

**INSTRUMENT APPROACH**

HEIGHTS RELATED TO AD. ELEV 20 ( 1 hPa)

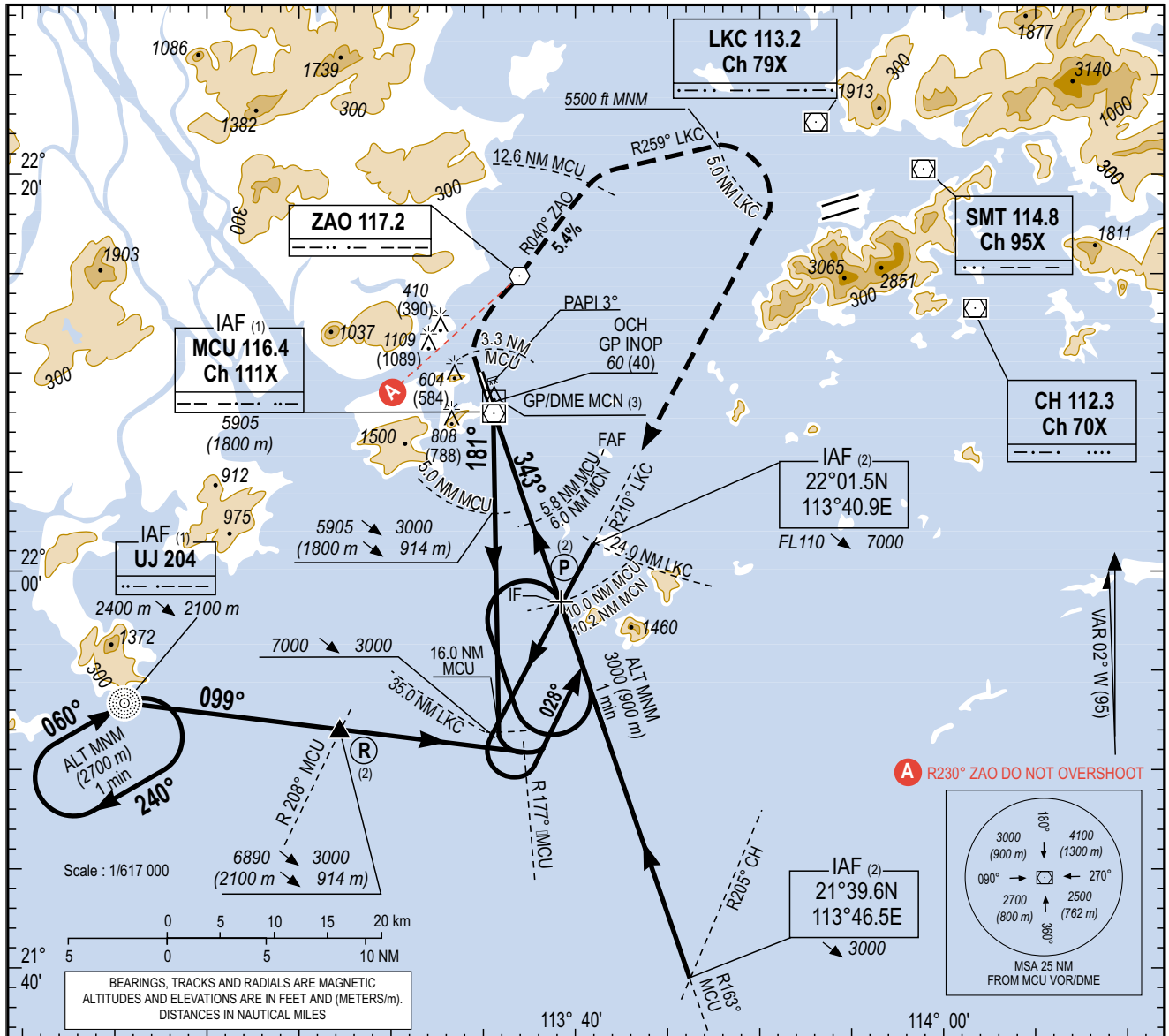
ATIS MACAU : 126.4  
 APP : ZHUHAI Approach 120.35 (124.25) (1)  
 HONG KONG Radar 126.3 / 119.1(2)  
 TWR : MACAU Tower 118.0  
 MACAU Ground 121.725 / 121.975

