

General Info

Ningbo, CHN

N 29°49.4' E121°27.8' Mag Var: 4.5°

Elevation: 13'

Public, Control Tower, IFR, No Fee, Customs

Fuel: Jet

Time Zone Info: GMT+8:00 no DST

Runway Info

Runway 13-31 10499' x 148' concrete

Runway 13 (128.0m) TDZE 13'

Lights: Edge, ALS, Centerline

Right Traffic

Displaced Threshold Distance 492'

Runway 31 (308.0m) TDZE 13'

Lights: Edge, ALS, Centerline

Communications Info

ATIS **126.45**

Ningbo Tower **130.0** Secondary

Ningbo Tower **118.35**

Ningbo Ground Control **121.85**

Notebook Info

ZSNB/NGB
LISHE

JEPPESSEN
3 AUG 07 **10-2**

NINGBO, PR OF CHINA

STAR

ATIS
126.45

Apt Elev
13'

Alt Set: hPa

Trans Level: FL118

Trans alt: 9850'

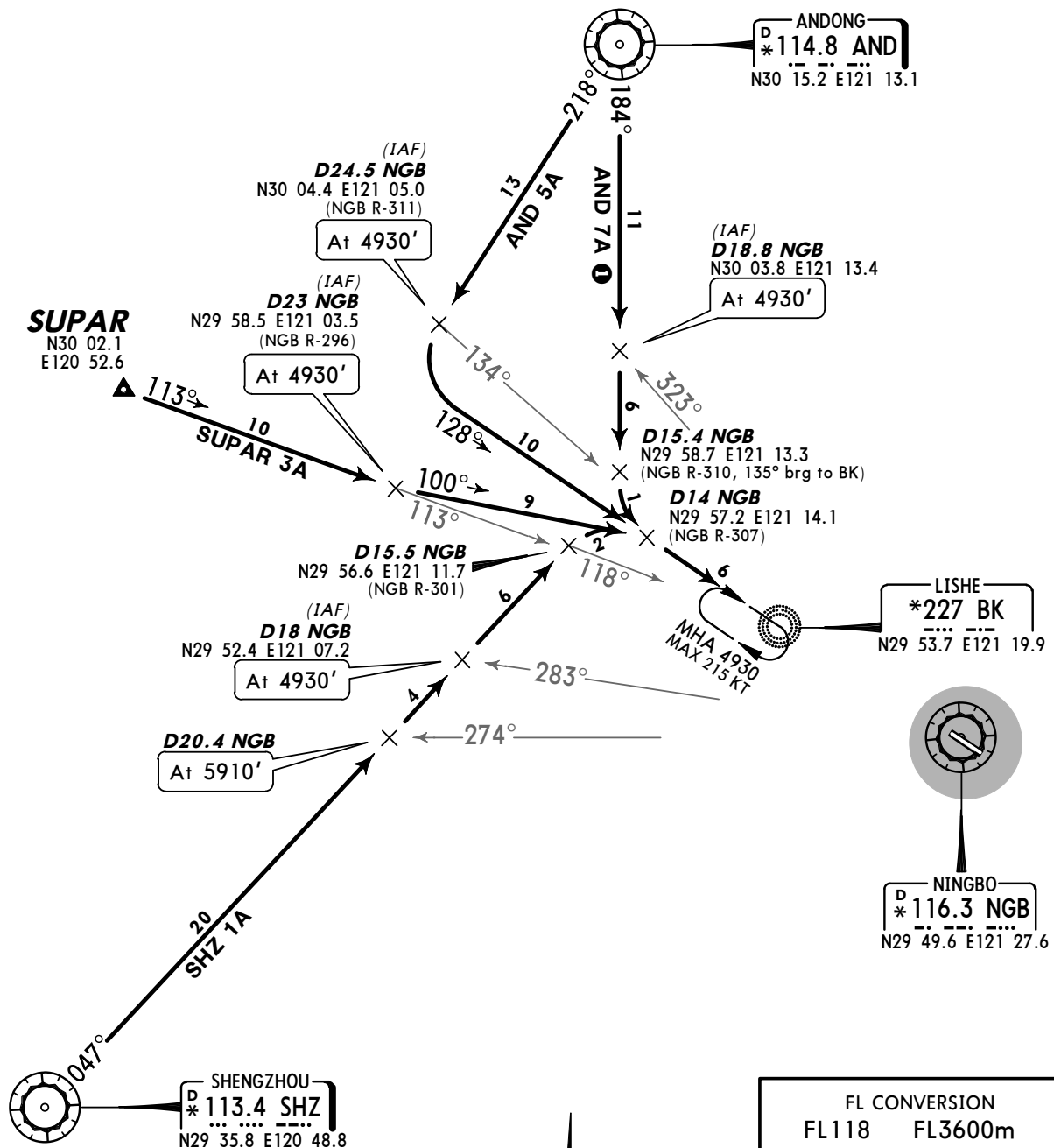
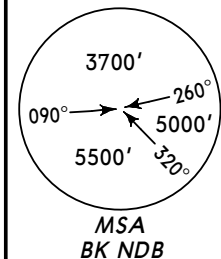
10830' 1031 hPa or above

8860' 979 hPa or below

Initial approach MAX 205 KT.

**AND 5A, AND 7A ①, SHZ 1A
SUPAR 3A [SUPA3A]
RWY 13 ARRIVALS**

① By ATC



FL CONVERSION
FL118 FL3600m

FT/METER CONVERSION
QNH
10830' - 3300m
9850' - 3000m
8860' - 2700m
5910' - 1800m
4930' - 1500m

ZSNB/NGB
LISHE

JEPPesen
3 AUG 07 **(10-2A)**

NINGBO, PR OF CHINA

STAR

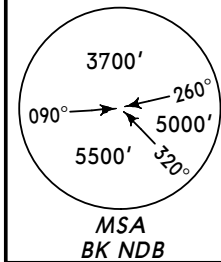
ATIS
126.45

Apt Elev
13'

Alt Set: hPa
Trans Level: FL118 Trans alt: 9850'
10830' 1031 hPa or above
8860' 979 hPa or below
Initial approach MAX 205 KT.

