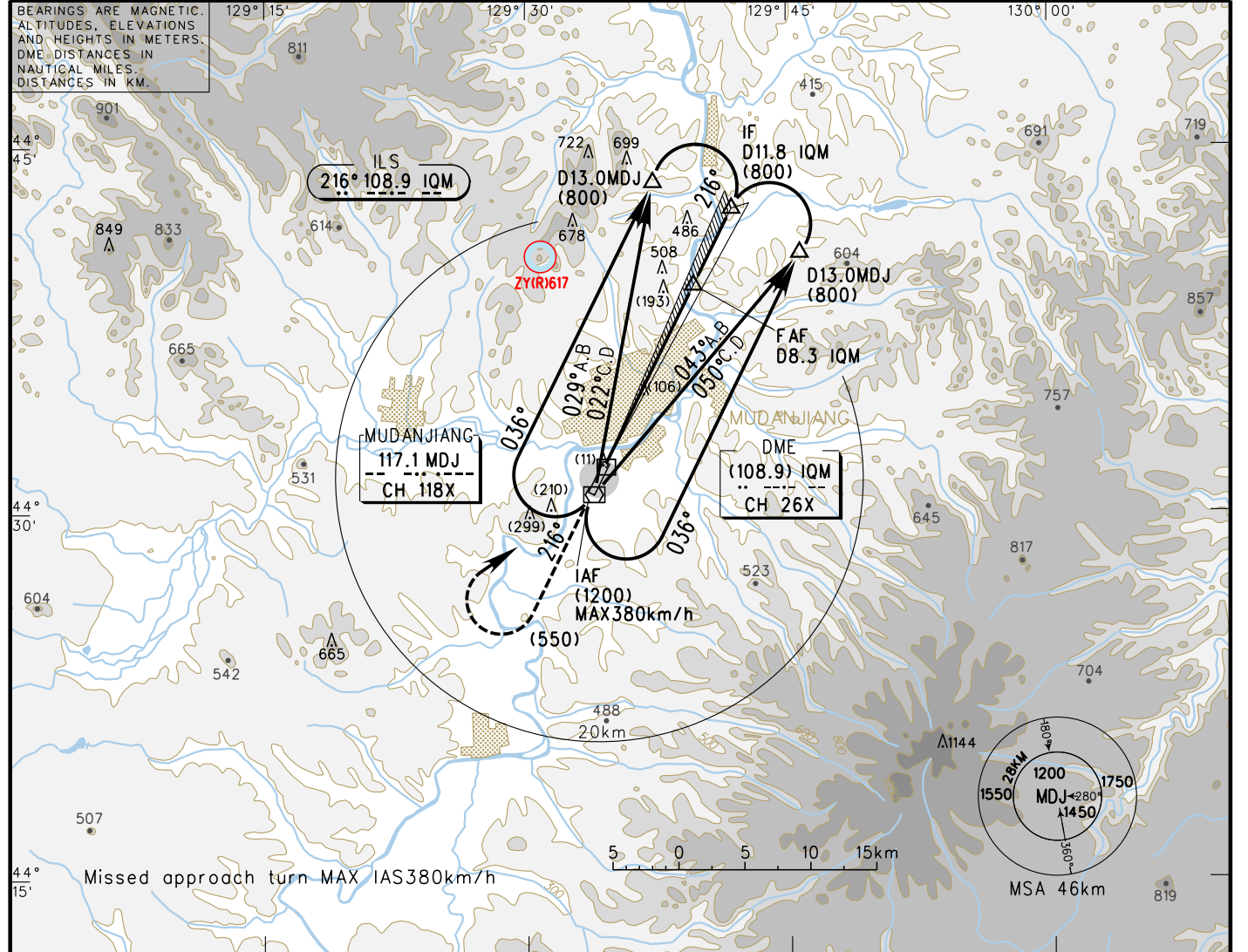
Activities of bird flocks are found all the year round in the vicinity of the aerodrome especially during summer and autumn. Daily peak hours of their activities are one to two hours after sunrise and before sunset with flying heights at about 600m or below. Aerodrome Control Unit will, as far as practicable, inform pilots of bird activities and their estimated heights. During the above periods pilots are advised to switch on landing lights during takeoff, climb and approach-to-land within the Tower Control Area. Aerodrome Authority resorts to dispersal methods to reduce bird activities.



# INSTRUMENT APPROACH CHART-ICAO

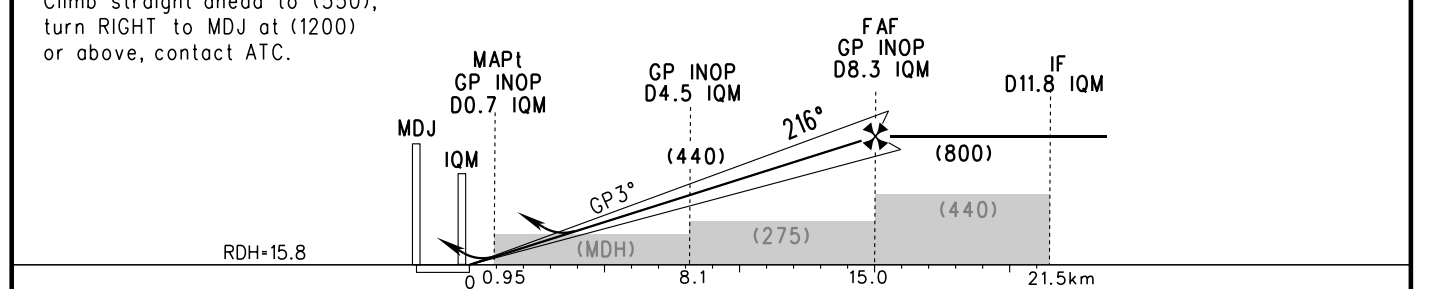
## ZYMD MUDANJIANG/Hailang

VAR10° W    AERODROME ELEV 269.6    THR RWY22 ELEV 264.5    TWR 130.0(118.6)    ILS/DME z RWY22



GP INOP	DME (IQM) (NM)	2	3	4	5	6	7	8
	HGT (m)	(193)	(290)	(388)	(485)	(582)	(679)	(776)

**MISSED APPROACH** TL 3600  
TH (3000)  
Climb straight ahead to (550), turn RIGHT to MDJ at (1200) or above, contact ATC.



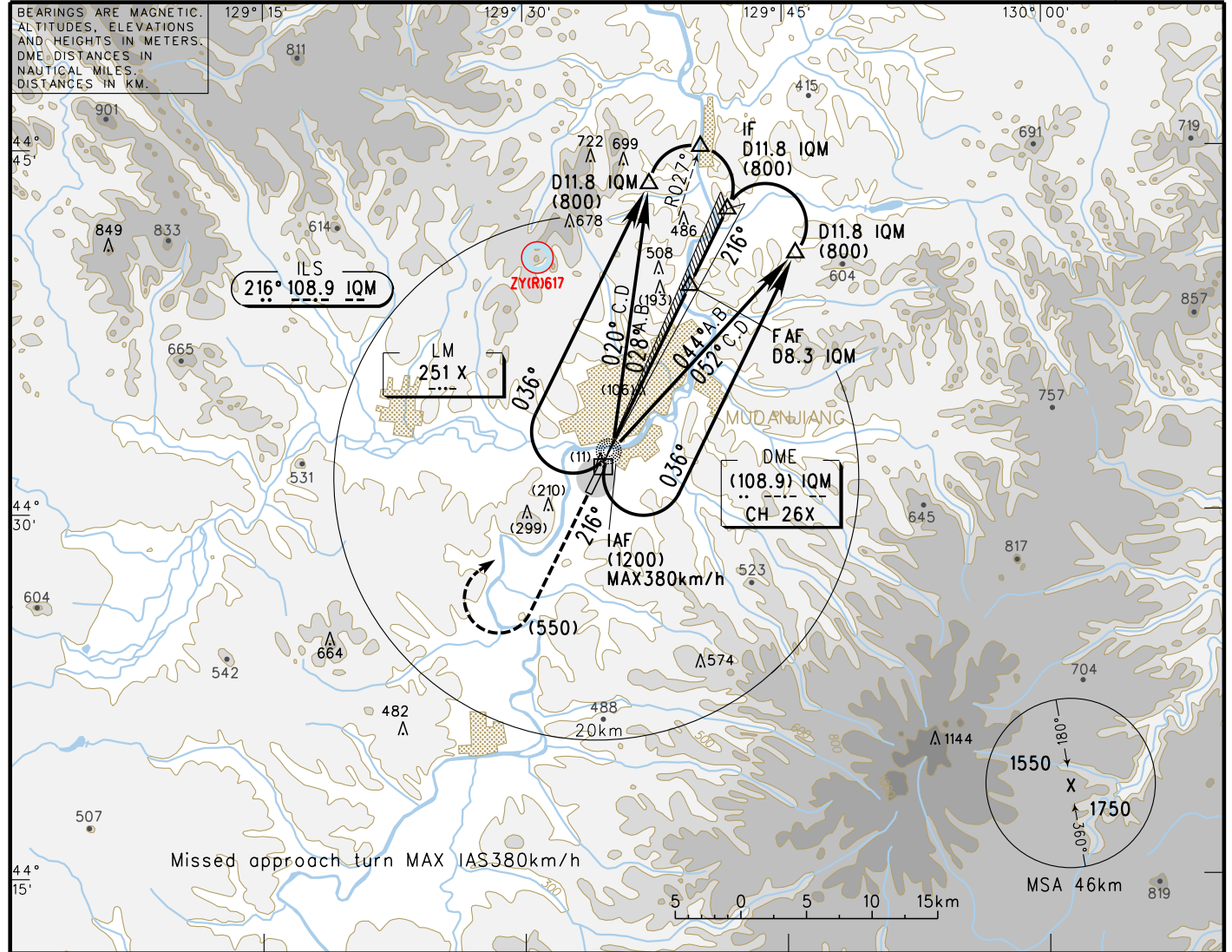
	A	B	C	D	FAF-MAPt(GP INOP) 14.1km						
ILS/DME (DH) RVR/VIS	(60) 550/800		(65) 550/800	(70) 550/800	GS in kt	80	100	120	140	160	180
					km/h	150	185	220	260	295	335
GP INOP (MDH) VIS	(190) 2800				Time min:sec	5:43	4:34	3:48	3:16	2:51	2:32
					Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000								

Changes: Restricted area.