AD 2 - VMMC - 69  
 ILS RWY 34

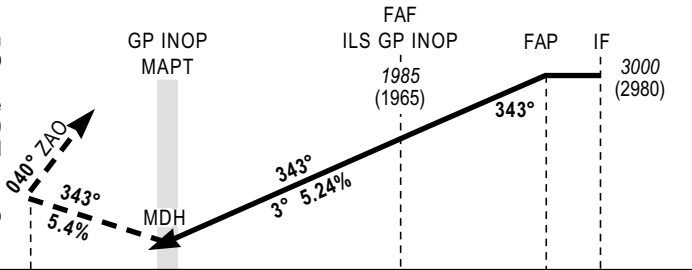
PROTECTED FOR A B C D CAT

03 MAY 2001

ILS MCN 109.7  
 RDH: 54  
 MAX APCH TURNING SPEED : 190 kt IAS  
 MAX MISSED APCH TURNING SPEED : 185 kt IAS



TA : 9000 (2700 m)  
**MISSED APPROACH (2):**  
 (minimum climb gradient 5.4% required until passing 5500 ft)  
 Climb on runway heading to 600 ft (183 m). At or before MCU/DME 3.3 turn right (MAX IAS 185 kt) to ZAO VOR, climbing to 1200 m (3937 ft). Leave ZAO on ZAO VOR R040°. At MCU DME 12.6 turn right to intercept LKC VOR R259°, continue climbing to 6000 ft (1829 m). At LKC DME 5.0 and altitude at or above 5500 ft turn right to establish on LKC DVOR R210 and at LKC DME 35.0 descend to 3000 ft and turn left on track 028M to intercept Macau RWY 34 final approach track,  
 or  
 expect radar vectoring by Hong Kong ATC via the most expeditious means to Macau RWY 34 final approach.



MCN/DME(4)	← (NM)	3.3	0	0.4	6.0	9.2	10.2
VOR/DME	← (NM)			0.2	5.8	9.0	10.0

Standard MNM : vertical distances in feet, horizontal visibility in meters. REF HEIGHT : ALT SDE.

CAT	ILS CAT I		ILS CAT II		GP INOP OCH : 286		CIRCLING		OCH CAT I	OCH CAT II	GP/DME MCN
	DA(DH)	HV(RVR)	DA(DH)	RVR	MDH	HV	MDH	HV			
A	220(200)	800	120(100)	350	290	1200			A : 141	A : 49	NM 7
B	220(200)	800	120(100)	350	290	1200			B : 150	B : 62	ALT 2303
C	220(200)	800	120(100)	350	290	1200			C : 164	C : 76	(HEIGHT) (2283)
D	220(200)	800	120(100)	350	290	1600			D : 171	D : 89	(1965) (1666) (1328) (1009) (691) (372)

Remarks : (3)OCH ILS CAT I (CAT A, B, C, D) AND CAT II (CAT D) - CAT II (CAT A, B, C) ground plane. (4)MCN/DME is provided from the displaced threshold

FAF - Displaced THR	6.0 NM	70 kt 5 min 09	85 kt 4 min 14	100 kt 3 min 36	115 kt 3 min 08	130 kt 2 min 46	160 kt 2 min 15	185 kt 1 min 57
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**INSTRUMENT APPROACH**

HEIGHTS RELATED TO AD. ELEV 20 ( 1 hPa)