AND 6A, AND 8A ①, SHZ 2A, SHZ 4A ①
SUPAR 4A [SUPA4A]
RWY 31 ARRIVALS

① By ATC



ANDONG
D *114.8 AND
N30 15.2 E121 13.1

SUPAR
N30 02.1
E120 52.6

D25 NGB
N30 01.1
E121 02.6
(NGB R-302)

D23 NGB
(NGB R-296)
At 4930'

LISHE
*227 BK
N29 53.7 E121 19.9

(IAF)
NINGBO
D *116.3 NGB
N29 49.6 E121 27.6
At 3940'

MHA 4930
MAX 215 KT

(IAF)
D14 NGB
N19 35.6
E121 26.8
At 5910'

SHENGZHOU
D *113.4 SHZ
N29 35.8 E120 48.8



FL CONVERSION
FL118 FL3600m

FT/METER CONVERSION

QNH

10830' - 3300m
9850' - 3000m
8860' - 2700m
5910' - 1800m
4930' - 1500m
3940' - 1200m

ZSNB/NGB
LISHE

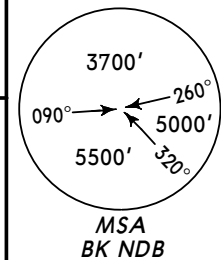
JEPPesen
12 MAY 06 **10-3**

NINGBO, PR OF CHINA

SID

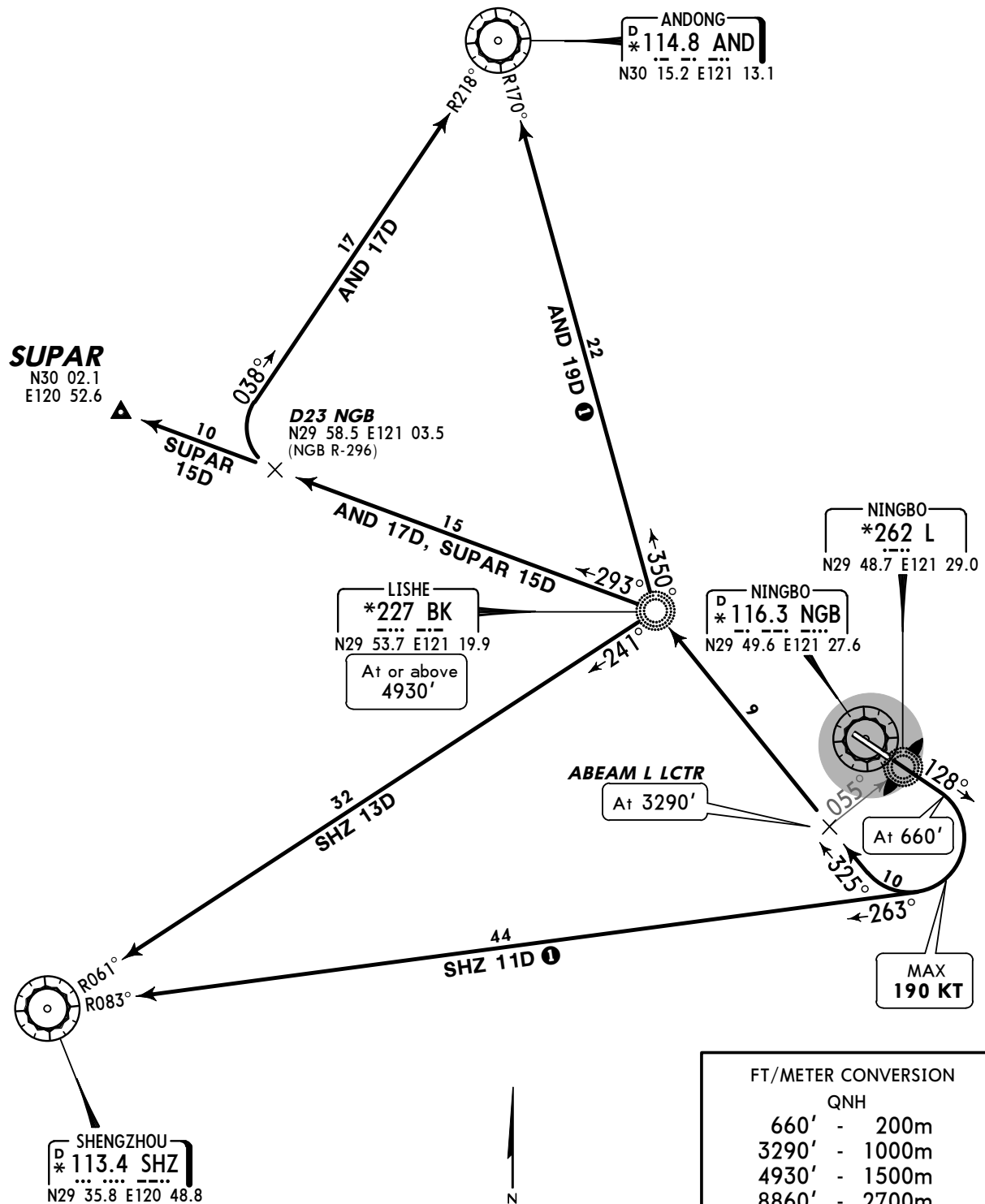
Apt Elev
13'

Trans Level: FL118 Trans alt: 9850'
10830' 1031 hPa or above
8860' 979 hPa or below



AND 17D, AND 19D ①, SHZ 11D ①, SHZ 13D
SUPAR 15D [SUP15D]
RWY 13 DEPARTURES

① By ATC



NOT TO SCALE

FT/METER CONVERSION

QNH

660'	-	200m
3290'	-	1000m
4930'	-	1500m
8860'	-	2700m
9850'	-	3000m
10830'	-	3300m

