

ZYTL (Zhoushuizi)**General Info**

Dalian, CHN

N 38°57.6' E121°31.8' Mag Var: 6.9°

Elevation: 105'

Public, Control Tower, IFR, No Fee, Customs

Fuel: Jet A

Time Zone Info: GMT+8:00 no DST

Runway Info

Runway 10-28 10827' x 148' concrete

Runway 10 (103.0m) TDZE 105'

Lights: Edge, ALS, Centerline

Right Traffic

Displaced Threshold Distance 656'

Stopway Distance 164'

Runway 28 (283.0m) TDZE 85'

Lights: Edge, ALS, Centerline

Right Traffic

Displaced Threshold Distance 328'

Stopway Distance 164'

Communications InfoATIS **126.65**Dalian Tower **118.85** SecondaryDalian Tower **118.25**Dalian Approach Control **127.95** SecondaryDalian Approach Control **123.85****Notebook Info**

ZYTL/DLC
ZHOUSHUIZI

JEPPesen
23 JUN 06 **10-2**

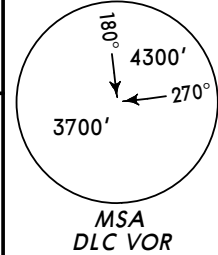
DALIAN, PR OF CHINA

STAR

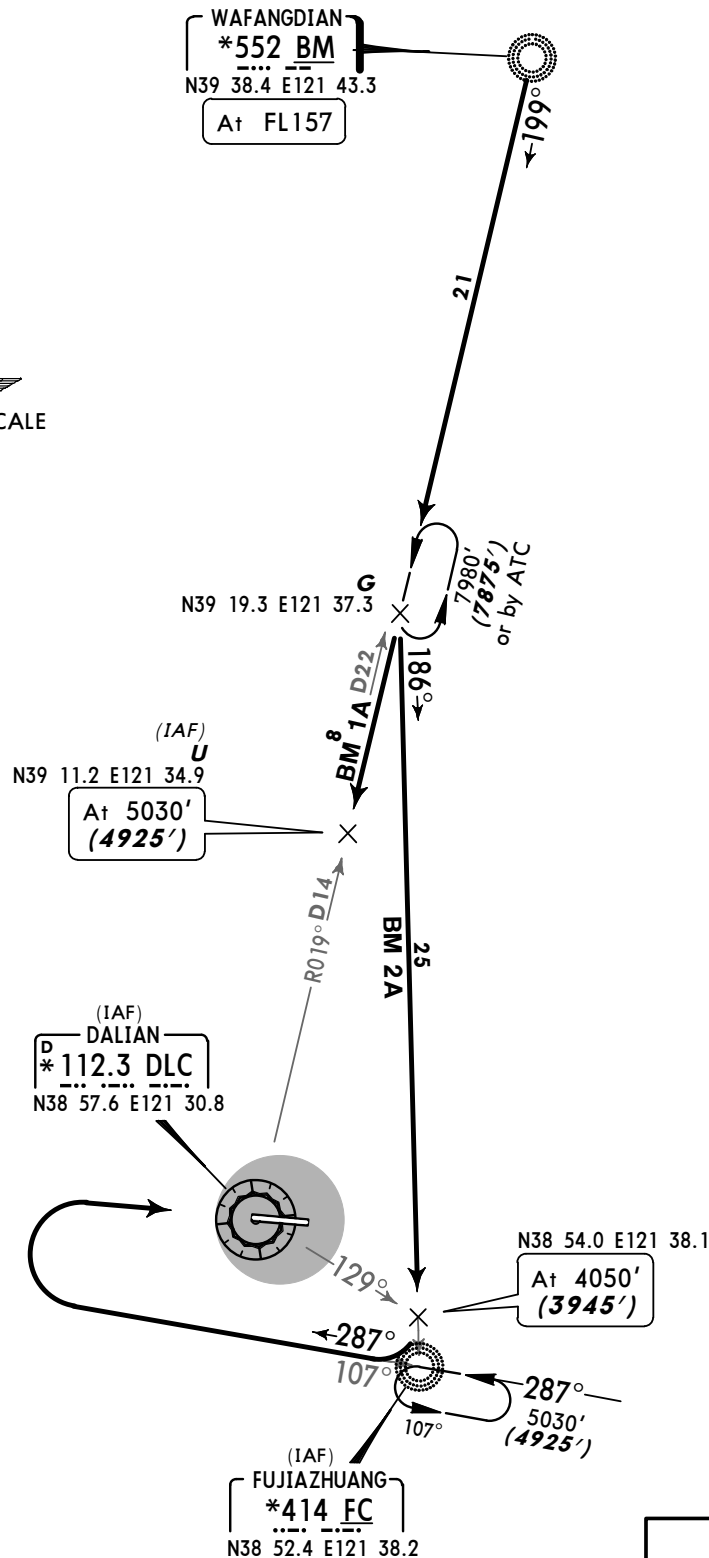
*ATIS
126.65

Apt Elev
105'

Alt Set: hPa QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



**BM 1A, BM 2A
RWY 10 ARRIVALS**



FL CONVERSION
FL157 FL4800m

ALT/HEIGHT CONVERSION	
QNH	(QFE)
7980'	(7875' - 2400m)
5030'	(4925' - 1500m)
4050'	(3945' - 1200m)

ZYTL/DLC
ZHOUSHUIZI

JEPPesen
23 JUN 06 **(10-2A)**

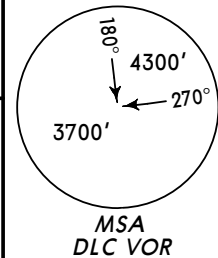
DALIAN, PR OF CHINA

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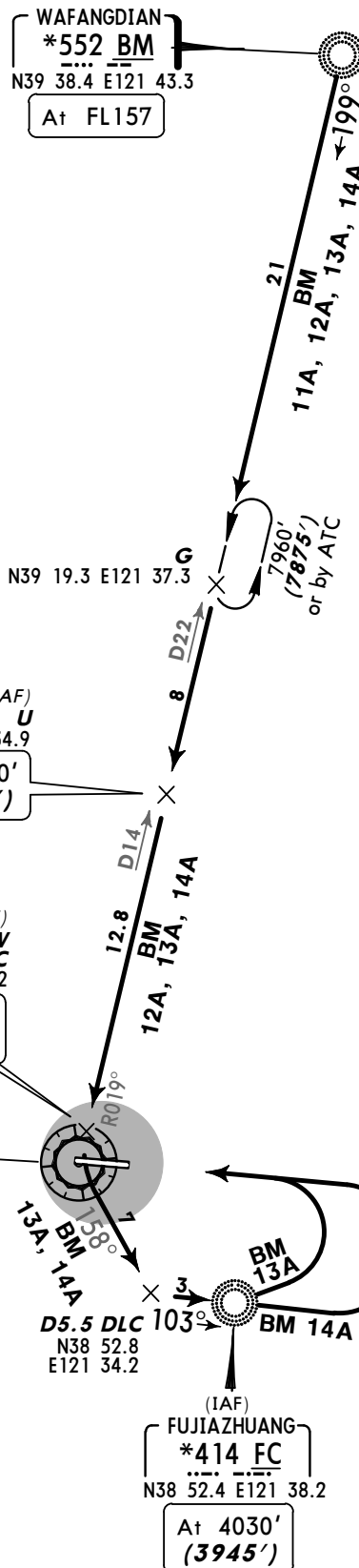
*ATIS
126.65

Apt Elev
105'

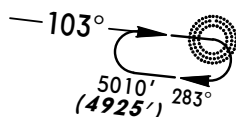
Alt Set: hPa QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



**BM 11A, BM 12A, BM 13A, BM 14A
RWY 28 ARRIVALS**



**HOLDING OVER
FC**



FL CONVERSION
FL157 FL4800m

ALT/HEIGHT CONVERSION
QNH (QFE)
7960' (7875' - 2400m)
5010' (4925' - 1500m)
4030' (3945' - 1200m)

