PBN Standard Operating Procedures Guidance Material

Long version 1.0
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Disclaimer

The PBN Standard Operating Procedure (SOP) Guidance Material provided in this document has been produced in response to feedback received during the New Southern Sky (NSS) PBN Expo in 2018. It has been produced collaboratively with industry as an output of the NSS programme and should be considered as guidance only.

Moreover, this material is not intended to be definitive and is not intended to be used in isolation. The user is responsible for ensuring that their SOPs are relevant to their operation.

The information in this guidance material does not, in any way, replace the requirement for participants to comply with their own obligations under the Civil Aviation Rules, the Civil Aviation Act 1990 and other legislation. Should there be any inconsistency between this information and the rules or legislation, the rules and legislation have precedence.

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Glossary

Abbreviations associated with PBN Operations:

AC Advisory Circular

ADS-B Automatic Dependent Surveillance - Broadcast

AIP Aeronautical Information Publication

AIRAC Aeronautical Information Regulation and Control

APCH Approach

ARINC Aeronautical Radio, Incorporated

ARP Aerodrome Reference Point

ASE Altimetry System Error

ATS Air Traffic Service

BARO VNAV Barometric Vertical Navigation

CAA Civil Aviation Authority

CAR New Zealand Civil Aviation Rule

CDI Course Deviation Indicator

Code of Federal Regulations

DF Direct Fix

DME Distance Measuring Equipment

Doc Document

EASA European Aviation Safety Agency

FAA Federal Aviation Administration

FD Fault Detection

FDE Fault Detection and Exclusion

FIR Flight Information Region

FMS Flight Management System

Ft Feet

FTE Flight Technical Error

GNSS Global Navigation Satellite system

GPS Global Positioning System

GBNA Ground Based Navigation Aid (VOR, NDB, DME)

HSI Horizontal Situation Indicator

ICAO International Civil Aviation Organization

IF Initial Fix

IFR Instrument Flight Rules

ILS Instrument Landing System

INU Inertial Navigation Unit

IRU Inertial Reference Unit

LOA Letter of Acceptance

LOC Localiser

MEL Minimum Equipment List

MLS Microwave Landing System

MPS Minimum Performance Specification

MSL Mean Sea Level

NM Nautical Mile

NZ New Zealand

OEM Original Equipment Manufacturer

PANs-OPS Procedures for Air Navigation Services - Operations

PBN Performance Based Navigation

RAIM Receiver Autonomous Integrity Monitoring

RNAV Area Navigation

RNP Required Navigation Performance

RNP APCH Required Navigation Performance Approach

RTCA Radio Technical Commission for Aeronautics

SID Standard Instrument Departure

STAR Standard Instrument Arrival

TF Track Fix

TGL Temporary Guidance Leaflet

TSE Total System Error

TSO Technical Standard Order

VNAV Vertical Navigation

VOR Very High Frequency Omnidirectional Range

References Used to Develop This Guidance Material:

ICAO Doc 9613 Performance-Based Navigation Manual 4th Edition
Volume I - Concept and Implementation Guidance
Volume II - Implementing RNAV And RNP Operations

ICAO Doc 9997 - Performance-based Navigation (PBN) Operational Approval Manual

Rule Part 91

Rule Part 135

AC91-21 RNAV 1, RNAV 2, RNP 1, RNP 2, RNP APCH and BARO VNAV—Operational Approvals, Revision 0.3.

AC61-17 Pilot Licences and Ratings—Instrument Rating, Revision 12

Performance Based Navigation Implementation Plan – Revised 2017, New Zealand

Performance Based Navigation Standard Operating Procedure Guidance Material

Philosophy

This Standard Operating Procedures (SOP) Framework is designed to be integrated with an operator's current IFR procedures (also referred to as legacy IFR or legacy GNSS procedures) as there are only minor additions for PBN operations.

Simplicity has been a key tenet of this guidance material, therefore, only the differences for PBN operations are covered. Users may add to SOPs, adjust wording, or create a full stand-alone suite of procedures to suit their operation(s).

This SOP Guidance Material is suitable for Fixed Wing and Rotary Wing Operations.

The SOP for PBN operations can be included in:

- a standalone PBN Manual for organisations operating under Part 91 and Part 135 operations; or
- an operator's exposition and/or training manual for Part 135 operations.

