



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
A United Nations Specialized Agency



# ICAO APAC FPP

## RNP AR online Workshop

2026



# PUBLICATION AND CHARTING

## Chapter 5 — RNP AR Procedure Design Manual (Doc 9905)

# INTRODUCTION



- General criteria in PANS-OPS, Volume II, Part I, Section 4, Chapter 9 and Part III, Section 5 apply as modified in this chapter
- See PANS-OPS, Volume II, Part III, Section 5, Chapter 2 for specific aeronautical database publication requirements
- The required navigation specification for any published procedure must be included in the State AIP on the chart in the PBN requirements box or in the GEN



# AERONAUTICAL CHART TITLES



- The chart shall be identified by the name of the city or town or area which the aerodrome serves, the name of the aerodrome

Charts must be titled in accordance with Annex 4 — Aeronautical Charts, Chapter 11, 11.6 for approach

**10 NOV 2016**  
 ties changed, MSA ARP center, NOTES, updated airspace. → **ALICE SPRINGS, NT (YBAS)**

**RNAV-U (RNP) RWY 12**

TWR	FIA (AH)	CTAF + AFRU (AH)
<b>18.3</b>	<b>ML CEN 119.8</b>	<b>118.3</b>
W. <b>1789'</b>	<i>AS612 (FAF)</i>	<i>Trans Level</i>
E <b>1786'</b>	<b>GP 3340'</b> (2.80°)	<b>FL110</b>

1 April 2026 (AF) 5.0 160°

# APPROACH CHART IDENTIFICATION



- The chart must be identified in accordance with Annex 4, Chapter 11, 11.6, and with PANS-OPS, Volume II, Part III, Section 5, Chapter 1
- From 1 December 2022, charts depicting procedures that meet the RNP AR APCH navigation specification shall include the term RNP in the identification with a parenthetical suffix (AR)
  - e.g. RNP RWY 23(AR)

# APPROACH CHART IDENTIFICATION



- When more than one PBN approach procedure exists for the same runway, A single letter suffix, starting with the letter “Z” following the navigation specification.
  - e.g. RNP Z RWY 23, RNP Y RWY 23
- Two or more missed approaches are associated with a common approach

