CIVIL AVIATION AUTHORITY OF FIJI

[1]**AMENDMENT TO STANDARDS DOCUMENT:** INSTRUMENT FLIGHT PROCEDURE

DOCUMENT AFFECTED**:** SD-IFP Edition 2, May 2019

DATE OF THE PROPOSED AMENDMENT**:** July 2025

EFFECTIVE DATE OF THE PROPOSED AMENDMENT**:** August 2025

APPLICABLE DATE OF THE PROPOSED AMENDMENT**:** August 2025

PURPOSE OF THE PROPOSED AMENDMENT: This update to Fiji's Standards Document Instrument Flight Procedures (SD-IFP) aims to align with international best practices, particularly ICAO Document 10068, and address issues raised during the 2019-2022 ICAO Universal Safety Oversight Audit Programme. It introduces three new certification categories—IFP Service Provider, Independent Reviewer, and Designer—along with updated personnel requirements.

DETAILS OF THE PROPOSED AMENDMENT: SD-IFP Edition 3, details Fiji's new framework for Instrument Flight Procedures (IFPs), aiming to meet rigorous international standards. It establishes specific certification for IFP Service Providers, Independent Reviewers, and Designers, outlining their respective duties and demanding enhanced qualifications and training. The standards document mandates stricter procedural controls for IFP design, validation, and data management, requiring comprehensive checklists at each stage. It also significantly improves safety management by requiring formalised risk assessments for Performance-Based Navigation procedures and when utilising older obstacle data.

--- END SUMMARY ---

[1] *This Cover-Page which is intended for the industry-consultation phase only, will be removed during the finalisation of the SD for issue.*

Standards Document

INSTRUMENT FLIGHT PROCEDURE

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PREFACE

General

Fiji's National Aviation Law consists of a three-tier regulatory system, comprising Acts, Regulations and Standards Documents; the purpose of which is to ensure, where deemed appropriate, compliance and conformance with ICAO Standards and Recommended Practices (SARPS).

The three-tier regulatory system represents Fiji's Primary Legislation System and Specific Operating Regulations to meet Critical Elements CE1 and CE2 of ICAO's Eight Critical Element of a safety oversight system

Standards Documents (SD) are issued by the Civil Aviation Authority of Fiji under the provision of Section 14 (3) (b) of the Civil Aviation Authority Act 1979 (CAP 174A)
Where appropriate, the SD also contains guidance information (Critical Element CE5) on standards, practices, and procedures that are acceptable to the Authority.

Notwithstanding the above, and where specifically indicated in this Standards Document that such a provision is available, consideration may be given to other methods of compliance that may be presented to the Authority provided they have compensating factors that can demonstrate a level of safety equivalent to or better than those prescribed herein. Accordingly, the Authority will consider each case based on its own merits holistically in the context of and relevancy of the alternative methods to the individual applicant.
When new standards, practices, or procedures are determined to be acceptable, they will be added to this document.

Purpose

This Standards Document – Instrument Flight Procedure is issued by the Civil Aviation Authority of Fiji pursuant to *Section 6 (4) (c) of the Civil Aviation (Reform) Act 1999.* This Document is intended for use by CAAF, applicants for, and holders of an Instrument Flight Procedure Service Provider Certificate and their staff.

Change Notice

This Standards Document has been developed pursuant to the Authority's obligation to provide oversight on Instrument Flight Procedure operators/service providers and their personnel, as well as the operator's/service providers and applicants obligation to comply with standards notified by the Authority and is the means by which such notification is given.

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Theresa Levestam
Chief Executive Officer

AMENDMENT RECORD

The following space is provided to keep a record of all amendments.

AMENDMENTS			
No.	Date applicable	Date entered	Entered by
Edition 1.0 to 2.1 are incorporated in this edition			
3.0	04/08/25	01/07/25	CAAF

CORRIGENDA			
No.	Date of issue	Date entered	Entered by

From time to time the Authority will issue amendments to the requirements stipulated in this publication. This will be done in the form of 'Notice of Amendments' including an attachment 'Notification of Approval/Disapproval' of all or part of the proposed amendment. The Amendments will also be accessible through the CAAF website.

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Historical Summary of Amendments

The Civil Aviation Reform Act (1999) requires the Authority to produce standards for the provision of instrument flight procedures design. A draft version of Standard Document- Flight Procedures Design (SD-IFP, 1st Edition dated Dec 2017) was developed and circulated internally for comments.

Amendment	Source	Subject(s)	Effective Date
Edition 1.0	CAAF	Initial issue - Standards Document – Instrument Flight Procedures (SD-IFP)	07 Dec 2017
Edition 2.0	CAAF	Amdt to Preface, include Doc 8168 Vol III, Amdt Doc 9613 ref, Amdt Doc 9906 Vol 5 & 6, include service providers validation & implementation flow chart, Appendix A-senior persons experience requirements	31 May 2019
Edition 2.1	CAAF	Insert paragraph on 2.1.1 training programme, expand on design and flight validation 2.3(c), Amdt to appendix A qualifications of senior, qualified and apprentice IFP designers, insert appendix B acceptable standards for validation of instrument flight procedures.	15 Aug 2019
Edition 3.0	CAAF	CAAF Rebranding Incorporate amendments to training and experience requirements for Designer and Independent Reviewer. Alignment with Doc 10068 requirements. USOAP Protocol Questions resolution.	[2]DD-MMM-2025

[2] *Effective date will be entered following Authority endorsement*

Chapter 1 – General

1.1 Applicability

1.1.1 This Standard prescribes the following scope:

a) standards governing the certification and operation of an organisation that provides services for the design and maintenance of instrument flight procedures; and

b) standards governing the certification of an individual instrument designer and Principal designer of independent reviewer; and technical standards for the design of instrument flight procedures.

1.1.2 This Standard shall not apply to the design of aircraft performance operating limitations or flight paths, for critical engine inoperative emergency procedures.

1.1.3 This Standard aims to ensure that the design, maintenance, and promulgation of instrument flight procedures intended for use by aircraft operating under IFR in that part of the Nadi Flight Information Region administered by Fiji under international agreement meet ICAO standards and recommended practices for instrument flight procedures.

1.1.4 An instrument flight procedure design service provider intending to design an instrument flight procedure for aerodromes or airspace under the authority of Fiji shall meets the requirements established by the Authority.

1.1.5 In this Standard, unless the context otherwise requires, “certificate” means an Instrument Flight Procedure Service Provider Certificate.

1.2 Requirement for certificate

1.2.1 Except as provided for under paragraph (b) a person shall not provide an instrument flight procedure service for the Nadi FIR except under the authority of an Instrument Flight Procedure Designer Service Provider Certificate, or an Individual Instrument Flight Procedure Designer Certificated issued in accordance with this Standard.

1.2.2 In this Standard reference to the Nadi FIR excludes those portions of airspace within the Nadi FIR where an individual State by international agreement administers operations in part of the Nadi FIR and regulates that State’s IFR flight procedures.

1.3 Application for certificate of Instrument Flight Procedure Design Service Provider

1.3.1 An applicant for this grant of a certificate shall complete and submit to the Authority the appropriate form (GS700), with the following requirements:

a) exposition required under 2.12; and

b) prescribed fee.

Once the Authority is satisfied that the above requirements have been fulfilled, the prescribed fee must be paid.

1.4 Application for certificate of Procedure Design Independent Reviewer

1.4.1 An applicant for the grant of this certificate shall complete and submit to the Authority the appropriate form (GS 752), with the following requirements:

a) latest curriculum vitae, containing successfully completed IFP related training and experience in relation to qualification stated in Appendix A, A1

b) at least five recent IFP designed and published.

Once the Authority is satisfied that the above requirements have been fulfilled, the prescribed fee must be paid.

1.5 Application for certificate of Individual Instrument Flight Procedure Designer

1.5.1 An applicant for the grant of this certificate shall complete and submit to the Authority the appropriate form (GS 753), with the following requirements:

a) latest curriculum vitae, containing successfully completed IFP related training and experience

b) at least 2 recent IFP designed and approved by the reviewer; then as may be required by the Authority pass with 80% of a written exam or assessment both written and verbal

Once the Authority is satisfied that the above requirements have been fulfilled, the prescribed fee must be paid.

1.6 Issuance of service provider certificate

1.6.1 An applicant shall be entitled to the grant of a certificate if the Authority is satisfied that the following requirements are met:

a) service provider applicant meets the requirements of Chapter 2;

b) service provider applicant and the senior persons required under para 2.1(a) are fit and proper persons;

c) applicant is in compliance with instrument flight procedure service standards published by the Authority; and

d) grant of the certificate is not contrary to the interests of aviation safety.

1.7 Issuance of Independent Reviewer certificate

1.7.1 An applicant shall be entitled to the grant of a certificate if the Authority is satisfied that the following requirements are met:

a) An independent reviewer applicant meets the requirements of para 1.4.

b) a certified service provider support for the independent reviewer

c) applicant is in compliance with instrument flight procedure service standards published by the Authority; and

d) grant of the certificate is not contrary to the interests of aviation safety.

1.8 Issuance of designer certificate

1.8.1 An applicant shall be entitled to the grant of a certificate if the Authority is satisfied that the following requirements are met:

a) designer applicant meets the requirements of para 1.5;

b) a certified service provider support for the designer

c) applicant is in compliance with instrument flight procedure service standards published by the Authority; and

d) grant of the certificate is not contrary to the interests of aviation safety.

1.9 Privileges of service provider certificate

1.9.1 A certificate shall authorize the holder to exercise the following:

a) design, review, validate and maintain all IFPs;

b) make aeronautical information and/or data relating to any certified IFP readily available to certified AIS provider for dissemination; and

c) arrange for flight validation operations required for any IFP.

1.10 Privileges of Independent Reviewer certificate

1.10.1 A certificate shall authorize the holder to exercise the following:

a) act as Senior Person or Principal Designer if/when required

b) design, review, validate and maintain IFPs delegated by the Certified service provider or Authority; and

c) coordinate with certified service provider or Authority on making aeronautical information and/or data relating to any certified IFP readily available to certified AIS provider for dissemination; and

d) coordinate with certified service provider or Authority on making arrangements for flight validation operations required for any IFP, if required.

1.11 Privileges of Designer certificate

1.11.1 A certificate shall authorize the holder to exercise the following:

a) design, review and maintain IFPs delegated by the Certified service provider

b) assist the independent reviewer/Principal Designer in coordination with certified service provider or Authority on making aeronautical information and/or data relating to any certified IFP readily available to certified AIS provider for dissemination.

c) assist the independent reviewer/Principal Designer in coordination with certified service provider or Authority on planning for flight validation operations required for any IFP.

1.12 Duration of certificate

1.12.1 The duration for an instrument flight procedure design certificates are as follows:

a) All IFP related certificates shall be granted or renewed for a period up to 1 year.

b) A certificate shall remain in force until it expires or is suspended or revoked.

c) The authority and responsibility to suspend or revoke the IFP design privileges rests with Civil Aviation Authority of Fiji if a deficiency is not corrected within the established time frame stated in Appendix F.