Once the PBN compliant equipment[1] is identified to be fitted, the following differences for PBN operations are:

1. Software Configuration Management – operating system configuration assurance, including system default settings (set out in a Maintenance Manual).
2. Navigation Database Management (set out in a Manual, SOPs or Exposition).
3. RAIM prediction (Manual, SOPs or exposition).
4. Notification on the Flight Plan - Items 10 & 18 (set out in a Manual, SOPs or Training Manual).
5. Retrieval of the named procedure from the database (set out in a Manual, SOPs or Exposition).
6. Confirmation of the named procedure (set out in a Manual, SOPs or exposition).
7. Contingency Procedures (set out in a Manual, SOPs or exposition).

Components of the PBN Concept[2]

The ICAO PBN Manual (Doc 9613) defines Precision Based Navigation as:

Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure, or in a designated airspace.

PBN is one of several enablers of an Airspace Concept. The others are Communications, ATS Surveillance and ATM. The PBN Concept is comprised of three components:

1. Navigation Specification,
2. Navaid Infrastructure, and
3. Navigation Application.

The **Navigation Specification** prescribes the performance requirements in terms of accuracy, integrity, continuity for proposed operations in a particular Airspace. Associated

[1] See AC91-21 for acceptable Technical Standard Order (TSO) equipment. However, if purchasing new equipment TSO 145/146 certificated receivers would be advisable.

[2] https://www.skybrary.aero/index.php/Performance_Based_Navigation_(PBN)

with the navigation specification are requirements related to pilot knowledge and training and operational approval.

A Navigation Specification is either:

1. an RNP specification (used in a limited or no surveillance environment), or
2. an RNAV specification (used in a surveillance environment).

An RNP specification includes a requirement for on-board self-contained performance monitoring and alerting because it is expected to be conducted in a limited or no surveillance environment[3]. RNAV specifications are expected to be conducted in a surveillance environment[4], and the ATS should provide the performance monitoring and alerting.

The **Navaid Infrastructure** relates to ground or space-based navigation aids that are called up in each Navigation Specification. The availability of the navaid infrastructure has to be considered in order to enable the navigation application.

The **Navigation Application** refers to the application of the Navigation Specification and Navaid Infrastructure in the context of an airspace concept to ATS routes and instrument flight procedures.

Requirements for navigation applications on specific routes or within a specific airspace must be defined in a clear and concise manner. This is to ensure that the flight crew and the air traffic controllers (ATCs) are aware of the on-board RNAV system capabilities in order to determine if the performance of the RNAV system is appropriate for the specific airspace requirements.

New Zealand Context

New Zealand will be operating in a fully operational Performance Based Navigation (PBN) environment by 2023. PBN will be the primary means of navigation in the New Zealand Flight Information Region (FIR). This moves navigation away from conventional ground based to satellite-based navigation means. General Aviation and Air Transport Instrument Flight Rule (IFR) operators will require PBN capability to take advantage of the safety and efficiency benefits provided through PBN specifications in enroute, terminal and approach phases of flight.

PBN will be based upon the United States Global Positioning System (GPS) navigation service. The move towards a fully operational PBN environment will result in reduced ground-based conventional navigation infrastructure and associated procedures.[5]

There are two modes of operation required for safe operations in a full PBN operating environment, PBN Operations and PBN Failure (safe recovery of aircraft).

With the dependency on the GPS constellation for PBN operations, the New Zealand PBN Implementation Plan – Revised 2017 requires Air Transport operations to continue between Auckland, Wellington, and Christchurch in the event of loss of GPS service. This operation is known as “Contingency Operations – Continued IFR Air Transport operations upon long-term loss of PBN”.

[3] AC91-21 Table 10 p35.
[4] Operation outside surveillance or below Minimum Vectoring Altitude requires a state safety case. AC91-21 Table 2 p16.
[5] PBN Operational End-State 2023: A Regulatory View, p6

Although Civil Aviation Rules (CARs) already partially support PBN, they will be modernised to reflect current PBN practices, and future-proofed for ongoing advances in technology and procedures.

Performance Based Navigation SOP Guidance Material

The following procedures are applicable to routes and airways procedures for Performance Based Navigation (PBN) for both fixed and rotary wing aircraft.