# APPROACH CHART IDENTIFICATION



AIP New Zealand

NZQN AD 2 - 45.1

ELEV 1171

CAT C,D

**QUEENSTOWN**

RWY 05 THR ELEV 1160

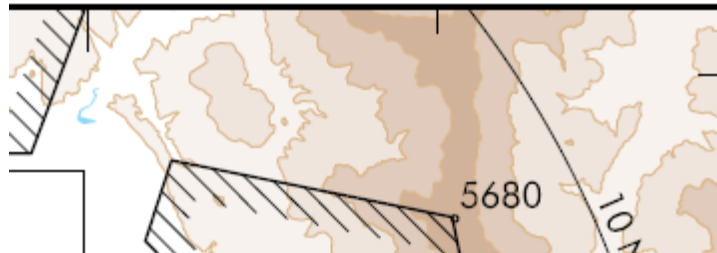
**RNAV (RNP) Y RWY 05**

TOWER: 118.1 128.9

APPROACH: 125.75

ATIS: 126.4

UNATTENDED: 118.1



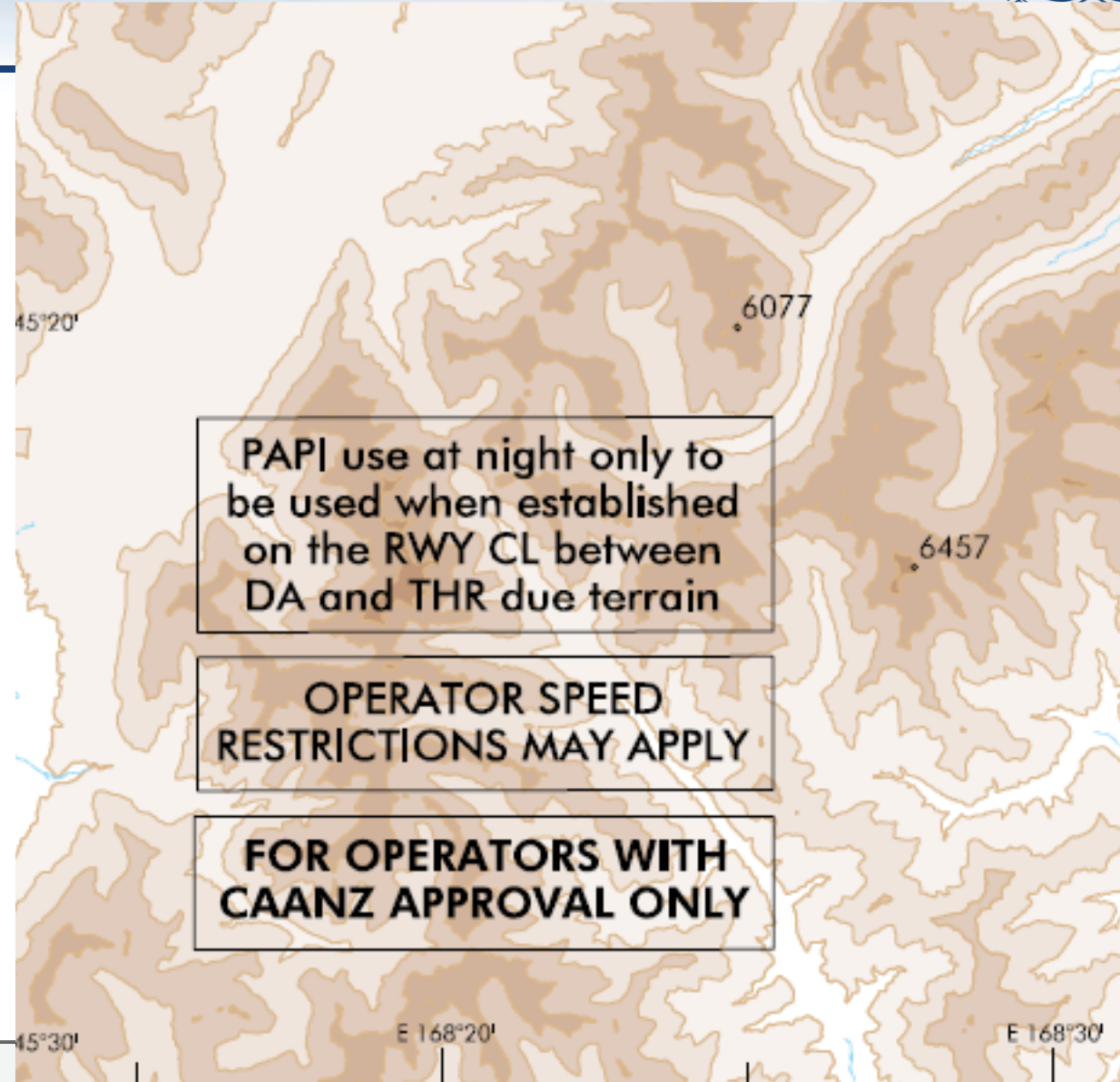
CAUTION  
- Aerodrome surrounded by mountainous terrain  
- VFR ACFT may be OPR without reference to  
ATC in G758, G756, G755 and G752

# CHART NOTES



- For chart notes and PBN requirements box, criteria in

PANS-OPS Volume II,  
Part III, Section 5



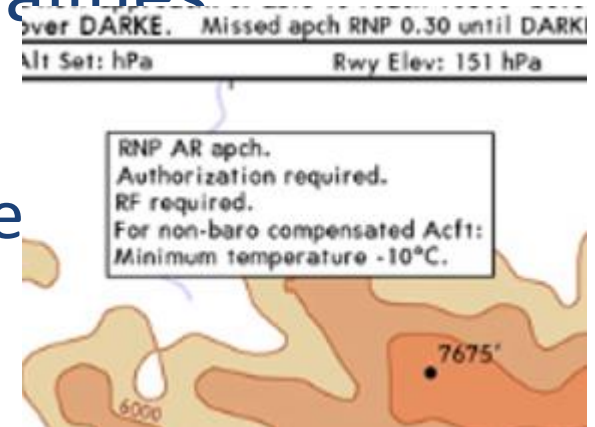
- The depiction of PBN requirements box in the chart plan view
- “RNP AR APCH”, **must be** depicted in the PBN requirements box

**MANDATORY:** Specific authorization note required for all RNP AR APCH charts

- navigation sensor limitations and required functionalities:

- a) RF required;
- b) the navigation accuracy requirement if not part of the specification.

“RNP <0.3, Missed approach RNP < 1”



- Additional procedure requirements:
  - c) “ATS surveillance service required”;
  - d) “Night operations N/A.”
- specific notes may be required:
  - a) a note must be published on the chart that includes the specific authorization requirement;
  - b) for RNP AR APCH procedures with missed approach RNP navigation accuracy requirement less than 1.0 NM, the following note is required: “Transition to missed approach RNP for lateral guidance must not be initiated prior to the along-track position of DA/H”.