FL CONVERSION

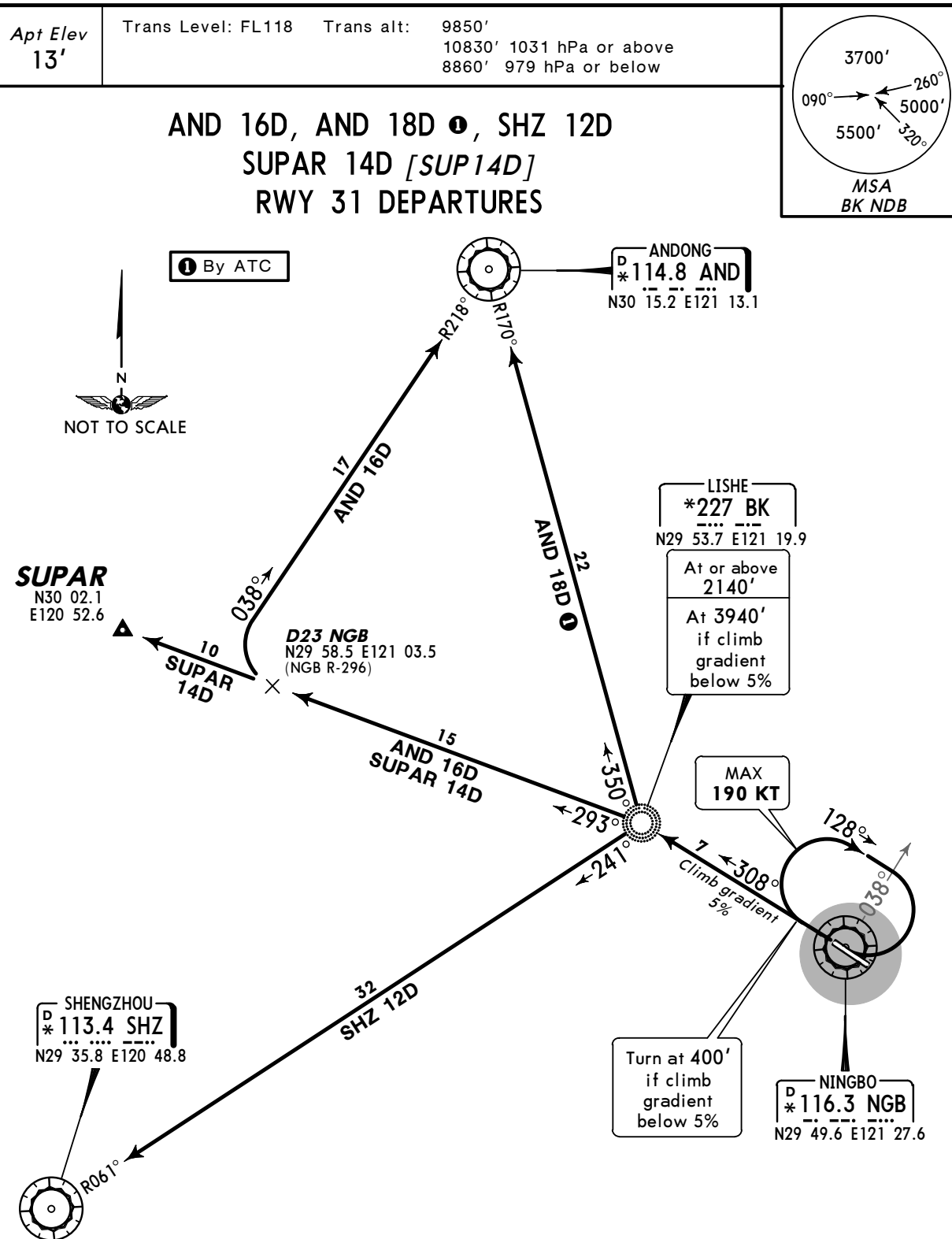
FL118 FL3600m

ZSNB/NGB
LISHE

JEPPESSEN
12 MAY 06 **(10-3A)**

NINGBO, PR OF CHINA

SID



These SIDs require a minimum climb gradient of 304' per NM (5%).

Gnd speed-KT	75	100	150	200	250	300
304' per NM	380	506	760	1013	1266	1519
213' per NM	266	354	532	709	886	1063

If unable to achieve a minimum climb gradient of 304' per NM (5%):
 Climb straight ahead to 400' with a minimum climb gradient of 213' per NM (3.5%), turn RIGHT, 128° track to Abeam NGB, turn RIGHT, intercept 308° bearing to BK. Cross BK at 3940'.
 This procedure ought to be permitted by ATC before take-off.

FT/METER CONVERSION

QNH

400'	-	120m
2140'	-	650m
3940'	-	1200m
8860'	-	2700m
9850'	-	3000m
10830'	-	3300m

FL CONVERSION

FL118 FL3600m

ZSNB/NGB

Apt Elev **13'**
N29 49.4 E121 27.8

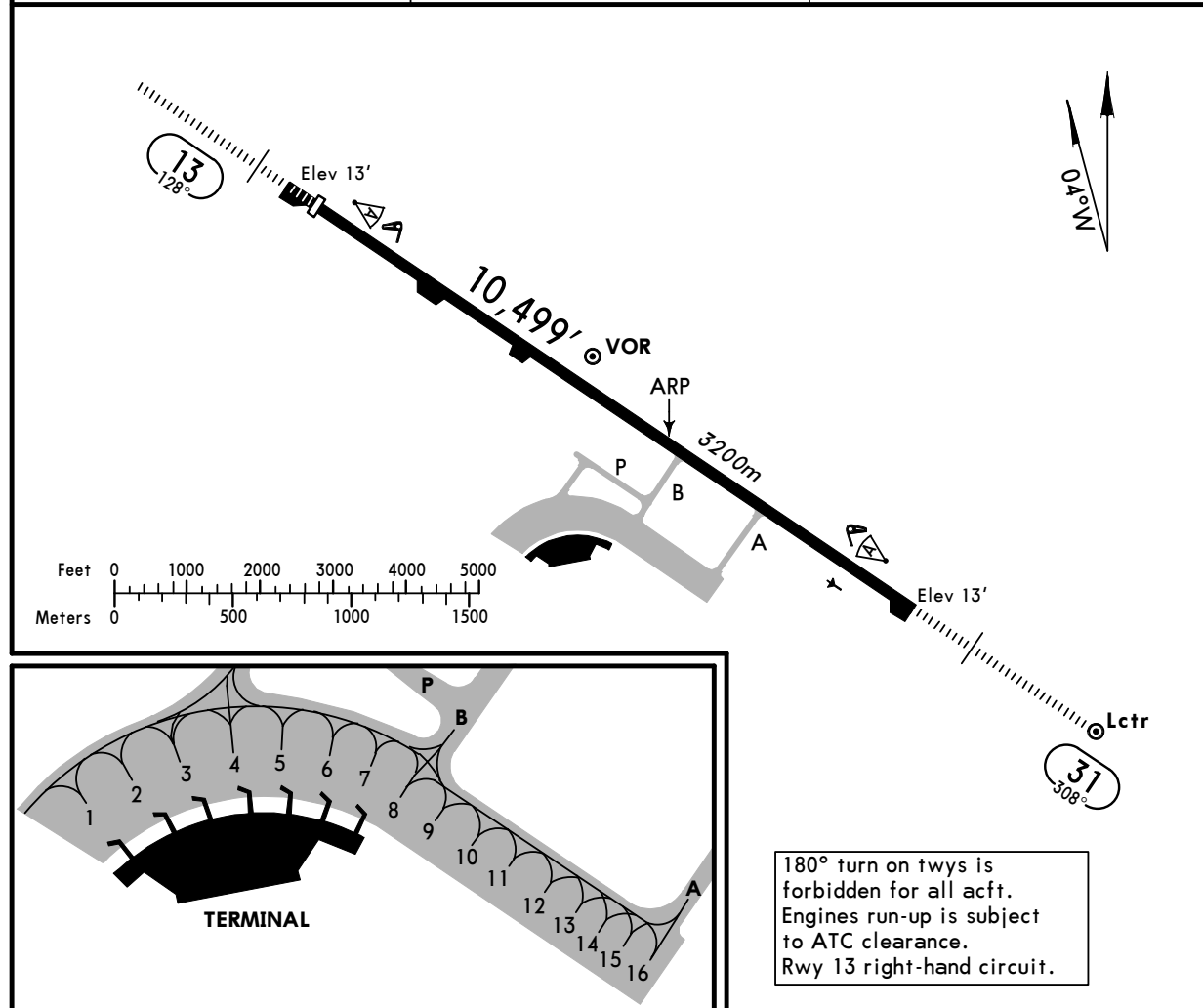
JEPPESEN

3 AUG 07 **(10-9)**

NINGBO, PR OF CHINA

LISHE

*ATIS	NINGBO Ground	Tower
126.45	121.85	118.35



ADDITIONAL RUNWAY INFORMATION						
RWY		USABLE LENGTHS		TAKE-OFF	WIDTH	
		Threshold	Landing Beyond			
13 31	HIRL (60m) CL (30m) HIALS SFL PAPI-L ① RVR	10,007' 3050m	9059' 2761m		148' 45m	
			9502' 2896m			

① (angle 3.0°)

TAKE-OFF		
All Rwys ①		
	RL	NIL (DAY only)
2 TURB Eng or 3&4 Eng	RVR 400m VIS 800m	RVR 500m VIS 800m
Other	VIS 1600m	

① RWY 31: Ceiling 650m, VIS 5000m if climb gradient is less than 5.0% and circling climb not permitted.

