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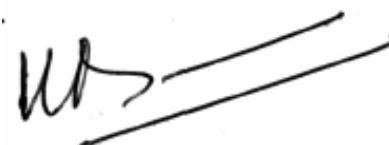
AERONAUTICAL INFORMATION SERVICE
 AIRPORTS AUTHORITY OF INDIA
 RAJIV GANDHI BHAVAN
 SAFDARJUNG AIRPORT
 NEW DELHI - 110003

SI. No. 29/2008

Date 17 APRIL 2008

File No. AAI/NAD/09-09/03/AIP-SUPP (Part-AIS)

Following Supplement regarding the ILS Procedure Rwy 27 – Bangalore International Airport Ltd. (BIAL) is issued for information, guidance and necessary action. The date of implementation shall be notified through G-Series NOTAM separately after the successful flight trials of the procedure.



K. RAMALINGAM
 CHAIRMAN

AIRPORTS AUTHORITY OF INDIA

[Effective Date - To be notified]

ILS Procedure Rwy 27 – BIAL (DME REQUIRED)

All radials and distances are from VOR (112.3 BIA)

1.	Holding Procedures :-	
1.1	BIBDU (R-077/21D)	One minute right hand pattern inbound track 257 Deg M. Minimum holding altitude F85.
1.2	BEGRA (R-027/21D)	One minute right hand pattern inbound track 207 Deg M. Minimum holding altitude F85.
1.3	TAREX (R-310/21D)	One minute left hand pattern inbound track 130 Deg M. Minimum holding altitude F85
1.4	EKVOG (R-282/21D)	One minute left hand pattern inbound track 102 Deg M. Minimum holding altitude F85.
	(NOTE : Simultaneous holding at EKVOG and TAREX at same level is not authorized)	

2.	Procedure	(Note : Speed shall be restricted to 185 KT IAS maximum prior to crossing the lead radial.
2.1	<p>ATS routes W42N/W43N/W118N/W81 BANGO 1 Arrival</p> <p>(If holding is required, aircraft shall proceed to BIBDU via R-077)</p>	<p>Leave VOR (112.3 BIA) on track 052 Deg M (R-052) descending to 7000 feet. At 11D turn right to intercept 13 DME arc descending to 5500 feet. Crossing lead radial 081 turn right to establish localizer (108.3 IDEV) inbound track 272 Deg M. Descend on glide path to DA/H. (Note : Aircraft from ATS route W42N shall commence right turn at R-161/3 DME to intercept the outbound track 052 Deg M (R-052).</p>
2.2	From BIBDU BIBDU 1 Arrival	<p>From BIBDU turn left to intercept 19 DME arc descending to 5500 feet. Crossing lead R-086 turn right to intercept LLZ (108.3 IDEV) inbound track 272 Deg M. Descend on glide path to DA/H. (Note : Aircraft from ATS route W117 may join holding at BIBDU via 26 DME arc.)</p>
2.3	ATS route W57S/W47S BEGRA 1 Arrival	<p>Leave BEGRA on track 207 Deg M (R-027) descending to 5500 feet. At 15D turn left to intercept 13 DME arc. Crossing lead radial 081 turn right to intercept localizer (108.3 IDEV) inbound track 272 Deg M. Descend on glide path to DA/H.</p>
2.4	ATS route W101E/W56S TAREX 1 arrival	<p>Leave TAREX on track 130 Deg M (R-310) maintaining FL85. At 15D turn left to intercept 13 DME arc. Crossing R-025 descend to 5500 feet and crossing lead radial 081 turn right to intercept localizer (108.3 IDEV) inbound track 272 Deg M. Descend on glide path to DA/H.</p>
2.5	ATS route W117 AKAGA 1 Arrival	<p>From AKAGA (R-088/21D) turn left to intercept LLZ (108.3 IDEV) inbound track 272 Deg M descending to 5500 feet. Descend on glide path to DA/H.</p>
2.6	From EKVOG EKVOG 1 Arrival	<p>Leave EKVOG on track 102 Deg M (R-282) maintaining FL85. At 15 DME turn left to intercept 13 DME arc and thereafter, follow procedure applicable to TAREX 1 arrival for landing.</p>

3	IF Altitude at IF Altitude at 4D (ILS DME) Altitude at 1D (ILS DME) Glide path angle ILS RDH	13D (VOR DME) 5500 feet 4350 feet 3270 feet 3.4 Degree 50 feet
4	OCA	Straight in 3120 feet Circling Cat A/B 3620 feet Cat C/D 3870 feet (Visual Manouvring (Circling) is restricted to North of Aerodrome Only).
5	GP In-operative Procedure FAF Altitude at FAF Descent gradient MAPt	7.2 (ILS DME) 5500 feet 5.94% (3.4 Degree) 1D (ILS DME)
5.1	OCA	Straight in 3420 feet Circling Cat A/B 3620 feet Cat C/D 3870 feet (Visual Manouvring (Circling) is restricted to North of Aerodrome Only).

