

Required Navigation Performance visual with prescribed track RNP (VPT)

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Webinar on RNP(VPT).

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Agenda

- Introduction
- EASA – RNP(VPT) Background and SIB.
- EasyJet – Safety and predictability during visual manoeuvring.
- Lufthansa & Austrian Airlines – Operators' proprietary procedures.
- Iberia – RNP (VPT) published (AIP) procedures.
- Airbus –Introduction of RNP(VPT) on Airbus A/C documentations.
- Questions and answers





Background & ICAO Circular 359.

FLTOSP.023.05		Introduce a concept of operations for using VPT based on RNAV, VPT (RNAV)
Source	FLTOSP/1	
Problem Statement	Visual RNAV or RNAV Visual procedures are already implemented in many countries in a variety of ways, however a global concept of operation has not been established and there is no standardisation in implementation, charting, operational criteria or phraseology. Increasing numbers of comments from both States and industry suggest this is a growing issue, and a number of incidents have already occurred on these procedures.	
Specific Details	<p>A clear concept of operations and guidance for standardized implementation of a new kind of VPT using RNAV waypoints and path terminators could offer many benefits including increased runway utilisation, reduced fuel consumption and safer approaches to airports where no other types of approach can be implemented.</p> <p>The lack of a Concept of Operations has resulted in many such procedures being developed for a variety of other reasons, and as a result it is not clear exactly how some of these procedures have been designed and what, if any, separation and obstacle clearance exists when using them.</p> <p>As part of the Concept of Operations, a standardized name for these approaches needs to be agreed on. VPT (RNAV) is suggested</p>	
Expected Benefits	Guidance and best practice for the design and use of visually guided approaches, ensuring correct implementation and safe use.	
Reference Documents	IFPP proposed initial ConOps for RNAV Visual approach	
Deliverable Expert Group	Flight Operations Panel (FLTOSP)	

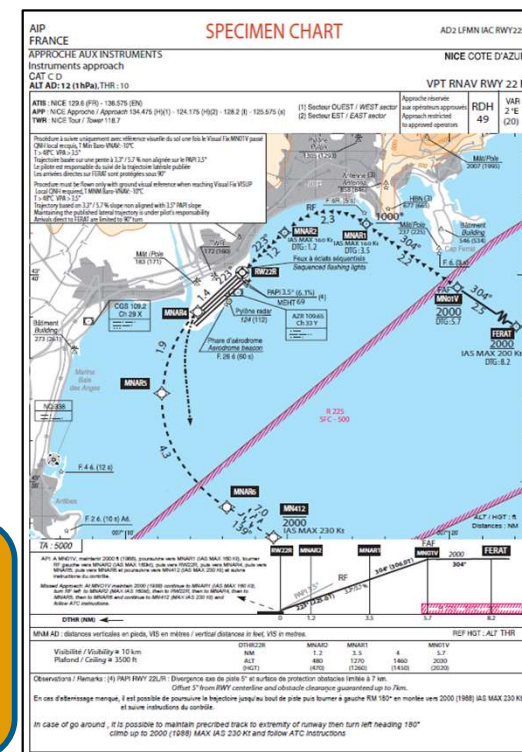
ID	Document Affected	Description of Amendment proposal or Action	Supporting Expert Group	Status	Expected Dates		
					Delivery Date	Effective	Applicability
1618	Actions	Develop a concept of operations that clearly describes the operational criteria for VPT (RNAV)	-	Delivered	Q4 2016	Nov 2016	Nov 2016
1620	Aeronautical Chart Manual (Doc 8697)	Develop depiction standards for VPT (RNAV)	IFPP	Re-scheduled	Q2 2021	Jun 2022	Jun 2022
10104	New ICAO Circular (CIR ###)	Guidance for the development of VPT (RNAV) procedures	ATMOPSP IFPP PBNSG	Re-scheduled	Q2 2021		Jun 2022
1622	PANS-OPS Vol I (Doc 8168)	Requirements for the pilots to fly VPT (RNAV)	IFPP	Re-scheduled	Q2 2021	Jun 2024	Nov 2024
1619	PANS-ATM (Doc 4444)	Inclusion of ATM procedures for VPT (RNAV)	ATMOPSP	Re-scheduled	Q2 2021	Jun 2024	Nov 2024
Status: Approved		Priority:	Initial Issue Date: 12 Mar 2015	Date Approved by ANC: 08 Jun 2021	Session / Meeting: 217-6		

- Job Card
FLTOSP.023
- FLTOSP/1 to 8
(2014-2021)
- Standardise the
'RNAV Visual'
development.
- RNP (VPT) is IFR to
a Visual Fix

Two concepts

The logo of the International Civil Aviation Organization (ICAO) is displayed. It features a central globe with latitude and longitude lines, flanked by two olive branches. Above the globe, the acronym "ICAO" is written in English, and below it, the name is written in Chinese ("国际民航组织"). The logo is set against a white background with a blue border.