ZYTL/DLC
ZHOUSHUIZI

JEPPesen
17 MAR 06 **(10-2B)**

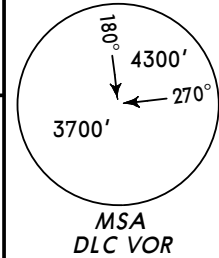
DALIAN, PR OF CHINA

STAR

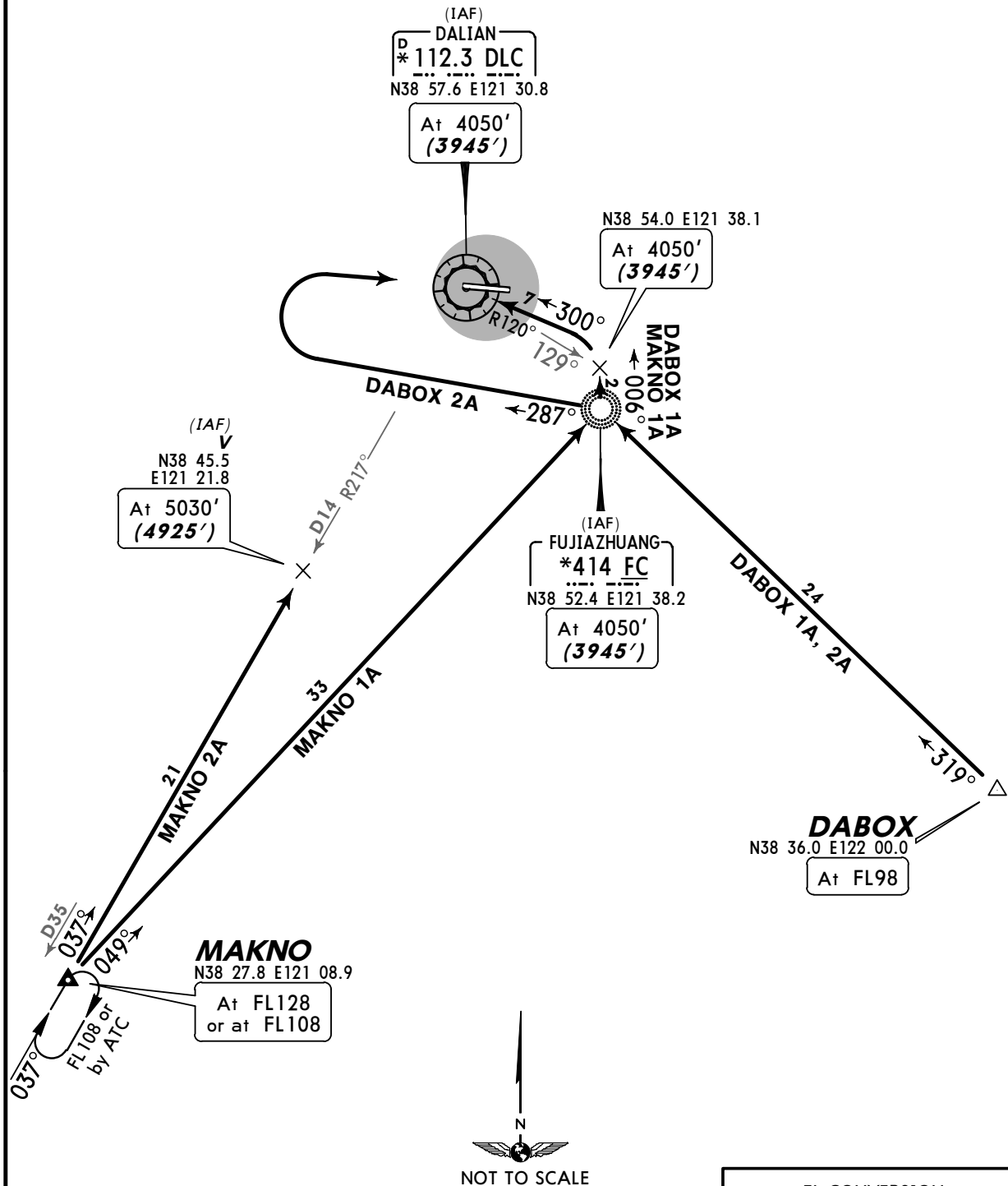
*ATIS
126.65

Apt Elev
105'

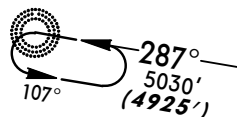
Alt Set: hPa QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



DABOX 1A [DABO1A], DABOX 2A [DABO2A]
MAKNO 1A [MAKN1A], MAKNO 2A [MAKN2A]
RWY 10 ARRIVALS



HOLDING OVER FC



FL CONVERSION
FL128 FL3900m
FL108 FL3300m
FL98 FL3000m

ALT/HEIGHT CONVERSION
QNH (QFE)
5030' (4925' - 1500m)
4050' (3945' - 1200m)

ZYTL/DLC
ZHOSHUIZI

DALIAN, PR OF CHINA

STAR

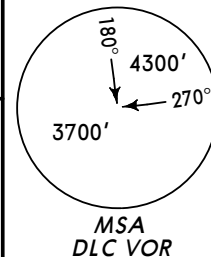
17 MAR 06

10-2C

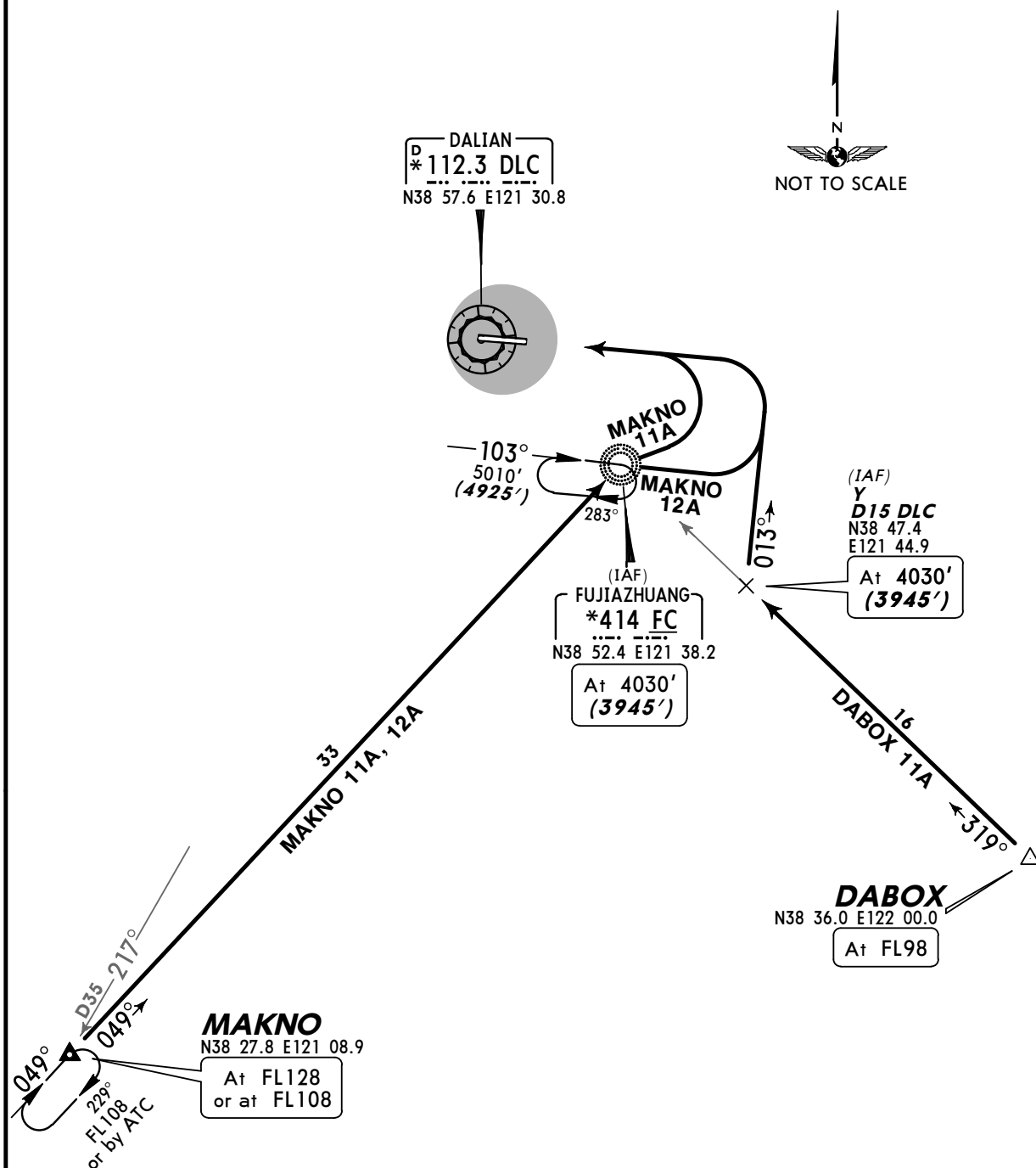
*ATIS
126.65

Apt Elev
105'

Alt Set: hPa QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



DABOX 11A *[DAB11A]*
MAKNO 11A *[MAK11A]*, MAKNO 12A *[MAK12A]*
RWY 28 ARRIVALS



FL CONVERSION

FL128	FL3900m
FL108	FL3300m
FL98	FL3000m

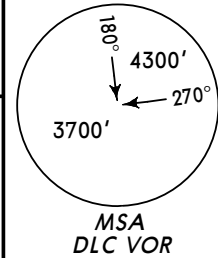
ALT/HEIGHT CONVERSION
QNH (QFE)
5010' (4925' - 1500m)
4030' (3945' - 1200m)

