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		12 JAN 2011

File No. AAI/ATM/AIS/09-09/2011

Following supplement is issued for information, guidance and necessary action.

V.P. AGRAWAL
CHAIRMAN
AIRPORTS AUTHORITY OF INDIA

[EFFECTIVE DATE: 10 FEBRUARY 2011]

**CALICUT ILS (Z) RWY10 PROCEDURE
(DME REQUIRED)**

1	Holding	
	VOR (116.5 CLC)	One minute left hand race-track pattern, inbound track 305 deg M. Minimum holding altitude 3600 FT.
	VOR-DME holding R285/15D	One minute right hand race-track pattern, inbound track 105 deg M. Minimum holding altitude 3600 FT.
2	Procedure	
2.1	VOR (116.5 CLC)	Proceed outbound on track 293 deg M upto 8.5 D for Cat A/B aircraft and on track 305 deg M upto 9.5 D for Cat C/D aircraft descending to 2200 FT. Commence level base turn left to intercept LLZ (110.7 ICLB) inbound track 104 Deg M. Descend on glide path to DA/H.
2.2	VOR-DME ARC	
2.2.1	From W93 (R-285)	After passing IAF at 15D on R285 turn right to intercept LLZ (110.7 ICLB) inbound track 104 deg M. At IF 13D descend to 2200 FT. Descend on glide path to DA/H.
2.2.2	From W15S (R-333) & M300 (R-307)	After passing IAF at 15D on R-333 & R-307 turn right to fly 13 DME-arc, descending to 3600 FT. Crossing lead radial 290, turn left to intercept LLZ (110.7 ICLB) inbound track 104 deg M descending to 2200 FT. Descend on glide path to DA/H.

2.2.3	From W15N (R-160)	After passing IAF at 15D on R-160 turn left to fly 13 DME-arc, descending to 3600 FT. Crossing lead radial 272, turn right to intercept LLZ (110.7 ICLB) inbound track 104 deg M descending to 2200 FT. Descend on glide path to DA/H.														
3		IF :13 D Altitude at IF :3600 FT Glide path angle : 3.00 Deg Altitude at 4D (ILS-DME) :1590 FT ILS RDH : 53 FT														
4	OCA	Cat A/B - 560 FT Cat C/D - 580 FT														
5	GP Inoperative Procedure															
5.1	FAF - 5.9D (ILS-DME) Altitude over FAF - 2200 FT Descent Gradient - 5.24% MAPt - 1D (ILS-DME)															
5.2	OCA	Straight-in - 800 FT Visual Circling: Cat A/B - 1350 FT Cat C/D - 1570 FT														
5.3	Distance-Altitude Information															
		<table border="1"> <tr> <td>Distance (ILS-DME)</td> <td>5.9D</td> <td>5D</td> <td>4D</td> <td>3D</td> <td>2D</td> </tr> <tr> <td>Altitude (Ft)</td> <td>2200</td> <td>1910</td> <td>1590</td> <td>1270</td> <td>950</td> </tr> </table>	Distance (ILS-DME)	5.9D	5D	4D	3D	2D	Altitude (Ft)	2200	1910	1590	1270	950		
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Altitude (Ft)	2200	1910	1590	1270	950											
5.4	Rate of Descent/Ground Speed information:															
		<table border="1"> <tr> <td>Ground Speed (Kt)</td> <td>80</td> <td>100</td> <td>120</td> <td>140</td> <td>160</td> <td>180</td> </tr> <tr> <td>Rate of Descent (FT/Min)</td> <td>425</td> <td>530</td> <td>635</td> <td>745</td> <td>850</td> <td>955</td> </tr> </table>	Ground Speed (Kt)	80	100	120	140	160	180	Rate of Descent (FT/Min)	425	530	635	745	850	955
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6	Missed Approach	Climb straight ahead to 2400 FT, then climbing turn RIGHT to VOR, to join holding at 3600 FT or as instructed by ATC														
7	MSA	Sector 340 Deg to 120 Deg: Upto 10NM – 4300 FT From 10NM to 25NM – 10000 FT Sector 120 Deg to 340 Deg:- Upto 25NM – 3600 FT														
8	Note	1. These procedures require a missed approach climb gradient of 3.0% (182 FT/NM) until passing 1500 FT. 2. For aircraft which can only achieve a 2.5% (152 FT/NM) missed approach climb gradient the OCA is 645 FT for Cat A/B and 665 FT for Cat C/D.														

