

APPLICATION TO CONDUCT RNAV 5 Operations

1. Introduction

This Job Aid was developed to provide operators, and inspectors with guidance on the process to be followed in order to obtain an RNAV 5 approval. It should be used as an aid for the approval process but frequent reference to the ICAO PBN Manual (DOC9613) and CAAF SD-PBN (Operations Approval) will be required. Volume II, Part B, Chapter 2 contains detailed guidance on the implementation of RNAV 5.

2. Purpose of the Job Aid

- 2.1 To give operators and inspectors information on the main RNAV 5 reference documents.
- 2.2 To provide tables showing the contents of the application, the associated reference paragraphs, the place in the application of the operator where RNAV 5 elements are mentioned and columns for inspector comments and follow-up on the status of various elements of RNAV 5.

3. Actions Recommended for the Inspector and Operator

- 3.1 At the pre-application meeting with the operator, the inspector reviews the “basic events of the RNAV 5 approval process” described in Section 1 of this Job Aid, in order to provide an overview of the approval process events.
- 3.2 The inspector reviews this Job Aid with the operator in order to establish the form and content of the RNAV 5 approval application.
- 3.3 The operator uses this Job Aid as a guide to collect the documents of the RNAV 5 application.
- 3.4 The operator inserts in the Job Aid references showing in what part of its documents are the RNAV 5 elements located.
- 3.5 The operator submits the Job Aid and the application to the inspector (with the required documents).
- 3.6 The inspector indicates in the Job Aid whether an item is in compliance or needs corrective action.
- 3.7 The inspector informs the operator as soon as possible when a corrective action by the operator is required.
- 3.8 The operator provides the inspector with the revised material when so requested.
- 3.9 The CAAF provides the operator with the operational specification (air operators) or a letter of authorization (others), as applicable, when the tasks and documents have been completed.

SECTION 1 - INFORMATION ON THE IDENTIFICATION OF AIRCRAFT AND OPERATORS

NAME OF THE OPERATOR:

is applying for RNAV 5 Operations Approval.

Aircraft manufacturer, model, and series	Aircraft Registration (required only if installed equipment varies between model and series)	List relevant make and model of related navigation equipment

DATE OF PRE-APPLICATION MEETING

DATE ON WHICH THE APPLICATION WAS RECEIVED

DATE ON WHICH THE OPERATOR INTENDS TO BEGIN RNAV 5 OPERATIONS

SECTION 2 – OPERATOR APPLICATION (ITEMS AND DOCUMENTS)

Item	Title of document	Indication of inclusion by the operator	Comments by the Inspector
1	Airworthiness documents to determine aircraft eligibility Airworthiness documents that establish the aircraft and the navigation system have been approved for RNAV 5 operations.		

2	RNAV 5 system requirements Documents that show the aircraft equipment One (1) RNAV system comprising of: <ul style="list-style-type: none"> • one or a combination of the following navigation sensors: VOR/DME, DME/DME, INS or IRS, and GNSS; • an Area Navigation (RNAV) computer; • a Control Display Unit (CDU); and • a navigation display(s) or instrument(s) e. g., Navigation Display (ND), Heading Situation Indicator (HSI) or Course Deviation Indicator (CDI). 		
3	Maintenance program 1. For Aircraft with established RNAV or GPS stand-alone maintenance practices provide document references. 2. For newly installed RNAV or GPS stand-alone provide maintenance practices for review.		
4	Minimum equipment list (MEL) if applicable showing provisions for RNAV 5 systems.		
5	Training Training program for flight crews, flight dispatchers, and maintenance personnel as applicable		
6	Operational policies and procedures Operations manual and checklists or sections to be attached to the application, corresponding to RNAV 5 operating procedures and policies.		
7	Navigation database (if carried) Details of the navigation data validation programme.		

SECTION 3 – GUIDE FOR DETERMINING RNAV 5 AIRCRAFT ELIGIBILITY

Item	Topics	Reference paragraphs ICAO Doc 9613 Vol II Part B 2	Location in the Documents of the operator	Comments
1	Aircraft eligibility			
	Aircraft approved for B-RNAV	2.3.2.6		

	Aircraft with an approved statement of compliance	2.3.2.4		
	Aircraft with statement by the manufacturer	2.3.2.4		
2	Aircraft and System requirements – one of the following			
	VOR/DME or DME/DME system	2.3.3.2.2 2.3.3.2.3		
	INS or IRS	2.3.3.2.1		
	GNSS a) TSO C129 with pseudo range step detection and health word checking; or b) TSO C129 (a) or TSO C145 () or TSO C146() or equivalent	2.3.3.2.4		
3	Availability of conventional navigation equipment as a back-up in the event of loss of GNSS, if required by the State.	2.3.3.2.4.3		
4	RNAV 5 system functional requirements	2.3.3.3		

SECTION 4 - PROCEDURES FOR RNAV 5 OPERATIONS

Item	Operating Procedures	Reference paragraphs ICAO Doc 9613 Vol II Part B 2	Location in the Documents of the operator	Comments
1	Flight planning			
	Verify aircraft is approved for RNAV operation.	2.3.4.1		

	File appropriate flight plan suffixes for RNAV 5	2.3.4.2.1		
	Verify that GNSS or ground-based navigation aids required for RNAV 5 operations are available for the route and period of operations, including any contingencies	2.3.4.2.2		
	Verify that database is current and appropriate for the route (if carried)	2.3.4.2.3		
	Confirm availability of GNSS (if carried). Revise flight planning if a continuous loss of integrity of more than 5 minutes is predicted	2.3.4.3		
2	General operating procedures			
	Operator procedures to ensure flight crew do not request, or file a flight plan for RNAV 5 routes unless they meet all the criteria in the relevant State documents.	2.3.4.4.1		
	Operator procedures to ensure any manufacturer requirements, to meet the RNAV 5 performance requirements	2.3.4.4.2		
Item	Operating Procedures	Reference paragraphs ICAO Doc 9613 Vol II Part B 2	Location in the Documents of the operator	Comments
	For RNAV 5 routes – procedures for the use of a lateral deviation indicator, a FD or an AP in the lateral navigation mode.	2.3.4.4.7		
	Operator procedures for setting lateral deviation scale (where applicable)	2.3.4.4.7		
	Operator procedures for limiting FTE to +/- ½ navigation accuracy	2.3.4.4.8		
	Operator procedures for rejoining route following ATC course assignment	2.3.4.4.9		

3	Contingency Procedures			
	Notification of ATC when RNAV performance ceases to meet the requirements for RNAV 5	2.3.4.5.1		
	Operator procedures for use of GNSS; a) Loss of integrity monitoring function b) Integrity alert	2.3.4.5.3 a) 2.3.4.5.3 b)		