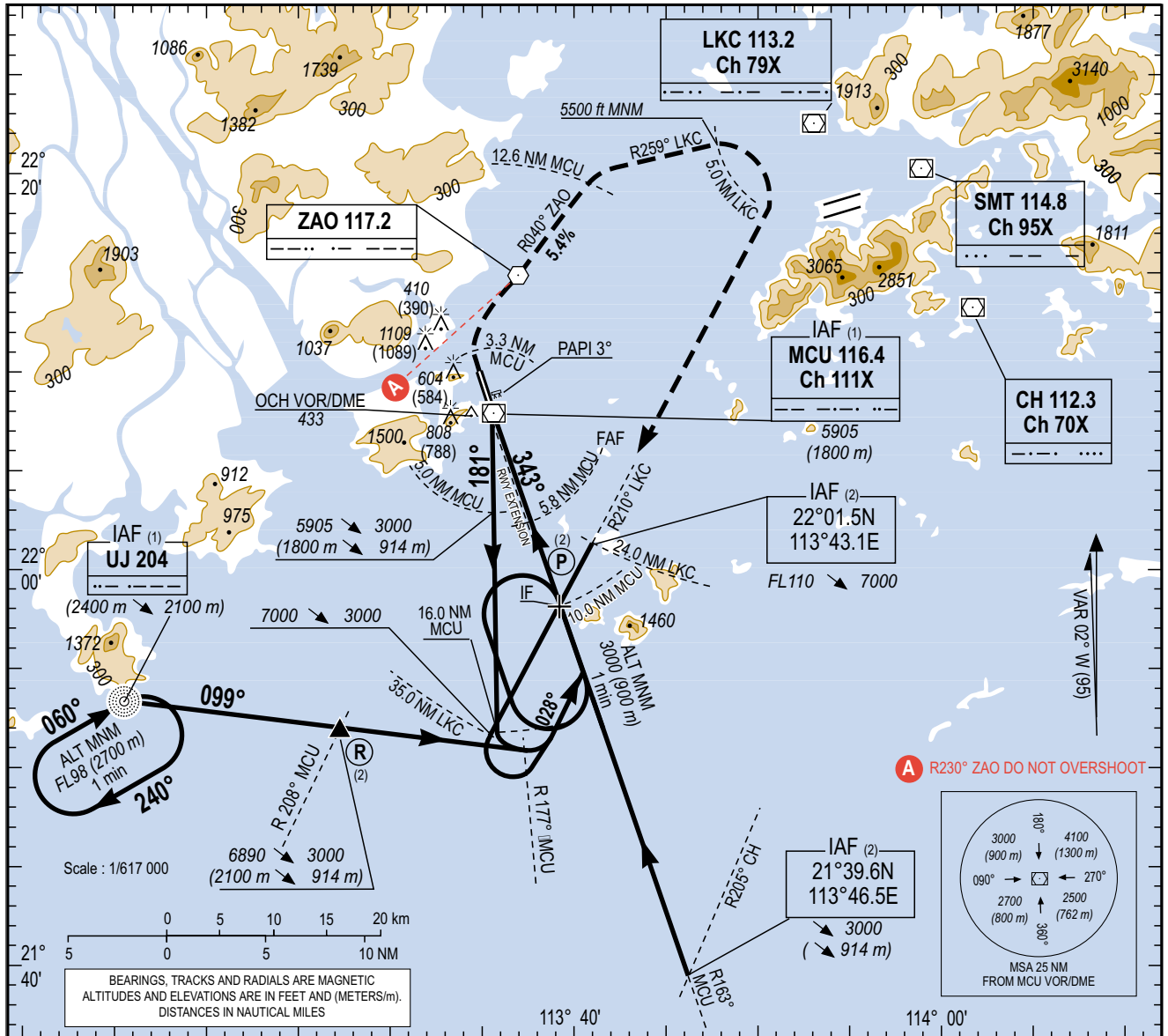
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 TWR : MACAU Tower 118.0  
 MACAU Ground 121.725 / 121.975

AD 2 - VMMC - 70  
 VOR/DME RWY 34

PROTECTED FOR A B C D CAT

05 APR 2021

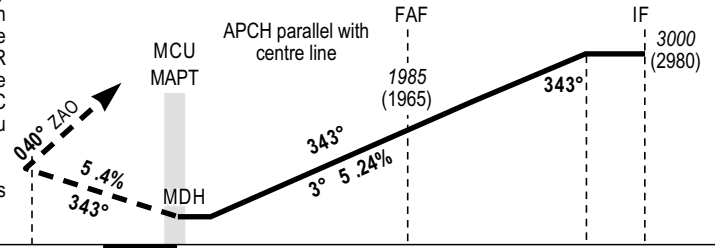
MAX APCH TURNING SPEED : 190 kt IAS  
 MAX MISSED APCH TURNING SPEED : 185 kt IAS



TA : 9000 (2700 m)

**MISSED APPROACH (2) :**

(minimum climb gradient 5.4% required until passing 5500 ft)  
 Climb on runway heading to 600 ft (183 m). At or before MCU/DME 3.3 turn right (MAX IAS 185 kt) to ZAO VOR, climbing to 1200 m (3937 ft). Leave ZAO on ZAO VOR R040°. At MCU DME 12.6 turn right to intercept LKC VOR R259°, continue climbing to 6000 ft (1829 m). At LKC DME 5.0 and altitude at or above 5500 ft turn right to establish on LKC DVOR R210 and at LKC DME 35.0 descend to 3000 ft and turn left on track 028M to intercept Macau RWY 34 final approach track,  
 or  
 expect radar vectoring by Hong Kong ATC via the most expeditious means to Macau RWY 34 final approach.