1.13 Renewal of certificate

1.13.1 An application for the renewal of a certificate shall be made using the appropriate for and be submitted to the Authority not less than 90 days before the certificate expires.

1.13.2 Certificate renewal shall depend on the acceptance of the Exposition Document and Mitigation of any Level 2 finding.

Chapter 2 – Service Provider Certification Requirements

2.1 Personnel requirements

2.1.1 An applicant for the grant of a certificate shall employ, contract, or otherwise engage the following personnel:

a) an Accountable Manager who shall ensure the following:

i). have the authority within the applicant's organisation to ensure that the organisation's instrument flight procedure services can be financed and provided in accordance with the requirements and standards prescribed by this Standard; and

ii). be responsible for ensuring that the organisation complies with the requirements of this Standard;

b) a senior person (s), who shall ensure the following:

i). ensure that the applicant's organisation complies with the organisation's exposition; and

ii). be responsible to the Accountable Manager

iii). hold a valid certificate of Principal Designer from the Authority.

iv). ensure that all IFP submitted to the Authority are validated accordingly, and

v). ensure that any aeronautical data and information that can be used in the design of instrument flight procedure are provided to the IFP unit

c) sufficient personnel (minimum 2) in permanent employment as designers to plan, design, review, validate and maintain the instrument flight procedures provided by the applicant's organisation.

2.1.2 An applicant for the grant of an instrument flight procedure design service certificate shall establish a procedure for initial assessing, training and maintaining the competence of personnel involved in the planning, design, validation, and maintenance of instrument flight procedures.

2.2 Training Program

2.2.1 An applicant for the grant of a certificate shall ensure that the following requirements are met:

a) a training program and training plan are developed for all the IFP designers;

b) The training program provided by the applicant shall align to the guidelines as prescribed in Doc 9906 Vol II and/or equivalent accepted by the Authority; and

c) Prior to assignment to duty, each IFP personnel shall, whether employed on a full-time or part-time basis, receive such training as appropriate to their duties

2.3 Resource requirements

2.3.1 An applicant for the grant of a certificate shall ensure that the following requirements are met:

a) have readily available appropriate and sufficient facilities including workspace, equipment and software for the design, review, ground validation, and maintenance of instrument flight procedure that are specified in the applicant's exposition

b) have access to relevant and current data including, but not limited to, aeronautical data, land contour data, spot height data and obstacle data for the design, ground validation, and maintenance of the instrument flight procedures validated by, and maintained by, the applicant's organisation; and

c) hold or have ready access to copies of relevant documentation comprising technical standards, practices and instructions, and any other documentation that may be necessary for the design, review and ground validation, and maintenance of instrument flight procedure that are specified in the applicant's exposition.

2.4 **Data and Documentation Requirements**

2.4.1 An applicant for the grant of a certificate shall establish a procedure for ensuring that the following requirements are met:

a) personnel have access to the data referred to in paragraph 2.3 (b) for

b) instrument flight procedure specified in the applicant's exposition; and

c) the data referred to in paragraph (b) is current, traceable and meets the required level of verifiable accuracy for the design, review, ground validation and maintenance of instrument flight procedures specified in the applicant's exposition.

2.4.2 An applicant for the grant of a certificate shall establish a procedure for managing all documentation required by paragraph (c) to ensure that the following requirements are met:

a) the required documentation is reviewed and authorised by an appropriate person before issuance and use.

b) current issues of relevant documentation are available to personnel at every location where access to the documentation is required.

c) every obsolete document is promptly removed from every point of issue and use;

d) any change to documentation is reviewed and authorised by an appropriate person before issuance and use;

e) the current version of every item of documentation can be identified to prevent the use of superseded material;

f) access to sensitive or critical documentation is restricted to authorized personnel only;

g) a version control system is implemented to track changes and updates to documentation.

h) an audit trail is maintained for all changes made to documentation, including the identity of the person making the changes and the date of the changes.

i) personnel are trained in the procedures for handling and controlling documentation to ensure compliance; and

j) a schedule for periodic review of documentation is established to ensure it remains current and relevant.

2.5 Design of instrument flight procedures

2.5.1 An applicant for the grant of an instrument flight procedure design certificate shall establish procedures to ensure that every instrument flight procedure certified under the authority of the applicant's certificate in accordance with paragraph 2.7 is:

a) Designed or Amended using methods that ensure the procedure meets the applicable requirements and standards prescribed in Chapter 4;

b) Independently Reviewed before validation, by a qualified person who is independent of the person directly responsible for the design.

c) Validated, except as provided in paragraphs (b) and (c), in accordance with the appropriate validation procedures required under paragraph (d), to ensure that:

i). The instrument flight procedure allows aircraft using the procedure to manoeuvre consistently within safe operating practices and pilot workloads for the categories of aircraft that the procedure is intended for.

ii). The instrument flight procedure provides azimuth and distance information, and vertical guidance information for a precision approach, in accordance with ICAO or other standards for the operation of aircraft to ensure that an aircraft using the procedure remains clear of obstacles;

iii). The instrument flight procedure is not affected by any radio frequency interference.

iv). Visual guidance systems and cues for the runway are appropriate for the instrument flight procedure and are not confused by lighting, laser sky displays, or any other visual distraction.

d) Compliance with ICAO Documents to ensure that the design and validation processes comply with relevant ICAO documents such as Doc 8168 (Procedures for Air Navigation Services – Aircraft Operations) and other applicable ICAO standards and recommended practices.

e) Documentation and Record Keeping-maintain detailed records of the design, review, and validation processes to demonstrate compliance with ICAO standards.

f) implement a system for continuous monitoring and improvement of the instrument flight procedures to ensure ongoing compliance with ICAO standards.

2.5.2 An applicant for the grant of a certificate shall have the resources available and established procedures for the implementation of appropriate validation of instrument flight procedures (IFP).

2.5.3 An applicant for the grant of certification may apply the concept of Smart Validation, under which the following instrument flight procedures do not require flight validation if it can be shown that current obstacle data meets the design requirements of the instrument flight procedure:

a) An en-route or an instrument standard arrival procedure (STAR) unless:

i). There is doubt about the coverage of the navigation system supporting the requirements of the procedure; or

ii). The procedure limits the flyability and performance characteristics of the class of aircraft the procedure is designed for.

b) An instrument departure procedure (SID) unless the procedure limits the flyability and performance characteristics, such as PDG of the class of aircraft the procedure is designed for;

c) An amendment of a previously flight validated instrument approach procedure (IAP) if:

i). The design change can be verified during the design process; and

ii). A safety assessment of the proposed amendment has been completed and confirms that no additional risks to the safety of the procedure are introduced by the amendment.

2.5.4 An applicant for the grant of an instrument flight procedure design service certificate shall establish procedures for conducting a systematic flight validation of an instrument flight procedure as required under paragraph 2.5.2 that:

a) Establishes detailed procedures for conducting the flight validation of an IFP as required.

b) Contains all elements of the validation and documents their proposed validation activities in a plan.

c) Comprises pre-flight validation elements and, in the case of RNAV procedures, a navigation database validation is also required.

d) Ensures flight validations, including simulator validation, shall be performed by qualified and experienced flight validation pilots.

e) Ensures the aircraft to be used for flight validation of an IFP shall have the performance capabilities appropriate to the categories for which the IFP has been designed.

f) Ensures all IFP validation flights shall be conducted during daylight hours in visual meteorological conditions (VMC).

g) Where a pre-flight, simulation, and/or flight validation has been conducted, a report shall be completed by the flight validation pilot and submitted as early as possible to the Authority for acceptance.

2.5.5 The flight validation procedures required under paragraph (d) shall include the use of equipment that:

a) Has the precision and accuracy traceable to appropriate standards that are necessary for the validation being

performed.

b) Has known measurement uncertainties, including but not limited to, the software, firmware, and crosswind uncertainties.

c) Records the actual flight path of the validation aircraft.

d) Is checked before being released for use, and at intervals not exceeding the calibration intervals recommended by the manufacturer, to establish that the system is capable of verifying the integrity of the instrument flight procedure.

e) Is operated in accordance with flight validation system procedures and criteria by persons who are competent and current on the system used.

2.5.6 An applicant for the grant of a certificate shall establish procedures for justifying the application of paragraphs (b) and (c) to an instrument flight procedure.

2.5.7 An applicant for the grant of a certificate shall establish procedures for ensuring that during the processes of design, review, maintenance, or transfer of data of an instrument flight procedure:

a) The applicable aeronautical data and aeronautical information comply with the standards specified in RTCA Inc. document number RTCA/DO-201A Standards for Aeronautical Information.

b) Manipulation or processing of aeronautical data complies with the standards specified in RTCA Inc. document number RTCA/DO-200A Standards for Processing Aeronautical Data.

c) Any transfer of aeronautical information within the certificate holder's organisation, or to or from external entities, complies with but is not limited to the standards specified in the Aeronautical Information Transfer Model (AIXM-5).

2.5.8 An applicant for the grant of a certificate may use alternative standards equivalent to the standards specified under paragraph (g) that are acceptable to the Authority.

2.6 Authorisation of person(s) to review of instrument flight procedures

2.6.1 An applicant for the grant of an instrument flight procedure design service certificate shall appoint an Independent Reviewer certified by the Authority to review an instrument flight procedure that has been designed in accordance with and meets every applicable standard and requirement prescribed by Chapter 4.

2.6.2 An appointment shall not be issued to a person unless the person meets the applicable training and experience requirements specified in paragraph A1 of Appendix A.

2.7 Review of instrument flight procedures

2.7.1 An applicant for the grant of an instrument flight procedure design service certificate shall establish a procedure for the review of every instrument flight procedure that the applicant's organisation proposes to design, review and make available to the Authority for certification and publication

2.7.2 The procedure required by paragraph 2.7.1 shall include the following requirements:

a) details of the checks to be carried out by an independent reviewer, who is certified by the Authority, to ensure that the instrument flight procedure meets the applicable requirements and standards prescribed by this Standard; and

b) the means for providing the Authority with the information specified in para 2.6(c) for the entry of the instrument flight procedure into the AIP Fiji.

2.7.3 A person who is certified by the Authority in accordance with para 2.6 to review an instrument flight procedure shall be independent of the design of the IFP being reviewed.

2.8 Promulgation of instrument flight procedures

2.8.1 An applicant for the grant of an instrument flight procedure design service shall establish a procedure to ensure

that the following requirements are met:

a) the information required under paragraph (c) is provided to the Authority; and

b) an instrument flight procedure is not published or made available for operational use unless the Authority has notified the holder of the certificate that the instrument flight procedure has been certified to be entered into the AIP Fiji Islands, and the date for operational use has been determined by the certified AIS Unit, according to its AIRAC scheduled dates.

2.8.2 The procedure required by paragraph 2.8.1 shall include details of the following:

a) means for coordinating with the aeronautical information service provider the publishing of the instrument flight procedure in the AIP Fiji Islands; and

b) means to check that the initial publication of, or any change to, an instrument flight procedure published under paragraph (a) has been accurately depicted in the AIP Fiji Islands prior to publication.