## NOTES:

- YBAS ACT QNH REQ.
- Minimum MAP gradient (All Engines) 3.0% to 5200FT.

0 m  
TO  
20 m

APP 119.1  
TWR 118.1

DONLON/INTL (EADD)  
RNP X RWY 27L (AR)

RNP AR  
RF required

# DEPICTION

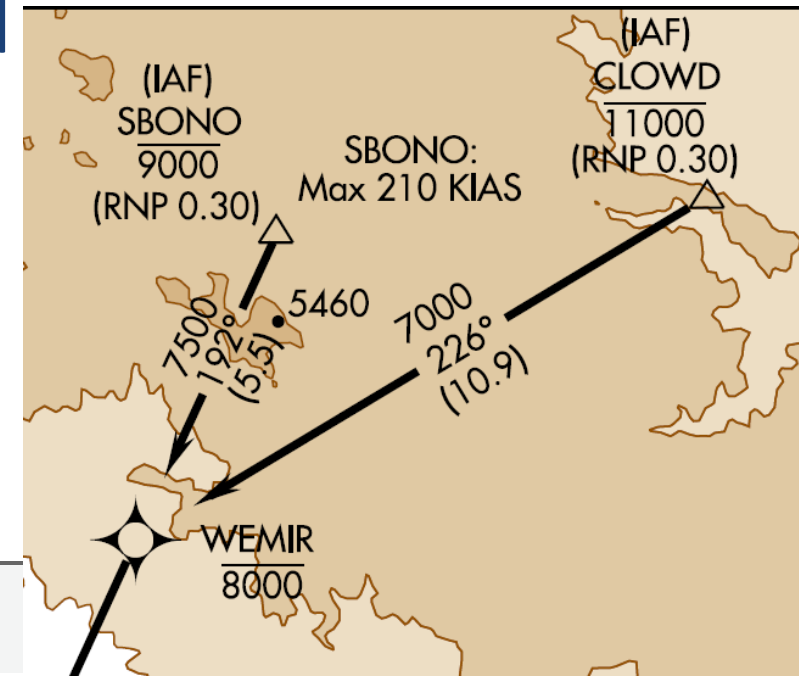


- Different required RNP navigation accuracy requirements on different initial segment legs must be charted with a note.
- The required note may be charted with the applicable leg or as a procedure note with reference to the applicable leg.

# DEPICTION-GENERAL PRINCIPLE



- Navigation accuracy values less than 1.0 NM within initial and intermediate segments shall be charted at the waypoint where they first take effect
- Continue to apply until another navigation accuracy value is charted or until the final segment is reached



# DEPICTION — FINAL SEGMENT



RNP <b>0.15</b> DA(H) <b>2095'</b> (309')		RNP <b>0.20</b> DA(H) <b>2099'</b> (313')		RNP <b>0.30</b> DA(H) <b>2103'</b> (317')	
HIALS OUT		HIALS OUT		HIALS OUT	
C	<b>800 m</b>	<b>1700 m</b>	C	<b>800 m</b>	<b>1700 m</b>
			C	<b>900 m</b>	<b>1700 m</b>

- Navigation accuracy values associated to the final segment shall be charted within the minima box
- Along with the associated OCA/H

# MINIMA — OCA/H PUBLICATION



- OCA/H is published on approach charts for all RNP AR APCH procedures
- An example of minima depiction is provided in PANS-OPS, Volume II, Part III, Section 5, Chapter 1

