AVIATION SAFETY BULLETIN

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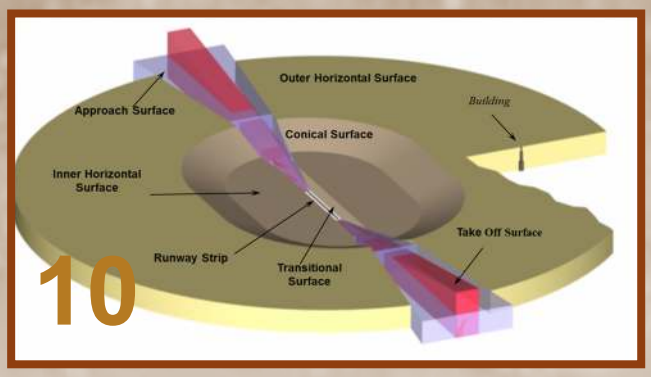
OBSTACLE LIMITATION SURFACES

LIGHTING SYSTEM AT NAUSORI AIRPORT

APPROVED SECURITY PROGRAMME

General Aviation Controlled Flight Into Terrain Awareness

'Promoting Effective Aviation Safety and Security in Fiji and the Region.'



OBSTACLE LIMITATION SURFACE

ENHANCED PACIFIC AVIATION REGIONAL COLLABORATION HIGHLIGHTED

MODERNISATION OF LIGHTING SYSTEM AT NAUSORI AIRPORT

CAAF APPOINTED MEDICAL ASSESSOR

In this issue...

AVIATION SAFETY BULLETIN

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From the Acting Chief Executive

Bula Vinaka and welcome to the Civil Aviation Authority of Fiji's **Aviation Safety Bulletin, Issue 3, 2021**.

As Fiji enters its wet season (November – April), aviators are reminded of the need to be more mindful of the inherent hazards that the associated weather brings. The article on Controlled Flight into Terrain provides important information on operations during marginal Visual Meteorological Conditions and Instrument Meteorological Conditions.

The issue of obstacles and increased development within the environs of our airports, particularly, the protected areas around aerodromes, has been the topic of much discussion and queries to CAAF. The article on Obstacle Limitation Surfaces provides an overview of these protected areas and CAAF's role in the oversight of these areas to ensure flight safety is not adversely affected.

Keeping abreast of international developments, articles on the International Civil Aviation Organisation's appointment of its new Secretary General, Mr. Juan Carlos Salazar and a new Regional Director for the Asia Pacific Region, Mr. Tao Ma are contained in this issue. We congratulate them both on their appointments and wish them well during their tenure.

On the home front, CAAF is pleased to report the appointment of its new Medical Assessor, Dr. Biumaitotoya, who takes over the reins from Dr. Ponnu Goundar. We thank Dr. Goundar for his 12 years of service to the aviation industry in Fiji.

Our national airline, Fiji Airways, celebrated its 70th Anniversary on the 01st of September. We are indeed proud of the airlines journey and resilience and congratulate them on this milestone.

The Aviation Safety Bulletin is one means to improve the safety culture and awareness in our aviation community and I hope you find this issue interesting and informative. Should you wish to see any specific articles published in future editions, we welcome your feedback.

Stay Safe ■

Vinaka,

MS THERESA LEVESTAM
ACTING CHIEF EXECUTIVE

See pages 20 and 21 …

SAFETY FIRST!