Normal procedures used during RNP1 operations are appropriate for most requirements of RNP1/RNP2/RNAV1/RNAV2 departures and arrivals. For specific guidance on any other PBN operation (i.e. RNP-AR, RNP10, RNP4, etc) refer to ICAO Doc 6913 and AC91-21.

In general, RNP is used in a limited or no surveillance environment and RNAV is used in a surveillance environment. This is why RNP includes a requirement for on-board self-contained performance monitoring and alerting because it is expected to be conducted in a limited or no surveillance environment.

SOP Start

Performance Based Navigation (PBN) / Required Navigation Performance (RNP) Operations[6]

Aircraft not meeting RNP criteria are unable to accept an RNP clearance and must request alternate instructions.

Navigation Database Management

The navigation data base must be current and appropriate for the region of intended operation and must include the NAVAIDs and waypoints required for the route.

- The process for updating the navigation database is [*up to seven days prior to the effective date, download the applicable update using the xxxx Download Manager program. Updates to GPS units[7] may be able to be carried out any time in this period*].

  > Note: Navigation databases are expected to be current for the duration of the flight. If the AIRAC cycle is due to change during flight, operators and pilots should establish procedures to ensure the accuracy of the navigation data, including the suitability of navigation facilities used to define the routes for the flight. Traditionally, this has been accomplished by verifying electronic data against paper products.

- Discrepancies that invalidate a route must be reported to the navigation database supplier and affected routes must be prohibited by an operator's notice to its flight crew. Aircraft operators should consider the need to conduct periodic checks of the operational navigation databases in order to meet existing quality system requirements.[8]

Flight Planning

- The pilot in command must obtain a RAIM prediction through [NOTAMs (where available) or through prediction services e.g. such as IFIS].
- A fault detection prediction for greater than five minutes, for any part of the RNP1 operation, the pilot should revise the flight plan (e.g. delaying the departure or planning a different route).
- The appropriate PBN designators for flight planning are
  - ITEM 10 – R;
  - ITEM 18 - [*insert appropriate designators*[9]].

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[6] ICAO Doc 9613, Volume II, Implementing RNAV and RNP pII-C-3-10

[7] Some receivers store the Navdata to the SD card (Garmin GNS400/500 series) and therefore cannot store the data in standby mode until the effective date. This requires the navdata to be inserted at the time of effectiveness. Other receivers store the data on the receiver or on PCMCIA cards in standby mode and switch to active on the effective date/time or on the next power up after the effective date/time.

[8] AC91-21 Part 2 p22.

[9] AIP ENR 1.10

- Pilots should assess their capability to navigate (potentially to an alternate destination) in case of unplanned failure of GPS navigation (via GBNA, climb to MSA/MRA etc[10]).

In-Aircraft

General[11]

- Pilots must not fly a RNP1 SID or STAR unless:
  - it is retrievable by procedure name from the on-board navigation database,
  - verified and conforms when cross-checked to the charted procedure.

  [*Note: be aware of the Human Factors issue that can cause selection of the incorrect SID/STAR/APCH. Cross check procedures should eliminate selecting the '1B procedure' instead of the '1A procedure' for example*][12].

- A SID or STAR procedure may subsequently be modified through the insertion or deletion of specific waypoints in response to ATC clearances.
- The manual entry, or creation of new waypoints, by manual entry of latitude and longitude or rho/theta values is not permitted.
- Pilots must not change any SID or STAR database waypoint type from a fly-by to a flyover or vice versa.
- For RNP1 routes, pilots must use [*insert an authorised method e.g. lateral deviation indicator/navigation map display/flight director/autopilot]* to achieve an appropriate level of performance for RNP 1.[13]
- Pilots of aircraft with a lateral deviation display must ensure that lateral deviation scaling is suitable for the navigation accuracy associated with the route/procedure (e.g. full-scale deflection: ±1 NM for RNP 1).
- For normal operations, cross-track error/deviation should be limited to ±½ the navigation accuracy associated with the procedure (i.e. 0.5 NM for RNP 1).
  - Deviations from this standard (e.g. overshoots or undershoots) during and immediately after turns, up to a maximum of one-times the navigation accuracy (i.e. 1.0 NM for RNP 1) are briefly allowable.
- RNP1 operations beyond 30nm from the ARP require the RAIM Integrity alarm to be set to 1nm; [the pilot must be competent in the procedure to change equipment RAIM limits].
- [*Flight Mode requirements for automated aircraft should be considered for each phase of flight. These may or may not be specific to PBN operations.*]

System Pre-flight

- The navigation database must be current.