5.2 Distance (ILS DME)/ Altitude Information :

Distance (NM)	7.2D	7D	6D	5D	4D	3D	2D
Altitude (Feet)	5500	5440	5080	4710	4350	3990	3630

5.3 Rate of Descent / Ground Speed Information :

Ground Speed (Kt)	80	100	120	140	160	180
Rate of Descent (Ft./Min)	480	600	720	840	960	1080

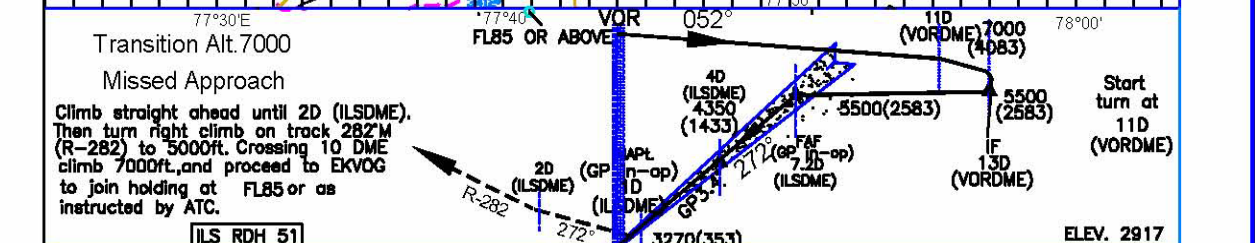
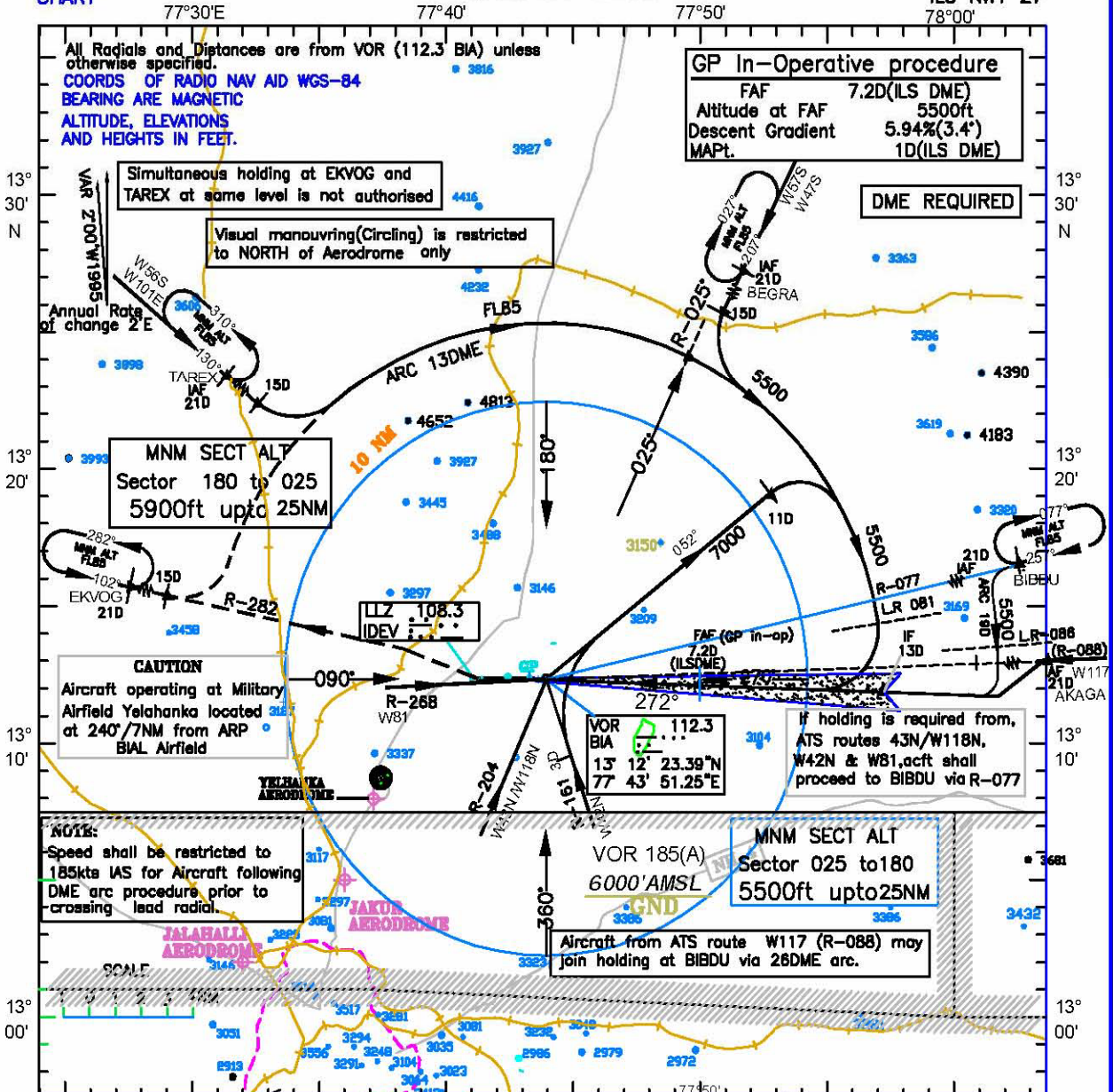
6 M.A. Procedure : Climb straight ahead until 2D (ILS DME). Then turn right climb on track 282 Deg M (R-282) to 5000 feet. Crossing 10 DME climb to 7000 feet and proceed to EKVOG to join holding at FL85 or as instructed by ATC.

