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PEOPLE'S REPUBLIC OF BANGLADESH

Aeronautical Information Services Civil Aviation Authority, Bangladesh Headquarters, Kurmitola, Dhaka-1229, Bangladesh AIP Supplement

AIP SUPP 09/18 11 OCT 2018

PUBLICATION DATE: 16 AUG 2018.

EFFECTIVE DATE: 0000 UTC, 11 OCT 2018.

SUB: <u>RNP Approach Procedure for RWY11 and RWY29 at Osmani International</u> <u>Airport, Sylhet, Bangladesh.</u>

- 1. INTRODUCTION:
- 1.1 The following RNP Approach (RNAV GNSS) Procedure is designed for VGSY in accordance with the criteria as stipulated in the ICAO PANS-OPS (DOC 8168) Vol. II and ICAO Manual of PBN (Doc 9613). This procedure can be flown as a Non-Precision Approach (NPA) down to LNAV minima or an Approach with Vertical Guidance (APV) using barometric vertical navigation (BaroVNAV) down to LNAV/VNAV minima.
- 1.2 The RNP Approach Procedure is designed to enhance the VGSY safety and efficiency of the aircraft operations with an alternative approach procedure to access the airport.
- 1.3 This version to the RNP approach procedure for Runway 11 & Runway 29 at Osmani International Airport, Sylhet will be effective from 0000UTC, 11 OCT 2018.
- 1.4 The name of the approach chart is designated in accordance with the ICAO Cir 336 AN/195 and Amendment 6 to Doc8168, Procedures for Air Navigation Services-Aircraft Operations (PANS-OPS), Volumes I and II, where it states that' "..... procedures that are currently named RNAV and meet the PBN specification of RNP APCH or RNP AR APCH will be designated RNP. This change will be fully implemented by 1 December 2022".
- 1.5 Details of the RNP Approach procedure for Runway 11 & Runway 29 at Osmani International Airport, Sylhet are given in the attachment with this cover page. The individual Approach Procedure for both RWY11 and RWY29, including Chart, Coding table and procedure description, are given as below:
 - i) RNP Approach RWY11 : Chart & Coding Table : Attachment A1 Procedure Description of RNP Approach RWY11 : Attachment A2
 - ii) RNP Approach RWY29 : Chart & Coding Table : Attachment B1Procedure Description of RNP Approach RWY29 : Attachment B2

2. <u>APPROVALS</u>

- 2.1 Aircraft Operators and pilots must possess the necessary operational approvals to conduct RNP APCH (RNAV GNSS) and BaroVNAV operations from their respective State authorities to carry out this procedure.
- 2.2 The on-board performance monitoring and alerting criteria for specific navigation system and functional requirement must be in accordance to Volume II, Part C- Chapter 5 of the ICAO Manual on PBN (Doc 9613).
- 2.3 Before commencing the procedure, pilot in command must ensure that the navigation database is current and the aircraft's capability of conducting the procedure like GNSS availability system performance, etc.

3. <u>CONTINGENCY PROCEDURES</u>

3.1 The pilot must notify ATC of any loss of the RNP APCH capability, together with the proposed course of action. If unable to comply with the requirements of an RNP APCH procedure, ATC shall be informed as soon as possible the alternate course of action from the pilots of the concerned aircraft. The loss of RNP APCH capability includes any failure or event causing the aircraft to no longer satisfy the RNP APCH requirements.

4. <u>CANCELLATION</u>

4.1 This AIP Supplement will be cancelled when the contents will be incorporated into AIP Bangladesh.

Attachment A1 to AIP SUP 09/18



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CODING TABLE

TABU	LAR C	DESCRII	PTION							
SL NO	Path Descript or	Waypoint Ident	Fly Over	Course M (T)	Turn	DST (NM)	Altitude (FT)	Speed Limit	VPA/TCH	NAV SPEC
10	IF	IRNOX	-	-	-	-	+3000	-230	-	RNP APCH
20	TF	LUHAI	-	113° (112.92°)	-	6.0	+1800	-200	-	
10	IF	METUL	-	-	-	-	+3000	-200	-	RNP APC
20	TF	LUHAI	-	023° (022.92°)	-	6.0	+1800	-200	-	
10	IF	LUHAI	-	-	-	-	+1800	-200		RNP APC
20	TF	RAUTI	-	113° (112.92°)	-	3.9	@1800	-	-	RNP APC
30	TF	RW11	Y	-	-	5.3	@100	-	-3.0/50	RNP APC
40	СА	RW11	-	113° (112.92°)	-	-	+1500	-	-	RNP APC
50	DF	KILOK	Y	-	R	-	-	-230	-	
60	НМ	KILOK	Y	293° (292.49°)	R	-	4000	-230	-	

WAYPOINT LIST

RNP RWY11 (LNAV/VNAV only)							
WAYPOINT IDENTIFIER	COORDINATES						
IRNOX (IAF)	N 25:04:05.21 E 91:35:39.41						
METUL (IAF)	N 24:56:12.06 E 91:39:10.34						
LUHAI (IF)	N 25:01:44.70 E 91:41:44.59						
RAUTI (FAF)	N 25:00:14.19 E 91:45:39.53						
RW11 (MAPt)	N 24:58:09.20 E 91:51:04.30						
KILOK (MAHF)	N 24:47:53.21 E 91:53:25.45						

Procedure Description (RNP Approach RWY 11):

(i) From IAF (Right) : METUL

The aircraft approaching to IAF (Right) will descend at or above 3000ft till reaching the METUL and join the procedure on track 023⁰ (Mag). Then descend to 1800ft and execute a Fly-by turn at IF (LUHAI), it will join the intermediate track of 113⁰ (Mag). Aircraft will reach 1800ft before reaching FAF (RAUTI). The intermediate segment length is 3.9NM and the FAF (RAUTI) is placed at a distance of 5.3NM from THR11.