ZYTL/DLC
ZHOUSHUIZI

JEPPESSEN
23 APR 04 **10-3**

DALIAN, PR OF CHINA
SID

Apt Elev
105'
QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



BM 1D, DABOX 1D, MAKNO 1D
RWY 10 DEPARTURES

WAFANGDIAN
*552 BM
N39 38.4 E121 43.3
At FL148

G
N39 19.3 E121 37.3
At 7000'
(6894')

ALT/HEIGHT CONVERSION	
QNH	(QFE)
1420'	(1314' - 400m)
3060'	(2954' - 900m)
4050'	(3944' - 1200m)
7000'	(6894' - 2100m)

FL CONVERSION	
FL148	FL4500m



D DALIAN
*112.3 DLC
N38 57.6 E121 30.8

ZHOUSHUIZI
257 K
N38 57.5 E121 33.6

D5.8 DLC
N39 02.6 E121 34.5
At or above
3060' (2954')

At 1420'
(1314')

FUJIAZHANG
*414 FC
N38 52.4 E121 38.2
At or above
3060' (2954')

D20 DLC
At or above
4050' (3944')

DABOX
N38 36.0 E122 00.0

MAKNO
D35 DLC
N38 27.8 E121 08.9

These SIDs require visual contact to obstacle of 168' (1106' east of THR Rwy 28 and 922' south of RCL) or a minimum climb gradient of 304' per NM (5%) up to K.

Gnd speed-KT	75	100	150	200	250	300
304' per NM	380	506	760	1013	1266	1519

ZYTL/DLC
ZHOSHUIZI

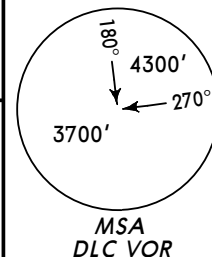
DALIAN, PR OF CHINA

SID

23 APR 04 (10-3A)

Apt Elev
105'

QNH on request **(QFE)**
Trans level: By ATC Trans alt: By ATC
Turn speed MAX 205 KT.



BM 11D, BM 12D
DABOX 11D, MAKNO 11D
RWY 28 DEPARTURES
BY ATC



- 1** When ATC requires an acft not to cross the restricted line, pilot should strictly adhere to the instructions and turn LEFT at or above 1570' (1486'). Otherwise departure from runway 28 is not permitted.

WAFANGDIAN
*552 BM
N39 38.4 E121 43.3
At FL148

D22 DLC

At 6980'
(6896')

ALT/HEIGHT CONVERSION

QNH	(QFE)
1570'	(1486' - 450m)
1730'	(1646' - 500m)
3040'	(2956' - 900m)
6980'	(6896' - 2100m)

FL CONVERSION
FL148 FL4500m

DALIAN
D * 112.3 DLC
N38 57.6 E121 30.8

At or above
3040'
(2956')

FUJIAZHANG
 *414 FC
 N38 52.4 E121 38.2
 At or above
 3040' (**2956'**)

DABOX
N38 36.0 E122 00.0

Due to obstacle of 822' (15190' west of THR Rwy 10 and 1306' north of RCL) these SIDs require a minimum climb gradient of 346' per NM (5.7%).

Gnd speed-KT	75	100	150	200	250	300
346' per NM	433	577	866	1155	1443	1732

No climb gradient applies when VIS 4800m, ceiling 919'.

ZYTL/DLC

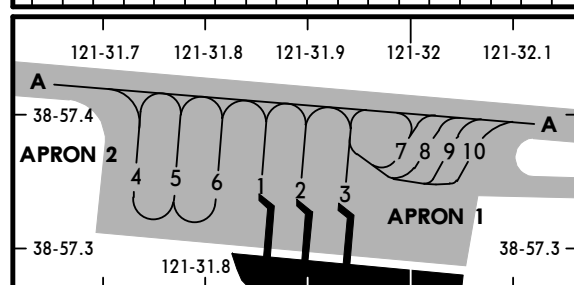
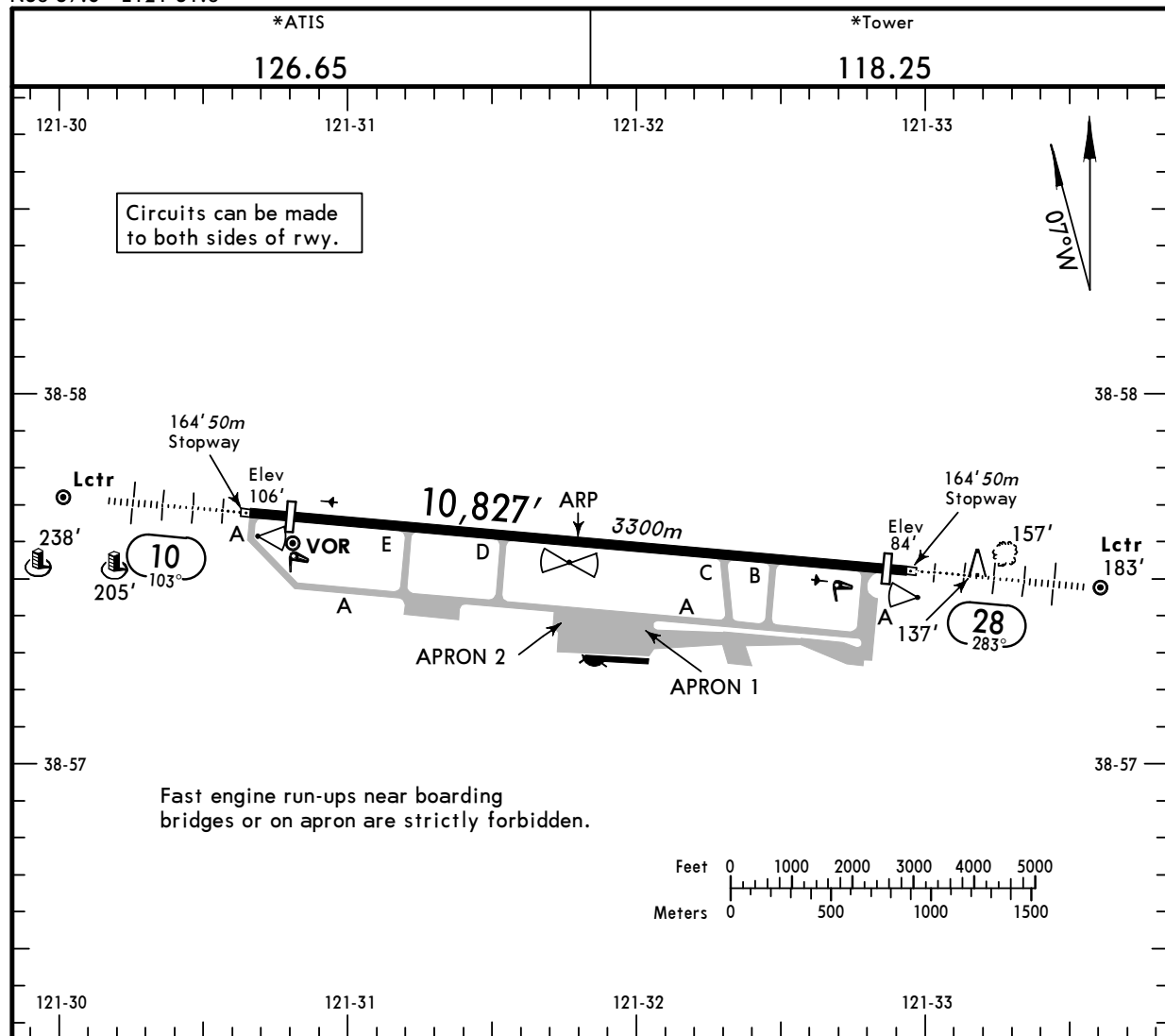
Apt Elev **105'**
N38 57.6 E121 31.8

JEPPesen

23 APR 04 **(10-9)**

DALIAN, PR OF CHINA

ZHOUSHUIZI



INS COORDINATES

STAND No.