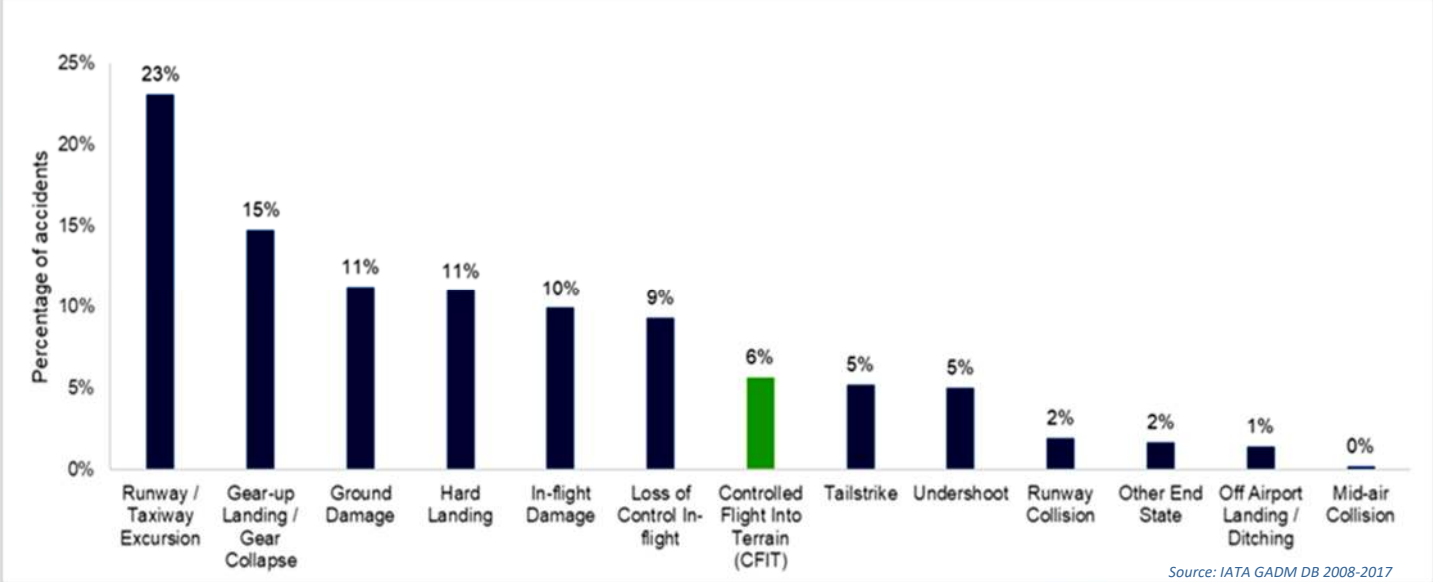
WHETHER ON LAND OR IN AIR

SAFETY SHOULD BE PRACTICED EVERYWHERE

General Aviation Controlled Flight Into Terrain Awareness

CFIT ACCIDENTS ACCOUNTS FOR ALMOST SIX PERCENT OF THE TOTAL ACCIDENTS

FIGURE 1: PERCENTAGE OF COMMERCIAL ACCIDENT CATEGORIES IN RELATION TO THE TOTAL ACCIDENTS



Source: IATA GADM DB 2008-2017

Aim

The Fiji Air Navigation Regulations (ANR) 1981 do not specifically address CFIT but highlights the minimum requirements for VFR and IFR flights. This article will look at various conditions/ scenarios of flights to mitigate the risks of a CFIT.

In visual meteorological conditions, the pilot in command (PIC) is responsible for terrain and obstacle clearance (See and Avoid) whether operating under VFR or IFR. Although this article addresses the issue of pilots operating under VFR in marginal VMC or IMC conditions, the authority does not approve of pilots operating under VFR in IMC. The paragraphs dealing with such operations are only designed to highlight the risks of such operations. The authority expects pilots to comply with the appropriate regulations for all flight operations.

RECOMMENDED INTERVENTION STRATEGIES

Ten recommended strategies:

- Increase pilot awareness on accident causes.
- Improve safety culture within the aviation community.
- Promote development and use of a low-cost terrain clearance and/or a look ahead device.
- Improve pilot training (i.e., weather briefing, equipment, decision-making, wire and tower avoidance, and human factors.
- Improve the quality and substance of weather briefs.
- Enhance the flight review and/or instrument competency check.
- Develop and distribute mountain-flying technique advisory material.
- Standardize and expand use of markings for towers and wires.
- Use high visibility paint and other visibility enhancing features on obstructions.
- Eliminate the pressure to complete the flight where continuing may compromise safety.