For Holding over METUL:

IAS	Inbound track	Turn direction	Timing	Minimum Holding Altitude
200 kts	023 ⁰ (Mag)	Right hand pattern	1 min O/B	3000 ft

(ii) From IAF (Center) : IRNOX

The aircraft approaching to IAF (Center) will descend at or above 3000ft till reaching the IRNOX and join the procedure on track 113⁰ (Mag), Then descend to 1800ft before reaching FAF (RAUTI)). The intermediate segment length is 3.9NM and the FAF (RAUTI) is placed at a distance of 5.3NM from THR11.

No Holding over IRNOX :

(iii) There is no IAF(Left) for this procedure.

Missed Approach procedure:

In case of missed approach, aircraft will climb on course 113⁰ to 1500ft then turn right and follow DF leg to join the holding waypoint KILOK at 4000ft or as directed by ATC. No turn before MAPt.

Note i) Remain all the time within DHAKA FIR while holding and commencing approach. Note ii) For commencing approach aircraft will join IAF as directed by ATC.

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NEV

CODING TABLE :

TAE	BULAR I	DESCRI	PTION							
SL no.	Path Descriptor	Waypoint Ident	Fly Over	Course M (T)	Turn	DST (NM)	Altitude (ft)	Speed Limit	VPA/TCH	NAV SPEC
10	IF	APULI	-	-	-	-	+3600	-230	-	RNP APCH
20	TF	ANUVA	-	293° (292.92°)	-	6.0	+2100	-200	-	RNP APCH
10	IF	LALUN	-	-	-	-	+3600	-230	-	RNP APCH
20	TF	ANUVA	-	023° (022.92°)	-	6.0	+2100	-200	-	RNP APCH
10	IF	ANUVA	-	-	-	-	+2100	-200		RNP APCH
20	TF	UNTOL	-	293° (292.92°)	-	3.8	@2100	-	-	RNP APCH
30	TF	RW29	Y	-	-	5.4	@100	-	-3.5/50	RNP APCH
40	СА	RW29	-	293° (292.92°)	-	-	+2000	-	-	RNP APCH
50	DF	RUTPI	Y	-	L	-	-	-210	-	RNP APCH
60	НМ	RUTPI	Y	113° (112.92°)	R	-	4000	-210	-	RNP APCH

WAYPOINT LIST

RNP RWY29 (LNAV only)						
WAYPOINT IDENTIFIER	COORDINATES					
APULI (IAF)	N 24:51:34.57 E 92:08:08.23					
LALUN (IAF)	N 24:48:22.39 E 91:59:29.69					
ANUVA (IF)	N 24:53:55.13 E 92:02:03.55					
UNTOL (FAF)	N 24:55:24.14 E 91:58:12.53					
RW29 (MAPt)	N 24:57:30.70 E 91:52:44.20					
RUTPI (MAHF)	N 24:51:08.21 E 91:45:04.47					

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Procedure Description (RNP Approach RWY 29): (LNAV Only)

(i) There is no IAF (Right) for this procedure.

(ii) From IAF (Center) : APULI

The aircraft approaching to IAF (Center) will descend at or above 3600ft till reaching the APULI and join the procedure on track 293⁰ (Mag), Then descend to 2100ft before reaching FAF (UNTOL)). The intermediate segment length is 3.8NM and the FAF (RAUTI) is placed at a distance of 5.4NM from THR29.

On Final segment Approach Angle is 3.5⁰.

No Holding over APULI :

(iii) From IAF (Left) : LALUN

The aircraft approaching to IAF (Right) will descend at or above 3600ft till reaching the LALUN and join the procedure on track 023⁰ (Mag). Then descend to 2100ft and execute a Fly-by turn at IF (ANUVA), it will join the intermediate track of 293⁰ (Mag). Aircraft will reach 2100ft before reaching FAF (UNTOL). The intermediate segment length is 3.8NM and the FAF (UNTOL) is placed at a distance of 5.4NM from RWY29.

On Final segment Approach Angle is 3.5[°].

For Holding over LALUN :

IAS	Inbound track	Turn direction	Timing	Minimum Holding Altitude
230 kts	023 ⁰ (Mag)	Right hand pattern	1 min O/B	3600ft

Missed Approach procedure:

In case of missed approach, aircraft will climb on course 293⁰ to 2000ft then turn left and follow DF leg to join the holding waypoint RUTPI at 4000ft or as directed by ATC. Maximum holding speed is 210Kts. No turn before MAPt.

Note i) Remain all the time within DHAKA FIR while holding and commencing approach.

Note ii) Due to Hill at a distance of 470m from THR29 penetrating VSS, caution should be

exercised while descending on final approach angle at 3.5 degrees.

Note iii) For commencing approach aircraft will join IAF as directed by ATC.