Departure

- Ensure [***DPRT***] mode (RNP1.0) is annunciated prior to takeoff.
- The pilot must be able to use RNP 1 equipment to follow flight guidance for lateral navigation (e.g., LNAV) no later than 500 ft above airport elevation.

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[10] Noting for helicopters you do not need a runway to land (and you have limited fuel) this may include VMC landing on a ridge, landing on the other side of a range. Emergency options available to all are radar let down/radar altimeter let down off the coast etc.

[11] ICAO Doc 9613, Volume II, Implementing RNAV and RNP pII-C-3-10

[12] This can be mitigated by: Selection – read chart then enter in GPS; Cross check: Read (exactly) from GPS and confirm on chart.

[13] ICAO Doc 9613, Volume II, Implementing RNAV and RNP para 3.3.5.6.3

- Ensure GPS mode changes from [***DPRT*** *to* ***TERM***] after the SID sequence is complete

En Route

- Outside 30nm of the departure airfield, the navigation system will default to RNP 2.0 nm [indicated by the ***TERM*** annunciation changing to ***ENR***].
- *[Hold, suspension and continuation procedures should be stated to ensure the equipment remains with the aircraft position and does not get left behind. (e.g. the use of OBS). These can either be in the training manual or SOP. For Example:]*
    - System coupled to GPS NAV [*select Autopilot* ***HDG*** *mode, select EFIS* ***GPSS***]
    - Under vectors [*select* ***OBS*** *and use HDG bug to direct aircraft, move CRS if ground track is required*.]
    - Procedure for holds [*select* ***OBS*** *and use HDG bug to direct aircraft, move CRS to get ground track*]
    - To resume flight plan [*deselect* ***OBS***]

Approach

- A Top of Descent (TOD) point should be calculated for each approach to achieve a constant descent profile to MDA. TOD anticipation is [*0.5nm*].
- APCH mode must be verified prior to the FAF.

Missed Approach

- If Missed Approach [*select* ***OBS*** *to unsuspend and track the missed approach*].

Contingency Procedures[14]

Considerations for contingency operations can be found in [*the operations manual/route guide/training manual*[15]].

- The pilot must notify ATC of any loss of the RNP capability (integrity alerts or loss of navigation, XTE exceeds the RNP), together with the proposed course of action. The loss of RNP capability includes any failure or event causing the aircraft to no longer satisfy the RNP 1 requirements of the route. Refer to the MEL.
- If unable to comply with the requirements of a RNP1 SID or STAR for any reason, pilots must advise ATS as soon as possible.
- If, when operating in the en-route phase, a RAIM warning has been displayed for more than ten minutes, or the GPS equipment has operated in the DR mode for more than one minute—
    - advise the appropriate controlling ATC service; and
    - verify the aircraft position every 10 minutes using another IFR-approved navigation system.
- In the case of a loss of GPS integrity:
    - GPS annunciation [***INTEG*** or ***LOI***], dependent on whether it was a single or dual failure, this would require a change of primary navigation source.
    - [***ABORT APCH***], the system can no longer provide approach level of service. If IMC, transition to another instrument approach procedure.
    - In both cases, if IMC and the GPS System Annunciation occurs beyond the FAF/FAP, a missed approach must be carried out.

[14] ICAO Doc 9613, Volume II, Implementing RNAV and RNP 3.3.5.8

[15] Consider alternate aids available, weather, terrain, MSA, aircraft performance, night, communications.

- In the event of communications failure, the pilot should continue with the published lost communications procedure.

SOP End

Additional Guidance Material

Airworthiness certification requirements or aircraft eligibility[16]

The aircraft and pilot must be certified for RNP operations.

A summary of the requirements to gain CAA PBN operational approval for PBN operations are set out in Part 1 of AC91-21.

Operational approval is based upon the following[17]:

Aircraft Capability: the requirements for airworthiness approval are set out in Part 2 of AC91-21. Operators must demonstrate that the aircraft is eligible for the navigation specification sought, and show that the instruments and equipment comply with one of the airworthiness options.