State
published
procedure





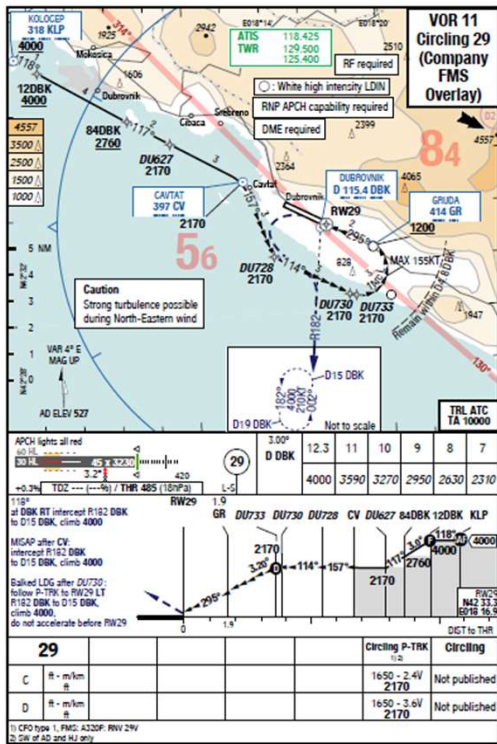
- RNP (VPT) is IFR to a Visual Fix
- Visual segment may be subject to restrictions.
- ATC clearance & Standard Phraseology
- Missed approach and Go-around



Operator's property procedures (OPP)

Operator proprietary procedure

- Developed internally, thus NOT PUBLISHED
- Lateral and vertical guidance
- Reduces risk of unstable approach
- Used for circling approaches & visual paths
- ATC clears aircraft for standard approach/circling
- Pilot use of procedure is transparent to ATC



SIB overview 2025-05

→ <https://ad.easa.europa.eu/ad/2025-05>

→ Applicability

→ Reason

→ Recommendation

→ All – explanation of the OPP

→ Operators (general)

→ Operators with RNP AR procedures approval.

→ Operators without RNP AR procedures approval.

→ National competent authorities (Member states)

→ ANSP and aerodrome operators

EASA SIB No.: 2025-05



Safety Information Bulletin

Operations

SIB No.: 2025-05

Issued: 27 May 2025

Subject: Development and Usage of Procedures for Visual Manoeuvring with Prescribed Tracks Relying on Required Navigation Performance

Ref. Publications:

- Commission Regulation (EU) No [965/2012](#) of 05 October 2012.
- Commission Implementing Regulation (EU) [2017/373](#) of 01 March 2017.
- ICAO Manual 'Required Navigation Performance Authorization Required (RNP AR) Procedure Design Manual' ([Doc 9905](#)), 3rd Edition dated 2021.
- ICAO Manual 'Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS), Volume II – Construction of Visual and Instrument Flight Procedures' ([Doc 8168](#)), 7th Edition dated 2020.
- ICAO Circular 'Development of Procedures for Visual Manoeuvring with Prescribed Tracks using Required Navigation Performance' ([Cir 359](#)).

Applicability:

Aircraft operators, Air Navigation Service Providers (ANSP), aerodrome operators, flight procedure designers, Design Approval Holders (DAH), and National Competent Authorities (NCAs).

Reason:

Traditional visual manoeuvring procedures, particularly circling approaches, require pilots to rely heavily on visual cues. This can be challenging in adverse weather conditions, near complex terrain, or when the flight crew is not familiar with the aerodrome environment and noise-sensitive areas.

The visual segment of a Required Navigation Performance (RNP) Visual manoeuvre with Prescribed Track (VPT) is a visual procedure that allows for more structured and precise visual manoeuvring, whereby the Flight Management System provides horizontal and vertical guidance to be followed during the approach. Thus, it reduces pilot workload and enhances safety and the predictability during visual manoeuvring – provided it is properly designed and coded in the aircraft navigation database, and crews are trained

SIB overview 2025-05

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→ Appendix 1

→ Appendix 2 – Checklist

→ 37 items.

→ Flyability Evaluation (usually in SIMULATOR) / Aircraft eligibility

→ Evaluation of the flight procedure (i.e. chart evaluation, etc.).