# INSTRUMENT APPROACH CHART-ICAO

## ZYMD MUDANJIANG/Hailang

VAR10°W AERODROME ELEV 269.6 THR RWY22 ELEV 264.5 TWR 130.0(118.6) ILS/DME y RWY22



GP INOP	DME (IQM) (NM)	2	3	4	5	6	7	8
	HGT (m)	(193)	(290)	(388)	(485)	(582)	(679)	(776)

**MISSED APPROACH**  
 Climb straight ahead to (550), turn RIGHT to X at (1200) or above, contact ATC. TL 3600 TH (3000)

	A	B	C	D	FAF-MAPt(GP INOP) 14.1km						
ILS/DME (DH) RVR/VIS	(60) 550/800		(65) 550/800	(70) 550/800	GS in kt	80	100	120	140	160	180
					km/h	150	185	220	260	295	335
GP INOP (MDH) VIS	(190) 2800				Time min:sec	5:43	4:34	3:48	3:16	2:51	2:32
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000		Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Changes: Restricted area.

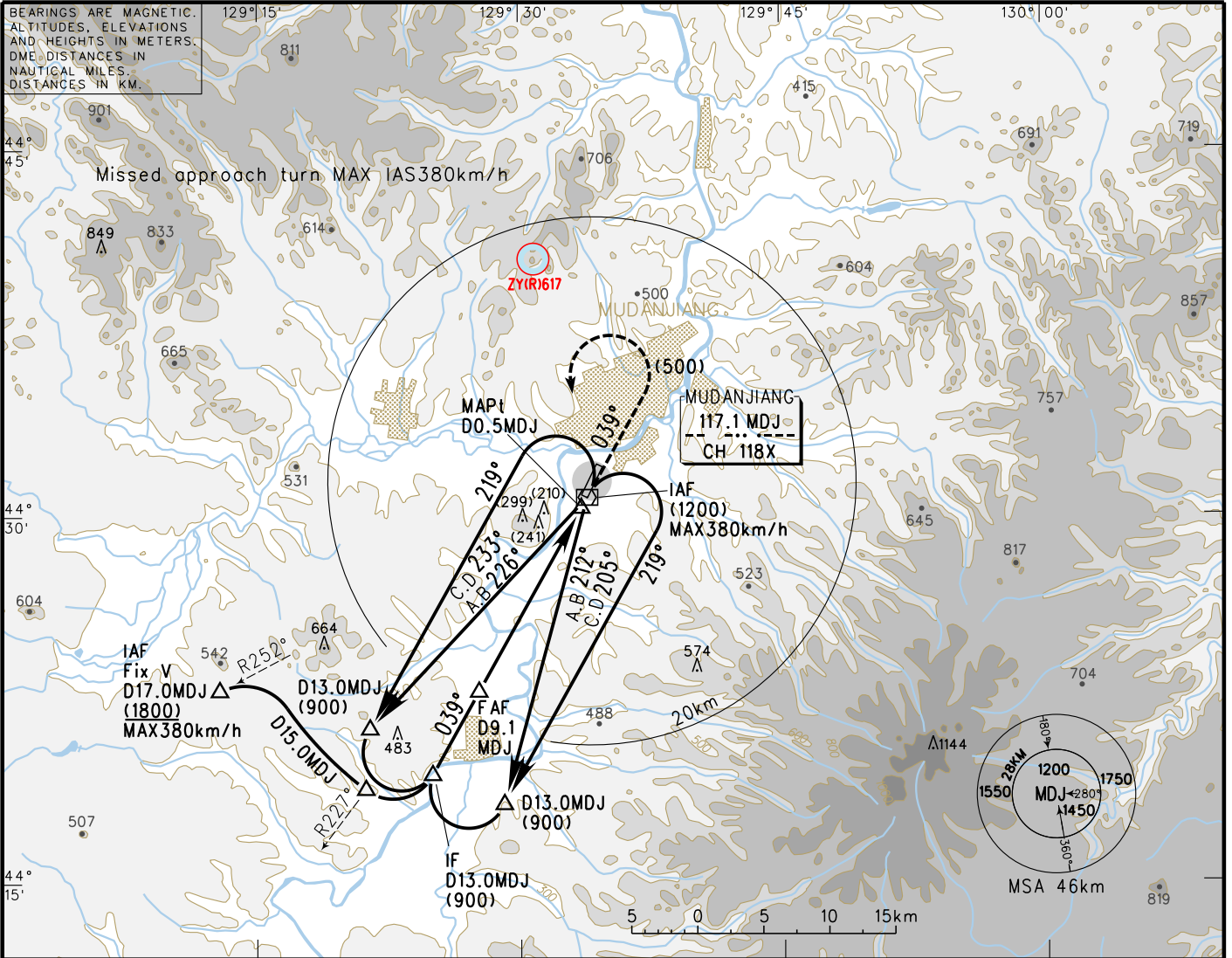
# INSTRUMENT APPROACH CHART-ICAO

## ZYMD MUDANJIANG/Hailang

VAR10° W AERODROME ELEV 269.6 THR RWY04 ELEV 269.6 TWR 130.0(118.6)

VOR/DME RWY04

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

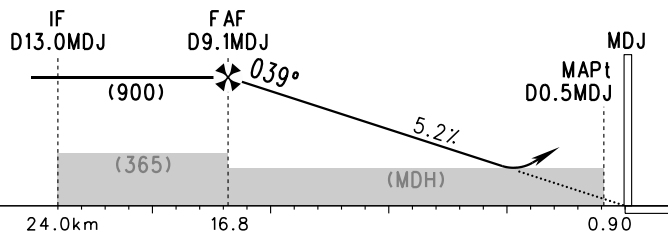


DME (MDJ) (NM)	9	8	7	6	5	4	3	2
HGT (m)	(887)	(790)	(693)	(596)	(499)	(402)	(305)	

TL 3600  
TH (3000)

### MISSED APPROACH

Climb straight ahead to (500), turn LEFT to MDJ at (1200) or above, contact ATC.



	A	B	C	D	FAF - MAPt 15.9km						
					GS in kt	100	120	140	160	180	
VOR/DME (MDH) VIS		(260) 4600			80	100	120	140	160	180	
					150	185	220	260	295	335	
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000		Time min:sec	6:26	5:09	4:18	3:41	3:13	2:52
					Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Changes: Restricted area.