2.8.3 The following information shall be required by the Authority for every entry of an instrument flight procedure into the AIP Fiji Islands:

a) the name or other appropriate identifier that is acceptable to the Authority to uniquely identify the instrument flight procedure;

b) aeronautical data that is acceptable to the Authority to define and describe the instrument flight procedure including a list of relevant obstacles and identification and description of controlling obstacles;

c) the date that the instrument flight procedure is intended to come into effect;

d) a statement signed by the Independent Reviewer referred to under para 2.5(b)(1), validating that the instrument flight procedure meets the applicable standards and requirements prescribed by this Standard; and

e) a statement signed by a Independent Reviewer, of an appropriate instrument flight procedure service organisation certifying that the instrument flight procedure is to be maintained in accordance with the organisation's procedures required by para 2.7.

2.8.4 For the purpose of paragraph (c)(5), an appropriate instrument flight procedure organisation is an organisation that is certificated in accordance with this Standard and whose certificate authorises the design, review, validation, and maintenance of the instrument flight procedure.

2.9 Maintenance of instrument flight procedures

2.9.1 An applicant for the grant of an instrument flight procedure design service shall establish a procedure for maintaining, in accordance with the requirements of this Standard, every instrument flight procedure that, in accordance with the statement required under para 2.7.1, is maintained under the authority of the certificate.

2.9.2 The procedure required under paragraph 2.9.1 shall include details for every instrument flight procedure to be reviewed, and validated as follows:

a) on a periodic basis not exceeding five (5) years, ensuring that the instrument flight procedure is still valid in terms of minimum obstacle clearances and continues to meet the applicable standards and requirements of this Standard; and

b) if there is a change in any of the data referred to in para 2.3.1(b) that may affect the integrity of the instrument flight procedure.

c) Ensure that the maintenance procedures comply with relevant ICAO documents such as Annex 11, Doc 10068, and Doc 8168 Volume II.

d) Maintain detailed records of the maintenance and review processes to demonstrate compliance with this Standards and ICAO standards.

e) Implement a system for continuous monitoring and improvement of the instrument flight procedures to ensure ongoing compliance with ICAO standards.

f) Ensure that personnel involved in the maintenance and review of instrument flight procedures are adequately trained and competent in accordance with ICAO standards and best practices.

g) Engage with relevant stakeholders, including air traffic service providers and airline operators, to ensure that any changes or updates to instrument flight procedures are communicated effectively and that their feedback is considered.

h) Establish a risk management process to identify, assess, and mitigate any risks associated with the maintenance and review of instrument flight procedures. A safety risk assessment shall be conducted when there is a deviation from SD-IFP requirements.

2.10 Errors in published instrument flight procedures

2.10.1 An applicant for the grant of an instrument flight procedure design service certificate shall establish a procedure for recording, investigating, correcting, and reporting in accordance with Mandatory Occurrence Reporting and Investigation Regulations, any identified error and any identified non-conformance or suspected non-conformance with the requirements of this Standard, in an instrument flight procedure that is validated or maintained under the authority of the certificate.

2.10.2 The procedure required by paragraph 2.9.1 shall require that:

a) an instrument flight procedure is immediately withdrawn from operational use, under the approval of the Authority if the error or non-conformance referred to in paragraph (a) affects, or may affect, the safety of an aircraft operation.

b) the error or non-conformance is corrected, and validated by a senior person who is appropriately certified in accordance with para 2.5;

c) the correction required is clearly identified and promulgated by the most appropriate means, under the approval of the Authority, relative to the operational significance of the error or non-conformance;

d) the source of the error or non-conformance is identified, and the following conducted:

i). if possible, eliminated to prevent a recurrence; and

ii). preventive action is taken to ensure that the source of the error or non-conformance has not affected the integrity of any other instrument flight procedure; and

e) The Authority is notified, in accordance with Occurrence Reporting and Investigation Regulations, of a promulgated information incident relating to an error or non-conformance referred to in paragraph 2.10.1.

f) Ensure that the procedures for handling errors and non-conformances comply with procedures in Appendix F;

g) Maintain detailed records of all identified errors, investigations, corrections, and reports to demonstrate compliance with this Standard;

h) Ensure that personnel involved in recording, investigating, correcting, and reporting errors and non-conformances are adequately trained and competent in accordance with this Standards;

i) Engage with relevant stakeholders, including air traffic service providers and operators, to ensure that any identified errors or non-conformances are communicated effectively and that their feedback is considered;

j) Establish a risk management process to identify, assess, and mitigate any risks associated with errors and non-conformances in instrument flight procedures.

2.11 Management of records

2.11.1 An applicant for the grant of an instrument flight procedure design service shall establish a procedure for the retaining all procedure design documentation so as to allow any data anomalies or errors found during production maintenance or operational use of the procedure to be corrected. This includes management of records that are required for the applicant organisation's functions relating to the design, validation and maintenance of instrument flight procedures.

2.11.2 The management of records under paragraph (a) includes the identification, collection, index, storage, safekeeping, accessibility, maintenance and disposal of records.

2.11.3 The procedure required under paragraph 2.10.1 shall provide for the following to be recorded for every instrument flight procedure that is certified by the Authority and every instrument flight procedure that is maintained in accordance with this Standard:

a) details required by para 2.8 for the instrument flight procedure;

b) details of the instrument procedure design carried out in accordance with para 2.6, including but not limited to design verification, amendment, validation, justification for not validating, and certification activities;

c) details of the promulgation and checking activities;

d) details of any action taken under para 2.9 regarding errors and non-conformances in an instrument flight procedure; and

e) details of every maintenance review and flight validation carried out, in accordance with the procedures required by para 2.8.

2.11.4 The procedure required by paragraph 2.10.1 shall also provide for the following:

a) a record that includes details of the qualifications, experience, training, assessments, and authorisations if applicable, for the following:

i). every senior person and

ii). personnel.

b) a record of every internal safety management review carried out under para 2.10; (3) the records required by paragraphs (c) and (d) to be legible, accurate, permanent and retrievable in a legible format; and

c) the records required by this Standard to be retained for at least 5 years after the associated instrument flight procedure is withdrawn from use.

2.12 Internal quality assurance

2.12.1 An applicant for instrument flight procedure design service provider certificate shall utilize a quality management system at each stage of the instrument flight procedure design process.

2.12.2 An applicant for the grant of an instrument flight procedure design service shall establish an internal quality assurance system to ensure compliance with, and the adequacy of, the procedures required by this Standard.

2.12.3 The internal quality assurance system shall be established in accordance with standards approved by the Authority for Internal Quality Assurance Systems and shall include:

a) Regular audits and reviews of the quality assurance processes;

b) Corrective actions to address any identified non-conformances and enhance the safety and effectiveness of instrument flight procedure;

c) Detailed records of all quality assurance activities, including audits, reviews, and corrective actions;

d) Training and competence requirements for personnel involved in quality assurance;

e) A system for continuous monitoring and improvement of the quality assurance processes;

f) Comprehensive stakeholder engagement process to consider their feedback in the quality assurance processes;

g) A risk management process to identify, assess, and mitigate any risks associated with the quality assurance processes. A safety risk assessment shall be conducted when there is a deviation from SD-IFP requirements.

2.12.4 The Principal Designer who has the responsibility for internal quality assurance shall have direct access to the

Accountable Manager on matters affecting the safe provision of any aircraft operations listed in the exposition.

2.13 Safety Management System

2.13.1 An applicant for an instrument flight procedure design service shall establish a safety management system, including risk and hazard identification, management and mitigation or elimination that will ensure a level of safety acceptable to the Authority.

2.13.2 The safety management system shall be established in accordance with standards approved by the Authority for Safety Management Systems.

2.13.3 The Principal Designer responsible for the safety management system shall have direct access to the Accountable Manager on matters affecting or that may affect the safety, reliability or integrity of the facilities operated under the authority of the certificate in support of aircraft operations.

2.13.4 When the IFP review is completed and submitted to the Authority for approval, the holder of an instrument flight procedure certificate shall submit a Risk Assessment (including mitigations) if it uses obstacle limitation surfaces (OLS) data which is more than five years old but less than six. While the use of outdated data is strongly discouraged, in the event of unforeseen circumstances where the review of the IFP is due and the obstacle limitation surfaces (OLS) data survey is delayed, the existing data may be used temporarily.

2.13.5 In the event that the certificate holder of instrument flight procedure design service and airlines are working together to introduce procedures based on best practices in Fijis airspace, the risks shall be properly assessed and mitigated.

2.13.6 The assumption is that the baseline operation is safe, and risks arise from changes made to the operational system.

2.13.7 Safety assessment starts at the beginning of the project and concludes when submitting the IFP for approval with the Authority.

2.13.8 Safety assessment activities can involve many stakeholders but the air navigation service provider through AIS shall take the lead role.

Note 1-A situation may arise where outdated data is better than no data at all. When this is the case, the certificate holder must develop and implement procedures for handling situations where outdated data is used.

Note 2-The IFP designer must validate the collected data from recognized suppliers and must get sufficient assurance from data suppliers of the conformity to quality requirements (integrity, accuracy and resolution)

Note 3-If the data supplier does not have a quality assurance system then the designer must conduct further verification such as cross checks, use of safety buffers, flight validation and formal assessment of the consequences on the IFP

2.14 Exposition requirements

2.14.1 An applicant for the grant of an instrument flight procedure design service shall provide the Authority with an exposition that shall include not limited to the following:

a) A statement signed by the Accountable Manager on behalf of the applicant's organisation confirming that the exposition and any included documentation define the organisation and demonstrate its means and methods for ensuring ongoing compliance with this Standard, and are required to be complied with by the organisation's personnel at all times;

b) the titles, names and contact details of the senior person or persons;

c) details of the duties and responsibilities of the senior person or persons including matters for which they have responsibility to deal directly with the Authority on behalf of the organisation;

d) if there is more than one senior person listed then a signed organisation chart showing the lines of responsibility of those persons must be provided;

e) the name of every senior person who is authorised in accordance with para 2.4 to approve instrument flight procedures;

f) a list of all the instrument flight procedure to be designed, certified or maintained by the applicant's organisation;

g) details of the applicant's means of meeting the requirements of this Standards in relation to the following:

i). software and equipment;

ii). access to relevant and current data; and

iii). access to copies of relevant documentation.

h) details of the applicant's means of meeting the requirements of this Standard regarding instrument flight procedures not requiring flight validation; and

i) details of the applicant's procedures regarding the following:

i). assessment and competence of personnel;
ii). access to data;
iii). currency and accuracy of data;
iv). control of documentation;
v). design, verification and flight validation of instrument flight procedures.
vi). flight validation of instrument flight procedures.
vii). the justification for instrument flight procedures not requiring flight validation;
viii). the compliance with standards;
ix). authorisation of senior persons;
x). certification of instrument flight procedures;
xi). promulgation of instrument flight procedures and the means to provide details of each procedure to the Authority;
xii). maintenance of instrument flight procedures every five years or less; (xiii)errors in published instrument flight procedures;
xiii). management of records;
xiv). internal quality assurance and
xv). safety management system; and procedures for controlling, amending and distributing the exposition.