VOR/DME ← ( NM )	3.3	5.8	9.0	10.0
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Standard MNM : vertical distances in feet, horizontal visibility in meters. REF HEIGHT : ALT AD.

CAT	VOR/DME OCH : 522		CIRCLING		VOR/DME MCU						
	MDH	HV	MDH	HV	NM	7	6	5	4	3	2
A	530	2000	SEE CHART AD 2 - VMMC - 72		ALT	2362	2044	1725	1407	1088	770
B	530	2000			(HEIGHT)	(2342)	(2024)	(1705)	(1387)	(1068)	(750)
C	530	2400									
D	530	3200									

FAF - MAPT	5.8 NM	70 kt 4 min 58	85 kt 4 min 6	100 kt 3 min 29	115 kt 3 min 2	130 kt 2 min 41	160 kt 2 min 11	185 kt 1 min 53
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INSTRUMENT  
APPROACH  
CHART - ICAO

HEIGHTS RELATED TO  
AD. ELEV 20 ( 1 hPa)

ATIS MACAU : 126.4  
APP : ZHUHAI Approach 120.35 (124.25) (1)  
HONG KONG Radar 126.3 / 119.1(2)  
TWR : MACAU Tower 118.0  
MACAU Ground 121.725 / 121.975

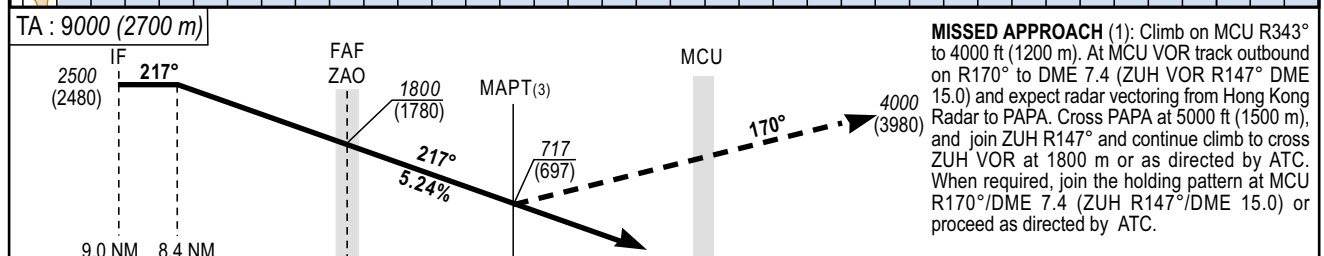
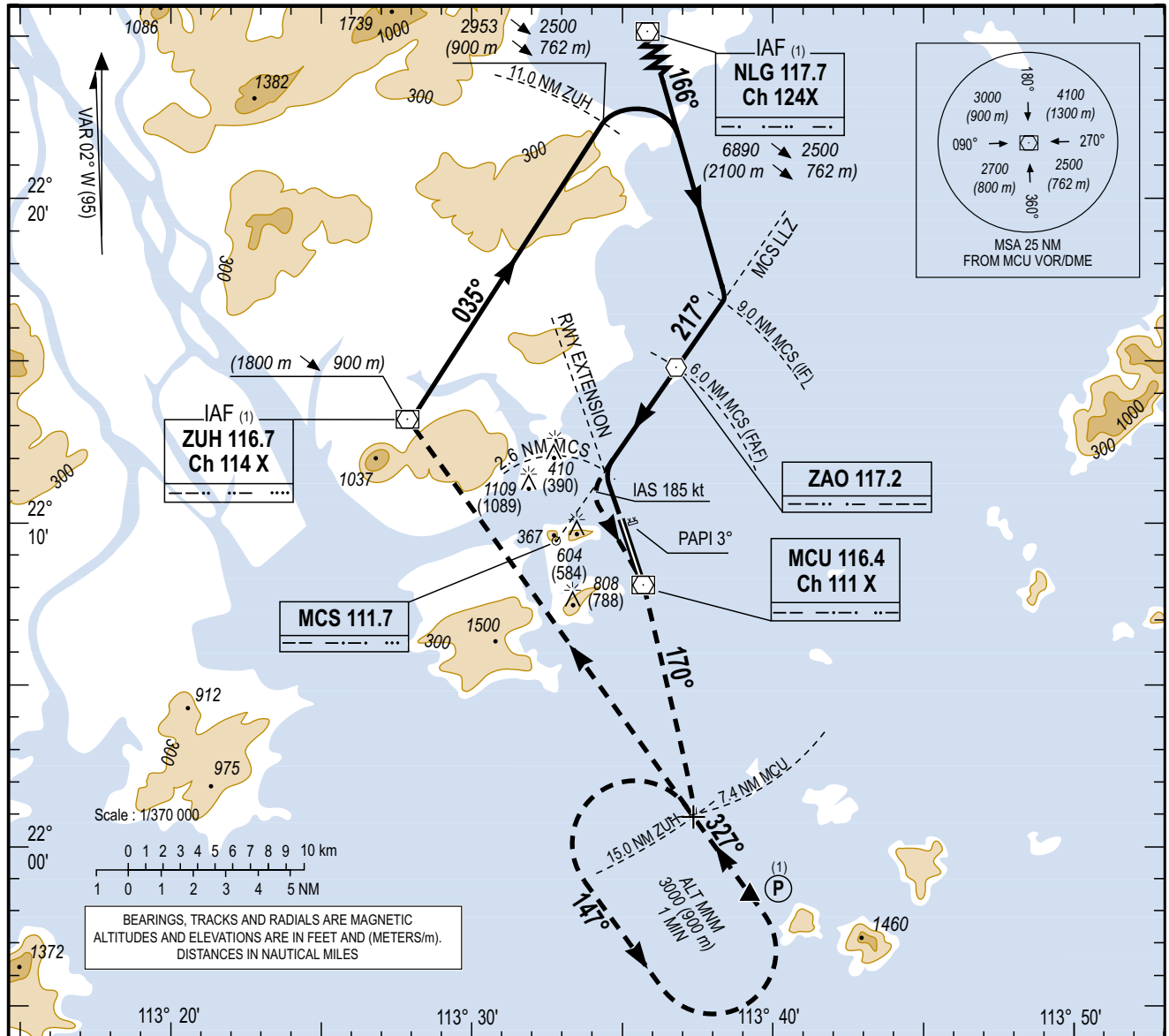
AD 2 - VMMC -71  
LLZ/DME RWY 16