ZSNB/NGB

JEPPESEN
3 AUG 07 (10-9A)

NINGBO, PR OF CHINA

LISHE

AIRCRAFT DOCKING GUIDANCE SYSTEM**Stop taxiing, marshalled by marshaller:**

The aircraft must be identified at least 39'/12m before the correct stop position. If this does not occur, the system displays "STOP" and then "ID FAIL" with two red rectangular fields being lighted.

**Follow the lead-in line.**

The correct aircraft type is displayed.

The scrolling arrows indicate that the system is activated.

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 the direction to steer.

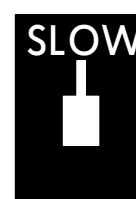
When the aircraft is 39'/12m from the stop position, closing rate information is given.

12m to 2m 1m steps
2m to Stop position 0.2m steps

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



The system also displays a "SLOW DOWN" sign when the aircraft exceeds the speed of 4m/s(7.7 KT). This is to minimize instances of aircraft overshooting the stopbar.

**Display indicating.**

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.

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



If the aircraft has gone past the correct stop position more than 3'/1m, the display will show "TOO FAR".



On seeing a wrong aircraft type displayed on the system, the pilot should stop the aircraft immediately.

When using the docking system, pilots are to be following taxi centerline into the stand at minimum operating speed.

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 marshaller.

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.

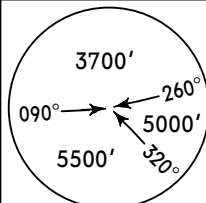
If the pilot is unsure of the information being shown on the DGS display unit, he must immediately stop the aircraft and obtain further information.

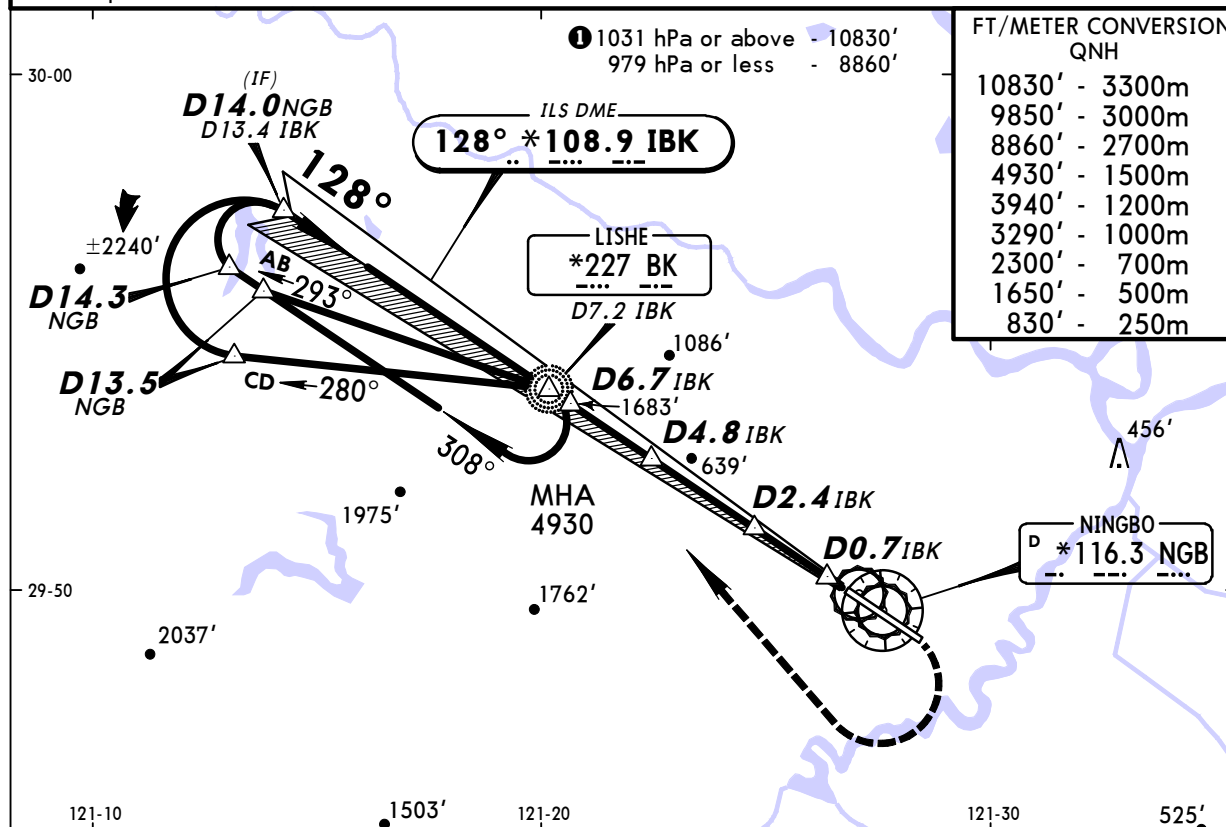
ZSNB/NGB
LISHE

JEPPesen
3 AUG 07 **(11-1)**

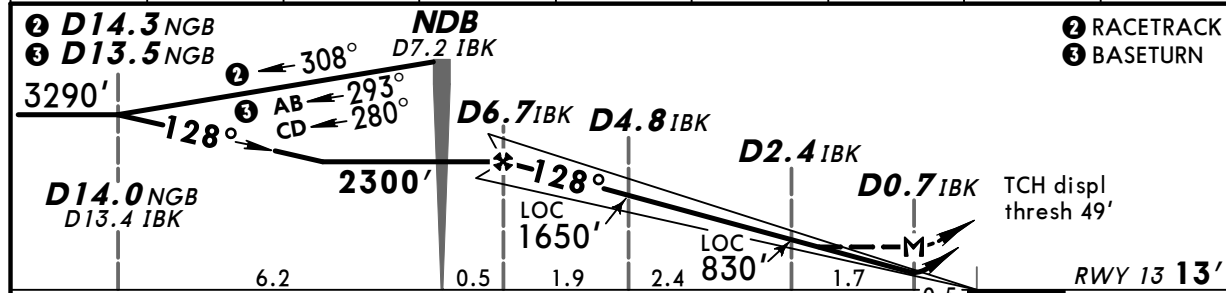
NINGBO, PR OF CHINA
ILS DME Rwy 13

BRIEFING STRIP

*ATIS 126.45		NINGBO Tower 118.35		Ground 121.85		
LOC IBK *108.9	Final Apch Crs 128°	GS D6.7 IBK 2300' (2287')	ILS DA(H) Refer to Minimums	Apt Elev 13' RWY 13'		
MISSED APCH: Climb STRAIGHT AHEAD to 830', then turn RIGHT to reach NDB at 3940'. MAX 190 KT.						
Alt Set: hPa Initial apch restricted to MAX 205 KT.						
Rwy Elev: 0 hPa		Trans level: FL 118		Trans alt: 9850' 1		MSA BK NDB