# INSTRUMENT APPROACH CHART-ICAO

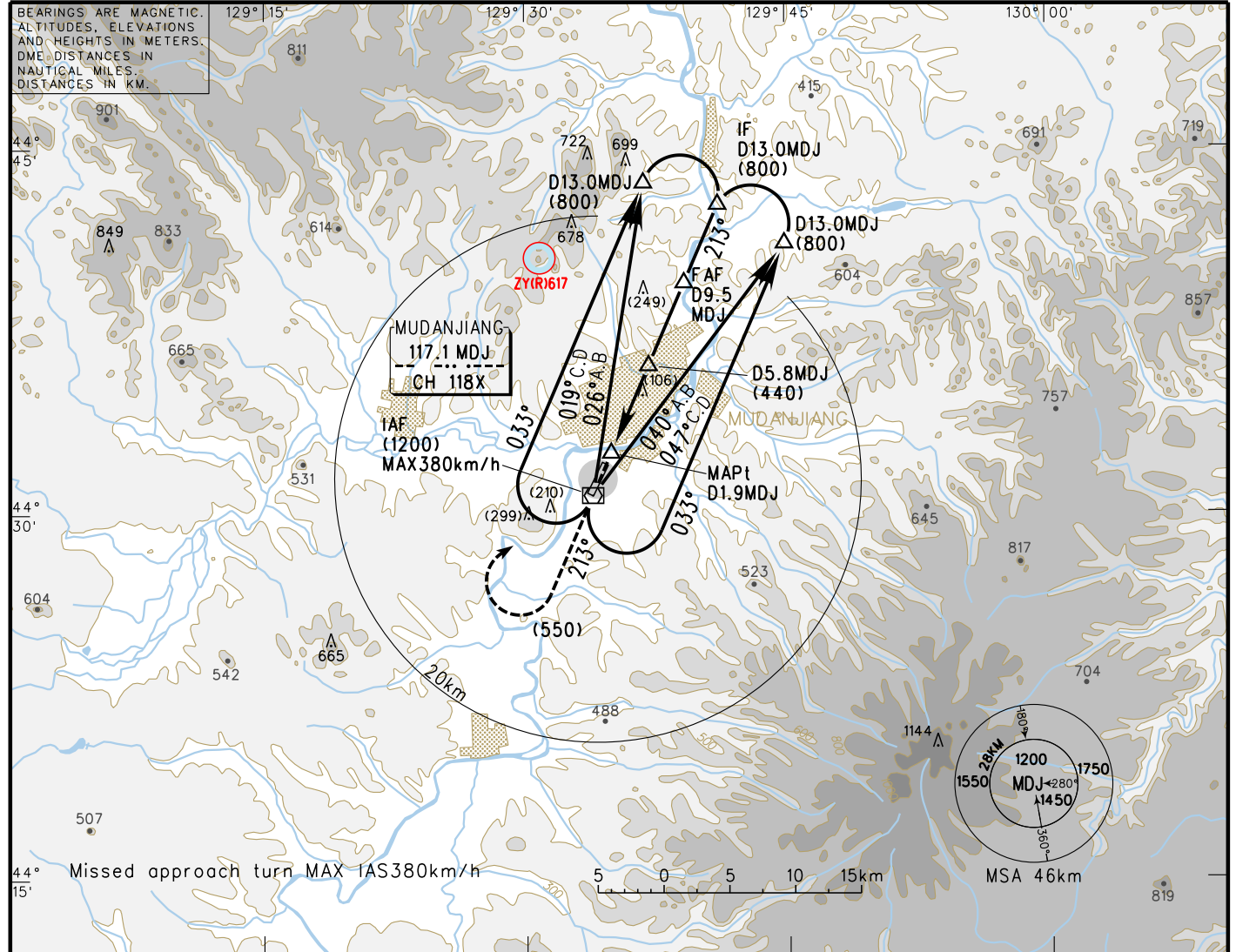
VAR10°W

AERODROME ELEV 269.6  
THR RWY22 ELEV 264.5

## ZYMD MUDANJIANG/Hailang

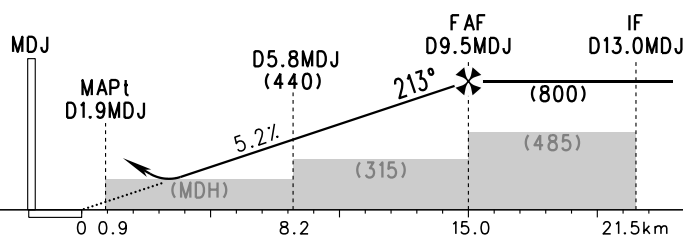
TWR 130.0(118.6)

VOR/DME RWY22



DME (MDJ) (NM)	2	3	4	5	6	7	8	9
HGT (m)			(268)	(365)	(462)	(559)	(656)	(753)

**MISSED APPROACH**  
 Climb straight ahead to (550), turn RIGHT to MDJ at (1200) or above, contact ATC.  
 TL 3600  
 TH (3000)



	A	B	C	D	FAF - MAPt 14.1km						
VOR/DME (MDH) VIS	(190) 2800				GS in kt	80	100	120	140	160	180
					km/h	150	185	220	260	295	335
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000		Time min:sec	5:42	4:34	3:48	3:15	2:51	2:32
					Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9

Changes: Restricted area.

# INSTRUMENT APPROACH CHART-ICAO

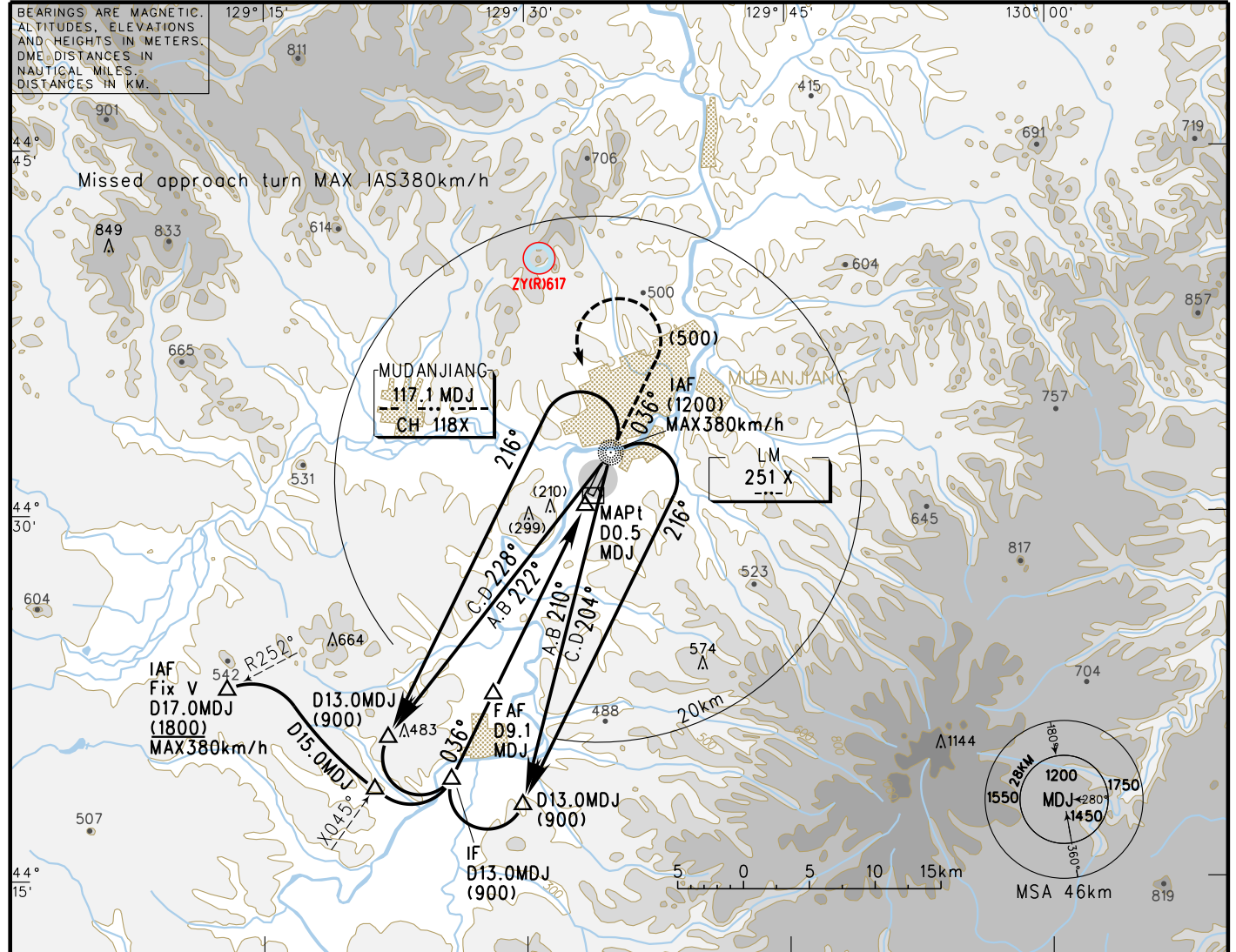
AERODROME ELEV 269.6  
THR RWY04 ELEV 269.6

## ZYMD MUDANJIANG/Hailang

TWR 130.0(118.6)

NDB/DME RWY04

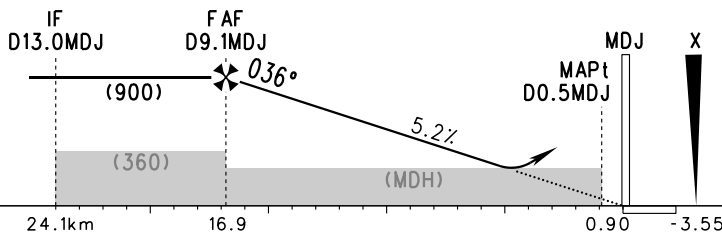
VAR10°W



DME (MDJ) (NM)	9	8	7	6	5	4	3	2
HGT (m)	(888)	(790)	(693)	(596)	(499)	(402)		

TL 3600  
TH (3000)

**MISSED APPROACH**  
Climb straight ahead to (500),  
turn LEFT to X at (1200) or  
above, contact ATC.



	A	B	C	D	FAF - MAPt 16.0km								
NDB/DME (MDH) VIS		(320) 5000			GS in kt	80	100	120	140	160	180		
					km/h	150	185	220	260	295	335		
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000		Time min:sec	6:29	5:11	4:19	3:42	3:14	2:53		
					Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9		

Changes: Restricted area.

