

# RNAV (RNP)

NP.30.15 and SP.4.12

Set Up	DEP/ARR - Select approach (RNP in title or in Green Page) POS Page 2 – Confirm FMC POS (GPS) line 1 – Set 0.16 < RNP < 0.3 – Expect Verify RNP EICAS msg REF NAV DATA – Select VOR/DME OFF (6R) LEGS- Set FAF to Hard airspeed – check fixes, alts, speeds (FAF) – Do not change fixes inside FAF – ✓RWYXX waypoint (EOD) CRZ- Set FL410 PERF- ✓FL410 DES- ✓check EOD point	M/A Criteria (Anytime) – VERIFY POSITION (FMC) (NOT VERIFY RNP (EICAS)) – UNABLE RNP (EICAS) – GPS (Dual Fail) (EICAS)	
Brief	Brief App plate normally, then extra – Check PRAIM – Airport Temp. w/in tolerance – Check Altimeters +/- 75 – DME/DME update inhibit (if in Green page) tune 110.45 – A/P until DA to comply with restrictions (4.13) – Set DA – LEGS page setup – Do not accept vector to RF leg fix – PM on PROG Page 2	M/A Criteria (After FAF and Lights or RWY not in sight) – XTK >= 0.2 NM (RNP 0.16-0.25) – XTK >= 0.3 NM (RNP > 0.25) – VTK +/- 70 – Loss of VNAV PATH  M/A Action – Before DA V/S – Stay in LNAV ???  – After DA ,immediately select LNAV after <ul style="list-style-type: none"> <li>○ G/A and</li> <li>○ above 400'</li> </ul>	
<b>Condition</b>	<b>PF</b>	<b>PM</b>	
	<b>Do</b>	<b>Say</b>	<b>Do</b> <b>Say</b>
After Brief		<i>Descent ✓ Approach ✓</i>	
Cleared for Approach	Select Roll Mode LNAV	<i>LNAV</i>	
On intercept Heading	Review LAVS PROG page 2 Monitor XTK and VTK		PROG page 2 Monitor XTK and VTK
XTK < 0.3			<i>Cross Track less than 0.3. You are established</i>
3-5 Miles to FAF	✓ ALT HOLD Don't Balloon (Config before selecting VNAV)	<i>Gear Down, Flaps 20, Update speed</i>	Comply  <i>Gear Down, Flaps 20</i>
3 Green		<i>Flaps 30 Update speed, Landing ✓</i>	<i>Flaps 30  Landing ✓</i>

XTK < 0.2 RNP .16-.25 <b>OR</b> XTK < 0.3 RNP > .25	A Set MCP Alt VNAV Selected (pause) Speed Intervene After window Blanks	<i>TDZE Alt. Set</i>	Point to altitude	<i>TDZE Alt. Set</i>
Before FAF	✓VNAV PATH	<i>VNAV Path</i>	✓ Football Alive	<i>VNAV Path</i>
At FAF	✓Football Disconnect A/P for any step alts. Stay VNAV Path!	<i>Starting down</i>	✓Football Watch Green Arc Call 3-1 info	
At least 300' below M/A altitude AND above 1000' AGL		<i>Set Missed Approach Alt.</i>		<i>Missed Approach Alt. Set</i>
1000' AGL				<i>1000, Cleared to Land, M/A Alt Set</i>
500' AGL				<i>500</i>
DA or DDA +80'				<i>Approaching Minimums</i>
At DA		<i>AppLts in Sight or Rwy in Sight or Missed App</i>		<i>Minimums  Repeat PF</i>
By DA - 50'	Disengage AP Fly the F/D the F/D down to 50' Use football	<i>AP Off</i>		
100' above TDZE		<i>Rwy in Sight or Missed App</i>		<i>Repeat</i>
50'	Look outside			
MAP				<i>Missed Approach Point</i>
EOD point <b>OR</b> Flare	Disconnect A/T	<i>A/T Off</i>		<i>A/T Off</i>

Confirm angle anymore???

Do we need ballnote anymore?

No need to check stepdowns inside of FAF???

- Enter fix, but don't execute to check crossing altitude is above charted.

- Disconnect A/P and hand fly to comply – Stay in VNAV PATH

Do we click off A/P to make step downs inside FAF???

Simism – Configure before selecting VNAV – No Balloon.

Delete FMS altitudes above vector

altitude – may prevent balloon. ??????

Confirm FMS GP angle is within 0.01 degrees of published descent angle?????

Inhibit VOR/DME updating?????

Inhibit DME/DME updating if req'd?????