COORDINATES

1 thru 3	N38 57.3 E121 31.9
4	N38 57.4 E121 31.7
5, 6	N38 57.4 E121 31.8
7 thru 9	N38 57.4 E121 32.0
10	N38 57.4 E121 32.1

ADDITIONAL RUNWAY INFORMATION

RWY		RVR	USABLE LENGTHS		TAKE-OFF	WIDTH
			Threshold	Glide Slope		
10	HIRL (60m) CL (30m) HIALS PAPI-L (3.0°)		10,171' 3100m	9121' 2780m		148'
28			10,499' 3200m	9442' 2878m		45m

TAKE-OFF

All Rwy's

	With HIRL and CL	With HIRL or CL	Without HIRL and CL
2 Eng	500m	600m	1600m
3 & 4 Eng			800m

ZYTL/DLC**JEPPESEN**

23 APR 04

10-9X**JAA MINIMUMS**
DALIAN, PR OF CHINA
ZHOU SHUIZI

STRAIGHT-IN RWY		A	B	C	D
10	ILS ①	305' (200')	305' (200')	308' (203')	318' (213')
		R700m	R700m	R700m	R700m
	ALS out	R1000m	R1000m	R1000m	R1000m
	ILS ②	449' (344')	459' (354')	469' (364')	479' (374')
		R900m	R900m	R900m	R900m
	ALS out	R1200m	R1200m	R1200m	R1200m
	LOC	1290' (1185')	1290' (1185')	1290' (1185')	1290' (1185')
		R1500m	R1500m	R1800m	R2000m
	ALS out	R1500m	R1500m	R2000m	R2000m
	VOR DME	1290' (1185')	1290' (1185')	1290' (1185')	1290' (1185')
		R1500m	R1500m	R1800m	R2000m
	ALS out	R1500m	R1500m	R2000m	R2000m
28	NDB	1390' (1285')	1390' (1285')	1390' (1285')	1390' (1285')
		R1500m	R1500m	R1800m	R2000m
	ALS out	R1500m	R1500m	R2000m	R2000m
	ILS ①	318' (233')	328' (243')	338' (253')	348' (263')
		R600m	R600m	R650m	R650m
	ALS out	R1000m	R1000m	R1200m	R1200m
	ILS ②	427' (342')	436' (351')	446' (361')	456' (371')
		R800m	R800m	R800m	R800m
	ALS out	R1200m	R1200m	R1200m	R1200m
	LOC	870' (785')	870' (785')	870' (785')	870' (785')
		R1200m	R1400m	R1400m	R1800m
	ALS out	R1500m	R1500m	R2000m	R2000m
	VOR DME	880' (795')	880' (795')	880' (795')	880' (795')
		R1200m	R1400m	R1400m	R1800m
	ALS out	R1500m	R1500m	R2000m	R2000m
	NDB	880' (795')	880' (795')	880' (795')	880' (795')
		R1200m	R1400m	R1400m	R1800m
	ALS out	R1500m	R1500m	R2000m	R2000m

① Missed apch climb gradient mim 5%.

② Missed apch climb gradient mim 2.5%.

CIRCLE-TO-LAND	100 KT	135 KT	180 KT	205 KT
	1570' (1465')	1570' (1465')	1670' (1565')	1670' (1565')
	V1500m	V1600m	V2400m	V3600m

TAKE-OFF RWY 10, 28

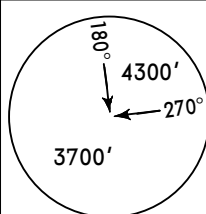
	HIRL & CL	HIRL or CL	NIL (DAY only)
2 Eng	500m	600m	1600m
3 & 4 Eng			800m

ZYTL/DLC
ZHOUSHUIZI

JEPPESSEN
11 JUN 04 (11-1)

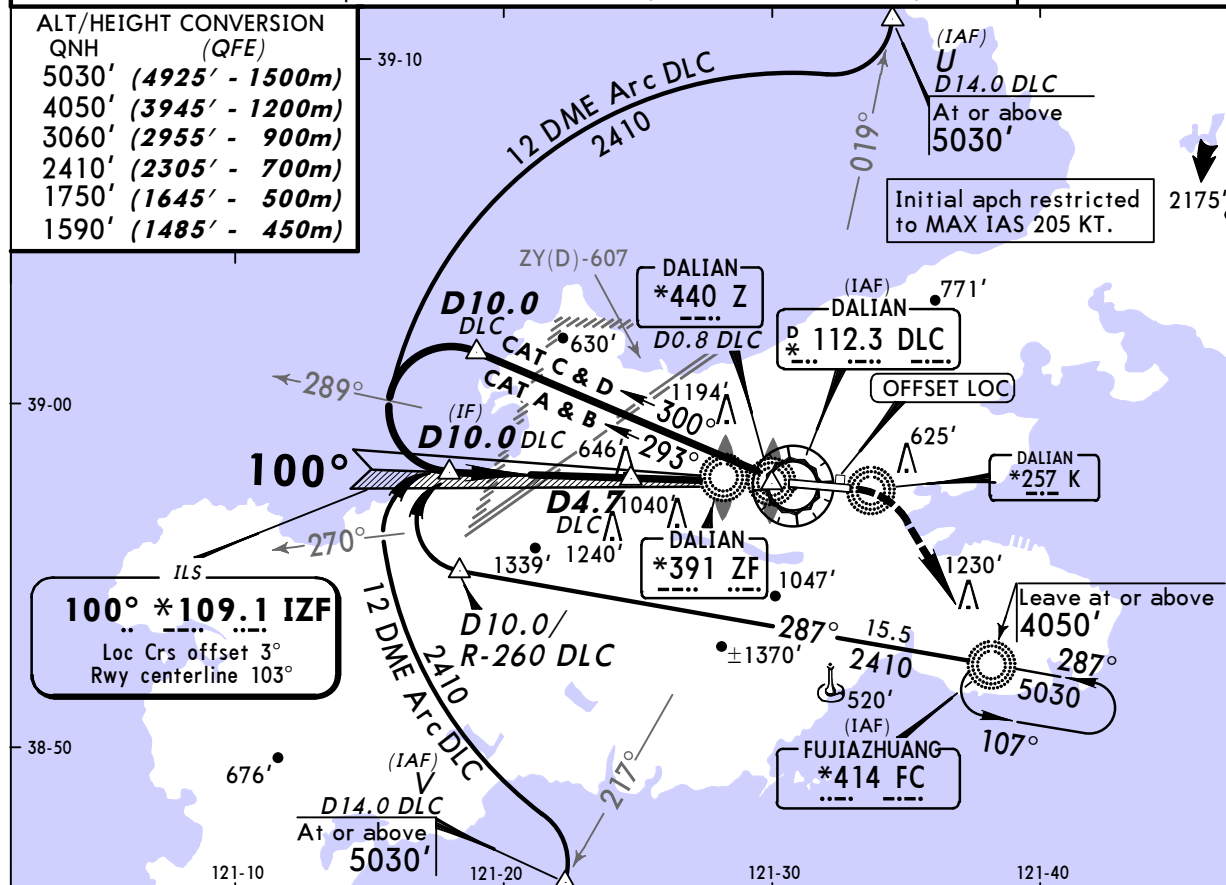
DALIAN, PR OF CHINA
ILS DME Rwy 10

BRIEFING STRIP

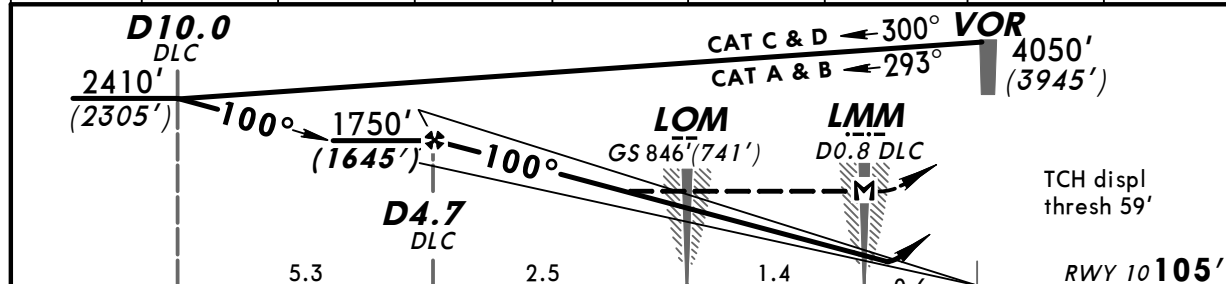
*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85		1200 - 0100 118.25	*DALIAN Tower 118.25	
LOC IZF *109.1	Final Apch Crs 100°	GS D4.7 DLC 1750' (1645')	ILS DA(H) Refer to Minimums		Apt Elev 105' RWY 105'	
MISSED APCH: Climb STRAIGHT AHEAD to 1590' (1485'), then turn RIGHT (MAX IAS 205 KT) to reach FC NDB at 3060' (2955') and contact ATC.						
Alt Set: hPa		QNH on req (QFE)		Trans level: By ATC		
				Trans alt: By ATC		

ALT/HEIGHT CONVERSION

QNH	(QFE)
5030' (4925' - 1500m)	
4050' (3945' - 1200m)	
3060' (2955' - 900m)	
2410' (2305' - 700m)	
1750' (1645' - 500m)	
1590' (1485' - 450m)	