LOC (GS out)	IBK DME ALTITUDE	7.0	6.0	5.0	4.0	3.0	2.0	1.0
		2300'	2050'	1710'	1370'	1040'	690'	350'



Gnd speed-Kts	70	90	100	120	140	160		190 KT	830'
ILS GS 3.20° or LOC Descent Gradient 5.6%	401	516	574	688	803	918		MAX	↑
MAP at D0.7 IBK									

STRAIGHT-IN LANDING RWY 13				CIRCLE-TO-LAND	
ILS		LOC (GS out)		Not authorized Northeast of rwy	
DA(H) ABC: 226' (213') D: 243' (230')		MDA(H) 430' (417')		MDA(H)	
FULL	ALS out		ALS out	Max Kts	
A		RVR 720m VIS 800m	RVR 1500m VIS 1600m	100	690' (677') 1600m
B				135	
C	RVR 720m VIS 800m	1200m		180	1370' (1357') 4800m
D			2000m	205	2240' (2227') 4800m

PANS OPS 4

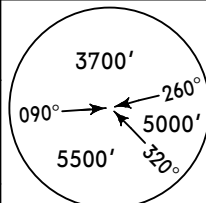
ZSNB/NGB
LISHE

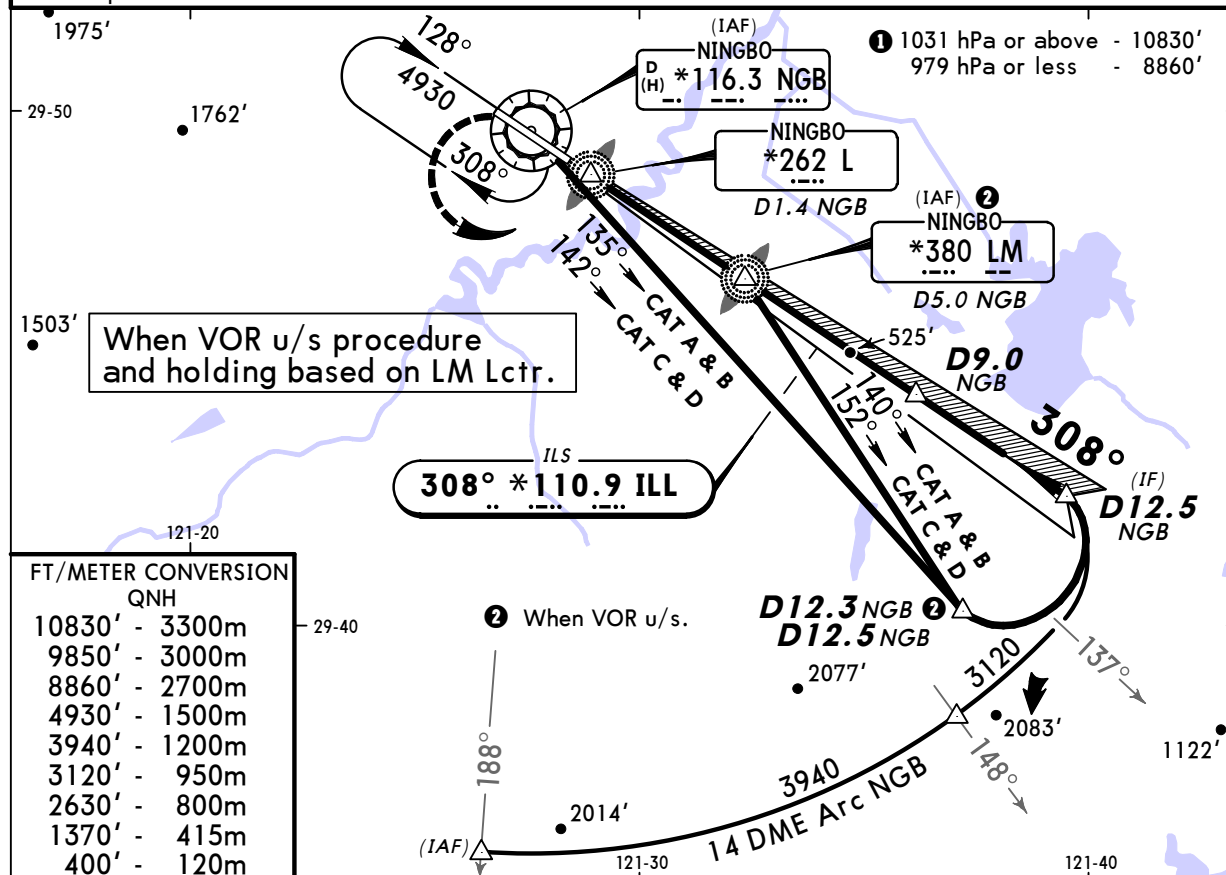
JEPPesen
3 AUG 07 **(11-2)**

MISSED APCH CLIMB
GRAD MIM 3.0%

NINGBO, PR OF CHINA
ILS DME Rwy 31

BRIEFING STRIP

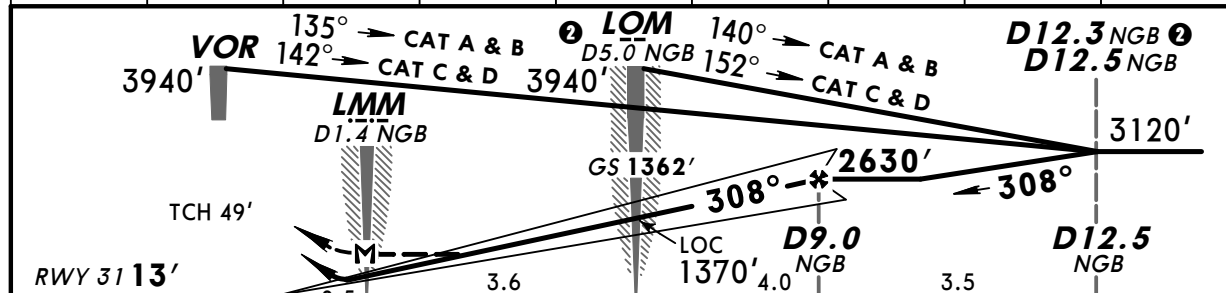
*ATIS		NINGBO Tower		Ground		
126.45		118.35		121.85		
LOC ILL *110.9	Final Apch Crs 308°	GS LOM 1362'(1349')	ILS DA(H) Refer to Minimums	Apt Elev 13' RWY 13'		
MISSED APCH: Climb STRAIGHT AHEAD to 400' (LOC (GS out): to VOR), then turn LEFT and join holding climbing to 3940'. Contact ATC. MAX 180 KT.						
Alt Set: hPa		Rwy Elev: 0 hPa		Trans level: FL 118		Trans alt: 9850' ①
Initial apch restricted to MAX 205 KT.						