LLZ  
MCS 111.7

PROTECTED  
FOR A B C D CAT

05 APR 2001

MAX APCH TURNING SPEED : 190 kt IAS  
MAX MISSED APCH TURNING SPEED : 185 kt IAS



**MISSED APPROACH (1):** Climb on MCU R343° to 4000 ft (1200 m). At MCU VOR track outbound on R170° and expect radar vectoring from Hong Kong Radar to PAPA. Cross PAPA at 5000 ft (1500 m), and join ZUH R147° and continue climb to cross ZUH VOR at 1800 m or as directed by ATC. When required, join the holding pattern at MCU R170°/DME 7.4 (ZUH R147°/DME 15.0) or proceed as directed by ATC.

Standard MNM : vertical distances in feet, horizontal visibility in meters. REF HEIGHT : ALT AD.

CAT	LLZ OCH : 700		CIRCLING		LLZ/DME MCS				(3) The approach final segment is offset from landing direction by 054° On the approach final segment, and at pilot discretion, a visual left turn should be initiated in time to allow lining up with the runway, considering the aircraft type, approach speed... before the MAPT. At MAPT (2.6 NM LLZ/DME), even visual, the missed approach procedure is mandatory.
	MDH	HV	MDH	HV	NM	6	5	4	
A	700	3600	Not Applicable		NM	6	5	4	3
B	700	3600			ALT	1800	1482	1163	845
C	700	3600			(HEIGHT)	(1780)	(1462)	(1143)	(825)
D	700	3600							

FAF - MAPT	3.4 NM	70 kt	85 kt	100 kt	115 kt	130 kt	160 kt	185 kt
		2 min 55	2 min 24	2 min 03	1 min 47	1 min 34	1 min 17	1 min 06

