



ICAO

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Eighth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/8)

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Agenda Item 4: Provision of AOP in the Asia/Pacific Region

– Certification and Operations of Aerodromes

OBSTACLE LIMITATION SURFACE REQUIREMENTS FOR SMALLER AIRPORTS

(Presented by Fiji)

SUMMARY

This paper presents the challenges that Fiji has in fully implementing the OLS requirements as stipulated in the ICAO Annex 14, Volume I. The domestic aerodrome requirements in Fiji are based on the ICAO Annex 14 requirements. Due to the heavy reliance of the local community on trees that surround the airport, its removal to satisfy the OLS requirement would have a significant implication on the livelihood of the local community.

Through the discussions, Fiji is recommending that a further review of the OLS requirement is carried out especially on the Transitional/Inner-horizontal and the Conical surface for Non-instrument Code 1 aerodromes with an objective to strike a balance between flight safety and the livelihood sustainability of the local community.

1. INTRODUCTION

1.1 The full implementation of OLS requirements for small domestic airports in Fiji is one of the key challenges especially on obstacles within the transitional areas, inner horizontal, and the conical surface.

1.2 The domestic aerodrome requirements in Fiji are based on the ICAO Annex 14 which are enforced by the State's Civil Aviation Authority through the Fiji Standard Documents – Aerodromes.

1.3 The key airports in Fiji are managed by Fiji Airports Ltd which is owned by the government.

1.4 Fiji Airports manages a total of fifteen (15) airports including two (2) international and thirteen (13) outer-islands airports.

1.5 Of the thirteen (13) outer-island airports, two (2) are classified as non-precision Code 2 Runway aerodromes while eleven (11) are classified as non-instrument Code 1 Runway aerodromes.

1.6 Out of the fifteen airports, of concern are the eleven (11) domestic aerodromes which are mainly serviced by Twin Otter (DHC 6) and Islander (BN2) aircraft; and only operate onto these aerodromes on Visual Meteorological Conditions (VMC) only.

1.7 Tabulated below are the total movements recorded for each airport during the Year 2023 together with the Aerodrome Reference Code as per ICAO Annex 14 Volume I Table 1-1:

Airports	Domestic Scheduled	Domestic Non-Scheduled	Total Movements	Critical Aircraft	Aerodrome Code
1. Bureta	0	170	170	Islander	1
2. Cicia	98	9	107	Twin Otter	1
3. Gau	95	36	131	Islander	1
4. Kadavu	504	166	670	Twin Otter	1
5. Koro	80	64	144	Twin Otter	1
6. Lakeba	106	50	156	Twin Otter	1
7. Matei	3081	71	3152	Twin Otter	1
8. Moala	97	40	137	Islander	1
9. Ono-i-lau	0	6	6	Twin Otter	1
10. Savusavu	3058	77	3135	Twin Otter	1
11. Vanuabalavu	99	68	167	Twin Otter	1

2. DISCUSSION

Aerodrome Requirements

2.1 In regard to non-instrument runways, Annex 14 para 4.2.1 states that “*The following obstacle limitation surfaces shall be established for a non-instrument runway:*

- *conical surface;*
- *inner horizontal surface;*
- *approach surface; and*
- *transitional surfaces.*

2.2 Furthermore, Annex 14 para 4.2.2 states that “*The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 4-1*”.

2.3 For the non-instrument Code 1 runway, the transitional surface extends to a distance of 225 meters horizontally at a slope of 20% (1:5) from the edge of the runway strip to a height of 45 meters. At the height of 45m, the inner-horizontal surface further extends to a distance of 2000m from the runway centerline from where the conical surface starts at 5% slope up to 35 m height from inner horizontal surface.

2.4 The same requirements are being enforced on all the domestic airports in Fiji. This is one of the outstanding compliance issues for all our small island airports.

2.5 Fiji Airports has been focusing mainly on maintaining the required OLS for the approach and take-off surface area.

OLS Implication on the Local Community

2.6 Due to the land size of these islands, the local communities had planted trees such as coconut trees, pine trees, and other crops around the airports.

2.7 The implementation of the above OLS requirements would be a devastation to the local communities which would result in the removal of trees that have been their livelihood for generations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) encourage Member States to share their practices or alternate means in complying with ICAO OLS requirements for Code 1 aerodromes.

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