FT/METER CONVERSION

QNH	
10830'	3300m
9850'	3000m
8860'	2700m
4930'	1500m
3940'	1200m
3120'	950m
2630'	800m
1370'	415m
400'	120m

LOC (GS out)	NGB DME	2.0	3.0	4.0	5.0	6.0	7.0	8.0
	ALTITUDE	410'	730'	1050'	1370'	1680'	2000'	2320'



Gnd speed-Kts	70	90	100	120	140	160		Refer to Missed Apch above
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	484	538	646	753	861		
MAP at LMM/D1.4 NGB								

STRAIGHT-IN LANDING RWY 31				CIRCLE-TO-LAND	
ILS Missed apch climb gradient mim 3.0% DA(H) C: 226' (213') AB: 213' (200') D: 243' (230')		LOC (GS out) Missed apch climb gradient mim 3.0% MDA(H) 430' (417')		Not authorized Northeast of rwy	
FULL	ALS out		ALS out	Max Kts	MDA(H)
A				100	690' (677') 1600m
B	RVR 720m VIS 800m	1200m	RVR 720m VIS 800m	135	
C			1200m	180	1370' (1357') 4800m
D			2000m	205	2240' (2227') 4800m

PANS OPS 4

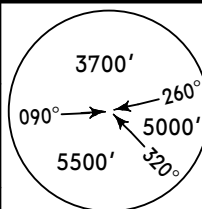
ZSNB/NGB
LISHE

JEPPesen
3 AUG 07 **(13-1)**

NINGBO, PR OF CHINA
VOR DME Rwy 13

BRIEFING STRIP

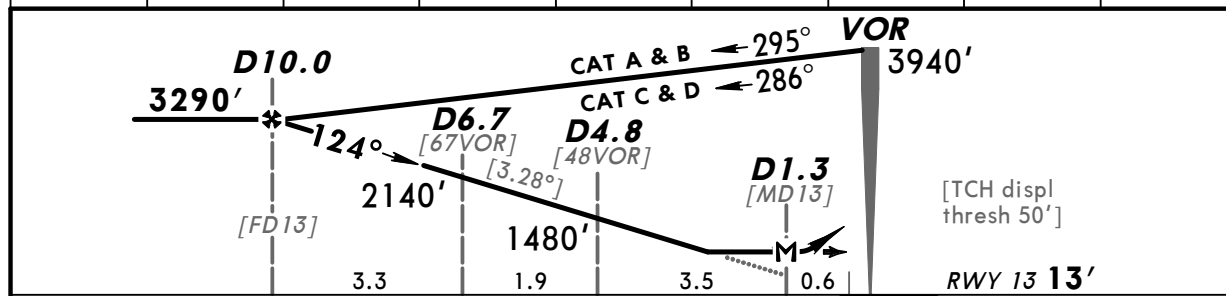
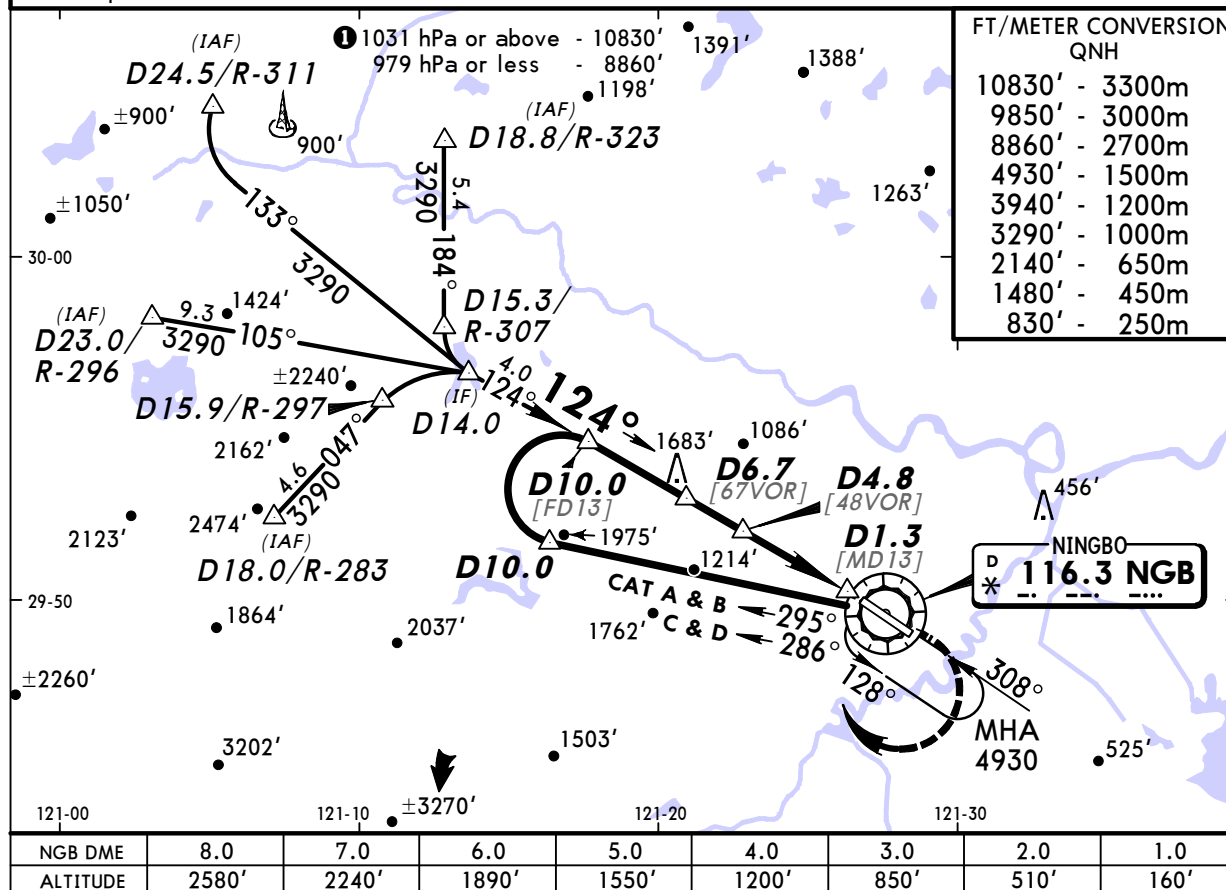
*ATIS 126.45		NINGBO Tower 118.35		Ground 121.85
VOR NGB *116.3	Final Apch Crs 124°	Minimum Alt D10.0 3290' (3277')	MDA(H) 430' (417')	Apt Elev 13' RWY 13'
MISSED APCH: Climb STRAIGHT AHEAD to 830', then turn RIGHT to reach VOR at 3940'. MAX 190 KT.				
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL 118 Trans alt: 9850' ① Initial apch restricted to MAX 205 KT.				