LOC (GS out)	DLC DME	7.0	6.0	5.0	4.0	3.0	2.0	1.0
	ALTITUDE	2560'	2210'	1860'	1510'	1160'	810'	460'



TO DISPLACED THRESHOLD							RWY 10 105'			
Gnd speed-Kts	70	90	100	120	140	160				
ILS GS 3.30° or LOC Descent Gradient 5.8%	414	532	591	710	828	946				
MAP at LMM/D0.8 DLC										

STRAIGHT-IN LANDING RWY10				CIRCLE-TO-LAND			
ILS		LOC (GS out)					
DA(H)		MDA(H) 1290' (1185')					
A: 456' (351') C: 476' (371')							
B: 466' (361') D: 486' (381')							
FULL		ALS out					
A		1500m		2000m			
B		1600m		2400m			
C							
D		1700m		4800m			

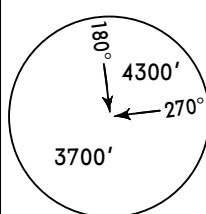
PANS OPS 4

ZYTL/DLC
ZHOUSHUIZI

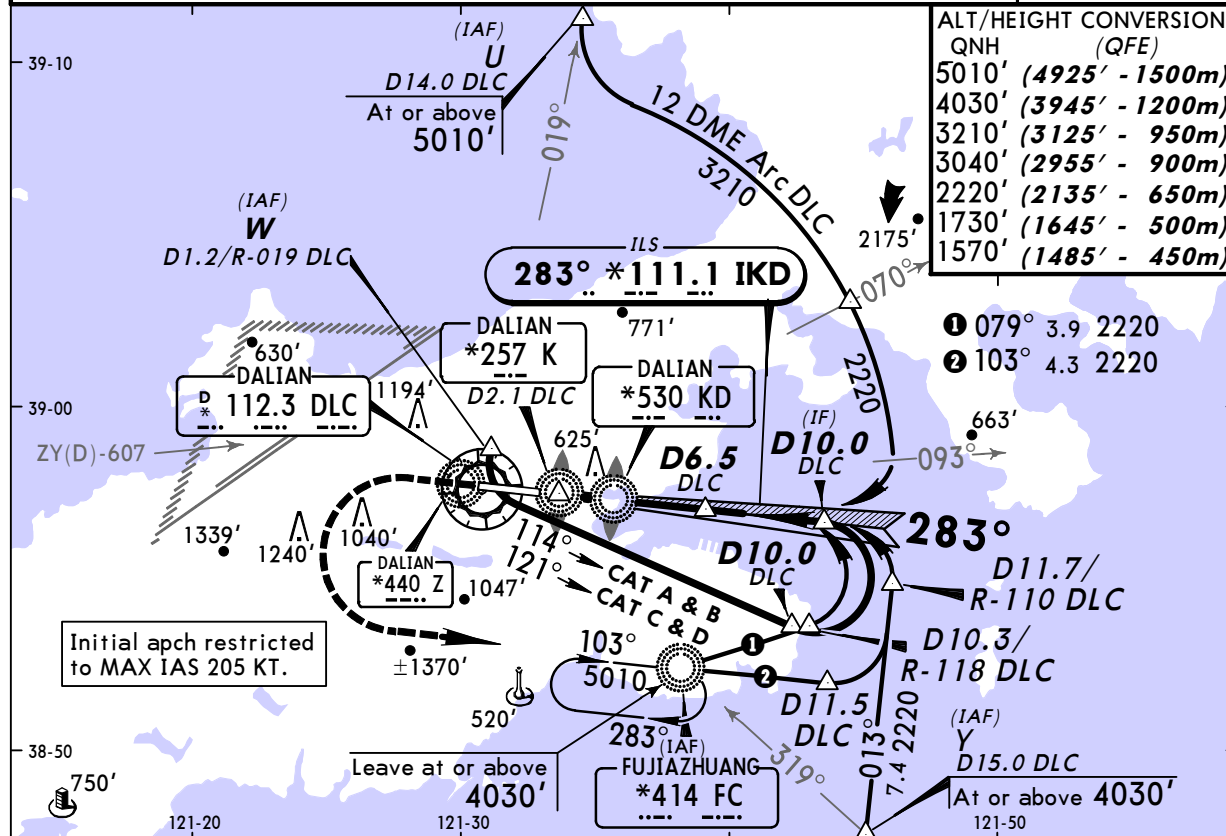
JEPPESSEN
11 JUN 04 (11-2)

DALIAN, PR OF CHINA
ILS DME Rwy 28

BRIEFING STRIP

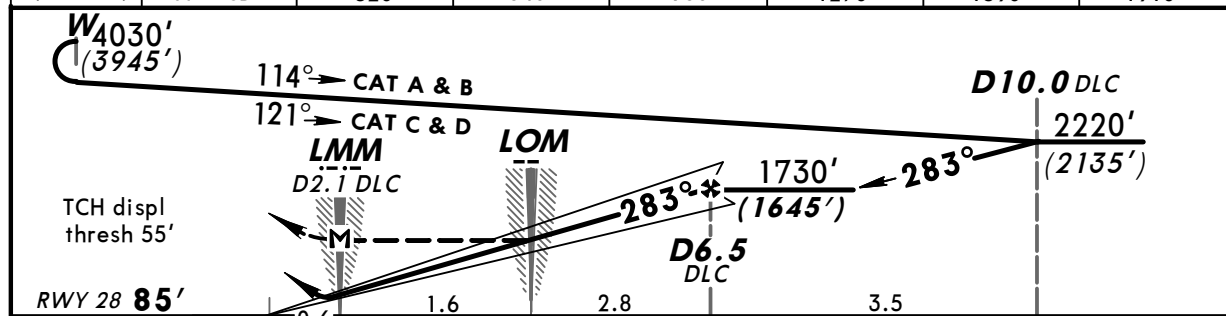
*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85		1200 - 0100 118.25	*DALIAN Tower 118.25	 MSA DLC VOR
LOC IKD *111.1	Final Apch Crs 283°	GS D6.5 DLC 1730' (1645')	ILS DA(H) Refer to Minimums		Apt Elev 105' RWY 85'	
MISSED APCH: Climb STRAIGHT AHEAD to 1570' (1485'), then turn LEFT (MAX IAS 205 KT) to reach FC NDB at 3040' (2955') and contact ATC.						
Alt Set: hPa		QNH on req (QFE)	Trans level: By ATC		Trans alt: By ATC	

Alt Set: hPa QNH on req (QFE) Trans level: By ATC Trans alt: By ATC



ALT/HEIGHT CONVERSION	
QNH	(QFE)
5010'	(4925' - 1500m)
4030'	(3945' - 1200m)
3210'	(3125' - 950m)
3040'	(2955' - 900m)
2220'	(2135' - 650m)
1730'	(1645' - 500m)
1570'	(1485' - 450m)

LOC (GS out)	DLC DME	2.0	3.0	4.0	5.0	6.0	7.0
	ALTITUDE	320'	640'	960'	1270'	1590'	1910'



Gnd speed-Kts	70	90	100	120	140	160	HIALS	1570' (1485')	3040' (2955')	205 KT MAX	FC 414
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	485	539	647	755	862	PAPI	↑	←		
MAP at LMM/D2.1 DLC											

STRAIGHT-IN LANDING RWY28				LOC (GS out)		CIRCLE-TO-LAND	
Missed apch climb gradient mim 5.0%		Missed apch climb gradient mim 2.5%		MDA(H)		Max Kts	
A: 318' (233') C: 338' (253')		A: 427' (342') C: 446' (361')		870' (785')		100	
B: 328' (243') D: 348' (263')		B: 436' (351') D: 456' (371')				135	
FULL	ALS out	FULL	ALS out	ALS out		1570' (1465') 2000m	
A		900m		RVR 720m VIS 800m	RVR 1500m VIS 1600m	1570' (1465') 2400m	
B		1000m		1200m	2000m	1670' (1565') 4800m	
C		1800m		2800m	3600m		
D				3200m	4000m		

CHANGES: See other side.