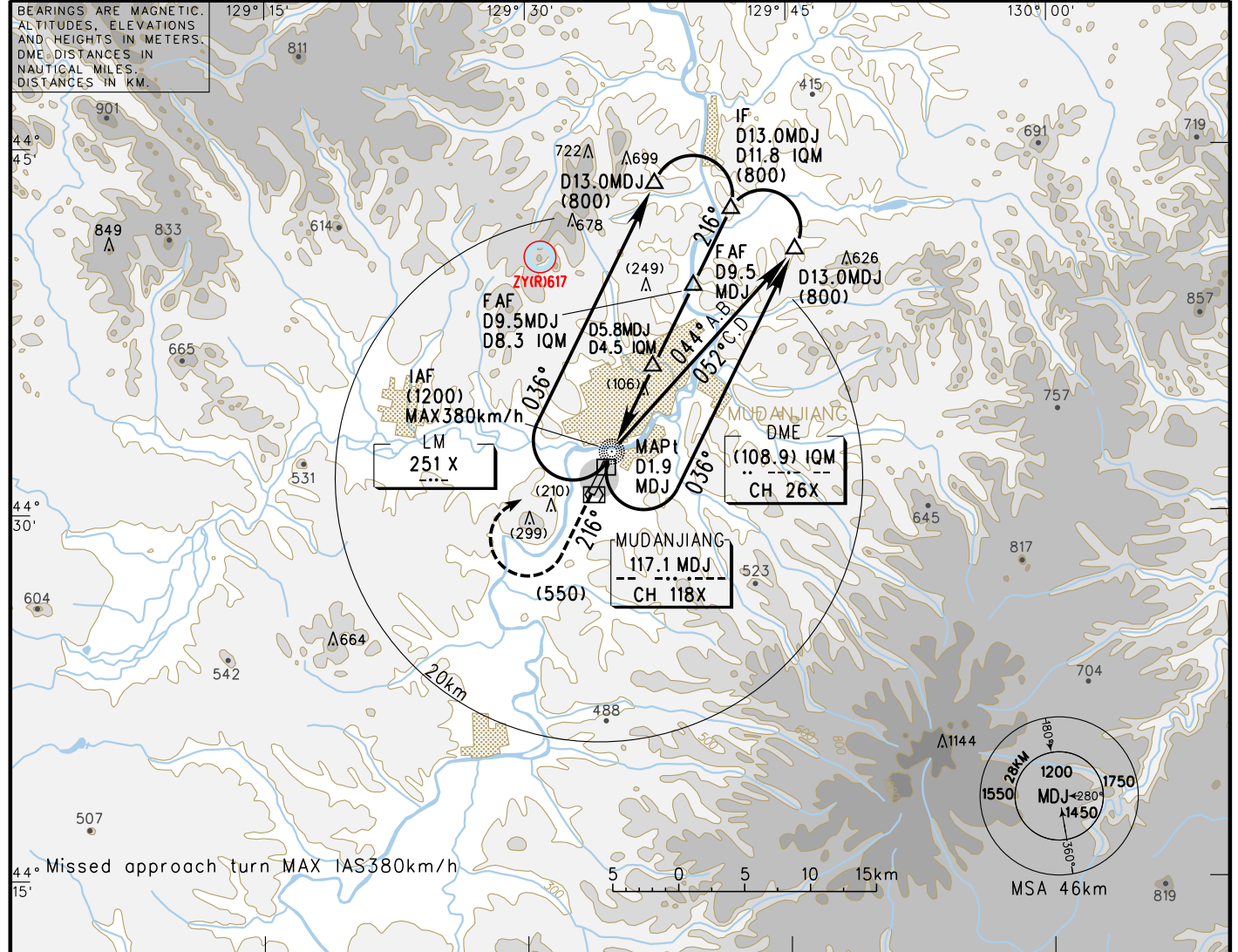
# INSTRUMENT APPROACH CHART-ICAO

VAR10° W

AERODROME ELEV 269.6  
THR RWY22 ELEV 264.5 TWR 130.0(118.6)

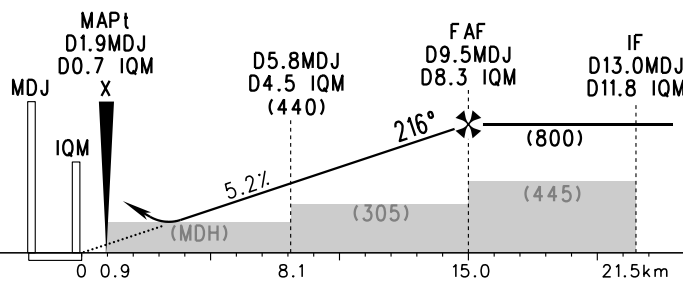
## ZYMD MUDANJIANG/Hailang

NDB/DME RWY22



DME (MDJ) (NM)	2	3	4	5	6	7	8	9
HGT (m)			(268)	(365)	(462)	(559)	(656)	(753)

MISSED APPROACH  
Climb straight ahead to (550), turn RIGHT to X at (1200) or above, contact ATC. TL 3600 TH (3000)



	A	B	C	D	FAF - MAPt 14.1km							
NDB/DME (MDH) VIS		(190) 2800			GS in kt	80	100	120	140	160	180	
					km/h	150	185	220	260	295	335	
CIRCLING (MDH) VIS	(320) 5000	(390) 5000	(420) 5000		Time min:sec	5:41	4:33	3:48	3:15	2:51	2:32	
					Rate of descent m/s	2.2	2.7	3.2	3.8	4.3	4.9	

Changes: Restricted area.

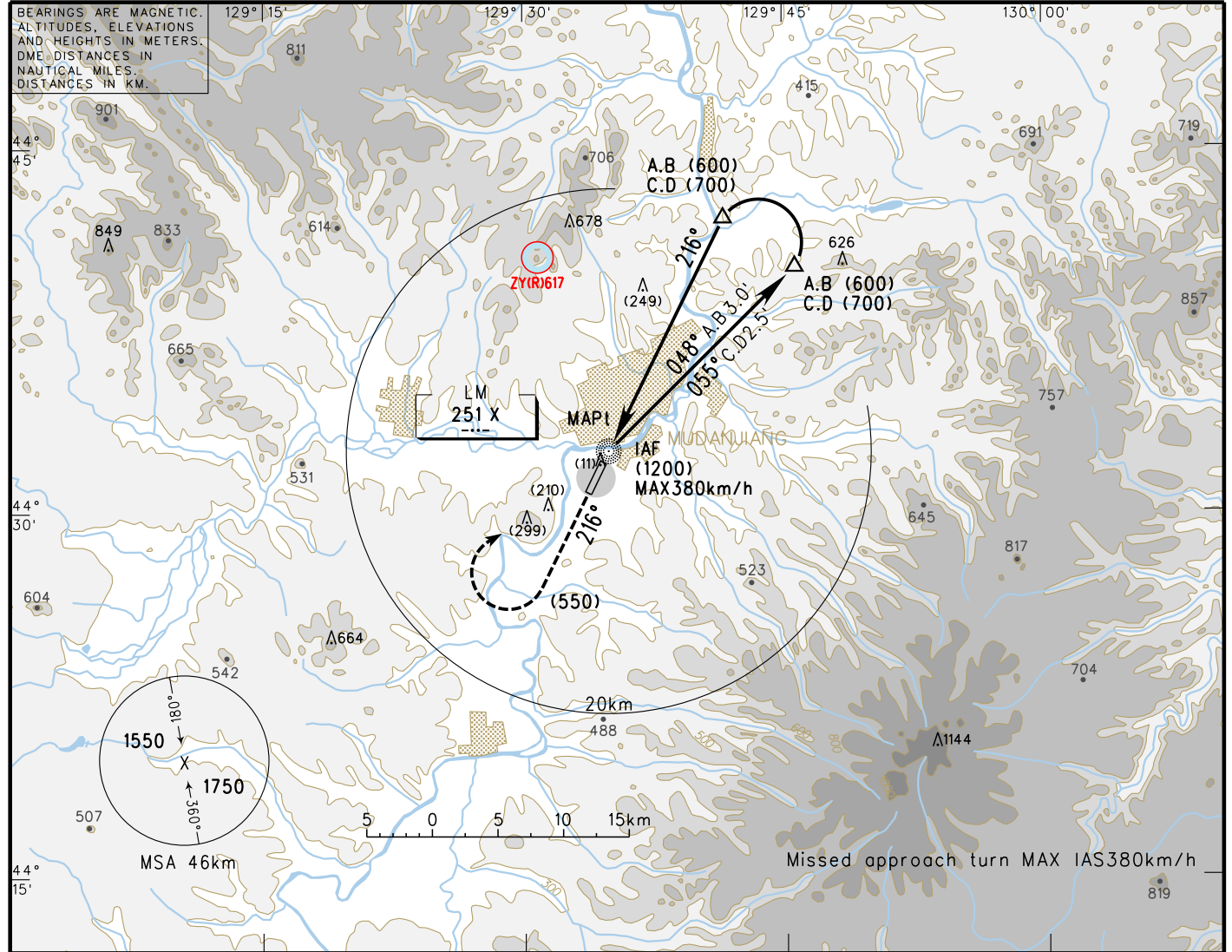
# INSTRUMENT APPROACH CHART-ICAO

VAR10°W

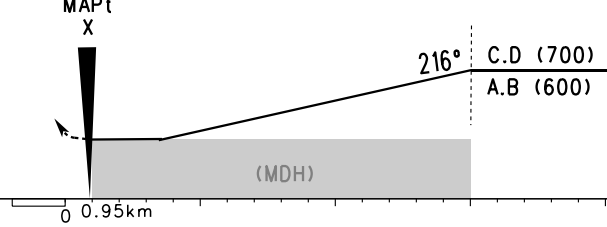
AERODROME ELEV 269.6  
THR RWY22 ELEV 264.5 TWR 130.0(118.6)

## ZYMD MUDANJIANG/Hailang

NDB RWY22



**MISSED APPROACH**  
 Climb straight ahead to (550), turn RIGHT to X at (1200) or above, contact ATC.  
 TL 3600  
 TH (3000)



NDB	(MDH) VIS	A	B	C	D	FAF-MAPt									
						GS in kt	150	185	220	260	295	335			
			(315) 5000												
CIRCLING	(MDH) VIS	(320) 5000	(390) 5000	(420) 5000											

Changes: Restricted area.

