



RNAV 5 OPERATIONS APPLICATION AND JOB AID

1. Introduction

This Job Aid was developed to provide operators and inspectors with guidance on the process to be followed by an operator in order to obtain an RNAV 5 approval. It shall be used for application by the operator and as an aid for the approval process by the inspector. Reference should be made to advisory pamphlets FSS-AOC-AP 120 and FSS-AOC-AP 122. The applicant may also use the ICAO PBN Manual (DOC9613) for guidance as required.

2. Purposes of the Job Aid

- 2.1 To be used by operators for the relevant PBN application.
- 2.2 To provide guidance on the contents of the application, the associated reference paragraphs, as well as a systematic system for application by the operator.
- 2.3 To provide the inspectors with a checklist/job aid including columns for comments and follow-up on the status of various application elements.

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 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 collects the documents/annexes required for the application and completes the Job Aid references. The operator uses this Job Aid as a guide to collect the documents/annexes 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 programme elements located.
- 3.5 The operator submits the Job Aid and the application to the inspector (documents/annexes).
- 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 CAA provides the operator with the operational specifications (OpSpecs) or a letter of authorisation (LOA), as applicable, when the tasks and documents have been completed.

4. Reference documents

Documents of reference	Subjects
Namibia DCA – 005/2014	Operational Directive - PBN requirements for air operators
NDCA FSS-AOC-AP 120	Advisory Pamphlet - PBN Approval Process – General Information
NDCA FSS-AOC-AP 122	Advisory Pamphlet - RNAV 5 Operations Approval Process
<i>Other Reference Documents</i>	
ICAO Doc 9613	Performance based navigation manual
EASA AMC 20-4	Acceptable means of compliance for airworthiness approval and operational criteria for the use navigation systems designated for Basic RNAV operations
FAA AC 90-96	Approval of U.S. Operators and aircraft to operate in European Airspace designated for BRNAV/RNP-5
ETSO-C115b	Airborne area navigation equipment using multi sensor input
TSO-C115, any version	Airborne area navigation equipment using multi-sensor inputs

PART 1. GENERAL INFORMATION BASIC EVENTS OF THE APPROVAL PROCESS

	Action by Operator	Action by Inspector
1	Establish the need for the authorization	
2	Review the AFM, AFM supplement, TC data sheet, other appropriate documents (e.g. STCs, SBs, SLs) to determine aircraft eligibility. If necessary contact the aircraft and/or avionics OEM to confirm eligibility ¹ .	
3	Schedule a pre-application meeting with the inspector.	
4		<p>During the pre-application meeting establish:</p> <ul style="list-style-type: none"> ✓ form and contents of the application; ✓ documents required to support the application; ✓ target date for the application submission; ✓ requirement for flight validation.
5	Submit the application at least 90 days prior to startup of the planned operations.	
6		Review submission.
7	Ensure that amendments to manuals, programmes and other relevant documents are complete; provide training to flight crews, flight dispatchers and maintenance personnel; if required, conduct a validation flight.	If required, participate in the validation flight.
8		Once the requirements have been met, issue operational approval.

PART 2: INFORMATION ON THE IDENTIFICATION OF AIRCRAFT AND NAVIGATION SYSTEM

NAME OF THE OPERATOR: _____ is applying for RNAV 5 operations approval.

Aircraft manufacturer, model and series	Registration numbers	Serial numbers	List relevant make and model of related navigation equipment

DATE OF PRE-APPLICATION MEETING _____

DATE APPLICATION WAS RECEIVED _____

DATE OPERATOR INTENDS TO BEGIN RNAV 5 OPERATIONS _____

SIGNATURE BY RESPONSIBLE POST HOLDER _____

NAME OF RESPONSIBLE POST HOLDER _____

Note: Application should be made 90 days before date of intended commencement of operations

PART 3 – OPERATOR APPLICATION (ITEMS AND DOCUMENTS)