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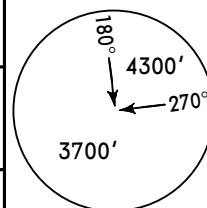
ZYTL/DLC
ZHOUSHUIZI

JEPPesen
21 MAY 04 (13-1)

DALIAN, PR OF CHINA
VOR DME Rwy 10

BRIEFING STRIP

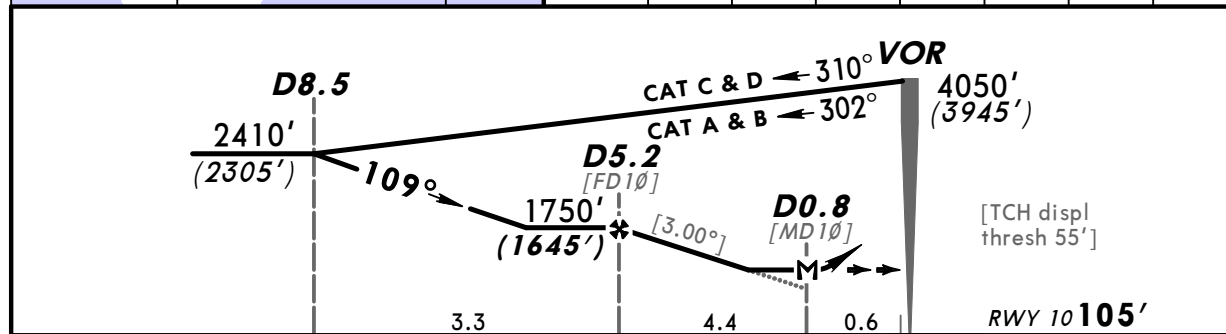
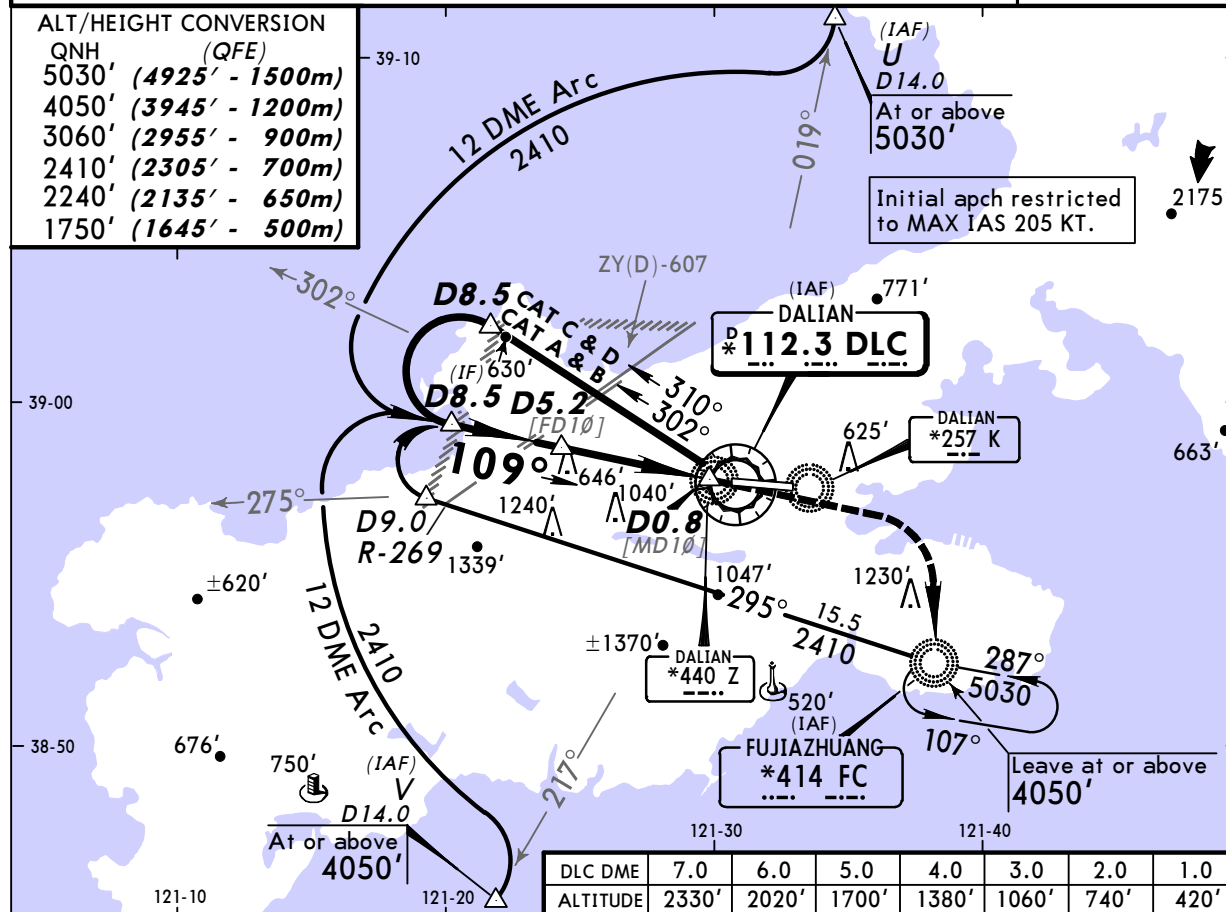
*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85 1200 - 0100 118.25		*DALIAN Tower 118.25
VOR DLC *112.3	Final Apch Crs 109°	Minimum Alt D5.2 1750' (1645')	MDA(H) 1290' (1185')	Apt Elev 105' RWY 105'
MISSED APCH: Climb STRAIGHT AHEAD to 2240' (2135'), then turn RIGHT (MAX IAS 205 KT) to reach FC NDB at 3060' (2955') and contact ATC.				
Alt Set: hPa		QNH on req (QFE)		Trans alt: By ATC



MSA
DLC VOR

ALT/HEIGHT CONVERSION

QNH	(QFE)
5030' (4925' - 1500m)	
4050' (3945' - 1200m)	
3060' (2955' - 900m)	
2410' (2305' - 700m)	
2240' (2135' - 650m)	
1750' (1645' - 500m)	



Gnd speed-Kts	70	90	100	120	140	160	HIALS	2240' (2135')	3060' (2955')	205 KT MAX	FC 414
Descent Gradient 5.24% or Descent angle [3.00°]	372	478	531	637	743	849	PAPI				
MAP at D0.8											

STRAIGHT-IN LANDING RWY 10				CIRCLE-TO-LAND			
MDA(H) 1290' (1185')							
ALS out				Max Kts	MDA(H)		
A	2000m			100	1570' (1465')	2000m	
B	2400m			135	1570' (1465')	2400m	
C				180			
D	4800m			205	1670' (1565')	4800m	