# AERODROME CHART

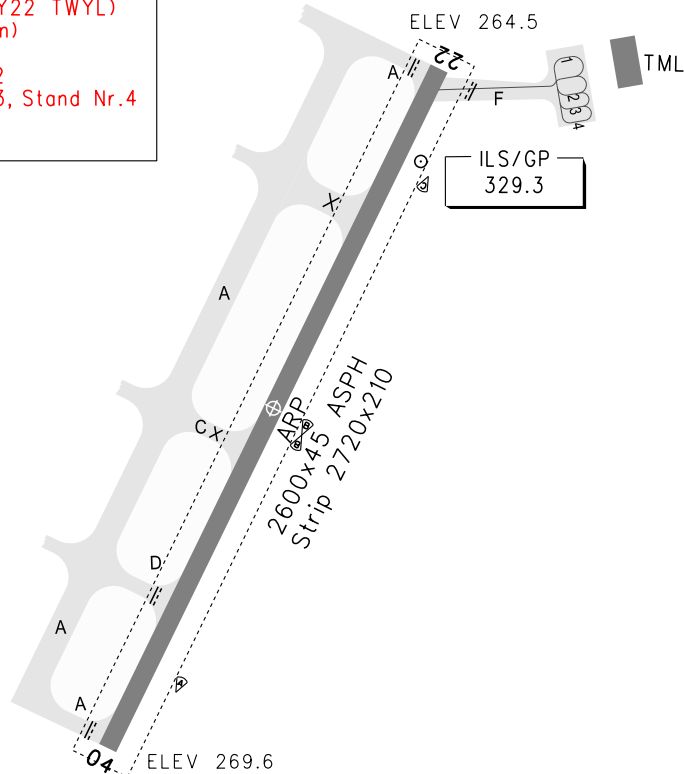
## ZYMD MUDANJIANG/Hailang

TWR 130.0(118.6)

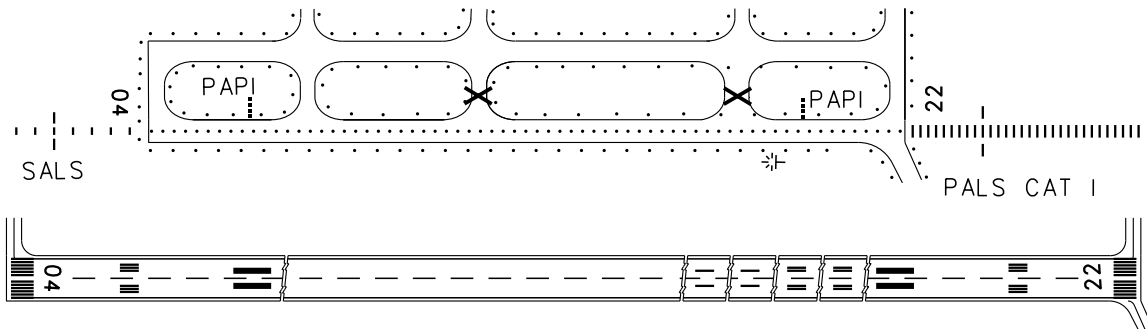
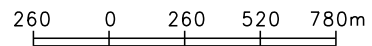
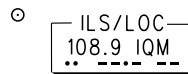
N44° 31.4'E129° 34.2' ELEV 269.6m

RWY	Direction	Bearing strength
04	036°	PCR 570/R/B/W/T: RWY04/22 ASPH
		PCR 740/R/B/W/T: TWY A(RWY04 TWYL)
22	216°	PCR 690/R/A/W/T: TWY D
		PCR 680/R/A/W/T: TWY A(RWY22 TWYL)
		PCR 580/R/C/W/T: TWY A(Main)
		PCR 540/R/C/W/T: TWY F
		PCR 690/R/A/W/T: Stand Nr.2
		PCR 560/R/A/W/T: Stand Nr.3, Stand Nr.4
		PCR 520/R/A/W/T: Stand Nr.1

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



Note: × Area not available.



TAKE-OFF MINIMA(WITH RELIABLE ALTN)(m)					LIGHTS	
ACFT Type	RWY04		RWY22		RWY04	RWY22
	REDL	NIL(Day only)	REDL	NIL(Day only)		
2 TURB ENG or 3&4 ENG	A				SALS PAPI REDL RCLL RENL	PALS CAT I PAPI REDL RCLL RENL
	B	RVR400	RVR500	RVR400		
	C	VIS800	VIS800	VIS800		
	D					
Other 1&2 ENG	VIS1600					
Note: RWY04: ceiling 70m/VIS 2000m, if climbing gradient <6.4%.						
Changes: PCR.						



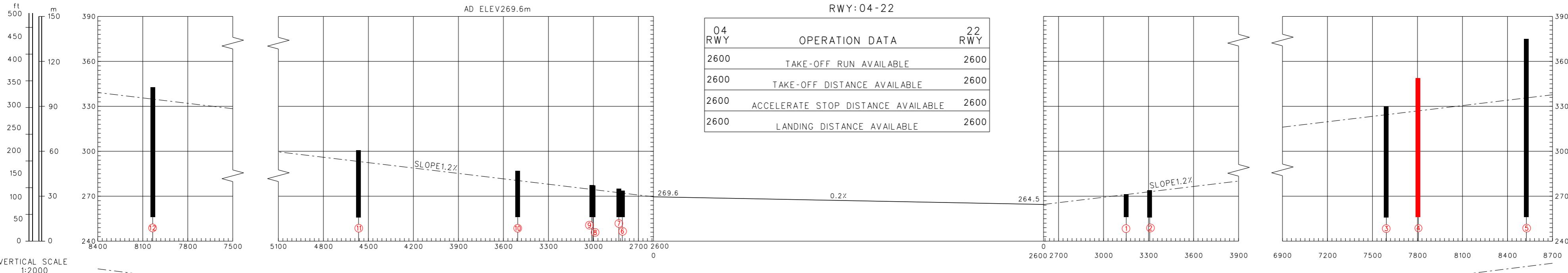
# AERODROME OBSTACLE CHART-ICAO

TYPE A (OPERATING LIMITATIONS)

ZYMD MUDANJIANG/Hailang

DIMENSIONS AND ELEVATIONS IN METERS BEARINGS ARE MAGNETIC

MAGNETIC VARIATION 10° W



LEGEND	
⊙	POLE
*	TREE
■	BUILD OR LARGE STRUCTURE
▲	MOUNTAIN
▲	CHIMNEY

AMENDMENT RECORD		
Nr	DATE	ENTERED BY

Changes: OBST.

# STANDARD DEPARTURE CHART - INSTRUMENT

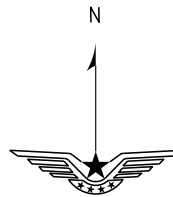
VAR10° W

TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailong  
RWY04

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

TL 3600  
TH (3000)