**INSTRUMENT APPROACH**

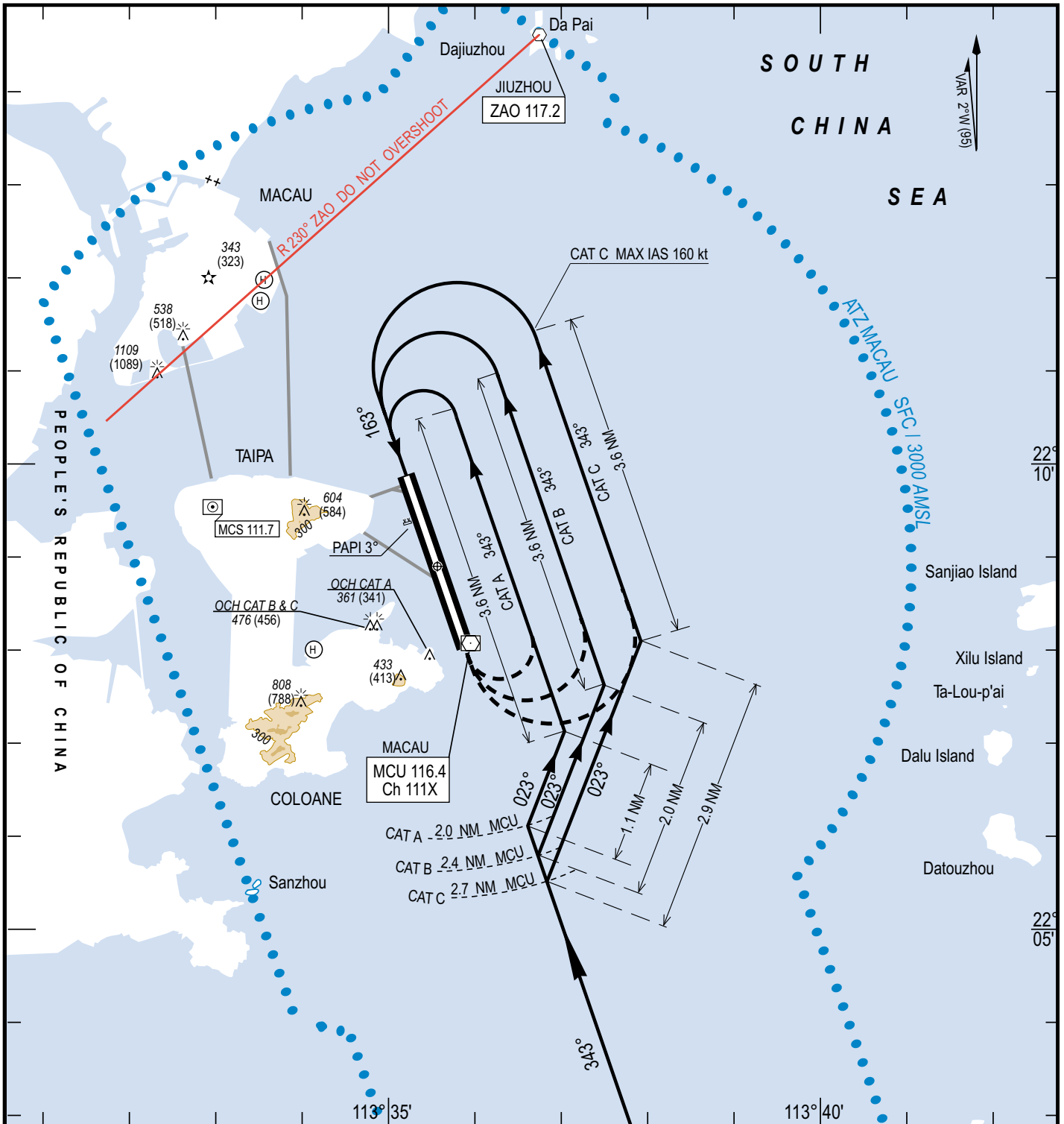
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 MACAU Ground 121.725 121.975

AD 2 - VMMC - 72  
 CIRCLING TO LAND RWY 16

PROTECTED FOR A B C CAT

03 MAY 2001



Do not overshooting ZAO R230° which defines the northern limit for flights due to noise abatement for Zhuhai City

Standard MNM : vertical distances in feet, horizontal visibility in metres.

CAT	MAX. kt	After ILS, GP INOP or VOR/DME approach			Speed / Time								
		MDA (MDH)	CEIL	HV	Distance(NM)	100kt	110kt	120kt	130kt	140kt	150kt	160kt	
A	100	660 (640)	1500	6000	1.1 (CAT A)	0 min 40							
B	135	770 (750)	1500	6000	2.0 (CAT B)	1 min 12	1 min 06	1 min 00	0 min 55				
C	160	870 (850)	1500	6000	2.9 (CAT C)	1 min 44	1 min 35	1 min 27	1 min 20	1 min 15	1 min 10	1 min 05	
					3.6 (CAT A,B,C)	2 min 10	1 min 58	1 min 48	1 min 40	1 min 33	1 min 26	1 min 21	