PANS OPS 4

ZYTL/DLC
ZHOUSHUIZI

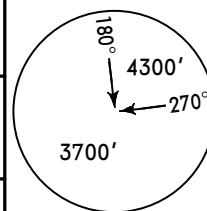
JEPPESSEN
21 MAY 04 **(13-2)**

DALIAN, PR OF CHINA
VOR DME Rwy 28

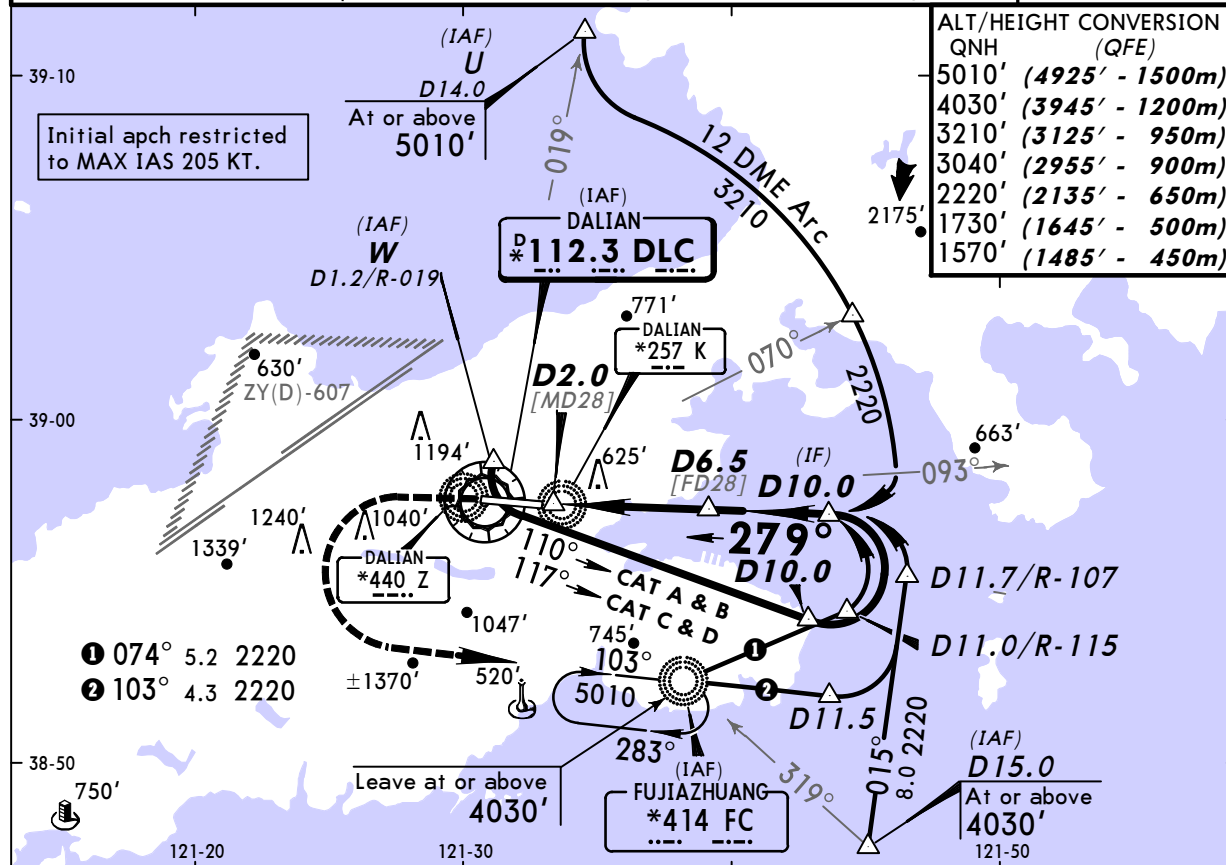
BRIEFING STRIP™

*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85		1200 - 0100 118.25	*DALIAN Tower 118.25
VOR DLC *112.3	<i>Final Apch Crs</i> 279°	<i>Minimum Alt D6.5</i> 1730' (1645')	<i>MDA(H)</i> 880' (795')	<i>Apt Elev 105'</i> <i>RWY 85'</i>	
MISSED APCH: Climb STRAIGHT AHEAD to 1570' (1485'), then turn LEFT (MAX IAS 205 KT) to reach FC NDB at 3040' (2955') and contact ATC.					
Alt Set: hPa		QNH on req (QFE)	Trans level: By ATC		Trans alt: By ATC

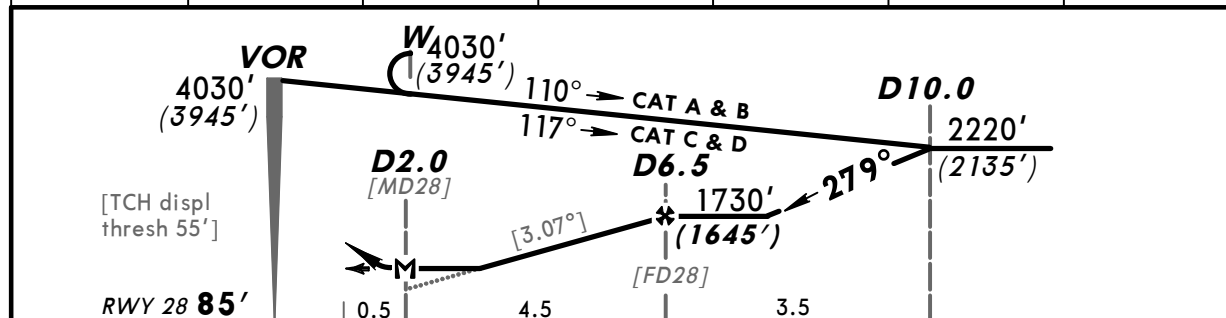
MSA
DLC VOR



MSA
DLC VOR



DLC DME	2.0	3.0	4.0	5.0	6.0	7.0
ALTITUDE	310'	630'	950'	1260'	1580'	1890'



Gnd speed-Kts	70	90	100	120	140	160	HIALS	1570' (1485')	3040' (2955')	205 KT MAX	FC 414
Descent Gradient 5.36% or Descent angle [3.07°]	380	489	543	652	760	869	PAPI				
MAP at D2.0											

STRAIGHT-IN LANDING RWY 28				CIRCLE-TO-LAND	
MDA(H) 880' (795')					
		ALS out		Max Kts.	MDA(H)
A	RVR 720m VIS 800m	RVR 1500m VIS 1600m		100	1570' (1465') 2000m
B	1200m	2000m		135	1570' (1465') 2400m
C	2800m	3600m		180	1670' (1565') 4800m
D	3200m	4000m		205	

PANS OPS 4

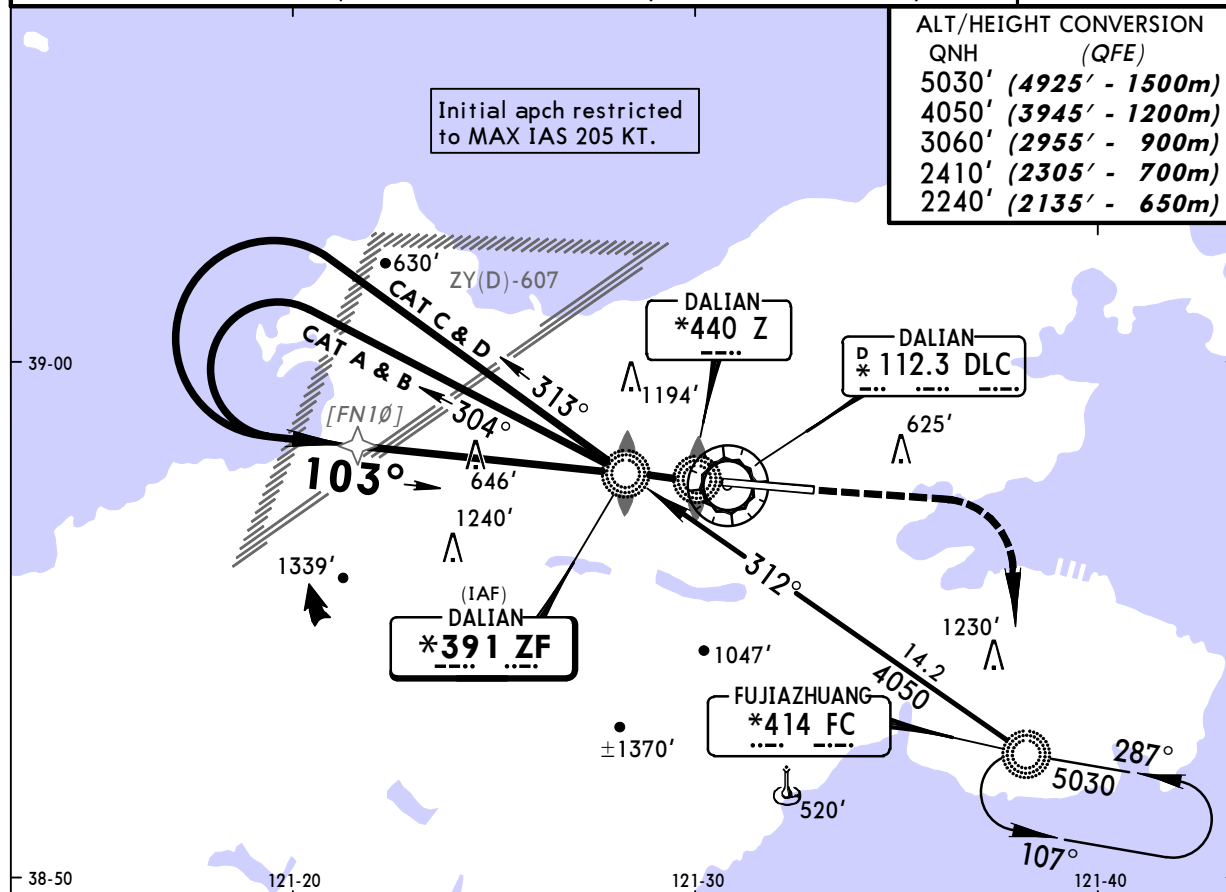
ZYTL/DLC
ZHOUSHUIZI

JEPPesen
21 MAY 04 (16-1)

DALIAN, PR OF CHINA
NDB Rwy 10

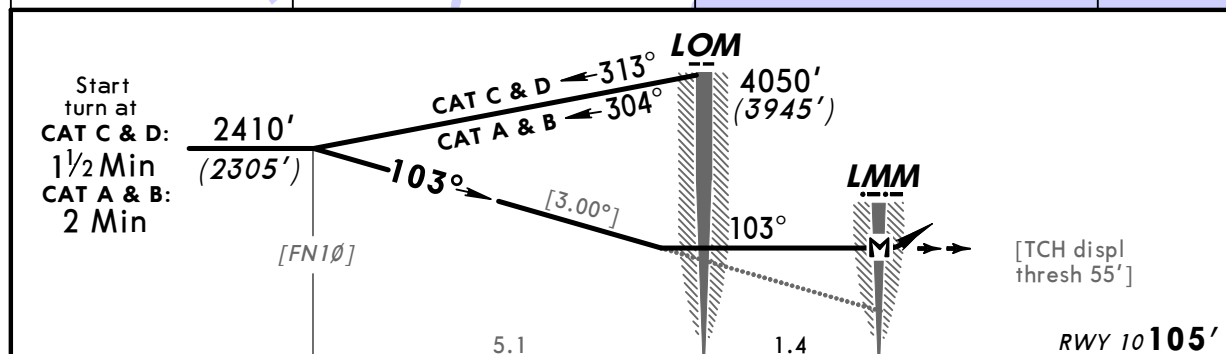
BRIEFING STRIP

*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85		1200 - 0100 118.25	*DALIAN Tower 118.25	 MSA DLC VOR
NDB ZF *391	Final Apch Crs 103°	Minimum Alt No FAF	MDA(H) 1390'(1285')	Apt Elev 105' RWY 105'		
MISSED APCH: Climb STRAIGHT AHEAD to 2240' (2135'), then turn RIGHT (MAX IAS 205 KT) to reach FC NDB at 3060' (2955') and contact ATC.						
Alt Set: hPa		QNH on req (QFE)	Trans level: By ATC		Trans alt: By ATC	