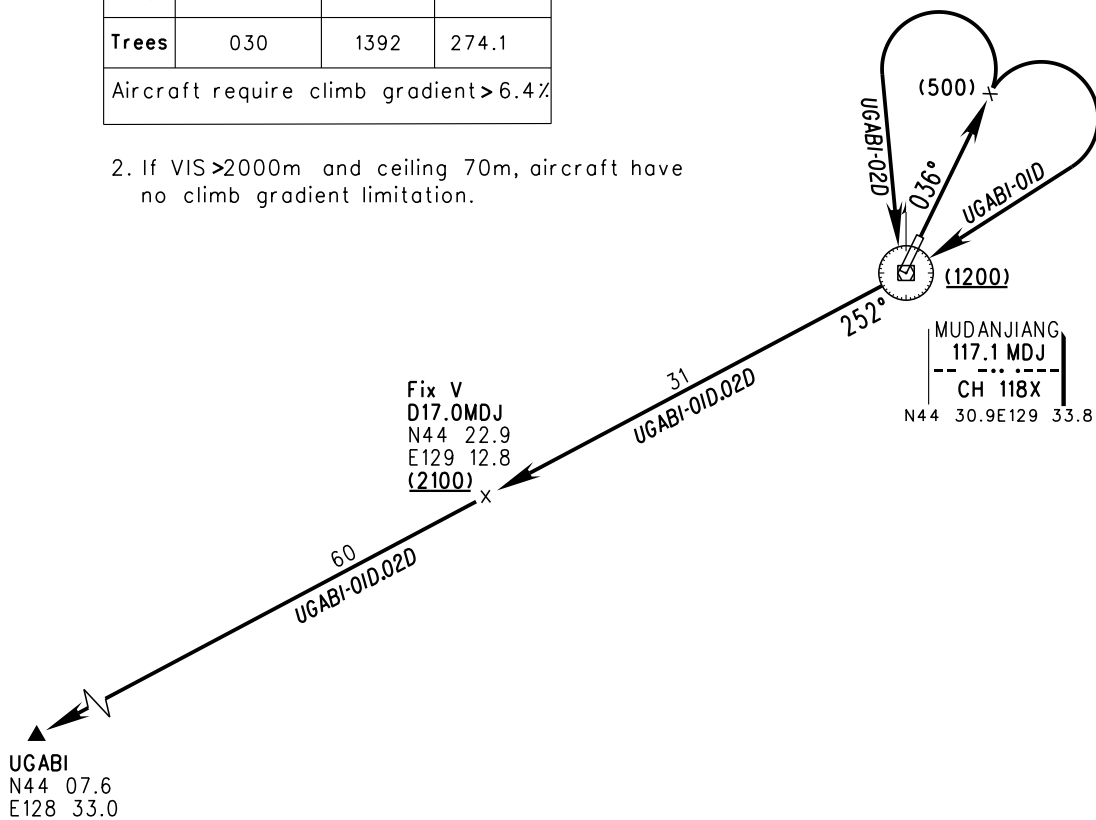
NOT TO SCALE

1. There exist two obstacles centered on RWY center near departure end of RWY04:

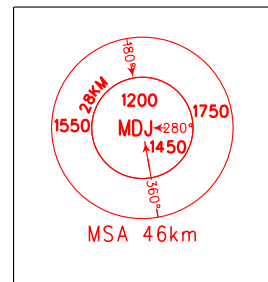
	BRG (MAG)(degree)	DIST (m)	ELEV (m)
Trees	030	1377	271.4
Trees	030	1392	274.1

Aircraft require climb gradient > 6.4%

2. If VIS > 2000m and ceiling 70m, aircraft have no climb gradient limitation.



Departure turn MAX IAS 380kmH



Changes: MSA.

# STANDARD DEPARTURE CHART - INSTRUMENT

VAR10° W

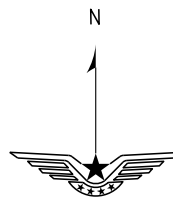
TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailong RWY22

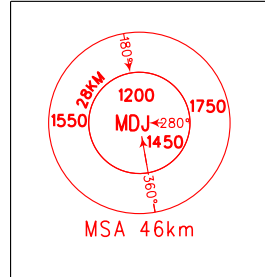
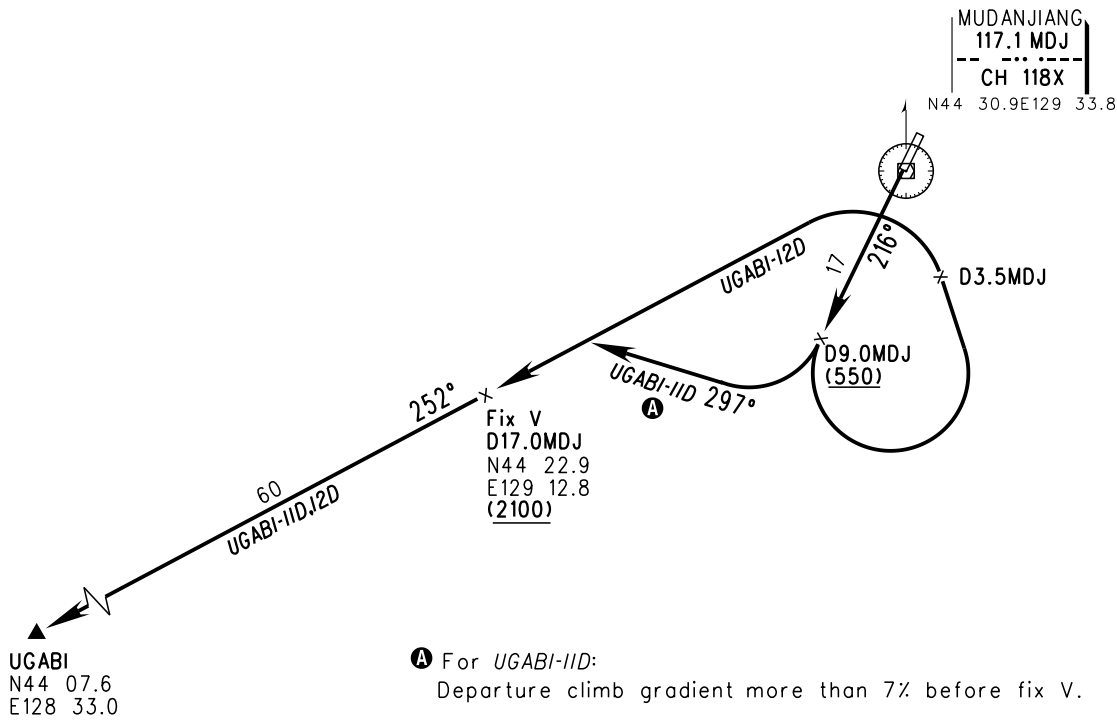
BEARINGS ARE MAGNETIC  
ALTITUDES, ELEVATIONS  
AND HEIGHTS IN METERS  
DME DISTANCES IN  
NAUTICAL MILES  
DISTANCES IN KM

TL 3600  
TH (3000)

Departure turn MAX IAS 380kmH



NOT TO SCALE



Changes: MSA.

# STANDARD DEPARTURE CHART-INSTRUMENT

VAR10° W

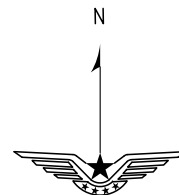
TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailang

NDB RWY04

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

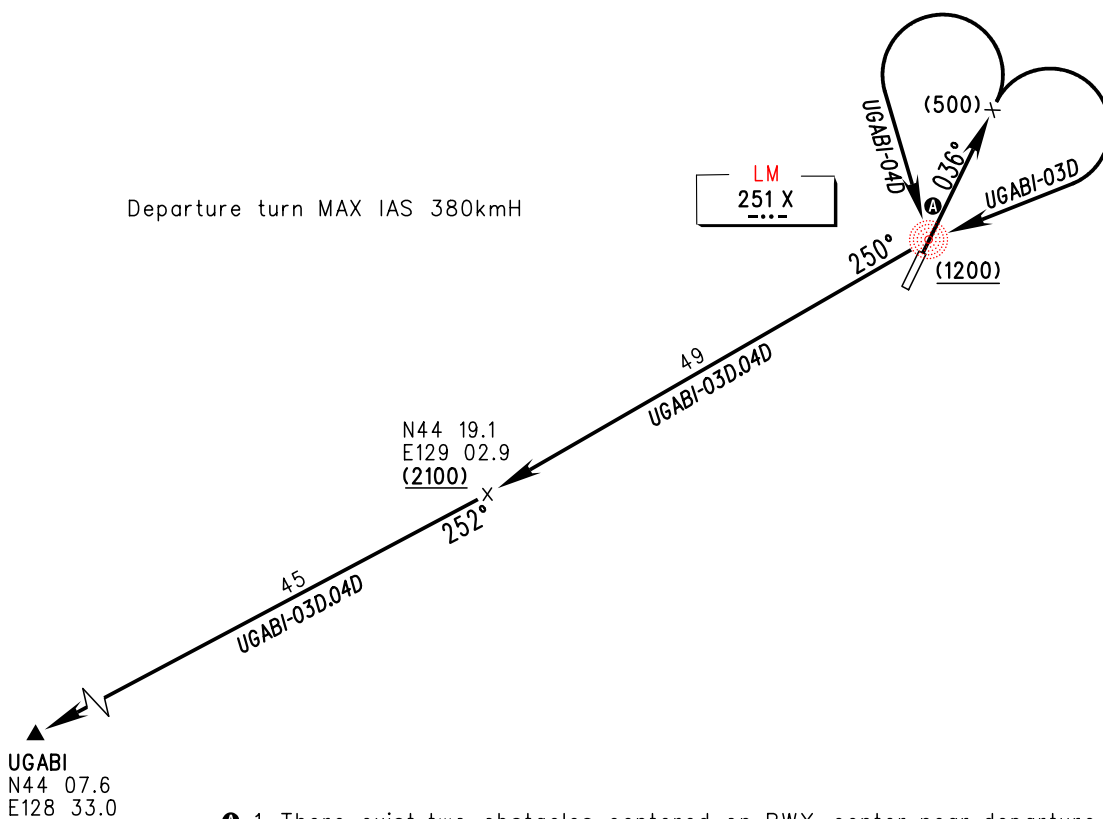
TL 3600  
TH (3000)



NOT TO SCALE

Departure turn MAX IAS 380kmH

LM  
251 X

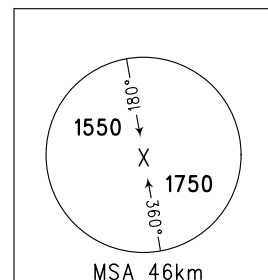


1. There exist two obstacles centered on RWY center near departure end of RWY04:

	BRG (MAG)(degree)	DIST (m)	ELEV (m)
Trees	030	1377	271.4
Trees	030	1392	274.1

Aircraft require climb gradient > 6.4%

2. If VIS > 2000m and ceiling > 70m, aircraft have no climb gradient limitation.



Changes: LM 'X'.