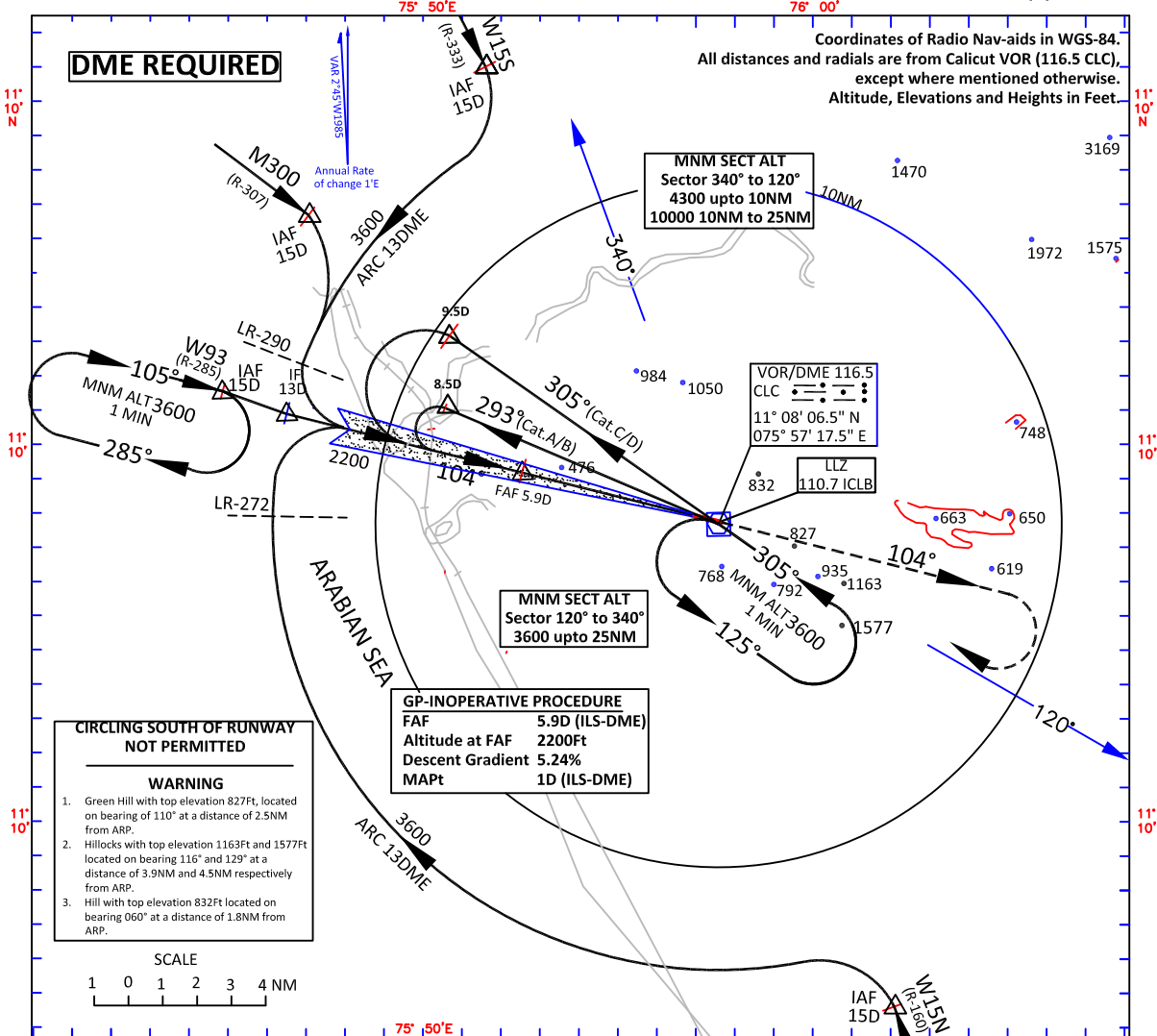
9 Aerodrome Operating Minima								
ACFT Category	Cat A		Cat B		Cat C		Cat D	
	With ALS	W/O ALS	With ALS	W/O ALS	With ALS	W/O ALS	With ALS	W/O ALS
Missed Approach Climb Gradient 3.0%								
Normal Minima (MA CG 3.0%)		1200		1200		1300		1300
Restricted Minima (MA CG 3.0%)		2200		2200		2300		2300
Missed Approach Climb Gradient 2.5%								
Normal Minima (MA CG 2.5%)		2200		2200		2400		2400
Restricted Minima (MA CG 2.5%)		3100		3100		3300		3300
GP In-Operative Procedure								
Normal Minima		2400		2400		2800		3200
Restricted Minima		2800		2800		3200		3600
Visual Circling								
Normal Minima		3600		3600		5000		5000
Restricted Minima		3600		3600		5000		5000