MSA
NGB VOR

FT/METER CONVERSION
QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
4930'	-	1500m
3940'	-	1200m
3290'	-	1000m
2140'	-	650m
1480'	-	450m
830'	-	250m



Gnd speed-Kts	70	90	100	120	140	160	HIALS		190 KT	830'
Descent gradient 5.72% or Descent angle [3.28°]	406	522	580	696	813	929	PAPI		MAX	↑
MAP at D1.3										

STRAIGHT-IN LANDING RWY 13				CIRCLE-TO-LAND			
MDA(H) 430' (417')				Not authorized Northeast of rwy			
			ALS out	Max Kts.			
A	RVR 720m VIS 800m	RVR 1500m VIS 1600m		100	690' (677')	1600m	
B				135			
C	1200m	2000m		180	1370' (1357')	4800m	
D	RVR 1500m VIS 1600m			205	2240' (2227')	4800m	

PANS OPS 4

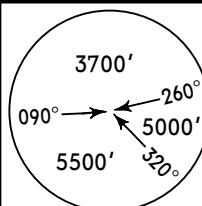
ZSNB/NGB
LISHE

JEPPesen
3 AUG 07 **(13-2)**

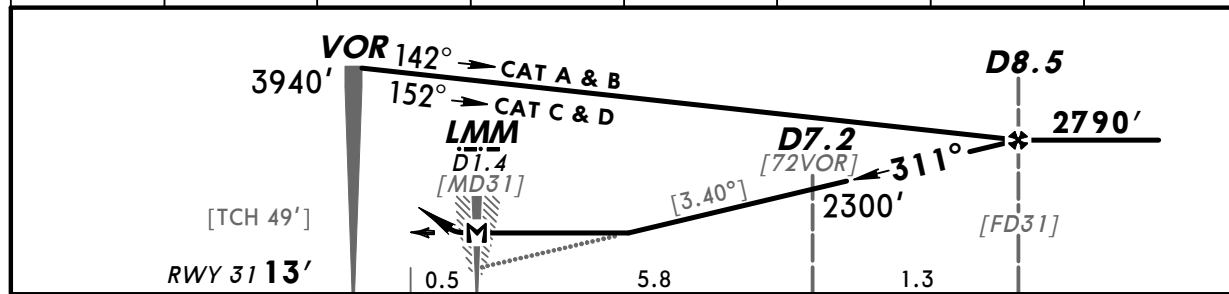
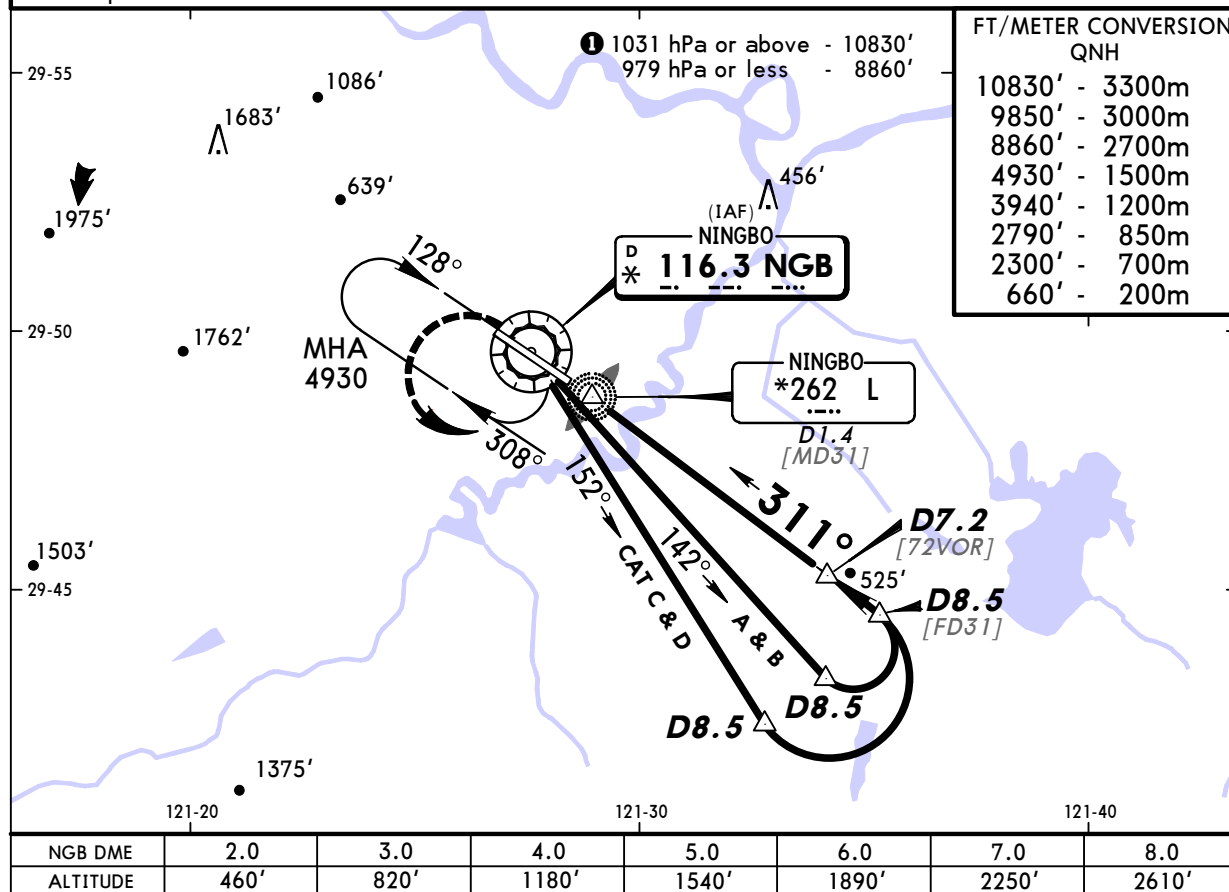
NINGBO, PR OF CHINA
VOR DME Rwy 31

BRIEFING STRIP

*ATIS 126.45		NINGBO Tower 118.35		Ground 121.85
VOR NGB *116.3	Final Apch Crs 311°	Minimum Alt D8.5 2790' (2777')	MDA(H) 430' (417')	Apt Elev 13' RWY 13'
MISSED APCH: Climb STRAIGHT AHEAD to VOR to at or above 660', then turn LEFT to join holding and continue climb to 3940' and contact ATC. MAX 180 KT.				
Alt Set: hPa Rwy Elev: 0 hPa Trans level: FL 118 Trans alt: 9850' ① Initial apch restricted to MAX 190 KT.				