STANDARD DEPARTURE  
CHART-INSTRUMENT

VAR10° W

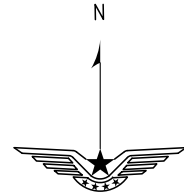
TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailang  
NDB RWY22

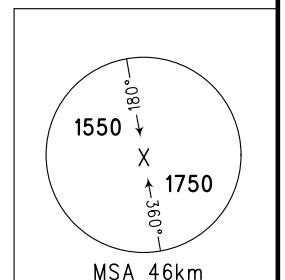
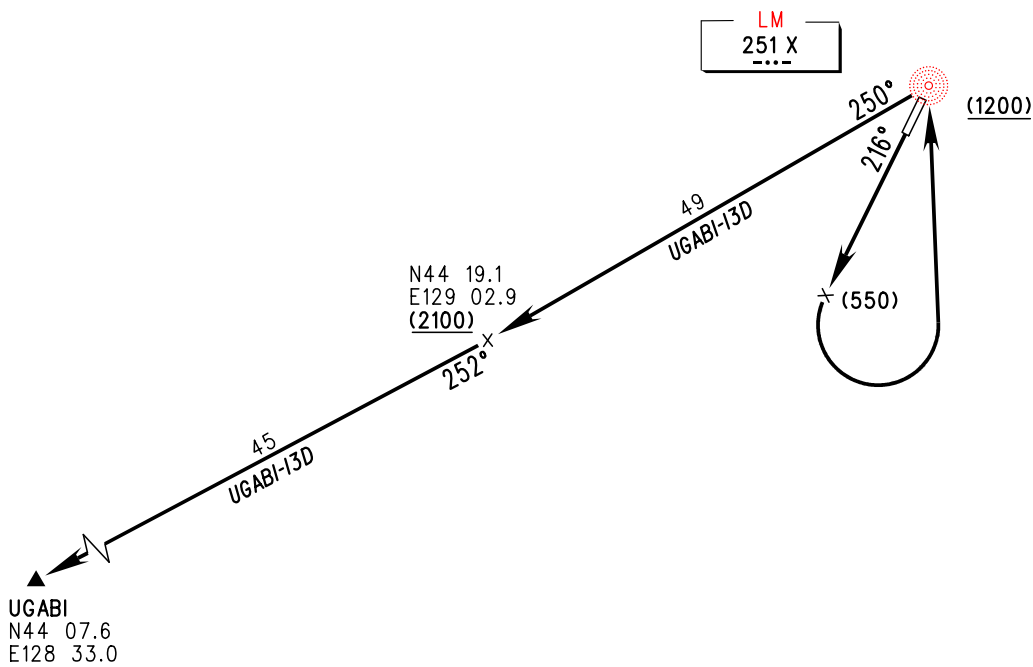
BEARINGS ARE MAGNETIC  
ALTITUDES, ELEVATIONS  
AND HEIGHTS IN METERS  
DME DISTANCES IN  
NAUTICAL MILES  
DISTANCES IN KM

TL 3600  
TH (3000)

Departure turn MAX IAS 380kmH



NOT TO SCALE



Changes: LM 'X'.

# STANDARD DEPARTURE CHART - INSTRUMENT

VAR10°W

TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailong  
RNP RWY04

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

TL 3600  
TH (3000)

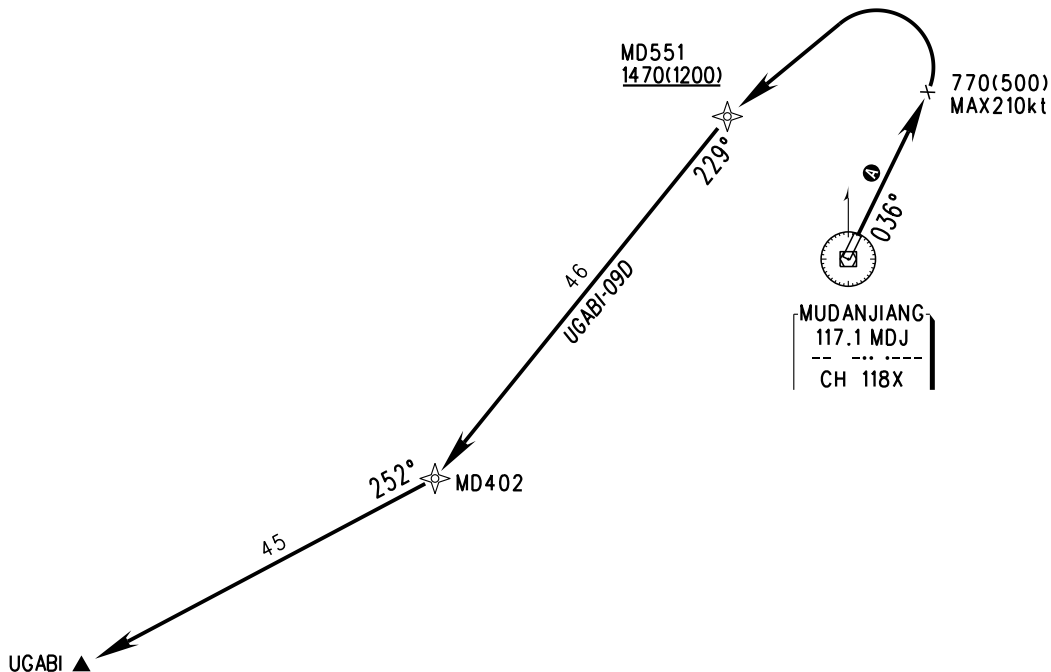


NOT TO SCALE

RNP1  
GNSS

Note:

1. Apply to ATC for QNH as needed.
2. Below QFE(3000) MAX IAS250kt.

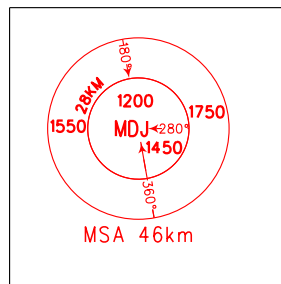


1. Two obstacles near RWY04 DER:

	BRG (MAG)(degree)	DIST (m)	ELEV (m)
Trees	030	1377	271.4
Trees	030	1392	274.1

Aircraft require climb gradient > 6.4%

2. Aircraft climb with no gradient limitation when VIS > 2000m, ceiling > 70m, and nearby obstacles can be visualized.



Changes: MSA.

# STANDARD DEPARTURE CHART - INSTRUMENT

VAR10° W

TWR 130.0 (118.6)

ZYMD MUDANJIANG/Hailong  
RNP RWY22

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

TL 3600  
TH (3000)

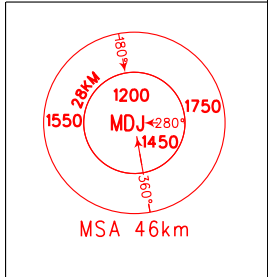
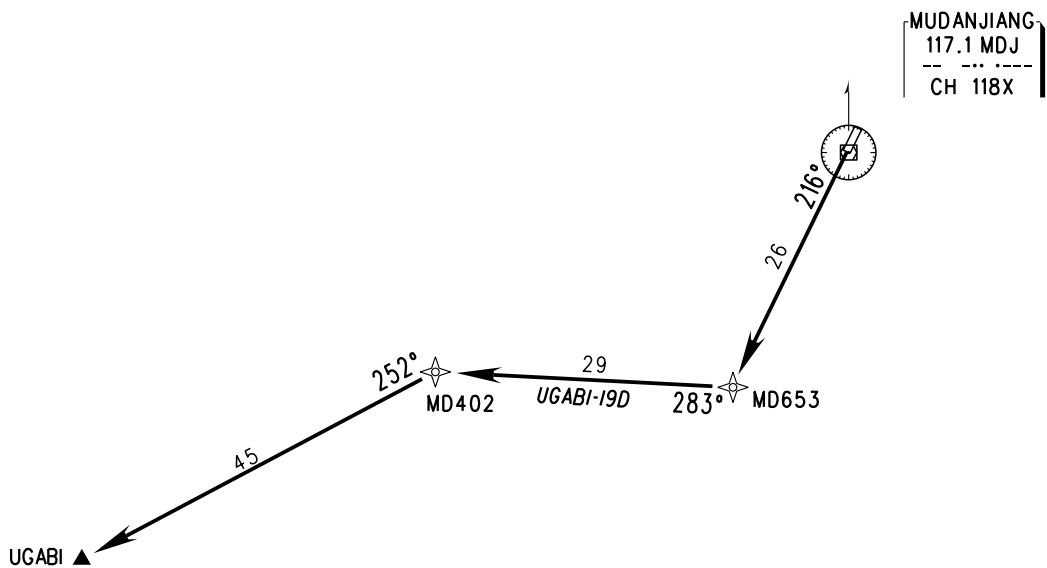


NOT TO SCALE

RNP1  
GNSS

Note:

1. Apply to ATC for QNH as needed.
2. Below QFE(3000) MAX IAS250kt.



Changes: MSA.