2.14.2 The exposition required under paragraph (a) and any amendment thereof shall be acceptable to the Authority.

2.15 Contracting out

2.15.1 The holder of a certificate may, with the approval of the Authority, contract out any or all the work of instrument flight procedure design process and maintenance to another organisation.

2.15.2 Any organisation contracted to provide instrument flight procedure design, validation or maintenance shall meet all the requirements of this Standard.

2.15.3 Notwithstanding the above paragraph, the holder of an instrument flight procedure design service certificate retains the responsibility for ensuring that any contracted party meets and continues to meet the requirements and conditions of this Standard.

2.15.4 The holder of a certificate shall audit the contracted party to an extent and frequency acceptable to the Authority.

2.15.5 The Authority shall have the power to exercise the provisions of para 3.1 in relation to any contracted party

Chapter 3 – Operating Requirements

3.1 Facilitation of examinations, audits and inspections

3.1.1 The holder of a certificate shall facilitate such arrangements as are necessary for a certified person to carry out an examination, audit or inspection when required:

a) for the purpose of securing and monitoring the provision of an instrument flight procedure service under these Regulations; and

b) to satisfy the Authority that the holder of the certificate is competent to operate.

3.1.2 An examination, audit or inspection carried out on the nature of the work pursuant to paragraph 3.1.1 shall include the following:

a) the examination and inspection of the work of the personnel providing an instrument flight procedure service;

b) the examination and inspection of instrument flight procedure service equipment and its maintenance facilities;

c) the examination and inspection of instrument flight procedure personnel(s), Pans-Ops training records; and/or

d) such other examination and inspection as may be necessary for the purpose of monitoring the safety of the provision of the service and the objectives of an instrument flight procedure service operations.

3.2 Continued compliance

3.2.1 The holder of an instrument flight procedure design certificate shall ensure the following:

a) continue to meet the standards and comply with the requirements of Chapter 2 prescribed for certification under this Standard;

b) comply with all procedures referred to in its exposition;

c) hold or have ready access to at least one complete and current copy of its exposition at each location listed in its exposition where a senior person is based;

d) make each applicable section of its exposition available to personnel who require those sections to carry out their duties;

e) comply with any recommendation or corrective action imposed by the Authority as a result of an examination, audit or inspection carried out under para 3.1; and

f) notify the Authority of any change of address for service, telephone number, or email address within 28 days of the change.

3.3 Changes to certificate holder's organisation

3.3.1 The holder of an instrument flight procedure design service certificate shall ensure:

a) subject to paragraph (b), ensure that the organisation’s exposition is amended so as to remain a current description of the certificate holder’s organisation;

b) ensure that any amendment made to the exposition meets the applicable requirements of this Standard; comply with the exposition amendment procedures contained in the exposition;

c) provide the Authority with a copy of each amendment that the certificate holder makes to the exposition as soon as practicable after the amendment is incorporated into the exposition; and

d) amend the exposition as the Authority considers necessary in the interests of aviation safety.

3.3.2 If the holder of a certificate changes, or proposes to change any of the following, the certificate holder shall notify the Authority prior to the change or as soon as practicable if prior notification is not possible, and the change shall

be accepted by the Authority, including applicable fit and proper person criteria, before being incorporated into the certificate holder's exposition:

a) the person identified as the Accountable Manager;

b) the title or name of any senior person specified in the exposition; and

c) the types of instrument flight procedure specified on the certificate holder's certificate.

3.3.3 The Authority may impose conditions under which the holder of a certificate may operate during or following any of the changes specified in paragraph (b) which the holder of the certificate shall comply with.

3.3.4 If any of the changes under paragraph (b) require an amendment to the certificate, the holder of the certificate shall forward the certificate to the Authority as soon as practicable for endorsement of the amendment.

3.4 Cessation of maintenance of an instrument flight procedure

3.4.1 If the holder of a certificate proposes to discontinue the maintenance of an instrument flight procedure as required under para 2.7, the certificate holder shall notify the Authority in writing of the proposal to discontinue the maintenance at least 30 days before the maintenance ceases.

3.5 Withdrawal of an instrument flight procedure from use

3.5.1 Notwithstanding para 3.4.1, the Authority may by the most appropriate means, withdraw an instrument flight procedure from use if the Authority has reasonable grounds to believe that:

a) the instrument flight procedure may be unsafe for use by aircraft operating under IFR; or

b) the instrument flight procedure is not being maintained in accordance with the applicable requirements of this Standard.

3.5.2 If the Authority withdraws an instrument flight procedure from use under paragraph 3.5.1, the Authority shall conduct the following:

a) confirm in writing the withdrawal of the instrument flight procedure with the holder of the certificate responsible for the maintenance of that instrument flight procedure.

b) take appropriate action to ensure that the instrument flight procedure is removed from the AIP Fiji Island and from operational use; and

c) remove the instrument flight procedure and its associated aeronautical data from the AIP Fiji Islands.

Chapter 4 – Design criteria – Instrument Flight Procedure

4.1 Design

4.1.1 Every instrument flight procedure shall be designed in accordance with the requirements of this Standard and in accordance with the appropriate design processes, standards, guidelines in Doc 8168 Volume 2 for which the Authority has promulgated as the basis for instrument flight procedures.

4.1.2 If a criteria other than Doc 8168 Volume 2 is used then the certificate holder must provide evidence that they provide an equivalent level of safety.

4.1.3 The aeronautical data quality requirements contained in the following documents shall also be complied with when conduct design ,review ,validation or maintenance activities:

a) ICAO Documents:

i). Doc 8168, Procedures for Air Navigation Services – Aircraft Operations – Volume I Flight Procedures, Volume III Aircraft Operating Procedures;

ii). Doc 8697, Aeronautical Chart Manual;

iii). Doc 9368, Instrument Flight Procedure Construction Manual;

iv). Doc 9365, Manual of All-Weather Operations;

v). Doc 9371 - Template Manual for Holding, Reversal and Racetrack Procedures;

vi). Doc 9613 Performance Based Navigation Manual – Volume I Concept and Implementation Guidance, and Volume II Implementing RNAV and RNP Operations;

vii). Doc 9674, World Geodetic System 1984 (WGS-84) Manual;

viii). Doc 9881, Guidelines for Electronic Terrain, Obstacle and Aerodrome Mapping Information;

ix). Doc 9905 - AN/471 Required Navigation Performance Authorisation Required (RNP AR) Procedure Design Manual;

x). Doc 9906 - Quality Assurance Manual for Flight Procedure Design (Vol 1, 2,3, 5, 6); and

xi). Doc 10068 – Manual on the Development of a Regulatory Framework for Instrument Flight Procedure Design Service

b) ICAO Annexes –

i). Annex 4, Aeronautical Charts.

ii). Annex 5, Units of Measurements.

iii). Annex 6, Operation of Aircraft.

iv). Annex 11, Air Traffic Services.

v). Annex 14, Volumes I & II Aerodromes;

vi). Annex 15, Aeronautical Information Services; and

vii). Annex 19 -Safety Management System (SMS)

c) any other guideline or standard that is applicable to a particular type of instrument flight procedure and is notified by the Authority as being acceptable and applicable.

4.1.4 For the purposes of paragraph (a), if there is a conflicting difference between any of the applicable design processes, standards, guidelines, or aeronautical data quality requirements, the particular design process, standard

or guideline to be used shall be acceptable to, or specified by, the Authority.

4.1.5 The design of an instrument flight procedure shall comply with the following:

a) be coordinated with all appropriate air traffic service providers;

b) be compatible with any air traffic service and associated procedure that is provided within the area or areas of airspace where the instrument flight procedure is intended to be established; and

c) take into account the following:

i). any noise abatement procedure prescribed in the AIP Fiji Islands;

ii). any law, or other authoritative documentation restricting or governing aircraft operations;

iii). the classification and any associated designation of the airspace in which the instrument flight procedure is to be established and any adjacent;

iv). airspace that may be affected by the procedure; and

v). the effect that the proposed instrument flight procedure may have on any other instrument flight procedure established in the airspace.

4.1.6 An instrument flight procedure shall not be designed for an aerodrome or heliport unless the operator of the aerodrome or heliport agrees in writing that the aerodrome or heliport may be used for IFR operations using the intended instrument flight procedure.

4.1.7 An instrument flight procedure shall not be designed on or use a ground-based aeronautical facility unless:

a) the aeronautical facility is operated under the authority of an Aeronautical Telecommunication Service Provider Certificate issued in accordance with Standard Document – Aeronautical Telecommunication; and

b) the holder of the Aeronautical Telecommunications Provider Certificate agrees in writing that the aeronautical facility can be used for the intended instrument flight procedure.

4.2 Aerodrome Operating Minima

4.2.1 An applicant for the grant of an instrument flight procedure design service certificate shall establish Aerodrome Operating Minima to be published in the AIP Fiji Islands for each instrument approach procedure and visual manoeuvring/circling procedures designed and /or maintained under the authority of their certificate.

4.2.2 This specifically refers to the publishing of visibility, minimum descent altitude/height (MDA) and decision altitude/height (DA) which are critical for ensuring safe landings under instrument flight rules, especially in poor visibility.

4.3 Use of Design Automation Tools

4.3.1 The holder of an instrument flight procedure certificate issued under this Standards shall ensure the following:

a) utilize design automation tools to the maximum extent practicable in the design of each IFP in order to minimize the potential for design errors; and

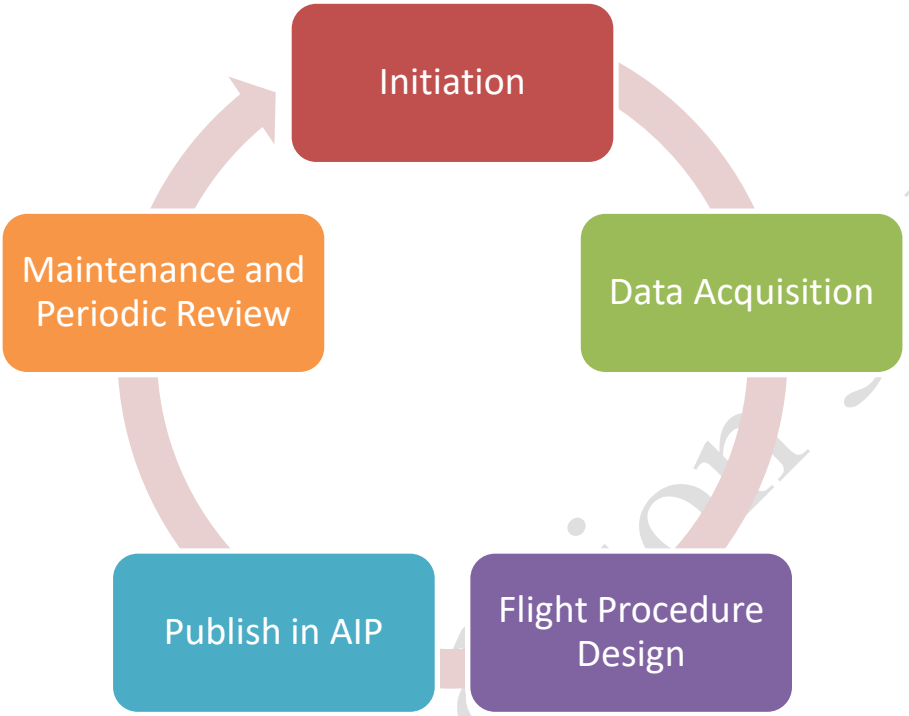
b) ensure that the developer provides the appropriate automation tool validation certificate holder.