Operator Procedures: The requirements for operator approval are set out in Part 3 of AC91-21. These procedures must be documented in a RNP and/or RNAV manual (as applicable), or as part of the operator's exposition in the case of operations being conducted under Part 119.

Pilot training and qualification: The requirements for pilot approval are set out in Part 4 of AC91-21. The applicant for operational approval must demonstrate that they have systems in place to ensure that pilots are appropriately trained in accordance with the applicable rule requirements.

Software Configuration Management Plan

Avionic System Configuration data: assist standardised system setup across all equipment. This can be achieved by recording a photo of all system setup screens where default settings to be adjusted.

See Annex A: Software Configuration Management Plan

Minimum Equipment List (MEL)

RNAV and RNP provisions must be included in the MEL approved by the CAA.

- Aircraft equipped with GNSS receivers without FDE, an operational approval may be issued with a condition that an alternate navigation system (non-GNSS) is available to navigate to a suitable airport. The GNSS and alternate navigation system requirements will need to be defined in the minimum equipment list.[18]
- Consider:
  - GPS Receiver
  - CDI display information
  - Remote Annunciators
  - Autopilot/Flight Director
  - Nav Source Selector

Complexity of operations

Consider single pilot vs two pilot operations and the level of CRM and instrumentation required.

[16] AC91-21.
[17] AC91-21 Part 1 p6.
[18] AC91-21 Use of GNSS p15.

Charter operations or Part 91 general aviation should have general procedures that can be adapted to all approved scenarios.

Operations to a small number of destinations can prescribe specific requirements.

Aircraft equipment

See AC91-21

Note: New GNSS equipment design is no longer being approved to TSO-C129 () and has been superseded by TSO-C145/146. There are a number of limitations with TSO-C129 equipment, i.e. no FDE, receiver noise threshold, timing of GPS data output for use with ADS-B; this equipment will not support the New Zealand future navigation and surveillance system requirements. There are certain OEM's that have modified the TSO-C129 equipment to overcome the above limitations, applicants will need to provide an OEM letter as evidence of the equipment qualification if the functionality is being demonstrated as part of compliance.[19]

LNAV +V Approach

For Baro VNAV equipped aircraft.

[*If not trained, the use of VNAV functions is forbidden.*

Traditional LNAV approach but with a generated advisory "Glideslope" provided on the HSI. This is a non-precision approach, and pilots must comply with the associated stepdown and MDA heights as shown on the approach plate for the LNAV minima.

Any LNAV approach without an associated LNAV/VNAV approach on the same chart will have an LNAV +V function available. This will provide vertical guidance and is listed on the PROC page of some equipped receivers when selecting the approach as "LNAV +V", and is the ONLY option available for that approach.

*This allows coupling the autopilot in **APPR** mode reducing pilot workload, and providing additional situational awareness for the pilot.*

> ***Warning**: Pilots must still comply with all published LNAV stepdown and MDA height restrictions. If coupled to the autopilot the aircraft will not level at MDA.*]

Database suitability

The navigation database suppliers should comply with RTCA DO-200A/EUROCAE document ED 76, Standards for Processing Aeronautical Data. A Letter of Acceptance (LOA), issued by the appropriate regulatory authority to each of the participants in the data chain demonstrates compliance with this requirement.[20] (e.g. FAA LOA issued in accordance with FAA AC 20-153 or EASA LOA issued in accordance with EASA OPINION Nr. 01/2005.)[21]

Selection of destination and alternate aerodromes

Standard IFR requirements as per AIP

See Flight Planning

[19] AC91-21 Use of GNSS p15.
[20] AC91-21 Table 5(m) p22.
[21] ICAO Doc 6913 ICAO Doc 9613, Volume II, Implementing RNAV and RNP Section 3.3.7

Departure
See In-Aircraft

Prior to commencing procedure
See In-Aircraft

During procedure
See In-Aircraft

Abnormal procedures
See Contingency Procedures

Occurrence reporting
See Navigation Database Management

IAW Part 12 or own safety reporting system.

Documentation
See AC91-21[22]

Pilot Knowledge and Training[23]
Pilot Knowledge requirements are listed at Advisory Circular AC61-17.

