



ICAO

*International Civil Aviation Organization***Eighth Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/8)***Bangkok, Thailand, 15 to 19 July 2024***Agenda Item 4: Provision of AOP in the Asia/Pacific Region****– Certification and Operations of Aerodromes****RESCUE & FIRE FIGHTING REQUIREMENTS FOR SMALL AIRPORTS***(Presented by Fiji)***SUMMARY**

This paper presents the challenges that Fiji has in fully implementing the Rescue and Fire Fighting Service (RFFS) requirements for its domestic airports in line with the ICAO Annex 14 Standards and Recommended Practices (SARPs). The domestic RFFS requirements in Fiji are based on the ICAO Annex 14 SARPs. Due to the low number of aircraft movements at our domestic airports together with our safety records for the past 20 years, Fiji is recommending that a review of the RFFS requirements be carried out for Category 1 –aerodromes to determine the need for the airport operator to provide RFFS at an aerodrome. This is paramount, in order to strike a balance between flight safety and the economical sustainability of the aerodrome operator in providing this service at our smaller airports.

1. INTRODUCTION

1.1 The full implementation of RFFS requirements for small domestic airports in Fiji is one of the key challenges on the provision of firefighting vehicles with the appropriate level of extinguishing agents to meet the required level of Fire Cover.

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 and are 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) airports are Category Four, while eleven (11) airports' Fire Cover ranges from Category One to Three considering the movements within three consecutive months.

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

1.7 Tabulated below are the total movements recorded together with the critical aircraft for the eleven airports for the Year 2023:

Table 1 – 2023 Domestic Airport Movements and Fire Category

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

2. DISCUSSION

Rescue and Firefighting Services (RFFS) Requirements

2.1 Annex 14 para 9.2.1 states that “Rescue and firefighting equipment and services shall be provided at an aerodrome when serving commercial air transport operations”. ICAO recognizes that where the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 in the busiest consecutive three months, the level of protection provided shall be not less than one category below the determined category.

2.2 The same requirements are being enforced on all the domestic airports in Fiji.

Australia and New Zealand Practices

2.3 Tabulated below are the Australia and New Zealand Civil Aviation Authority (CAA) requirements for the establishment of RFFS at their airports:

Table 2 – Australia & New Zealand RFFS Requirements

Country	Requirements	Legislation
Australia	Two measures constitute a trigger event for the conduct of a risk review relating to the establishment of an RFFS: (1) the receipt of scheduled international passengers air services, or (2) 350,000 passengers on scheduled commercial air services passing through the airport during a rolling twelve-month period.	https://consultation.casa.gov.au/regulatory-program/pp-2101as/supporting_documents/PP%202101AS.pdf

Country	Requirements	Legislation
New Zealand	<p>Each applicant for the grant of an aerodrome operating certificate for a domestic aerodrome shall determine the rescue and firefighting category of the aerodrome as follows: Ref 139.59 (c)</p> <p>(1) if the aerodrome serves any turbojet or turbofan aeroplanes with a certified seating capacity of <u>more than 30 passengers</u> engaged in regular air transport operations, the rescue and firefighting category must be the category specified in Table 1 according to the largest aeroplane type regularly using the aerodrome and may be reduced by 2 categories but in any case must not be less than category 4:, or</p> <p>(2) if the aerodrome does not serve any turbojet or turbofan aeroplanes of the kind specified in paragraph (c)(1), but serves non-turbojet or non-turbofan aeroplanes with a certified seating capacity of more than 30 passengers engaged in regular air transport operations, and has more than 700 aeroplane movements of such aeroplanes in the busiest consecutive 3 months of any 12 month period, the aerodrome category must be category 3 or higher:</p> <p>(3) if the aerodrome category for rescue and firefighting is not determined in paragraphs (1) or (2), then no category applies.</p>	<p>https://www.aviation.govt.nz/assets/rules/consolidations/Part_139_Consolidation.pdf</p>

2.4 Based on Australia's ARFFS Policy review, two measures that constitute a trigger event for the conduct of a risk review relating to the disestablishment of an RFFS constitute either the:

- Withdrawal of scheduled international passenger air services; or
- Passenger numbers on scheduled commercial air services falling below 350,000 and remaining below this level for a twelve-month period.

2.5 On the other hand, New Zealand Civil Aviation Rules states that the requirement for RFFS provision at domestic aerodromes, only applies to those airports that facilitate aeroplanes with a certified seating capacity of more than 30 passengers. Aerodrome that facilitates aeroplanes with less than 30 passengers are not required to establish any fire cover.

Fiji's RFFS Practices

2.6 Fiji's RFFS requirements are based on the Annex 14 Chapter 9 requirements.

2.7 In our effort to comply with the RFFS requirements for our Category 1 & 2 airports smaller airports, Fiji Airports has utilized the tractors as Fire vehicles to assist in the transportation of extinguishing agents and rescue equipment which are loaded on trailers.

2.8 The full implementation of RFFS at our domestic airports to comply with the ICAO Annex 14 RFFS minimum requirements does not have a business case. This is mainly due to the low number of aircraft /passenger movements at most of our domestic airports.

2.9 Tabulated below are the passenger numbers recorded for 2017 – 2022.

PASSENGER MOVEMENTS 2017 - 2020						
	Airport	2017	2018	2019	2022	Average
1.	Savusavu	30,598	35,936	34,607	34,124	33,816
2.	Matei	32,978	35,144	35,073	31,625	33,705
3.	Kadavu	6,464	7,326	7,163	4,633	6,397
4.	Bureta	5485	4797	4077	111	3,618
5.	Lakeba	1,237	1,317	1,656	1,343	1,388
6.	Vanuabalavu	1,473	1,450	1,436	1,437	1,449
7.	Cicia	870	894	866	776	852
8.	Moala	876	931	706	788	825
9.	Gau	694	712	653	314	593
10.	Koro	741	746	468	1,168	781
11.	Ono-i-Lau*	nil	nil	nil	20	5

Note:

- *Ono I Lau : there is nil schedule flights. Only Charter flight.*
- *Year 2020/2021 has been omitted due to COVID.*

2.10 Furthermore, based on the State's safety data records for the last 20 years, Fiji has not recorded any major accident within any of our domestic airport boundaries where it was classified as an aircraft accident.

2.11 Sharing of experiences by Asia/Pacific States in the establishment of RFFS requirements and guidance for smaller airports with code 1 & 2 aircrafts in operations would greatly assist ICAO member States facing challenges in the establishment of the RFFS at their domestic airports having a low level of traffic.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) request member States to share their experience in determining the need to provide Rescue & Fire Fighting Service for smaller/low traffic domestic airports based on safety risk assessment. Experiences by States such as Australia & New Zealand could provide additional guidance in this regard.

—END—