**INSTRUMENT
APPROACH
CHART**

**AERODROME ELEV. 342Ft
HEIGHT RELATED TO
THR RWY10 - ELEV. 312Ft**

APP 122.95
TWR 123.35

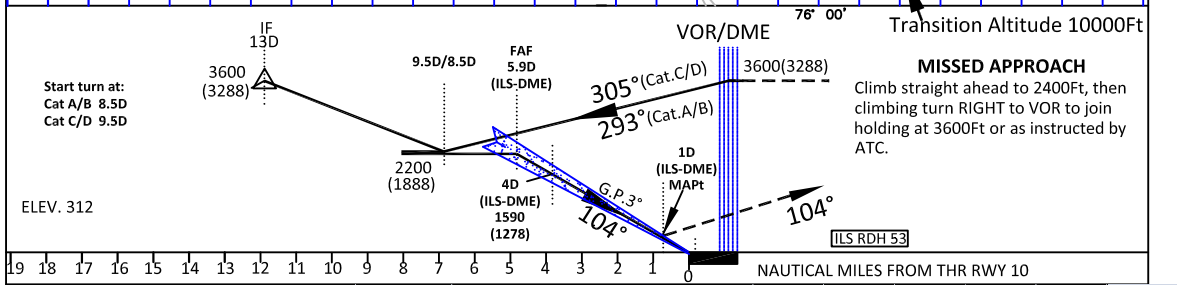
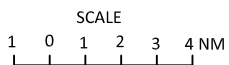
**CALICUT
INDIA
ILS (Z) RWY10**



**CIRCLING SOUTH OF RUNWAY
NOT PERMITTED**

WARNING

- Green Hill with top elevation 827ft, located on bearing of 110° at a distance of 2.5NM from ARP.
- Hilllocks with top elevation 1163ft and 1577ft located on bearing 116° and 129° at a distance of 3.9NM and 4.5NM respectively from ARP.
- Hill with top elevation 832ft located on bearing 060° at a distance of 1.8NM from ARP.



ACFT Category	OCA(H)		Distance (ILS-DME)/Altitude Information						
	A/B	C/D	Distance (NM)	5.9D	5D	4D	3D	2D	
Straight-In	560	580		2200	1910	1590	1270	950	
GP In-Operative			Ground Speed/Rate of Descent Information						
Straight-In	800		Ground Speed (Kt)	80	100	120	140	160	180
Visual Circling	1350	1570	Rate of Descent (Ft/Min)	425	530	635	745	850	955

ACFT Category	Cat A		Cat B		Cat C		Cat D	
	With ALS	W/O ALS	With ALS	W/O ALS	With ALS	W/O ALS	With ALS	W/O ALS
Missed Approach Climb Gradient 3.0%								
Normal Minima (MA CG 3.0%)	1200		1200		1300		1300	
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GP In-Operative Procedure								
Normal Minima	2400		2400		2800		3200	
Restricted Minima	2800		2800		3200		3600	
Visual Circling								
Normal Minima	3600		3600		5000		5000	
Restricted Minima	3600		3600		5000		5000	

Note:

- These procedure require a missed approach climb gradient of 3.0% (182Ft/NM) until passing 1500ft.
- For aircraft which can only achieve a 2.5% (152Ft/NM) missed approach climb gradient, the OCA is 645ft for Cat A/B and 665ft for Cat C/D.