4.4 Contravention and Penalties

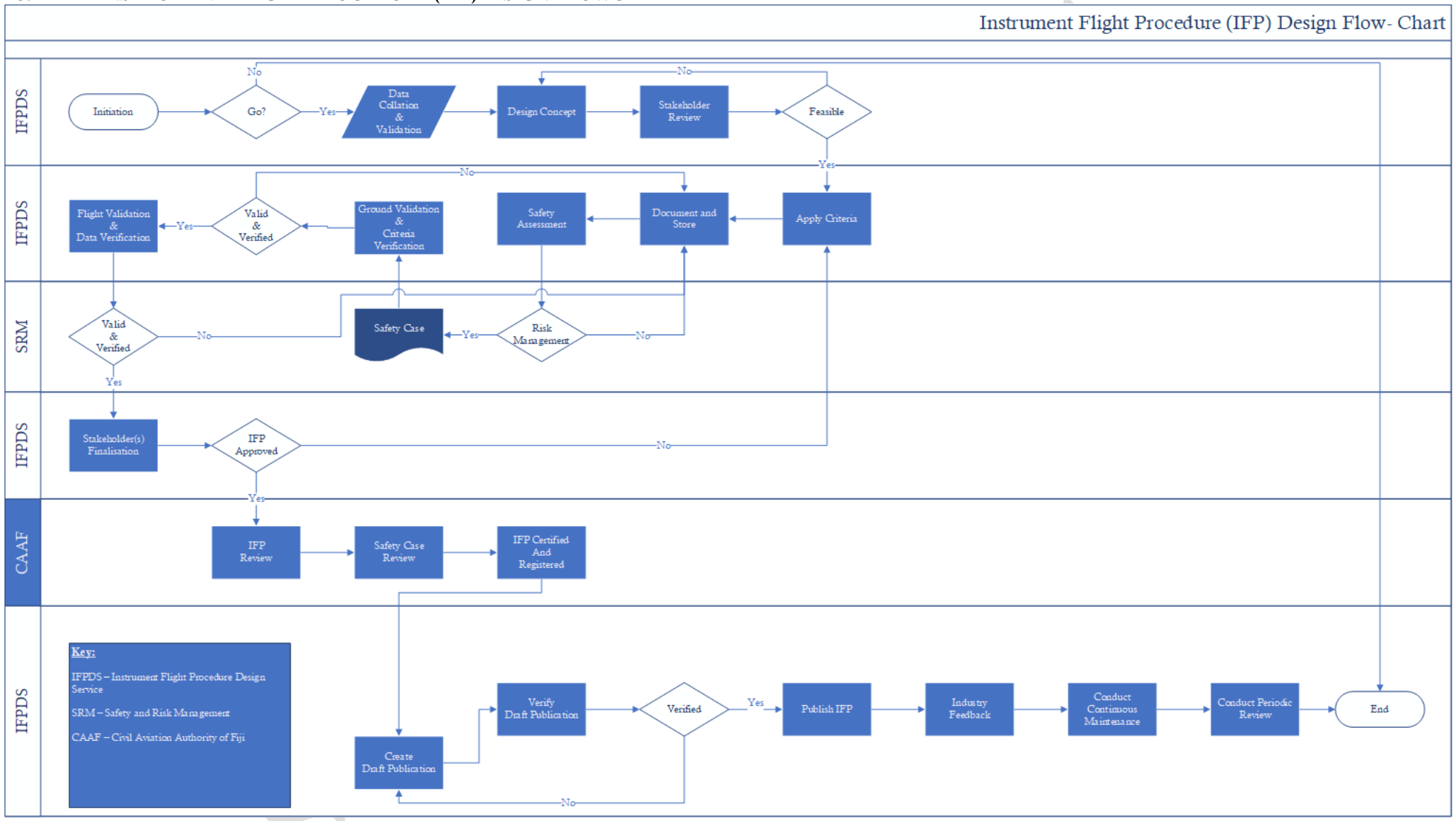
4.4.1 Any person or organisation who contravenes or fails to comply with any provision or requirement under this Standard or its corresponding Documents commits an offence and shall be liable to a prescribed penalty under the ANR.

Chapter 5 – Design criteria – Instrument Flight Procedure Process/Flow Diagram

5.1 Instrument Flight Procedure Process



5.2 INSTRUMENT FLIGHT PROCEDURE (IFP)DESIGN FLOWCHART



Appendix A – Qualifications And Experience For Senior Persons And Qualified Designers

This Appendix specifies the qualifications and experience for Principal IFP Designer and Qualified IFP Designer. Since competency is not equal to training, the development of skills during the mandatory OJT period is crucial.

A1 Principal IFP Designer to validate instrument flight procedures

a) Experience in application of instrument flight procedures – have at least 5 years' experience in the application of instrument flight procedures through experience gained in air traffic control, as a flight crew member on IFR operations, in operational control of IFR operations, or other experience accepted by the Authority as equivalent.

b) Training:
   i). have successfully completed an ICAO PANS-OPS training courses, or a training course accepted by the Authority as an equivalent, for the design and validation of instrument flight procedures;

   ii). have satisfactorily completed an approved training programme as prescribed under para 2.1.1.

   iii). Have satisfactorily completed annual recurrent IFP training or equivalent including participation in international conferences, workshops or relevant meetings.

   iv). Have participated in an IFP design software update workshop

c) Experience in design of instrument flight procedures – at least 5 years' experience designing instrument flight procedures which shall include –

   i). having designed and published at least 5 instrument flight procedures; or

   ii). any other related work on the development of IFP acceptable to the authority.

A2 Qualified IFP Designers

a) Experience in application of instrument flight procedures – have at least 3 years' experience in the application of instrument flight procedures through experience gained in air traffic control, as a flight crew member on IFR operations, or other experience accepted by the Authority as equivalent.

b) Training
   i). the satisfactory completion of an approved PANS-OPS procedures design course or a training;

   ii). the satisfactory completion of on-the-job training program in procedure design

   iii). satisfactorily completed initial IFP design software training

c) Experience in design of instrument flight procedures – at least 1 year experience designing instrument flight procedures (including on the job training period) which shall include –

   i). under supervision by a procedure designer whose qualifications are accepted by the Authority, the design of at least 3 instrument flight procedures published in AIP Fiji; or

   ii). any other related work on the development of IFP acceptable to the authority.

Appendix B – Acceptable Standards for Validation of Instrument Flight Procedures

B.1 Instrument flight procedures shall be validated in accordance with standards and guidelines contained in the following ICAO Documents:

a) Doc 8168 - Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) Volume 1,2 and 3

b) Doc 8071 - Testing of Radio Navigation Aids

c) Volume I: Testing of Ground-Based Radio Navigation Systems

d) Volume II: Testing of Satellite-Based Radio Navigation Systems

e) Doc 9274 - Manual on the Use of the Collision Risk Model (CRM) for ILS Operations

f) Doc 9368 - Instrument Flight Procedure Construction Manual

g) Doc 9674 - World Geodetic System 1984 (WGS-84) Manual

h) Doc 9365 - Manual of All-Weather Operations

i) Doc 9613 - Performance-Based Navigation (PBN) Manual

j) Doc 9905 - Required Navigation Performance Authorisation Required (RNP AR) Procedure Design Manual

k) Doc 9931 - Continuous Descent Operations (CDO) Manual

l) Doc 9859- Safety Management Manual

m) Doc 9906 - Quality Assurance Manual for Flight Procedure Design

   i). Volume 1: Flight Procedure Design Quality Assurance System

   ii). Volume 2: Flight Procedure Design Process

   iii). Volume 3: Flight Procedure Design Software Validation

   iv). Volume 4: Flight Procedure Design Data Validation

   v). Volume 5: Flight Validation of Instrument Flight Procedures

   vi). Volume 6: Flight Validation Pilot Training and Evaluation

n) Doc 10068 - Manual on the Development of a Regulatory Framework for Instrument Flight Procedure Design Service

Appendix C – Standards for Instrument Flight Procedure Design Operations Manual

1.0 The certificate holder of instrument flight procedure design service shall establish and maintain an instrument flight procedure operation which shall include the following:

a) the organisational structure of the instrument flight procedure design office;
b) a job description of each of the personnel involved with the instrument flight procedure design process which shall contain the job function and responsibilities.
c) the qualifications and training requirements of personnel responsible for instrument flight procedure designs;
d) the criteria used for the design of instrument flight procedure;
e) the documentation required for the design of instrument flight procedure;
f) the instrument flight procedure design process;
g) a system maintained by the certificate holder of instrument flight procedure design service instrument flight procedure design office for keeping documents and records relating to the instrument flight procedure design process;
h) the SMS and quality assurance program ;
i) the details of the procedures necessary to ensure compliance with this Standard; and
j) the procedures to control, amend and distribute the operations Standard, including the distribution of the initial copy and all subsequent amendments made to the operations Standard.

1.1 The certificate holder of instrument flight procedure design service shall establish a stakeholder engagement process to ensure regular communication and collaboration with all relevant parties.

1.2 This process shall include regular meetings, feedback mechanisms, and documentation of stakeholder input. Stakeholder feedback shall be considered and incorporated into the design process to ensure that all perspectives are addressed."

1.3 The certificate holder of instrument flight procedure design service shall notify the Authority of any changes to the instrument flight procedure operations Standard in a timely manner.

1.4 The certificate holder of instrument flight procedure design service shall take all reasonably practicable measures and develop and apply appropriate procedures to ensure that the instrument flight procedure operations Standard being used by all its personnel contains current information.

1.5 The certificate holder of instrument flight procedure design service shall update, amend or add to the instrument flight procedure operations manual as the Authority may require for ensuring:

a) the accuracy of the instrument flight procedure operations manual; and
b) the safety, efficiency or regularity of air navigation.

Use of Instrument Flight Procedure Operations Manual

1.0 The certificate holder of instrument flight procedure design service shall design every instrument flight procedure in accordance with the instrument flight procedure operations.

1.1 The certificate holder of instrument flight procedure design service shall ensure that the instrument flight procedure operations manual is readily available to all personnel concerned with the instrument flight procedure design process.

Appendix D - Requirement for the Use of Checklists by Instrument Flight Procedure Design Service (IFPDS) Providers

D1 Purpose

1.1 The purpose of this requirement is to ensure that all Instrument Flight Procedure Design Service (IFPDS) providers utilize comprehensive checklists to enhance the accuracy, consistency, and safety of instrument flight procedure design, review, validation, and maintenance processes.