7 MSA : Sector 025 – 180 5500 feet upto 25NM
Sector 180 – 025 5900 feet upto 25NM

(CAUTION : Aircraft operating at Military Airfield Yelahanka located at 240 Deg/7NM from ARP/ BIAL).

8. Aerodrome Operating Minima

Aerodrome Operating Minima	Category A (Visb./RVR)		Category B (Visb./RVR)		Category C (Visb./RVR)		Category D (Visb./RVR)	
	ALS	ALS OUT	ALS	ALS OUT	ALS	ALS OUT	ALS	ALS OUT
Normal Minima (ILS)	800(550)	1200	800(550)	1200	800(550)	1200	800(550)	1200
Restricted Minima (ILS)	1000	1600	1000	1600	1000	1300	1000	1300
Normal Minima (GP IN-OP)	1600	2400	1600	2400	2000	2800	2800	3600
Restricted Minima (GP IN-OP)	2000	2800	2000	2800	2800	3600	3200	4000
Normal Circling Minima		3600		3600		4000		4400
Restricted Circling Minima		3600		3600		4400		4800



Transition Alt. 7000
Missed Approach
Climb straight ahead until 2D (ILSDME). Then turn right climb on track 282°M (R-282) to 5000ft. Crossing 10 DME climb 7000ft, and proceed to EKVOG to join holding at FL85 or as instructed by ATC.
ELEV. 2917

O C A. (H)		Distance (ILSDME)/Altitude information for GP in-op Procedure:								
CATEGORY OF AIRCRAFT	A/B	C/D	7.2D	7D	6D	5D	4D	3D	2D	
STRAIGHT-IN	3120	3120	Altitude (ft.)	5500	5440	5080	4710	4350	3990	3630
CIRCLING	3620	3870	Rate of Descent /Ground speed information							
GP in-op Procedure:			Ground speed (kt.)							
STRAIGHT-IN	3420	3420	Rate of descent (ft/min)		480	600	720	140	160	180
CIRCLING	3620	3870								

AERODROME OPERATING MINIMA	CATEGORY A		CATEGORY B		CATEGORY C		CATEGORY D	
	ALS	ALS OUT	ALS	ALS OUT	ALS	ALS OUT	ALS	ALS OUT
NORMAL MINIMA (ILS)	800(550)	1200	800(550)	1200	800(550)	1200	800(550)	1200
RESTRICTED MINIMA (ILS)	1000	1600	1000	1600	1000	1300	1000	1300
NORMAL MINIMA (GP INOP)	1600	2400	1600	2400	2000	2800	2800	3600
RESTRICTED MINIMA (GP INOP)	2000	2800	2000	2800	2800	3600	3200	4000
NORMAL CIRCLING MINIMA	3600		3600		4000		4400	
RESTRICTED CIRCLING MINIMA	3600		3600		4400		4800	