

## **PART 2 PBN OPERATIONAL APPROVALS**

### **Chapter 1 Overview**

#### **1. General**

In this Part guidance is provided to assist inspectors in the evaluation of an application for PBN Operational Approval for each of the PBN Manual Navigation Specifications.

The PBN Manual contains a statement of the operational requirements for each type of operation, and while it is necessary that the Operational Approval evaluation determines that the proposed operation meets the minimum requirements, it is also necessary that an assessment is made of the operator's capability to meet the operational intent of the particular navigation specification.

It should be noted that each of the PBN Manual navigation specifications has a history of its own and the minimum requirements have originated over differing time frames and in some cases geographical operating requirements. In the development of the PBN manual it has not been possible to correlate all requirements of the individual navigation specifications and some inconsistencies may be noted between specifications.

Operations approval inspectors who have a good understanding of the underlying principles, intent and application appropriate to each of the navigation specifications should be able to manage any such limitation in the PBN Manual without difficulty.

#### **2. Responsibility for Operational Approval Evaluation**

Overall responsibility for the evaluation of an operational approval application will be assigned to a Flight Operations Inspector (FOI), who is (where possible) experienced and trained in PBN operations. The assigned inspector should have access to other specialist expertise where required.

It should be recognised that PBN is an operational concept and the primary task is to determine that the applicant's operating practices, procedures and training are adequate. Although some evaluation of aircraft eligibility and airworthiness is required during the operational approval process, PBN operational approval is not primarily an airworthiness task.

In some cases, particularly where documentation is available to demonstrate the aircraft eligibility, the FOI may be satisfied that any airworthiness issues are addressed and assistance from airworthiness experts may not be necessary. However in most cases issues of configuration control, ongoing maintenance, minimum equipment lists, training of maintenance personnel etc., should be assessed by qualified airworthiness inspectors in consultation with the FOI.

### **3. Issue of Approval**

Depending upon the legislative and organisational structure within each State, the method of issue of an operational approval will vary, although in most cases the approval will consist of the issue of an operations specification (OPSPEC) or a letter of approval.

OPSPECs should be annotated as shown in the table below to show the individual PBN operational approvals granted. The remarks as noted should also be included on the OPSEC to assist in identifying existing approvals which are equivalent to PBN navigation specifications. For example, it should be noted (as shown) that an RNAV 5 approval is applicable in B-RNAV airspace. This will assist regulators to recognise and accept OPSECS issued in accordance with PBN navigation specifications and help to avoid misunderstandings as the transition is made to the global adoption of PBN.

However issued the approval will commonly include conditions, as PBN operations may be conducted using a variety of aircraft, systems and procedures which have yet to be universally standardised.

It is not necessary to issue separate airworthiness and operational approvals for PBN operations. The operational approval is issued on the basis that an assessment is made of the airworthiness aspects of the operation.

### **4. Job Aids**

Job aids (included in Part 3) have been developed to assist inspectors in managing the process of PBN operational approvals. The job aids provide both inspectors and operators with guidance on the documentation required to be included in an operator's application, and the items that must be assessed by the FOI in order for an operational approval to be issued. The job aids also serve as means of recording the documentation process.

The job aids summarise the key elements to be assessed, and should be used as a guide to the approval process but frequent reference to the ICAO PBN Manual (DOC 9613) and PBN Operational Approval Handbook will be required to identify detailed requirements for approval.

### **5. Using the Job Aids**

Job aids are divided into four sections as follows:

**SECTION 1 - INFORMATION ON AIRCRAFT AND OPERATOR IDENTIFICATION** contains the general information identifying the operator and aircraft applicable to the particular application. This section should be completed by the applicant. In general a PBN operational approval can be issued according to aircraft type and model and it is not necessary to identify specific aircraft by registration marks or serial number unless there are significant differences in installed equipment in the operator's fleet.

<b>OPERATIONS SPECIFICATIONS</b> (subject to the approved conditions in the Operations Manual)				
Issuing Authority Contact Details.				
Telephone: _____; Fax: _____; E-mail: _____				
AOC#:	Operator Name:	Date:	Signature:	
	Trading Name			
<b>Aircraft Model:</b>				
<b>Types of operation:</b> Commercial air transportation <input type="checkbox"/> Passengers; <input type="checkbox"/> Cargo; <input type="checkbox"/> Other:.....				
<b>Area of operation:</b>				
<b>Special Limitations:</b>				
Special Authorizations:	Yes	No	Specific Approvals	Remarks
<b>Dangerous Goods</b>	<input type="checkbox"/>	<input type="checkbox"/>		
<b>Low Visibility Operations</b>				
Approach and Landing	<input type="checkbox"/>	<input type="checkbox"/>	CAT .... RVR: m DH:	
Take-off	<input type="checkbox"/>	<input type="checkbox"/>	RVR: m	
<b>RVSM</b> <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>		
<b>ETOPS</b> <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	Maximum Diversion Time: minutes	
<b>Navigation Specifications for PBN Operations</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RNP 10  RNAV 5  RNAV 1 and RNAV 2  RNP 4  Basic RNP 1  RNP APCH [LNAV, LNAV/VNAV, LPV, LP] <sup>1</sup>  RNP AR APCH	Also valid for B-RNAV routes  Also valid for P-RNAV routes  <sup>1</sup> List approach types approved. RNP APCH [LNAV] also valid for approach procedures designated as RNAV (GNSS)
<b>Continuing Airworthiness</b>				
<b>Others</b>	<input type="checkbox"/>	<input type="checkbox"/>		

SECTION 2 – OPERATOR APPLICATION (ITEMS AND DOCUMENTS) identifies the documentation that the operator must provide in support of the application. As full documentation is necessary for the inspector to conduct a comprehensive assessment, applications which are not supported by adequate documentation should be referred back to the operator before the detailed assessment of an application is commenced.

The applicant should insert in the column headed “*Indication of inclusion by the operator*” the relevant references in the applicant’s supporting documentation that demonstrate compliance.

The inspector, after assessing the information provided by the applicant, completes the “*Comments by the Inspector*” column by noting as follows:

- 1) Satisfactory
- 2) Additional information required, including items which require further action
- 3) Other comments

SECTION 3 – GUIDE FOR DETERMINING AIRCRAFT ELIGIBILITY provides the inspector with guidance on the basis for establishment of compliance with the PBN Manual aircraft eligibility requirements. The applicant should identify the specific reference(s) in the operator’s documentation that demonstrate compliance with each requirement. Where there are more than one means of compliance the applicant should note *Not Applicable* where appropriate.

The MCAA inspector must indicate in the comments column as follows:

- 1) Compliant
- 2) Partially compliant, including items which require further action
- 3) Not compliant
- 4) Other remarks

Where applicable the inspector should attach a statement supporting the assessment including any remarks relevant to the assessment including any alternative means of compliance, conditions related to the approval or reasons for assessing the application as non-compliant.

SECTION 4 - PROCEDURES FOR PBN OPERATIONS provides a checklist to identify that the operator’s procedures meet the requirements for the specific PBN operation. The operator must identify that each requirement is appropriately documented and applied to the conduct of the particular PBN operation. Procedures must be contained in the operator’s Flight Crew Training Manual, Flight Crew Training Manual, checklists, and instructions to operational personnel or equivalent documents. Where appropriate, reference may be made to manufacturer documentation provided that operational personnel have ready access to relevant documents.

All items on the job aid must be identified as satisfactory or compliant (subject to any appropriate conditions or approved exemptions) before an operational approval is issued.