D2 Scope

2.1. This requirement applies to all IFPDS providers certified by the Civil Aviation Authority of Fiji (CAAF) and covers the use of checklists in the design, review, validation, and maintenance of instrument flight procedures.

D3 Checklist Development and Maintenance

3.1 Development:

3.1.1 IFPDS providers shall develop comprehensive checklists for each stage of the instrument flight procedure design process, including but not limited to:

a) Data Collection and Verification

b) Design and Amendment

c) Independent Review

d) Ground and Flight Validation

e) Documentation and Record Keeping

f) Publication and Promulgation

g) Maintenance and Periodic Review

3.2 Content

3.2.1 Each checklist shall include specific items and tasks that must be completed at each stage of the process, ensuring compliance with applicable standards and regulations.

3.2.2 Checklists shall be tailored to the specific types of instrument flight procedures being designed, reviewed, validated, or maintained.

3.3 Review and Update

3.3.1 Checklists shall be reviewed and updated regularly to reflect changes in standards, regulations, and best practices.

3.3.2 Updates to checklists shall be documented and communicated to all relevant personnel.

D4 Checklist Usage

4.1 Mandatory Use

4.1.1 The use of checklists shall be mandatory for all personnel involved in the design, review, validation, and maintenance of instrument flight procedures.

4.1.2 Checklists shall be used to ensure that all required tasks and items are completed and verified at each stage of the process.

4.2 Completion and Verification

4.2.1 Personnel shall complete and verify each item on the checklist, indicating the date and their initials or signature.

4.2.2 Any discrepancies or incomplete items shall be documented, and corrective actions shall be taken before proceeding to the next stage.

4.3 Documentation

4.3.1 Completed checklists shall be retained as part of the official records for each instrument flight procedure.

4.3.2 Checklists shall be stored in a manner that ensures they are easily accessible for review and audit purposes.

Appendix E - Qualifications for Flight Validation Pilots

E1 Minimum Qualifications

a) Commercial Pilot License (CPL): The pilot must hold a valid Commercial Pilot License;

b) Instrument Rating: The pilot must have an instrument rating, allowing them to operate aircraft under instrument flight rules (IFR);

c) Airline Transport Pilot License (ATPL) or Equivalent Experience: The pilot should have an ATPL or equivalent experience, demonstrating extensive operational experience.

E2 Recommended Qualifications

a) Extensive Experience in IFR Operations: The pilot should have significant experience in IFR operations, ensuring familiarity with instrument flight procedures;

b) Experience in Related Roles: The pilot should have experience and qualifications in related roles, such as a flight operations inspector or flight inspection/calibration pilot;

c) Capability to Conduct RNP APCH Operations: The pilot should be capable of conducting Required Navigation Performance (RNP) Approach operations in at least one aircraft type;

d) Experience with FMS/GNSS Equipped Aircraft: The pilot should have experience operating Flight Management System (FMS) and Global Navigation Satellite System (GNSS) equipped transport category aircraft.

E3 Training Requirements

a) Initial Training: The pilot must complete initial training that provides a sound knowledge of the fundamentals of procedure design and practical and theoretical training in flight procedure validation;

b) PANS-OPS Training: The pilot should have completed training courses related to ICAO Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS);

c) Performance-Based Navigation (PBN) Knowledge: The pilot should have a sound knowledge of PBN operations, particularly PBN approach operations.

E4 Competency Requirements

a) Communication Skills: The pilot must be able to communicate effectively with flight procedure designers and other stakeholders;

b) Knowledge of Flight Procedure Design: The pilot should have sufficient knowledge of flight procedure design and construction to enable competent evaluation of the procedures;

c) Multi-Tasking Capabilities: The pilot should possess complex multi-tasking capabilities, as the task of flight validation involves the application of a wide variety of skills, experience, and knowledge.

E5 Experience Requirements:

a) Senior Experienced Pilots: Candidates for flight validation pilot training are expected to be senior experienced pilots with extensive operational experience;

b) Operational Experience: Suitable candidates include current or former flight operations inspectors or flight inspection pilots;

c) Flight validation pilots must have a combination of formal qualifications, extensive operational experience, and specialized training. They must hold a CPL with an instrument rating, have an ATPL or equivalent experience, and possess extensive experience in IFR operations. Additionally, they should have completed relevant training courses, including PANS-OPS and PBN operations, and demonstrate strong communication and multi-tasking skills.

These qualifications ensure that flight validation pilots are well-equipped to conduct flight validations effectively and safely, in accordance with ICAO standards.

Appendix F-Elimination of Deficiencies

1.0 An applicant for the grant of an instrument flight procedure design certificate shall establish procedures for the elimination of deficiencies identified by the flight procedure inspector or internal auditor.

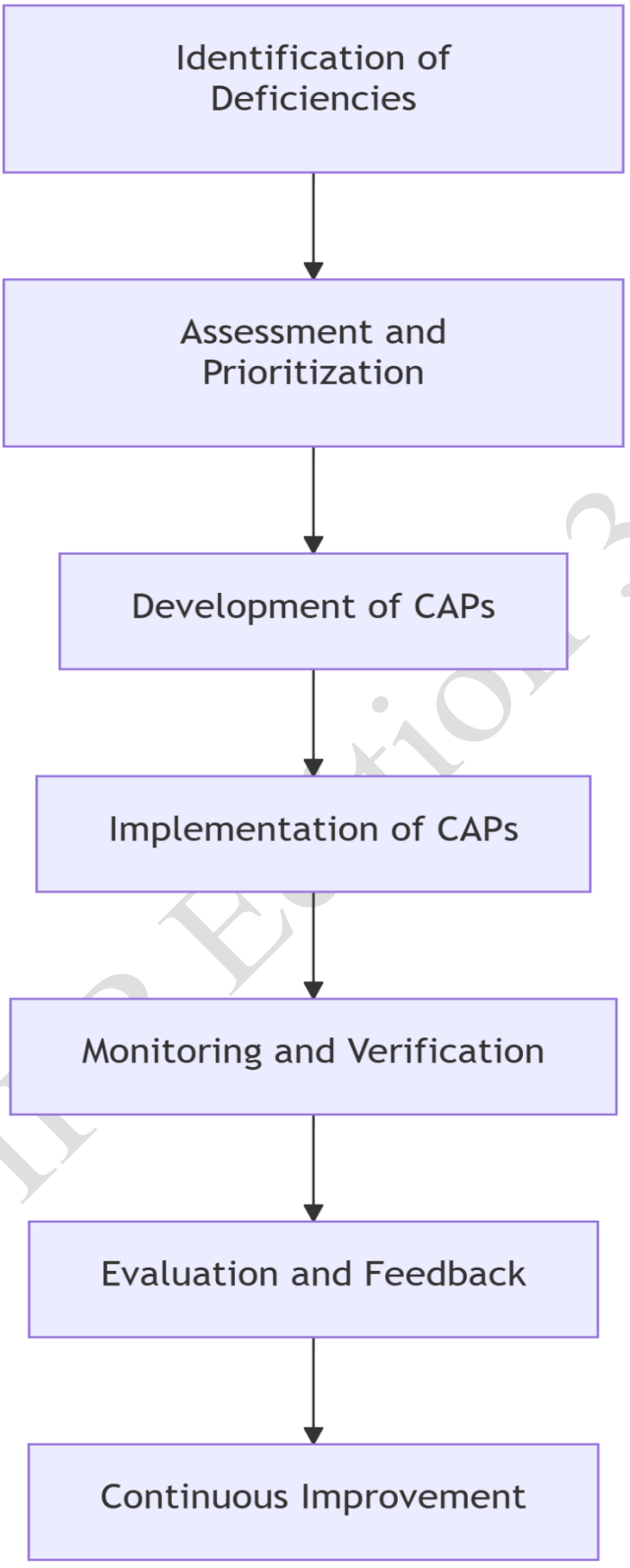
1.1 The description of the deficiency and time frame for elimination of deficiency shall be as follows:

a) Level 1 - non-compliance with these regulations which could affect the safety of aircraft. -7 days
b) Level 2 - non-compliance with these regulations with no immediate safety concern 30 days
c) Level 3 - deficiency that could lead to a non-compliance -90 days

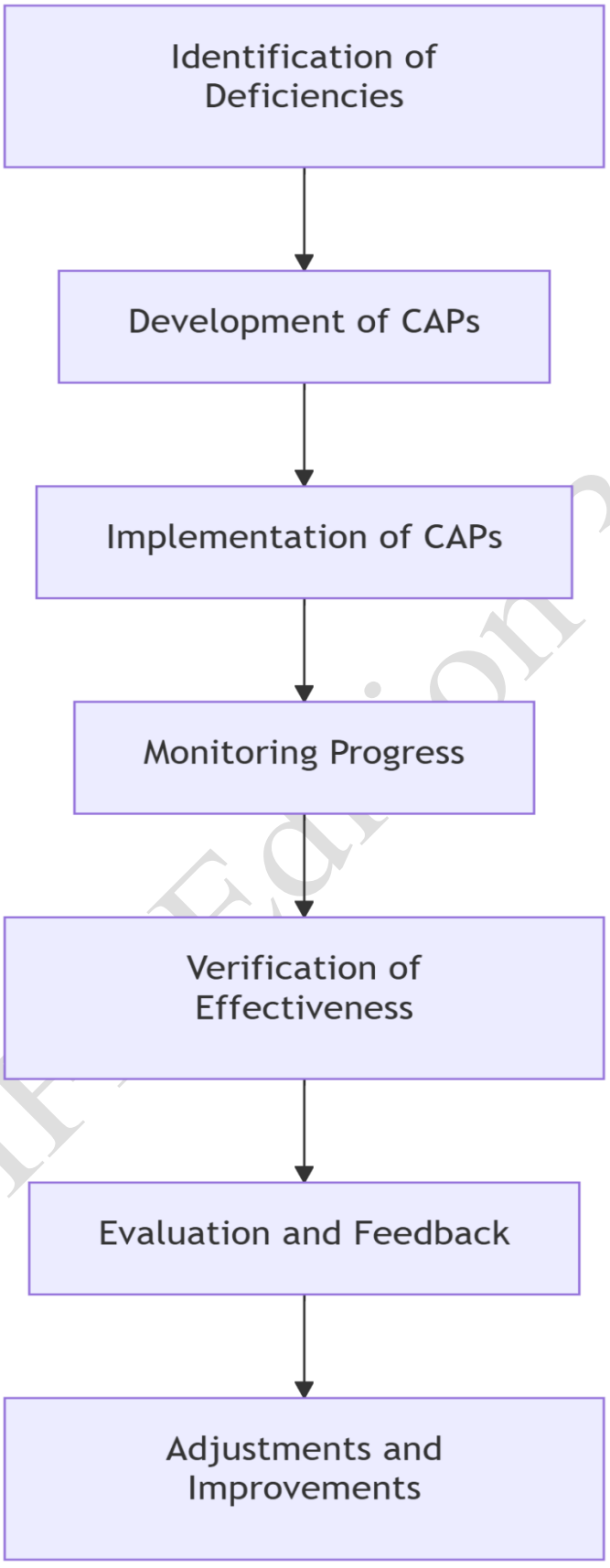
1.2 The Authority shall issue an improvement notice for any deficiency not eliminated for over six months from the time of identification and will issue an infringement notice if not eliminated for over 12 months.