# VISUAL APPROACH

Public Air Traffic

# AD 2 - VMMC - 73

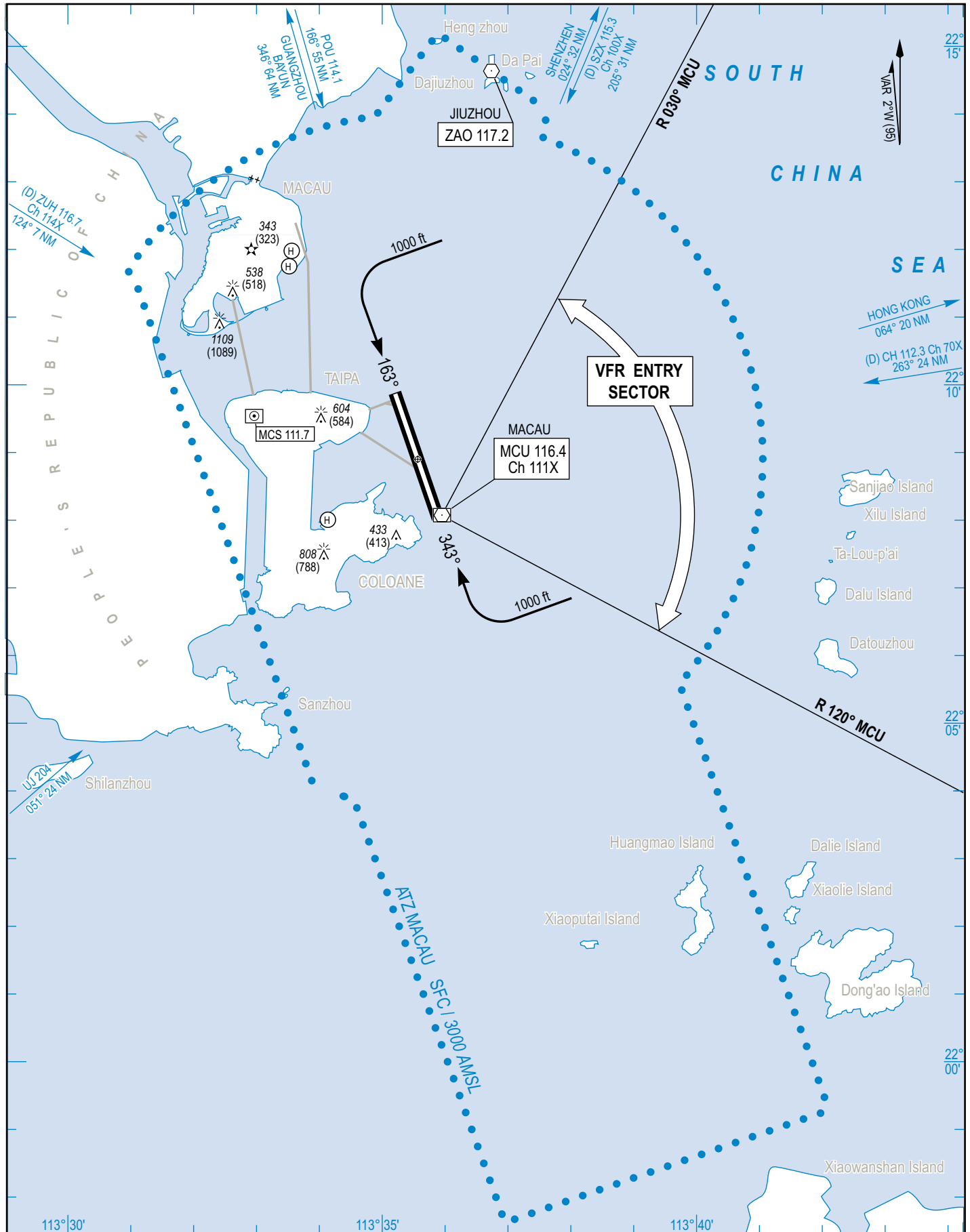
03 MAY 2001

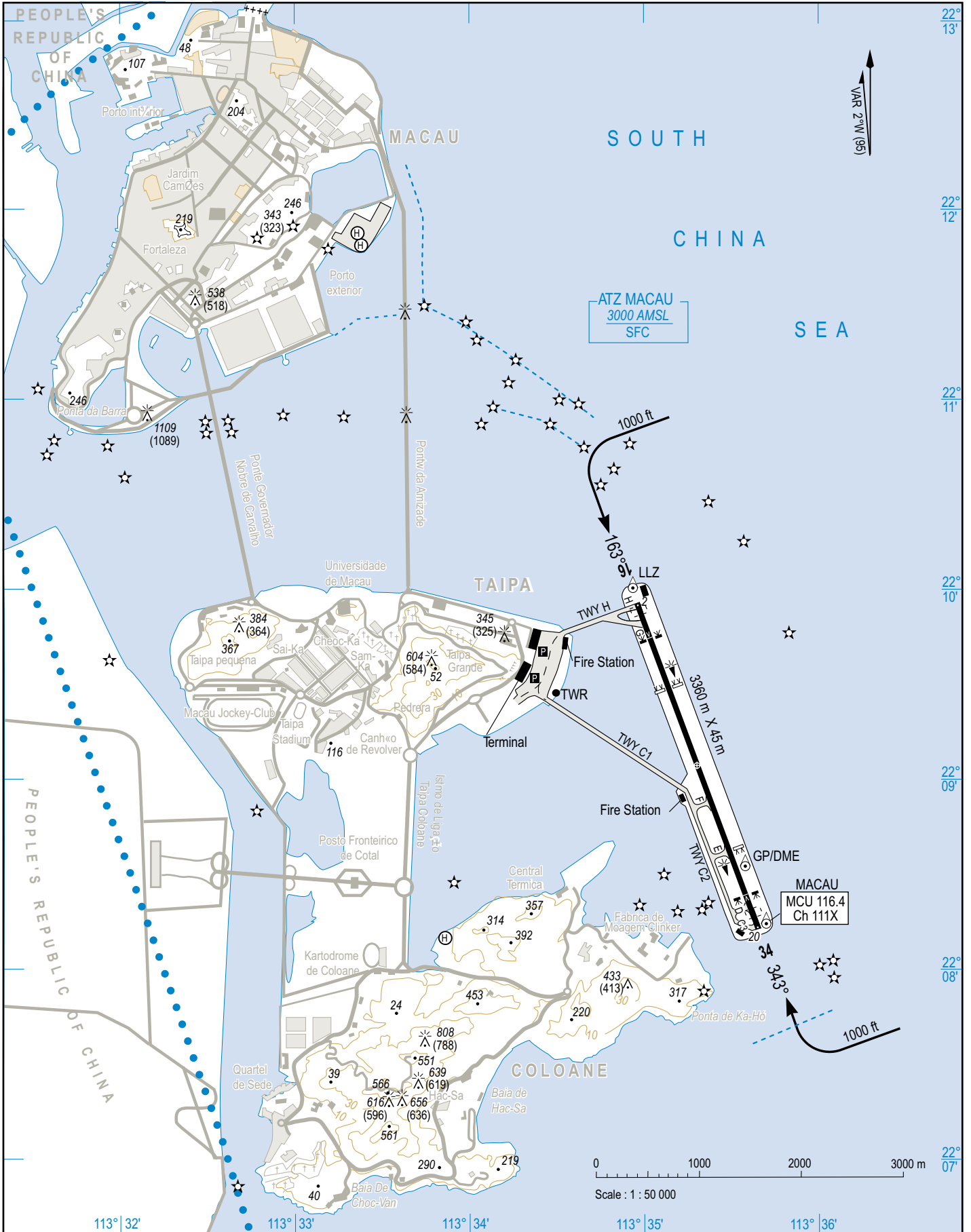
Bearings are magnetic  
Altitudes and Elevations in Feet  
AD ELEV : 20 (1hPa)



LAT : 22° 08' 58" N  
LONG : 113° 35' 29" E

ATIS MACAU : 126.4  
TWR MACAU : 118.0  
GROUND MACAU : 121.725 - 121.975





RWY	QFU	Dimension	Surface	Strength	TORA	TODA	ASDA	LDA
16	163°	3360 x 45	Concrete	PCN	3225	3285	3285	2865
34	343°	3360 x 45		63 / R / B / W / T	3300	3360	3360	2930

Lighting aids : RWY 16 : LIH - Threshold F LIH - Approach line W LIH - PAPI 3° ( 5.24% ) MEHT 70 ft  
 RWY 34 : LIH - Threshold F LIH - Approach line W LIH - PAPI 3° ( 5.24% ) MEHT 65 ft