→ Evaluation of the approach segments

→ Evaluation of abnormal and emergency aircraft scenarios

RNP (VPT) Evaluation Checklist		EASA European Aviation Safety Agency	
1. Date:	2. Aircraft type:		
3. Title of the Procedure:	4. Pilot in command:		
5. Terrain & obstacle DATA base (SIM and ACFT):	6. NAV Data Base / AIRAC cycle:		
7. RF capability (Note 1):	8. Free text:		
<small>Note 1: Although aircraft may have the ability to perform RF legs stated in their AFM, this does not imply that the high bank, low speed and possibly high acceleration cases of the RF legs applied for RNP AR have been assessed. If only the RF leg capability has been stated, without a statement of RNP AR qualification, this applies to relatively benign RF legs applied in the initial and intermediate sections of the approach, not in the final approach segment. RF legs in the final approach segment (FAS) are only assessed for qualification to RNP AR criteria. See items below related to RF, bank angle, etc.</small>			
Flyability Evaluation (usually in SIMULATOR) / Aircraft eligibility		Yes	No
8. Does the simulator qualify for the evaluation? Full data package of the aerodrome (Note 2):			
<small>Note 2: A partial SIM data package may be acceptable if the terrain database and runway location are correct, even though the visual of the aerodrome is generic.</small>			
9.	Comparison of the database of the SIM and ACFT versus the Chart		
<small>Comments and notes, reference to the evidence.</small>			
10.	Is the simulator equipped with the exact same FMS as the aircraft?		
11.	Is the FMGS/FMS navigation data coherent with the approach chart?		
12.	Evaluation of the Visual fix (VF) altitude and height.		
13.	Speed assessment (e.g. +20k, and/or 20k less than the standard in the chart).		
13.1	Is the maximum speed increment evaluated? (Note 3)	Max speed increment:	
13.2	Is the max speed decrement evaluated? (Note 3)	Max speed decrement:	
<small>Note 3: This step helps evaluate the sensitivity of the procedure to high energy approaches, to failures that require higher or lower speeds (e.g. flap or slot lock, etc.), indirectly, the sensitivity to wind limits, etc. Only one can be evaluated but both are recommended to be evaluated.</small>			
14.	Assess the impact of high tail- and crosswinds on the path-keeping ability while executing RF legs. Is it necessary to establish any wind limitation during the approach?		
15.	Was the max. bank achieved in the RF segment (turn) determined? Max bank achieved:		
16.	Temperature correction: evaluate the approach in a high and low temperature scenario. (Note 4)		
16.1	Evaluation at lower temp (limit) in accordance with operator's cold temperature correction procedure.		
16.2	Evaluation made at higher temp limit in accordance with operator's hot temperature procedure.		
<small>Note 4: Some charts indicate a lower temperature limit, while higher temperature limits are rare. If the simulator accurately represents temperature effects on the atmosphere, operators can assess approaches at reasonable high and low temperature and consider their associated risks. Low temperatures may lead to flying lower than intended, which is especially relevant in close to terrain approaches. In contrast, high temperatures can steepen approaches, increasing risks like high-energy approaches, unstable paths, and runway overruns.</small>			

END

Thank for your attention

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Q&A session.



Webinar
EASA - Cologne

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Appendix 2 - RNP (VPT) Procedure Evaluation Checklist

EASA SIB No.: 2025-05

RNP (VPT) Evaluation Checklist			
1.	Date:	2.	Aircraft type:
3.	Title of the Procedure:	4.	Pilot in command:
5.	Terrain & obstacle DATA base (SIM and ACFT):	6.	NAV Data Base / AIRAC cycle:
7.	RF capability (Note 1):	8.	Free text:
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8.	Does the simulator qualify for the evaluation? Full data package of the aerodrome (Note 2).		
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9.	Comparison of the database of the SIM and ACFT versus the Chart <i>Comments and notes, reference to the evidence.</i>		
10.	Is the simulator equipped with the exact same FMS as the aircraft?		
11.	Is the FMGS/FMS navigation data coherent with the approach chart?		
12.	Evaluation of the Visual fix (VF) altitude and height.		
13.	Speed assessment (e.g.+20k, and/or 20k less than the standard in the chart).		
13.1	Is the maximum speed increment evaluated? (Note 3)	Max speed increment: _____	
13.2	Is the max speed decrement evaluated? (Note 3)	Max speed decrement: _____	
<i>Note 3: This step helps evaluate the sensitivity of the procedure to high energy approaches, to failures that require higher or lower speeds (e.g. flap or slat lock, etc.), indirectly, the sensibility to wind limits, etc. Only one can be evaluated but both are recommended to be evaluated.</i>			
14.	Assess the impact of high tail- and crosswinds on the path-keeping ability while executing RF legs. Is it necessary to establish any wind limitation during the approach?		
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