1.3 The applicant for the grant of an instrument flight procedure design service certificate shall monitor and record progress, including actions taken by individuals and organizations performing an aviation activity in resolving such issues.

F2 Mechanism for Elimination of Deficiencies



F3 Mechanism for Verification of Effective Implementation



Appendix G -GS753 Form Application for IFP Designer

IMPORTANT

Before completing this form, its contents should be read carefully. Completed applications should be sent to the Civil Aviation Authority of Fiji, Private Mail Bag (NAP 0354), Nadi Airport, Fiji, together with the documents required under Section 2. Your attention is drawn to the provisions of the Air Navigation Regulations in respect of Regulation 128 Forgery, etc., of documents, of the Air Navigation Regulations.

SECTION 1 PERSONAL PARTICULARS OF APPLICANT (in BLOCK CAPITALS please)

Full Name (Surname first) .....

Address for Service .....

Postal Address (If different from above) .....

Contact Details (Telephone, Fax and Email) .....

.....

SECTION 2 APPLICATION

I hereby apply to be an IFP Designer for the Civil Aviation Authority of Fiji.

Evidence of the following is also attached in support of this application:

☐ Curriculum Vitae (CV) attached in support of this application.

Qualifications

1.Any advanced certifications and specialised training in IFP review and validation

☐ .....

☐ .....

☐ .....

☐ .....

2.Any continuous professional development and additional qualifications.

☐ .....

☐ .....

☐ .....

☐ .....

Skills and Competency

1.Any advanced proficiency in relevant software and tools.

☐ .....

☐ .....

☐ .....

☐ .....

2. Any level of knowledge of regulatory standards and design criteria.

☐ .....

☐ .....

☐ .....

☐ .....

3. The ability to conduct independent reviews and provide detailed feedback.

☐ .....

☐ .....

☐ .....

☐ .....

4. References

1. Professional references from previous employers, clients, or colleagues in the aviation industry

☐ .....

☐ .....

☐ .....

☐ .....

SECTION 3 Declaration

The provision of false information or failure to disclose information relevant to the grant or holding of an aviation document constitutes an offence of Air Navigation Regulations No. 128.

I, ...hereby declare that the information provided in this application is true and accurate to the best of my knowledge. I understand that any false or misleading information may result in the rejection of my application or revocation of any approval granted; and

I commit to upholding the highest standards of integrity and professionalism in my work in ensuring that:

Ensuring Safety and Accuracy: I will meticulously review all flight procedures to ensure they meet the highest safety standards and regulatory requirements.

Maintaining objectivity and will provide unbiased and impartial evaluations, free from any conflicts of interest.

Confidentiality: I will respect the confidentiality of all sensitive information and protect it from unauthorized disclosure.

Transparency: I will maintain honesty and transparency in all my professional activities and communications.

Ethical Conduct: I will adhere to all ethical guidelines and standards set forth by the Civil Aviation Authority of Fiji (CAAF) and other relevant bodies.

Taking full responsibility for the accuracy and quality of my work.

Correct any error related to my work either here or remotely and report any issues or challenges promptly to Fiji Airports.

Documenting my work processes and decisions to ensure transparency and traceability.

☐ I agree to pay any applicable fees as set out by CAAF for Instrument Flight Procedures.

1.Application Fee (Refer to Civil Aviation (Fees and Charges) Regulation)

2.Photograph

Passport size colour photographs (Signed and dated)

3.Proof of Identification

Passport, Voter ID NRC or Birth Certificate together with a Photo ID

Police Clearance

Police Clearance (from all countries resided in for more than 6 consecutive months within the past 10 years)

SECTION 4 CONDITIONS OF AUTHORISATION

This authorisation is valid for a period of three (3) years unless earlier terminated and is renewed only after evidence of a refresher training is provided to the Authority.

The designer must participate in ongoing training to stay current with the latest standards and technologies in IFP design.

The designer must maintain detailed records of all IFP designs, including any changes or updates. These records must be kept for a specified period and be available for review by the Civil Aviation Authority of Fiji (CAAF).

4. The Designer is required to conduct himself/herself in a professional manner and in accordance with the Fiji Airports Code of Conduct and SD-IFP and
must avoid any conflicts of interest and refrain from engaging in any activities that could compromise their professional judgment or the safety of flight operation.

take responsibility for his/her work, ensuring that all procedures are thoroughly validated and reviewed before implementation.

properly account for terrain, obstacles, vegetation and man-made obstacles.

avoid using outdated or incorrect data for navigation aids, waypoints, or airspace boundaries can result in errors in the procedure design.

comply with Pans Ops Criteria.

SECTION 5 FIT AND PROPER PERSON
THE INFORMATION SOLICITED HEREUNDER IS REQUIRED PURSUANT TO ANR REGULATION 56 (3) OF THE AIR NAVIGATION REGULATIONS 1981.

Have you previously had an application for an Aviation Document rejected or have you been the holder of an aviation document which has been suspended or revoked?

Have you been convicted on any criminal charge or are you presently facing charges for a transport safety offence?

Have you been convicted on any criminal charge or are you presently facing charges for a criminal offence?

Have you any history of physical or mental health or serious behavioural problems?

Have you been found guilty of malpractice of any kind?

Have you been the subject of/or dealt with in disciplinary or similar proceedings relating to medical practice?

Are you currently being investigated for any disciplinary or similar matters by any medical registration authority?

If answering "YES" to questions c) to g) above, please provide details on separate sheets enclosed in a sealed envelope marked "Confidential, Chief Executive, Civil Aviation Authority of Fiji, include name, client No (if known), organisation name, and attach to this application.

Note: The provision of false information or failure to disclose information relevant to the grant or holding of an aviation document constitutes an offence under Section 17(5)(b) of the Civil Aviation Authority Act 1979 and Regulation 128 of the Air Navigation Regulations 1981 and the applicant is subject to prosecution as well as the revocation, suspension or cancellation of their aviation document or in the event of initial issue, the rejection of the application.

I hereby certify that to the best of my knowledge and belief the statements made, and the information supplied on this form is true and correct, and that the enclosed copies of my personal documents are authentic and that information shown on them is true and correct.
I hereby authorise the Civil Aviation Authority of Fiji to use the information concerning me on this form or attached hereto for any purpose as required or authorised by Law and I authorise such information to be disclosed by the CAAF to any person who requires such information to carry out any function as lawfully directed by the CAAF. I consent to the disclosure by any court of law of any details of any convictions I may have pursuant to this application and by any medical administration authority, to the Chief Executive, Civil Aviation Authority of Fiji.

Signature of Applicant Date:

Appendix H-GS752 Form Application for Independent Reviewer

IMPORTANT

Before completing this form, its contents should be read carefully. Completed applications should be sent to the Civil Aviation Authority of Fiji, Private Mail Bag (NAP 0354), Nadi Airport, Fiji, together with the documents required under Section 2. Your attention is drawn to the provisions of the Air Navigation Regulations in respect of Regulation 128 Forgery, etc., of documents, of the Air Navigation Regulations.

SECTION 1 PERSONAL PARTICULARS OF APPLICANT (in BLOCK CAPITALS please)

Full Name (Surname first) .....

Address for Service .....

Postal Address (If different from above) .....

Contact Details (Telephone, Fax and Email) .....

.....

SECTION 2 APPLICATION

I hereby apply for authorisation to be an IFP Independent Reviewer approved by the Civil Aviation Authority of Fiji.

Evidence of the following is also attached in support of this application:

☐ Curriculum Vitae (CV) attached in support of this application.

Training and Education

1. Please tick all PANS-OPS and other flight procedure design-related courses that you have completed.

☐ ICAO PAN-OPS Instrument Flight Procedures: General Criteria and Conventional Practices
Year completed: _____

☐ ICAO PAN-OPS Instrument Flight Procedures: Criteria for RNAV, GNSS and RNP
Year completed: _____

☐ RNP-AR Training
Year completed: _____

☐ Navigation database coding (e.g., ARINC-424)
Year completed: _____

☐ Advanced RNP Training Course
Year completed: _____

☐ GBAS Training
Year completed: _____

☐ SBAS Training
Year completed: _____

☐ Other (indicate year complete)

☐ .....

☐ .....

☐ .....

☐ .....

Procedure Design Experience and Current Authorisations

2. Please describe your previous procedure design experience, for example: designed procedure for a certain company in the past number of years, peer reviewed flight procedures, developed concept procedures for a certain airport, etc.

☐ .....

☐ .....

- ☐ .....
- ☐ .....

Skills and Competency

1. Please tick all the instrument flight procedure types you have designed in the last 2 years.

☐ Non-precision Approach (Ground-based)
☐ Non-precision Approach (RNP APCH)
☐ Non-precision Approach (SBAS)
☐ Precision Approach (Ground-based, i.e., ILS)
☐ Precision Approach (SBAS)
☐ RNP-AR Procedures (RNP-AR)
☐ Approach with Vertical Guidance (APV/Baro-VNAV)
☐ Departure (Ground-based)
☐ Departure (PBN
☐ En route (Ground-based)
☐ En route (PBN)

Any other details

- ☐ .....
- ☐ .....
- ☐ .....
- ☐ .....

2.Do you currently hold any Full Authority to design any IFP types?
☐ No
☐ Yes, the IFP types are

_____
_____
_____

3.Have you held any Full Authority to design any IFP types?
☐ No
☐ Yes, the IFP types area _____
_____
_____

4 Have you held any Full Authority to peer review any IFP types?
☐ No
☐ Yes, the IFP types are _____
_____
_____

5. Tools, Software and Software Related Knowledge
What design software are you familiar with

Are you familiar with the use of PHX software

6.Are you familiar with use of Microsoft Excel for collation and preparation of data (e.g., obstacle data)?

_____

7.Have you used GIS software? ☐ No ☐ Yes, if yes what GIS software have you used:

_____

8.Have you used any software to obtain, download or manipulate terrain data such as SRTM, or ASTER DEM? Yes ☐ No ☐
Yes, the software I used is: _____
9.Are you familiar with the different projection datums used in Fiji (e.g., UTM Zones, etc.)?

_____

☐ No ☐ Yes

10.Are you familiar with Fiji local datum?

☐ No ☐ Yes

4. References

1. Professional references from previous employers, clients, or colleagues in the aviation industry

- ☐ .....
- ☐ .....
- ☐ .....
- ☐ .....

SECTION 3 Declaration

The provision of false information or failure to disclose information relevant to the grant or holding of an aviation document constitutes an offence of Air Navigation Regulations No. 128.

I, ...hereby declare that the information provided in this application is true and accurate to the best of my knowledge.

I understand that any false or misleading information may result in the rejection of my application or revocation of any approval granted; and

I agree to submit to CAAF any other information required to support this application

1.Application Fee (Refer to Civil Aviation (Fees and Charges) Regulation)

☐ I agree to pay any applicable fees as set out by CAAF for Instrument Flight Procedures.