Pilots may not perform any of the types of operation specified in this AC unless they have been trained and certificated in accordance with Appendix III to AC61-17. For pilots within a Part 119 organisation, pilot competency is achieved through operator compliance with their training programme and adherence to the standard operating procedures specified in their exposition.[24]

The training programme should provide sufficient training (e.g. simulator, training device, or aircraft) on the aircraft's RNP system to the extent that the pilots are familiar with the following:

a) the information in ICAO Doc 9613, Vol II, Chapter 3;

b) the meaning and proper use of aircraft equipment/navigation suffixes;

c) procedure characteristics as determined from chart depiction and textual description;

d) depiction of waypoint types (flyover and fly-by) and path terminators (provided in 3.3.3.3 AIRINC 424 path terminators) and any other types used by the operator), as well as associated aircraft flight paths;

e) required navigation equipment for operation on RNP 1 SIDs, and STARs;

f) RNP system-specific information:

> i) levels of automation, mode annunciations, changes, alerts, interactions, reversions, and degradation; [lateral deviation indicator/navigation map display/flight director/autopilot]
>
> ii) functional integration with other aircraft systems; [autopilot, navigation systems, instruments]

[22] AC91-21 Process for Application and Approval p10
[23] ICAO Doc 9613, Volume II, Implementing RNAV and RNP para 3.3.6.
[24] AC91-21 Part 4 p55.

iii) the meaning and appropriateness of route discontinuities as well as related pilot procedures; [link between enroute and approach/departure procedures]

iv) pilot procedures consistent with the operation; [SOPs]

v) types of navigation sensors utilized by the RNP system and associated system prioritization/ weighting/logic;

vi) turn anticipation with consideration to speed and altitude effects;

vii) interpretation of electronic displays and symbols; [utilisation of equipment instructions

viii) understanding of the aircraft configuration and operational conditions required to support RNP 1 operations, i.e. appropriate selection of CDI scaling (lateral deviation display scaling);

g) RNP system operating procedures, as applicable, including how to perform the following actions:

i) verify currency and integrity of the aircraft navigation data;

ii) verify the successful completion of RNP system self-tests;

iii) initialize navigation system position;

iv) retrieve and fly a RNP 1 SID or a STAR with appropriate transition;

v) adhere to speed and/or altitude constraints associated with a RNP 1 SID or STAR;

vi) select the appropriate RNP 1 SID or STAR for the active runway in use and be familiar with procedures to deal with a runway change;

vii) verify waypoints and flight plan programming;

viii) fly direct to a waypoint;

ix) fly a course/track to a waypoint;

x) intercept a course/track;

xi) following vectors and rejoining a RNP 1 route from “heading” mode;

xii) determine cross-track error/deviation. More specifically, the maximum deviations allowed to support RNP 1 must be understood and respected;

xiii) resolve route discontinuities;

xiv) remove and reselect navigation sensor input;

xv) when required, confirm exclusion of a specific NAVAID or NAVAID type;

xvi) change arrival airport and alternate airport;

xvii) perform parallel offset function if capability exists. Pilots should know how offsets are applied, the functionality of their particular RNP system and the need to advise ATC if this functionality is not available;

xviii) perform RNAV holding function;

h) operator-recommended levels of automation for phase of flight and workload, including methods to minimize cross-track error to maintain route centerline;

i) R/T phraseology for RNAV/RNP applications; and

j) contingency procedures for RNAV/RNP failures.

Annex A: Software Configuration Management Plan Outline

1. Introduction
   - 1.1. Table of Contents
   - 1.2. List of Effective Pages
   - 1.3. Record of Amendments
2. Software Management
   - 2.1. Purpose
   - 2.2. Base Document Reference
   - 2.3. Applicable Equipment Installed
   - 2.4. Software Management
   - 2.5. Software Upgrade
3. Avionics System Configuration Data
   - 3.1. Purpose
   - 3.2. Computer Requirements
   - 3.3. Configuration Procedure

Appendix A: Aircraft Software Revision Management

Current Software Revision								
ATA Chap	Function	Hardware	Hardware P/N (Mod Level)	Hardware Reference	Software Title	Software P/N	Software Media P/N	Installation Procedure

Optional Software						
ATA Chapter	Function	Hardware	Software Title	Technical Data	Purpose for Software as outlined in Technical Data	Reason for not updating

Appendix B: Avionics System Configuration Data

- *List default settings of each system.*

Appendix C: Software Configuration Review Register

Software Configuration Review Register			
Date	Name	Authorisation	Signature