# STANDARD ARRIVAL CHART - INSTRUMENT

VAR10° W

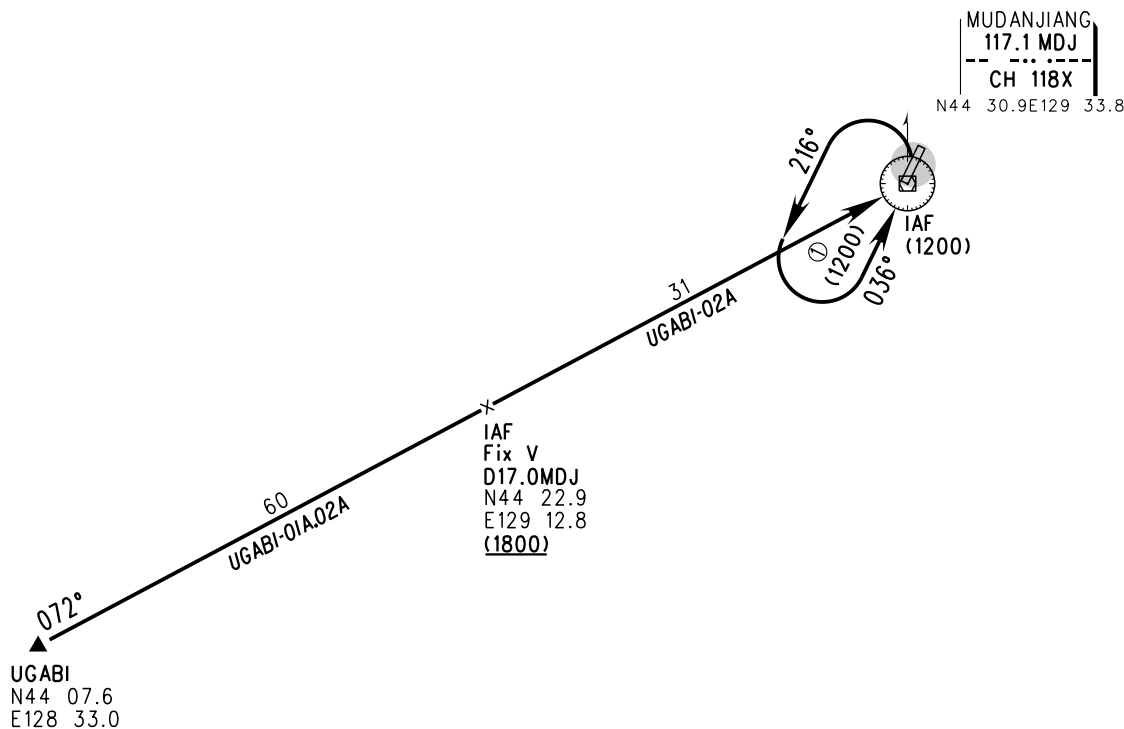
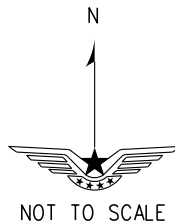
TWR 130.0(118.6)

ZYMD MUDANJIANG/Hailong  
RWY04

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

TL 3600  
TH (3000)

Note :  
Holding MAX IAS380km/h.  
Initial approach MAX IAS380km/h.



Changes: Delete holding.



# STANDARD ARRIVAL CHART - INSTRUMENT

ZYMD MUDANJIANG/Hailong  
RWY22

VAR10° W

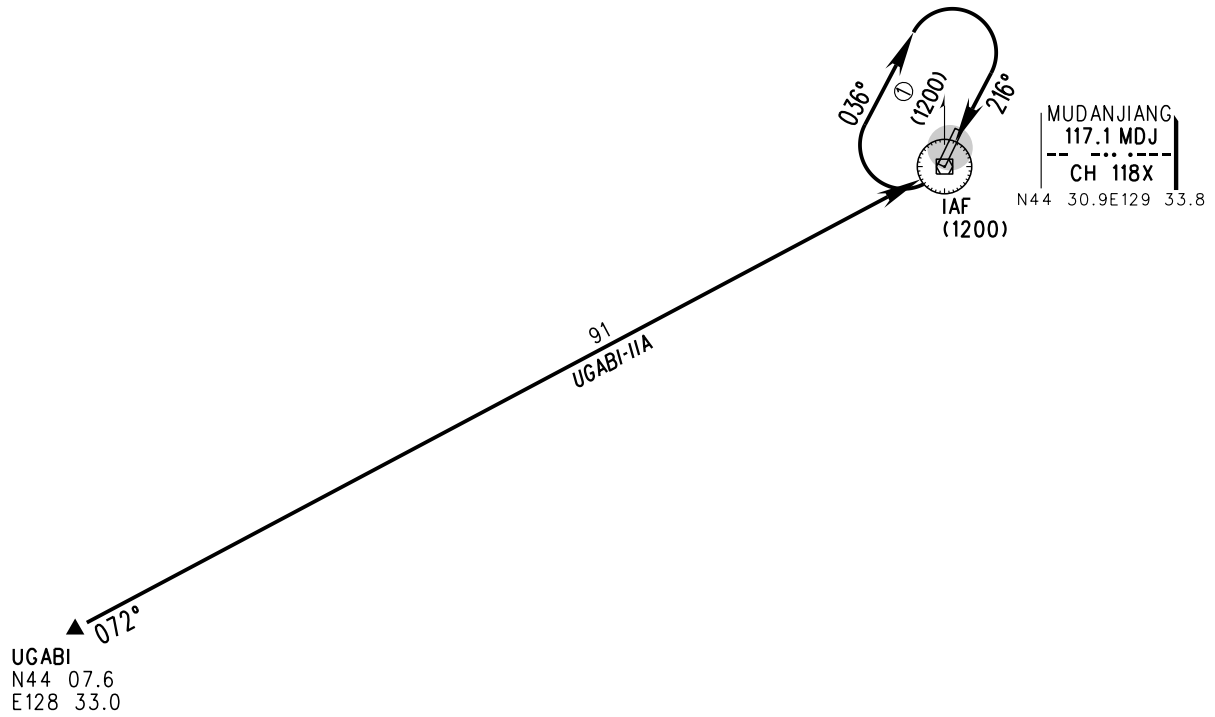
TWR 130.0(118.6)

TL 3600  
TH (3000)

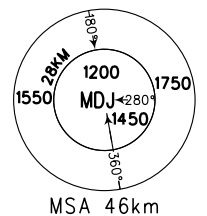
BEARINGS ARE MAGNETIC.  
ALTITUDES, ELEVATIONS  
AND HEIGHTS IN METERS.  
DME DISTANCES IN  
NAUTICAL MILES.  
DISTANCES IN KM.



NOT TO SCALE



Note :  
Holding MAX IAS 380km/h.  
Initial approach MAX IAS 380km/h.



Changes: Nil.

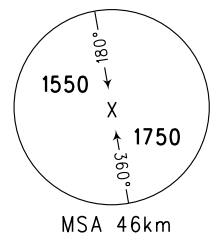
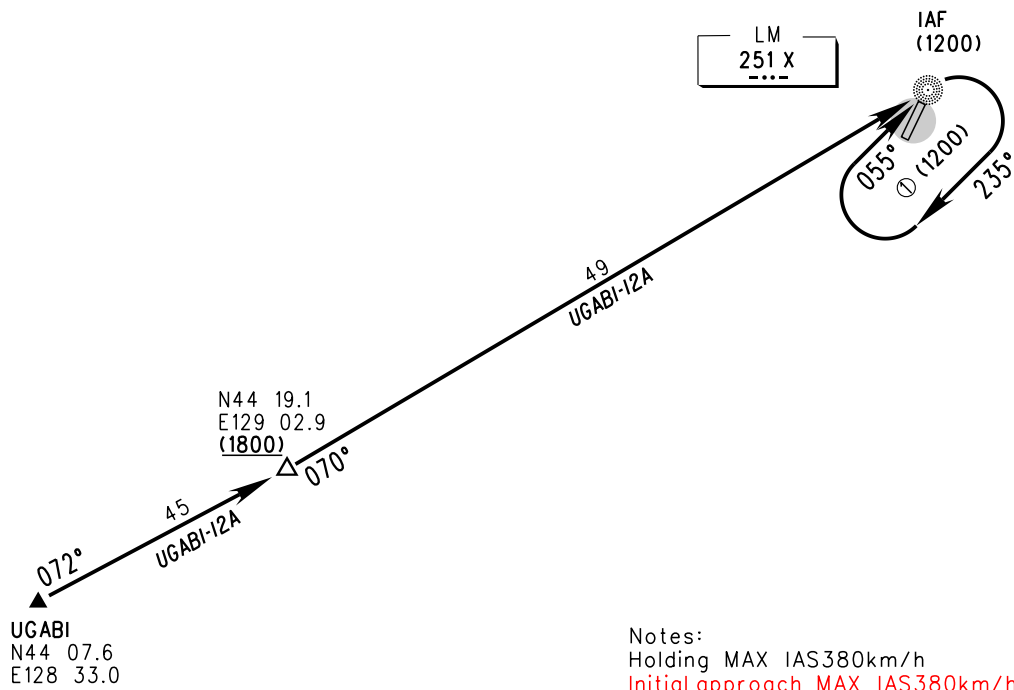
# STANDARD ARRIVAL CHART - INSTRUMENT

ZYMD MUDANJIANG/Hailang  
NDB RWY22

VAR10° W TWR 130.0(118.6)

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

TL 3600  
TH (3000)



Changes: Speed limit, change chart symbols.

# WAYPOINT LIST

MUDANJIANG/Hailang

WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES	WAYPOINT ID	COORDINATES
MD402	N44° 19'07"E129° 02'56"				
MD551	N44° 38'29"E129° 24'51"				
MD653	N44° 18'16"E129° 25'08"				
UGABI	N44° 07'36"E128° 33'00"				

Changes: New chart.