ALT/HEIGHT CONVERSION

QNH	(QFE)
5030'	(4925' - 1500m)
4050'	(3945' - 1200m)
3060'	(2955' - 900m)
2410'	(2305' - 700m)
2240'	(2135' - 650m)



TO DISPLACED THRESHOLD							RWY 10 105'			
Gnd speed-Kts	70	90	100	120	140	160	HIALS	2240' (2135')	3060' (2955')	205 KT MAX
Descent Gradient 5.24% or Descent angle [3.00°]	372	478	531	637	743	849	PAPI	↑	RT	FC 414
MAP at LMM										

STRAIGHT-IN LANDING RWY 10				CIRCLE-TO-LAND			
MDA(H) 1390'(1285')				Max Kts			
ALS out				MDA(H)			
A	2000m			100	1570' (1465')		2000m
B	2400m			135	1570' (1465')		2400m
C	4800m			180	1670' (1565')		4800m
D				205			

PANS OPS 4

ZYTL/DLC
ZHOUSHUIZI

JEPPesen
21 MAY 04 (16-2)

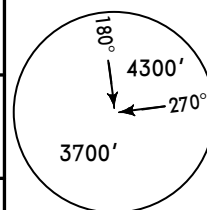
DALIAN, PR OF CHINA
NDB Rwy 28

BRIEFING STRIP

*ATIS 126.65		DALIAN Approach 0100 - 1200 123.85		1200 - 0100 118.25	*DALIAN Tower 118.25
Lctr K *257	Final Apch Crs 283°	Minimum Alt 219° FC NDB 2220' (2135')	MDA(H) 880' (795')	Apt Elev 105' RWY 85'	
MISSED APCH: Climb STRAIGHT AHEAD to 1570' (1485'), then turn LEFT (MAX IAS 205 KT) to reach FC NDB at 3040' (2955') and contact ATC.					
Alt Set: hPa		QNH on req (QFE)	Trans level: By ATC		Trans alt: By ATC

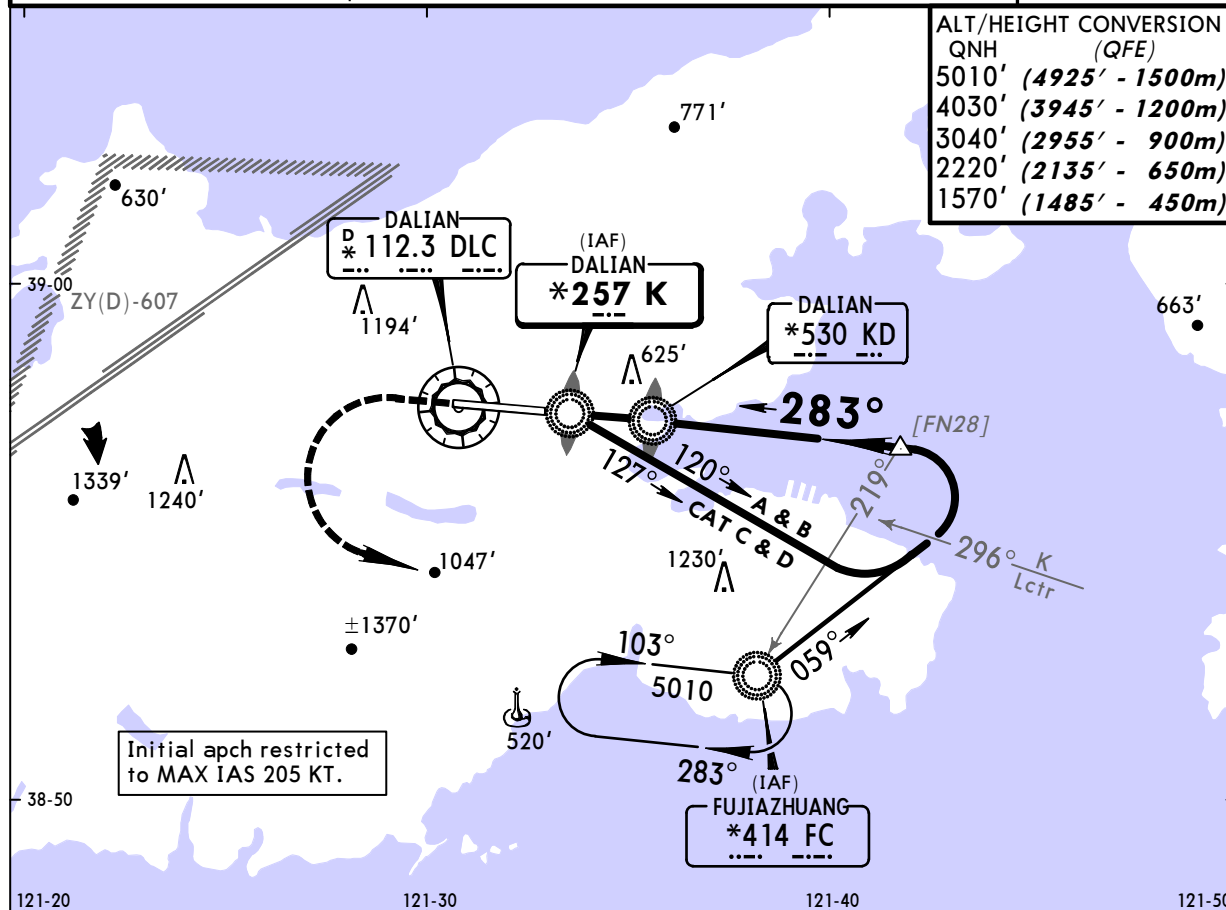
180°
4300'
270°
3700'

MSA
DLC VOR

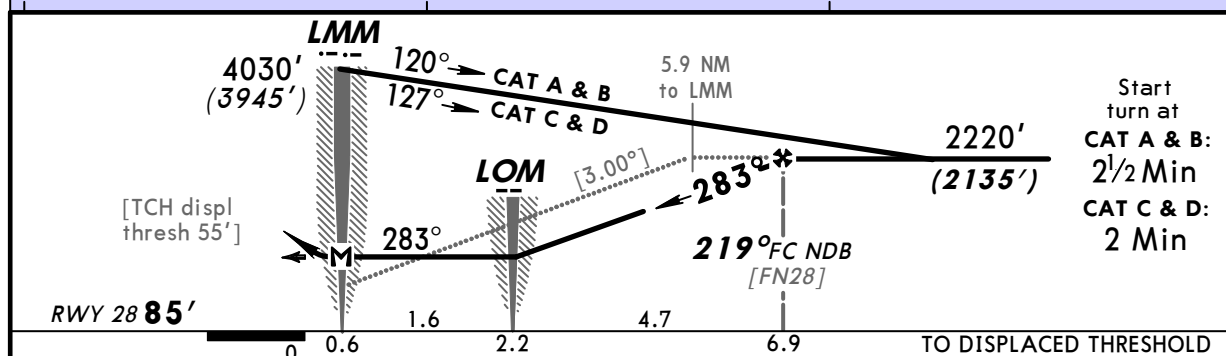


MSA
DLC VOR

ALT/HEIGHT CONVERSION	QNH (QFE)
5010'	(4925' - 1500m)
4030'	(3945' - 1200m)
3040'	(2955' - 900m)
2220'	(2135' - 650m)
1570'	(1485' - 450m)



Initial apch restricted to MAX IAS 205 KT.



Gnd speed-Kts	70	90	100	120	140	160	HIALS	1570' (1485')	3040' (2955')	205 KT MAX	FC 414
Descent Gradient 5.24% or Descent angle [3.00°]	372	478	531	637	743	849	PAPI	↑	LT		
MAP at LMM											

STRAIGHT-IN LANDING RWY 28				CIRCLE-TO-LAND	
MDA(H) 880' (795')				Max Kts	MDA(H)
ALS out				100	1570' (1465') 2000m
RVR 1500m VIS 1600m				135	1570' (1465') 2400m
2000m				180	1670' (1565') 4800m
3600m				205	
4000m					

PANS OPS 4