



*International Civil Aviation Organization*

**THE SEVENTH MEETING OF THE ASIA/PACIFIC GBAS/SBAS  
IMPLEMENTATION TASK FORCE (APAC GBAS/SBAS ITF/7)**

*(Bangkok, Thailand, 14-16 May 2025)*

**Agenda Item 4:** Updates on GBAS/SBAS system and States' implementation status

**PROGRESS REPORT ON FIJI'S INSTRUMENT FLIGHT PROCEDURE  
DEVELOPMENT AND SBAS/GBAS IMPLEMENTATION PLANNING**

(Presented by Fiji)

**SUMMARY**

This paper outlines Fiji's ongoing efforts to establish a national Instrument Flight Procedure (IFP) capability and provides an update on the country's strategic roadmap for implementing Satellite-Based Augmentation System (SBAS) by 2028 and Ground-Based Augmentation System (GBAS) from 2030 onwards. These initiatives are part of Fiji's broader modernization strategy under its Air Navigation Service Plan 2013–2028, particularly within the framework of Performance-Based Navigation (PBN) Block 3.

**1. INTRODUCTION**

- 1.1 Fiji is actively developing a dedicated Instrument Flight Procedure Unit (IFP Unit) under Fiji Airports to support the design, validation, and maintenance of all instrument flight procedures within its airspace. This initiative is aligned with ICAO PANS-OPS standards to ensure international compliance, safety, and operational efficiency.
- 1.2 The establishment of this unit is a foundational step in Fiji's transition toward Performance-Based Navigation (PBN), enabling the design and implementation of GNSS-based procedures that will support the future integration of SBAS by 2028 and GBAS from 2030. This initiative directly contributes to improving the safety, efficiency, and accessibility of Fiji's airspace.

**2. CAPACITY BUILDING AND TRAINING**

- 2.1 In 2024, with support from the Japan International Cooperation Agency (JICA) and Pacific Consultants, Fiji initiated capacity-building efforts to support the design and implementation of GNSS-based procedures critical for SBAS and GBAS integration. Five national personnel completed ICAO PANS-OPS Modules 1 to 3, covering procedure design, criteria application, and validation—skills essential for developing GNSS based approaches.
- 2.2 Fiji's Instrument Flight Procedure (IFP) Unit is currently focused on reviewing and modernizing legacy procedures at key airports, including Nadi and Labasa. This work involves comprehensive terrain and obstacle assessments and the redesign of procedures to

align with Performance-Based Navigation (PBN) principles, forming the foundation for future SBAS and GBAS integration.

- 2.3 To ensure operational continuity during the transition to GNSS-based navigation, two new VOR/DME installations are planned. These will serve as conventional navigation backups, supporting resilience in the national airspace system.

- 2.4 Fiji's navigation modernization roadmap includes:

- Implementation of SBAS by 2028, enabling APV and LPV approach procedures at selected airports.
- Introduction of GBAS from 2030 onwards, to support precision approach capabilities, particularly at high-traffic or terrain-challenged airports.
- These initiatives are aligned with the Fiji Air Navigation Service Plan 2013–2028 and support regional goals for enhanced airspace safety, efficiency, and accessibility.

### **3. REGULATORY FRAMEWORK DEVELOPMENT**

- 3.1 The Civil Aviation Authority of Fiji (CAAF) is currently planning to undergo awareness and technical training on applicable ICAO SARPs to support the integration of SBAS operations into national regulations. This includes conducting a Training Needs Analysis to identify the specific training requirements for all stakeholders involved in SBAS implementation—such as air traffic controllers, regulatory personnel, engineers, maintenance staff, pilots, and procedure designers.

- 3.2 In parallel, CAAF is reviewing and updating civil aviation regulations to:

- Certify procedure designers.
- Establish oversight mechanisms for GNSS-based operations.
- Formally integrate the IFP Unit into the national aviation framework.
- These regulatory updates are essential to ensure the safe, effective, and sustainable implementation of SBAS by 2028 and GBAS from 2030 onwards.

### **4. ALIGNMENT WITH REGIONAL AND GLOBAL INITIATIVES**

- 4.1 Fiji's navigation strategy is fully aligned with the Asia/Pacific Regional PBN Implementation Plan and ICAO's Global Air Navigation Plan (GANP). The integration of SBAS and GBAS will enhance:

- Navigation accuracy and integrity.
- All-weather operational capability.
- Safety and efficiency, particularly at airports with challenging terrain or limited infrastructure.

### **5. PROCEDURE REVIEW AND TRANSITION TIMELINE**

- 5.1 Fiji aims to complete a comprehensive review of all legacy procedures by 2027. New procedures will prioritize GNSS-based navigation, with SBAS Cat I, APV and LPV capabilities introduced by 2028 and GBAS integration commencing from 2030.

**6. ACTION BY THE MEETING**

6.1 The meeting is invited to:

- Acknowledge Fiji's progress in developing national IFP capabilities.
- Consider Fiji's phased approach to SBAS and GBAS implementation.
- Explore opportunities for regional collaboration in validation, training, and regulatory harmonization.

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