2.Photograph

Applicant are required to submit Passport size colour photographs (Signed and dated)

3.Proof of Identification

Applicant are required to submit Passport, Voter ID NRC or Birth Certificate together with a Photo ID as proof of identification.

4.Police Clearance

Applicant are required to submit Police Clearance (from all countries resided in for more than 6 consecutive months within the past 10 years)

SECTION 4 FIT AND PROPER PERSON

THE INFORMATION SOLICITED HEREUNDER IS REQUIRED PURSUANT TO ANR REGULATION 56 (3) OF THE AIR NAVIGATION REGULATIONS 1981.

Have you previously had an application for an Aviation Document rejected or have you been the holder of an aviation document which has been suspended or revoked?

Have you been convicted on any criminal charge or are you presently facing charges for a transport safety offence?

Have you been convicted on any criminal charge or are you presently facing charges for a criminal offence?

Have you any history of physical or mental health or serious behavioural problems?

Have you been found guilty of malpractice of any kind?

Have you been the subject of/or dealt with in disciplinary or similar proceedings relating to medical practice?

Are you currently being investigated for any disciplinary or similar matters by any medical registration authority?

If answering "YES" to questions c) to g) above, please provide details on separate sheets enclosed in a sealed envelope marked "Confidential, Chief Executive, Civil Aviation Authority of Fiji, include name, client No (if known), organisation name, and attach to this application.

Note: The provision of false information or failure to disclose information relevant to the grant or holding of an aviation document constitutes an offence under Section 17(5)(b) of the Civil Aviation Authority Act 1979 and Regulation 128 of the Air Navigation Regulations 1981 and the applicant is subject to prosecution as well as the revocation, suspension or cancellation of their aviation document or in the event of initial issue, the rejection of the application.

I hereby certify that to the best of my knowledge and belief the statements made, and the information supplied on this form is true and correct, and that the enclosed copies of my personal documents are authentic and that information shown on them is true and correct.
I hereby authorise the Civil Aviation Authority of Fiji to use the information concerning me on this form or attached hereto for any purpose as required or authorised by Law and I authorise such information to be disclosed by the CAAF to any person who requires such information to carry out any function as lawfully directed by the CAAF. I consent to the disclosure by any court of law of any details of any convictions I may have pursuant to this application and by any medical administration authority, to the Chief Executive, Civil Aviation Authority of Fiji.

Signature of Applicant

Date:

APPENDIX G -REQUIREMENTS ON VISUAL SURFACE SEGMENTS (VSS), OBSTACLE IDENTIFICATION SURFACE(OIS)

Visual Segment Surface

The holder of an instrument flight procedure design service certificate shall ensure that a Visual Segment Surface (VSS) for instrument approach procedures to be designed and that straight-in instrument approach procedures shall be protected in the visual segment by means of the VSS

Base width

The base width of the VSS is 300 meters for Code 3 and 4 runways and 150 meters for Code 1 and 2. Many Fijis certificated aerodromes do not have 150- or 300-meter strips and to meet this requirement would require additional survey and obstacle removal. The use of runway strip in lieu of the PANS-OPS criteria shall be used as the base width of the VSS as the published and surveyed runway strip width.

VSS Penetration

If the VSS is penetrated, then an aeronautical study shall be undertaken. The preferred mitigation options are to increase the nominal vertical path angle (VPA) or displace the runway threshold. To ensure a consistent application of aeronautical study mitigations the following are other acceptable mitigations to be applied:

a) Aircraft Track- When an approach is offset due to terrain the VSS area may be penetrated by the terrain which the approach is offset away from. For offset approaches the VSS area still diverges by 15% on the side opposite the offset to protect aircraft positioning along the extended runway centerline once visual. It may be possible to mitigate these situations by requiring aircraft to fly the published track until past the VSS penetration.

b) Visibility- When the VSS is penetrated the IFP minimum visibility must be 1600m.

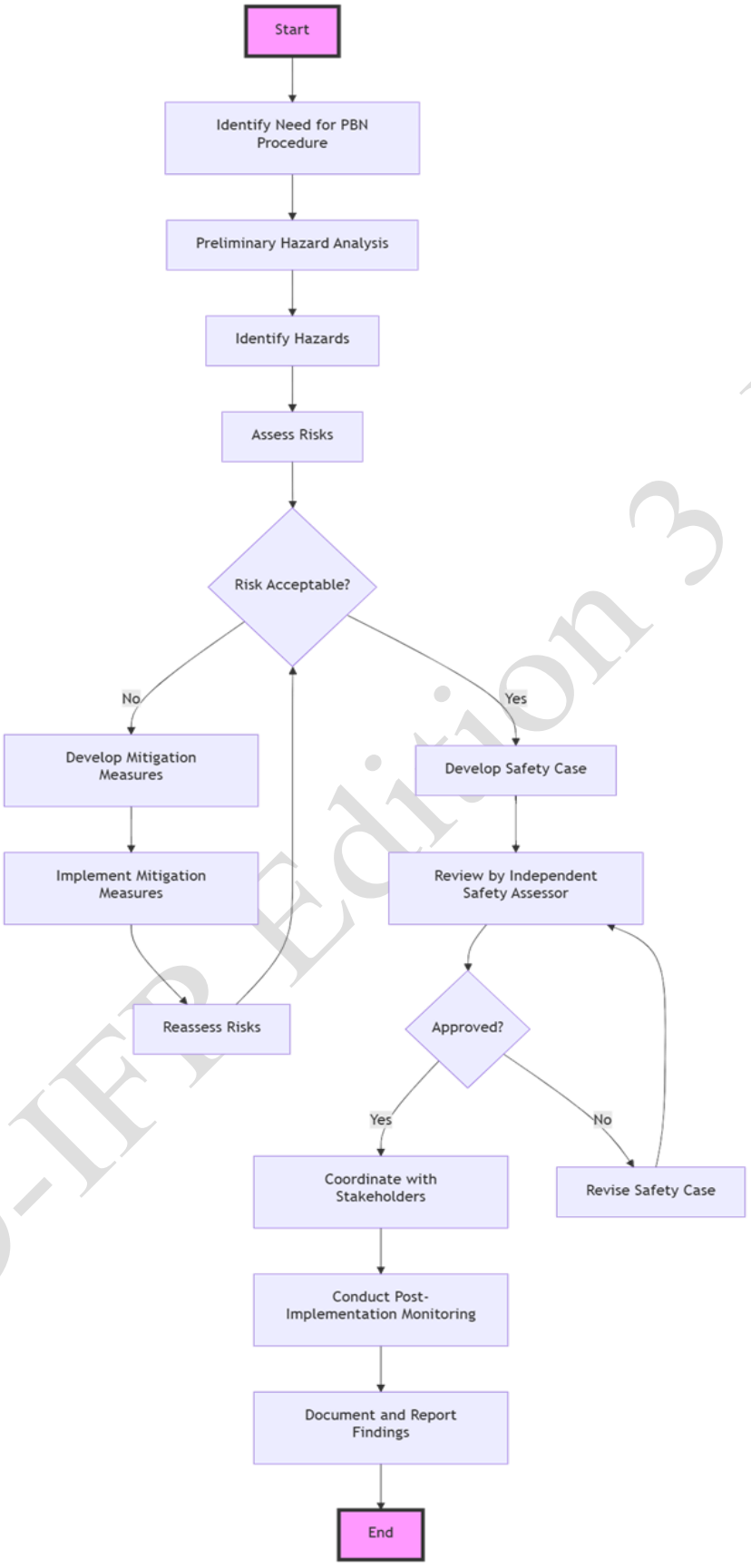
c) Identify Obstacle on Chart- The obstacle or associated spot height must be displayed on the approach chart in the Aeronautical Information Publication Fiji (AIP Fiji). A boxed warning can also be used to identify VSS penetrations.

d) Lighting- For approaches used at night VSS penetrations not otherwise mitigated must be lit. If the approach requires the obstacle to be lit then the lighting must have a monitoring system and a process established for when the lighting is not operational. If there is already lighting in the vicinity of the penetration that can be taken into account in assessing the necessity for other lighting.

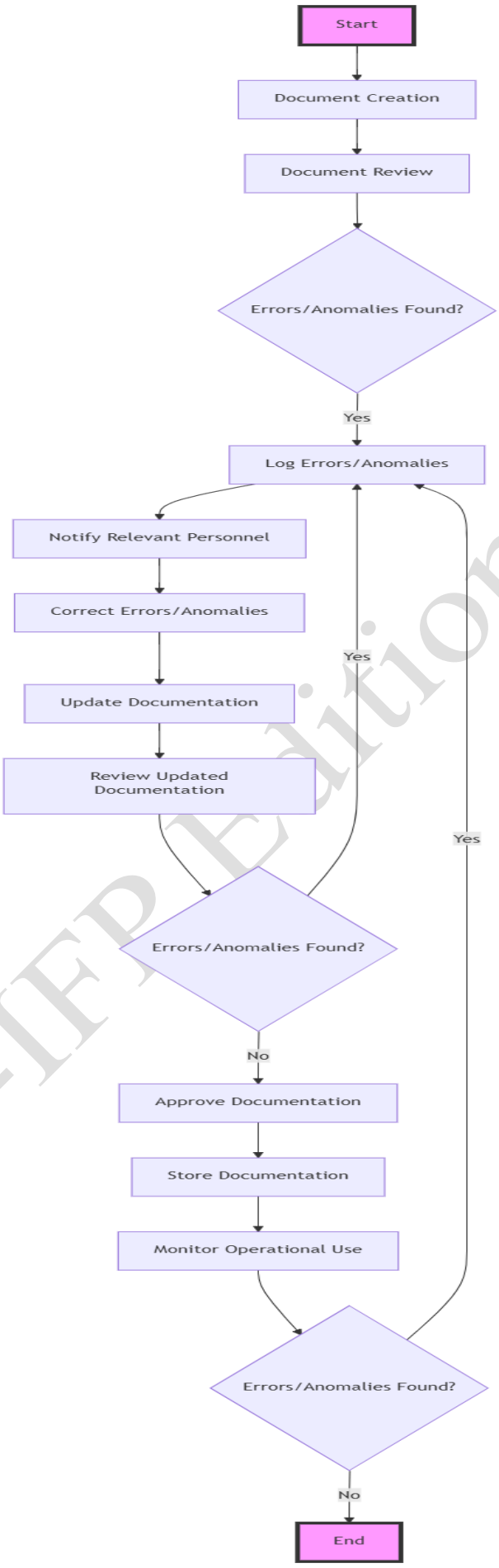
OBSTACLE IDENTIFICATION SURFACE (OIS)

The holder of an instrument flight procedure design service certificate shall ensure that an Obstacle Identification Surface (OIS) shall not be penetrated by an obstacle. If the OIS is penetrated an aeronautical study must be conducted.

Appendix H - Mechanism for Conduct of PBN Safety Assessment



Appendix I -Mechanism for Procedure Design Data Retention



ENDS