Item	Title of Document	Indication of inclusion by operator (specific title)	Comments by the Inspector
1.	<p>Airworthiness documents showing aircraft eligibility for RNAV 5.</p> <p>AFM, AFM revision, AFM supplement, or Type certificate data sheet (TCDS) showing that the LRNS is eligible for RNAV 5, or</p> <p>Statement by the manufacturer, or</p> <p>Aircraft modification documentation</p>		
2.	<p>Aircraft modified to meet RNAV 5 standards, if applicable.</p> <p>Documentation on aircraft inspection and/or modification.</p>		
3.	<p>Maintenance practices</p> <p>The list of references of the document or programme..</p>		
4.	<p>Minimum equipment list (MEL) (for operators conducting operations based on a MEL):</p> <p>Updated MEL showing provisions for required RNP 2 systems.</p>		
5.	<p>Training programmes</p> <p>Training</p> <p>1. Part 91 operators or equivalent: Training method: Details of Course completion.</p> <p>2. Part 121 and/or 135 operators or equivalent: Details of Training programmes (training curricula) for flight crews, flight dispatchers and maintenance personnel as applicable.</p>		
6.	<p>Operating policies and procedures</p> <p>1. Part 91 operators or equivalent: Applicable extracts from Operations manual or other document detailing RNP 2 operating procedures and policies.</p> <p>2. Part 121 and/or 135 operators or equivalent: Operations manual and checklists.</p>		
7.	<p>Navigation database</p> <p>Details of the navigation data validation including installation of new databases.</p>		

Note 1: Documents may be grouped in a single folder or may be sent as individual documents.

PART 4 – RNAV 5 OPERATING PROCEDURES

Item	Operating Procedures	Reference Advisory Pamphlet FSS-AOC- AP 122	Operator's documents reference Insert N/A where not applicable	Comments by the Inspector
	Aircraft Eligibility			
1.	Documents that establish RNAV 5 eligibility (see Part 3 above)	8.1,8.2		
	Flight Planning	10.1		
1.	Verification that aircraft has been approved for RNAV 5 operations.			
2.	Verification of RAIM availability (GNSS only) for the intended routing and times.			
3.	Verification of the availability of NAVAIDS (non –GNSS).			
4.	Verification navigation database is current and appropriate for the region.			
5.	Verification requirement to insert the letter “R” in item 10 and PBN/B1-5 as appropriate in item 18 of the ICAO flight plan.			
6.	Verification of any operational restriction related to RNAV 5 approval as appropriate.			
	General Operating Procedures	10.2, 10.3		
7.	Reviewing of maintenance logs/status and MEL dispatchability (for operators approved to dispatch flights under an MEL).			
8.	Confirming that the navigation database is up to date (if appropriate).			
9.	Cross-checking of charts with the RNAV system display.			
10.	Cross-checking with conventional NAVAIDS to monitor for required navigation performance and following routes to within 2.5 NM.			

Item	Operating Procedures	Reference Advisory Pamphlet FSS-AOC- AP 122	Operator's documents reference Insert N/A where not applicable	Comments by the Inspector
11.	Ensuring flight plan is not modified during ATC heading assignments until clearance is received to re-join the route or a new clearance is confirmed.			
12.	Operator procedures for use of a lateral deviation indicator, an FD or an AP in lateral navigation mode (LNAV) for RNAV 5 operations.			
13.	Operator procedures for limiting FTE to +/- ½ navigation accuracy			
14.	Operator procedures for manual updating of position (if approved in AFM)			
15.	Requirement/procedures for advising ATC if unable to comply with instructions.			
	Contingency procedures	10.4		
16.	Notification to ATC of any degradation or failure of the navigation equipment below the navigation performance requirements, or of any deviation required for a contingency procedure.			
17.	For stand-alone GPS installations, procedures in the event of failure, including crew reversion to an alternative means of navigation.			
	Training Programme that meets RNAV 5 requirements			
18.	The required training programmes for flight crew and flight dispatchers for RNAV 5 operations.	12		
	Navigation Database Procedures			
19.	Documented procedures (in maintenance manual) for management of Nav data including procedures for maintaining AIRAC cycle currency, checking for errors	FSS-OPS-AP 120 Para 11; FSS-AOC-AP 120 Appendix 2		

Item	Operating Procedures	Reference Advisory Pamphlet FSS-AOC- AP 122	Operator's documents reference Insert N/A where not applicable	Comments by the Inspector
	and reporting errors to the navigation database supplier;			

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Recommendation/observation (FOPS):

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AIR Inspector's Name & ASI Stamp

Signature

Date

FOPS Inspector's Name & ASI Stamp

Signature

Date

SUBDIVISION CHIEF'S REMARKS:

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The above requirements have been evaluated against the operator submissions and is hereby **approved / not approved** for RNAV 5 operations.

Chief Inspector's Name & ASI Stamp

Signature

Date