MSA
NGB VOR



Gnd speed-Kts	70	90	100	120	140	160	HIALS PAPI 	180 KT MAX	MIM 660'	NGB 116.3
Descent gradient 5.94% or Descent angle [3.40°]	421	541	602	722	842	963				
MAP at LMM/D1.4										

STRAIGHT-IN LANDING RWY 31				CIRCLE-TO-LAND			
MDA(H) 430' (417')				Not authorized Northeast of rwy			
			ALS out	Max Kts	MDA(H)		
A	RVR 720m VIS 800m	RVR 1500m VIS 1600m		100	690' (677')		
B				135	1600m		
C	1200m	2000m		180	1370' (1357')		
D	RVR 1500m VIS 1600m			205	2240' (2227')		

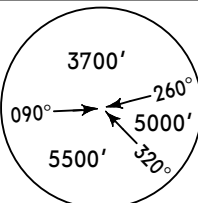
PANS OPS 4

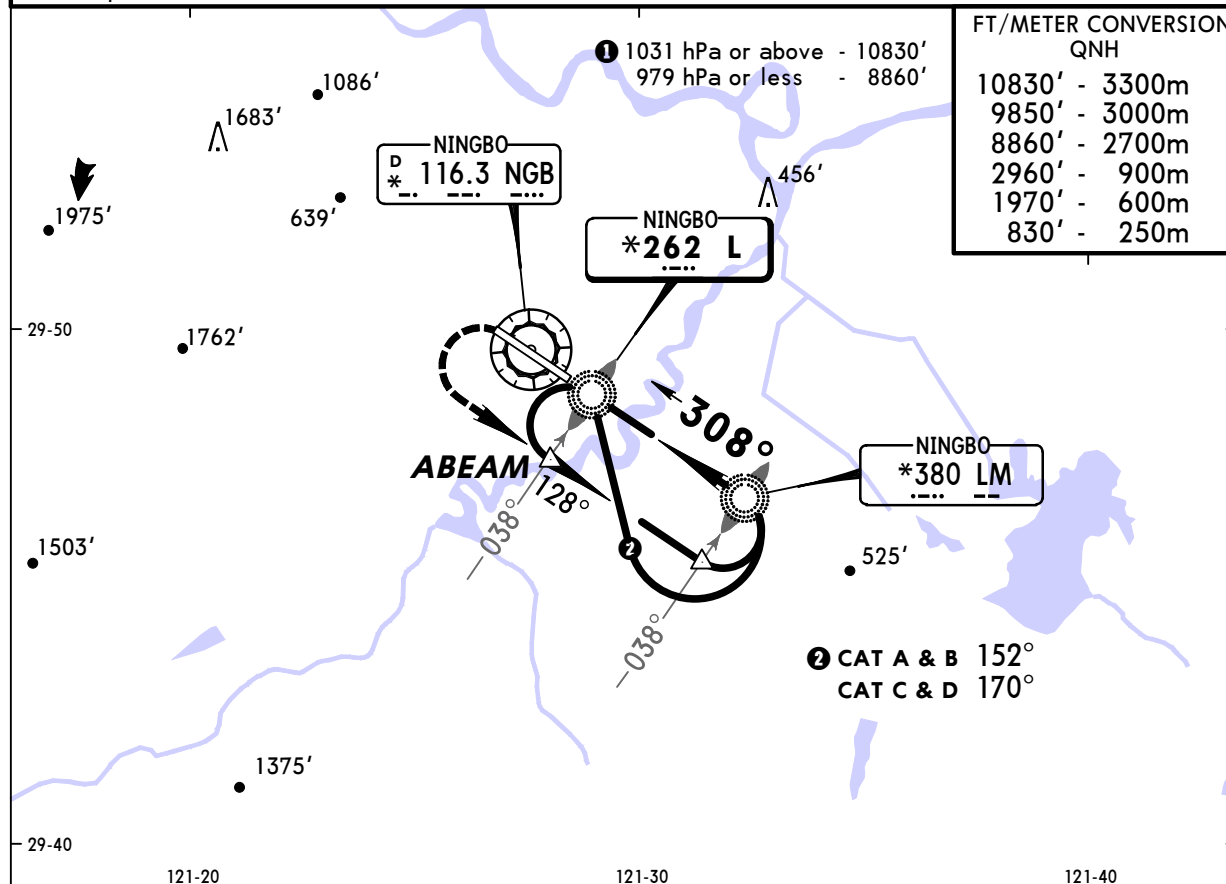
ZSNB/NGB
LISHE

JEPPesen
3 AUG 07 **(16-1)**

NINGBO, PR OF CHINA
CIRCLING NDB Rwy 31

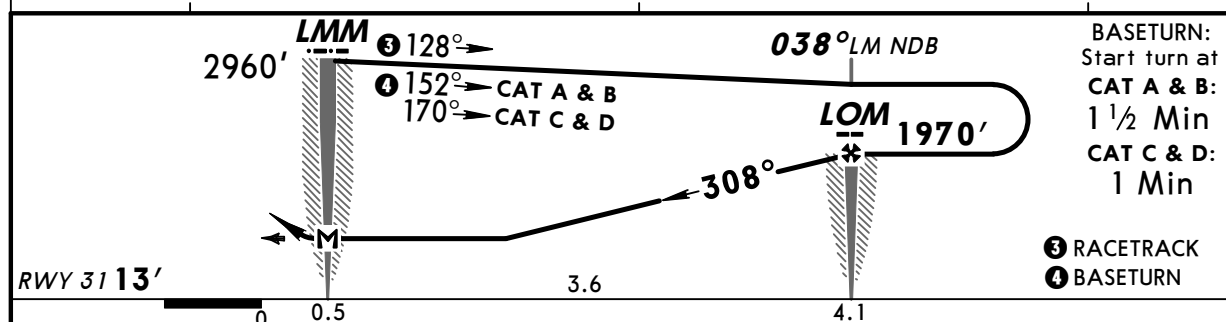
BRIEFING STRIP

*ATIS 126.45		NINGBO Tower 118.35		Ground 121.85		
Lctr L *262	Final Apch Crs 308°	Minimum Alt LOM 1970'(1957')	MDA(H) Refer to Minimums	Apt Elev 13' RWY 13'		
MISSED APCH: Climb STRAIGHT AHEAD to 830', then turn LEFT and join racetrack ABEAM L Lctr at 1970'. MAX 180 KT.						
Alt Set: hPa		Rwy Elev: 0 hPa		Trans level: FL 118		Trans alt: 9850' ①
Initial apch restricted to MAX 190 KT.						



FT/METER CONVERSION
QNH

10830'	-	3300m
9850'	-	3000m
8860'	-	2700m
2960'	-	900m
1970'	-	600m
830'	-	250m



MAP at LMM					HIALS PAPI	180 KT MAX	830' ↑	1970' LT	RACETRACK ABEAM L 262
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CIRCLE-TO-LAND			Not authorized Northeast of rwy	
	Max Kts.	MDA(H)		
A	100	690' (677')		1600m
B	135			
C	180	1370' (1357')		4800m
D	205	2240' (2227')		4800m