# MINIMA



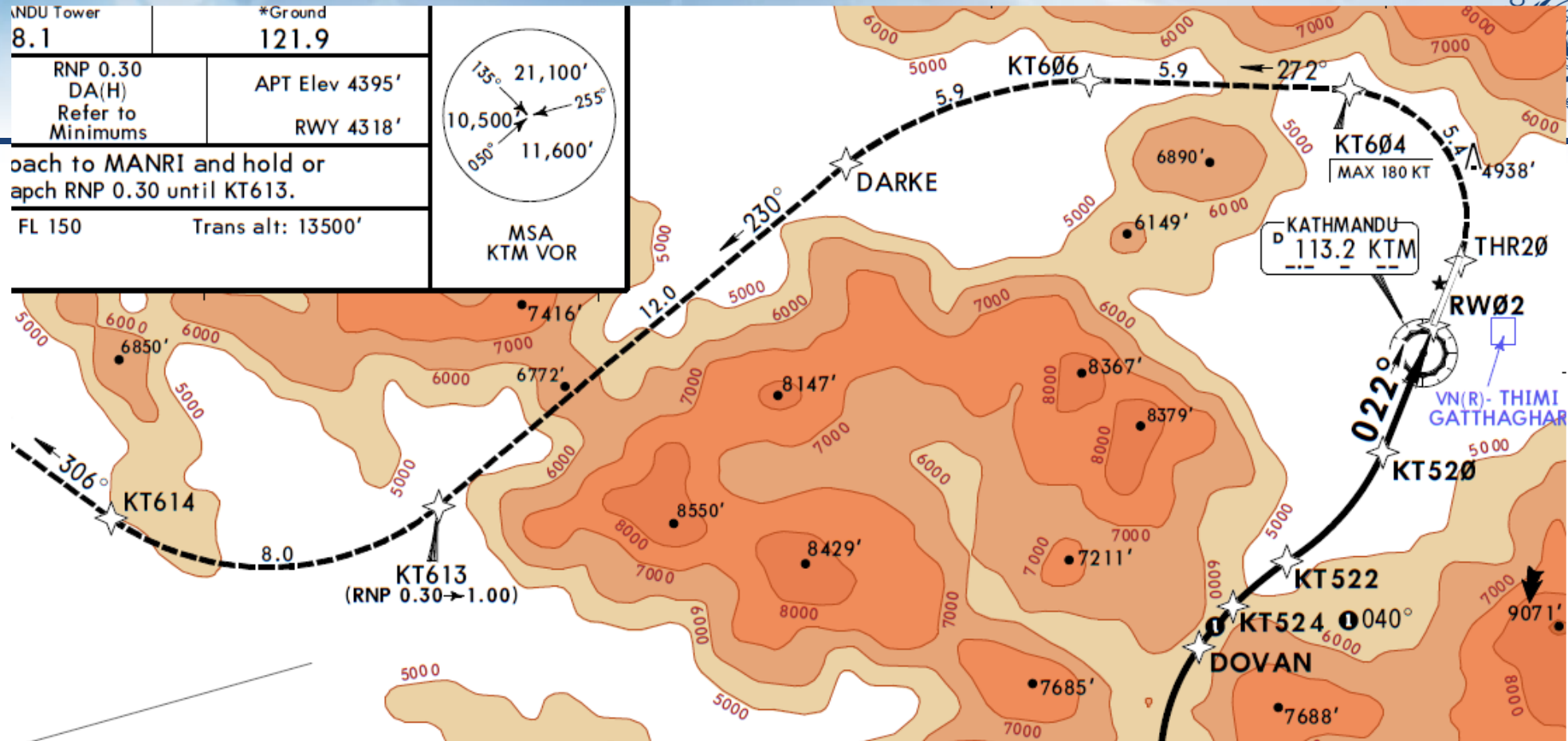
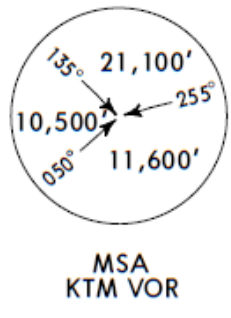
- An OCA/H or DA/H for RNP 0.3 must be published
- Additional OCA/H or DA/H for RNP navigation accuracy requirements between 0.1 NM and 0.3 NM may be published as applicable

RNP <b>0.15</b>			RNP <b>0.20</b>			RNP <b>0.30</b>		
DA(H) <b>2095'</b> (309')			DA(H) <b>2099'</b> (313')			DA(H) <b>2103'</b> (317')		
		HIALS OUT			HIALS OUT			HIALS OUT
C	<b>800 m</b>	<b>1700 m</b>	C	<b>800 m</b>	<b>1700 m</b>	C	<b>900 m</b>	<b>1700 m</b>

- OCA/H is published on approach charts for all RNP AR APCH procedures with one exception: for RNP AR APCH procedures involving a MAS with RNP navigation accuracy requirements less than 1.0 NM, a DA/H shall be published.



INDU Tower 8.1	*Ground 121.9
RNP 0.30 DA(H) Refer to Minimums	APT Elev 4395' RWY 4318'
Approach to MANRI and hold or approach RNP 0.30 until KT613.	
FL 150	Trans alt: 13500'



**DA(H) A: 4600'(282') B: 4630'(312') C: 4650'(332') D: 4670'(352')**

# RESTRICTIONS ON PROMULGATION OF RNP AR



- Final approach vertical guidance is based on barometric altimeters

***Remote altimeter setting not permitted for RNP AR procedures***



**Thank You**