VFR-ONLY PILOTS OPERATING IN MARGINAL VFR/IMC CONDITIONS

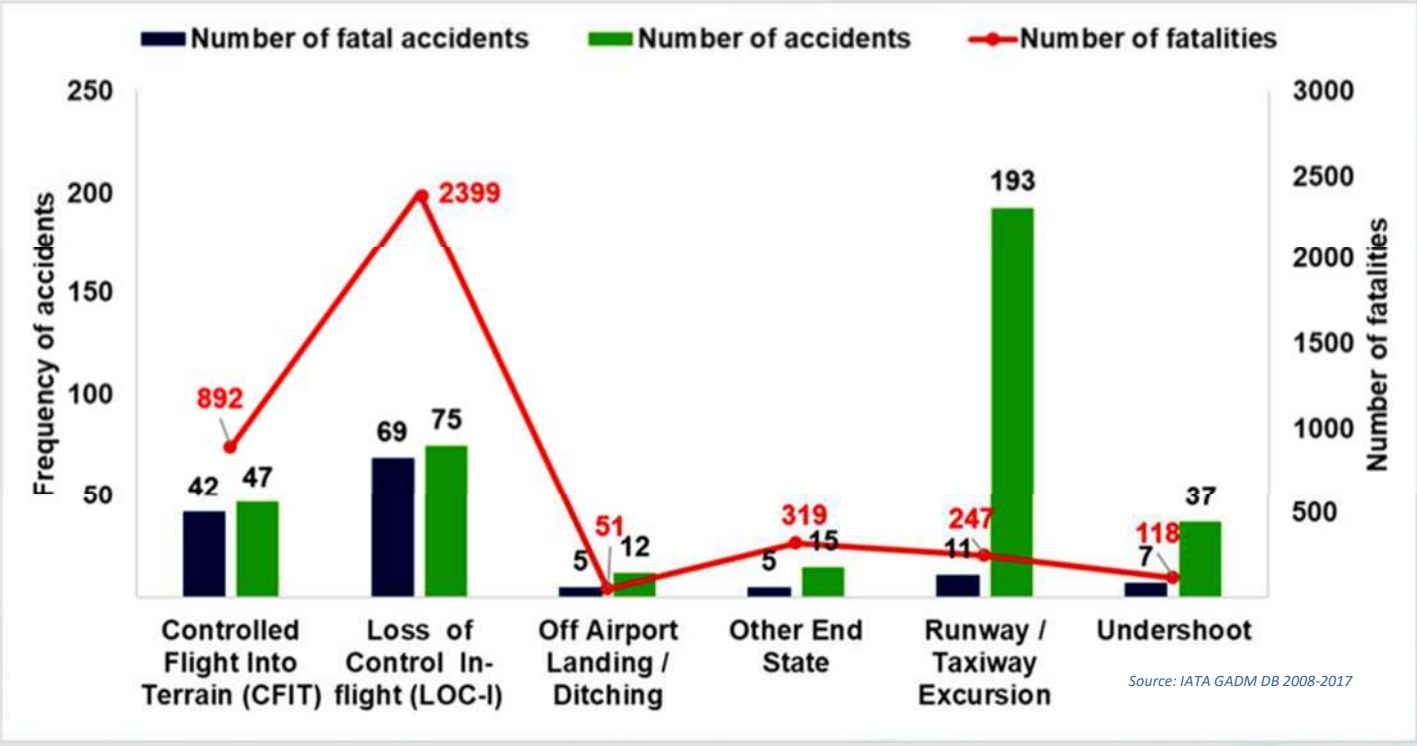
Operating in marginal VFR/IMC conditions is more commonly known as scud running. According to NTSB/FAA data, one of the leading causes of GA accidents is continued VFR flight into IMC. As defined in ANR 112, ceiling, cloud, or visibility conditions less than that specified for VFR or Special VFR is IMC and IFR applies. However, some pilots, including some with instrument ratings, continue to fly VFR in conditions less than that specified for VFR. The result is often a CFIT accident when the pilot tries to continue flying or manoeuvring beneath a lowering ceiling and hits an obstacle or terrain or impacts water. The accident may or may not be a result of a loss of control before the aircraft impacts the obstacle or surface. The importance of complete weather information, understanding the significance of the weather information, and being able to correlate the pilot's skills and training, aircraft capabilities, and operating environment with an accurate forecast cannot be emphasized enough. Continued flight in reduced visual conditions compounded by night operations and/or overwater flight poses some risks. VFR pilots in reduced visual conditions may develop spatial disorientation and lose control, possibly going into a graveyard spiral, or descend to an unsafe altitude while trying to maintain visual contact with the surface. The pilot then impacts terrain, the surface, or an obstacle while trying to manoeuvre.

The following are some of the CFIT risks associated with such flight.

- Loss of aircraft control.
- Loss of situational awareness.
- Reduced reaction time to see and avoid rising terrain or obstacles.
- Inability of the pilot to operate the aircraft at its minimum controllable airspeed.
- Getting lost or being off the preplanned flightpath and impacting terrain or obstacle.
- Reduced pilot reaction time in the event of an aircraft maintenance problem because of a low or lowering altitude.
- Failure to adequately understand the weather conditions that resulted in the reduced conditions.
- Breakdown in good aeronautical decision-making.
- Failure to comply with appropriate regulations.
- Failure to comply with minimum safe altitudes. Increased risk of hitting one of many new low altitude towers installed for cellular telephones and other types of transmissions. This risk is especially great along major highways if VFR pilots try to follow a highway when lost or trying to stay under a lowering ceiling.
- Failure to turn around and avoid deteriorating conditions when first able.

CFIT WAS THE SECOND HIGHEST FATAL ACCIDENT CATEGORY, AFTER LOC-I

FIGURE 2: COLLECTION OF DATA ON TOP SIX FATAL ACCIDENT CATEGORIES



Despite the fact that CFIT accidents represented only about six percent (6%) of all commercial aircraft accidents under review, this risk area was the second-highest fatal accident category after Loss of Control Inflighyt (LOC-I). This issue still deserves industry attention.

General Aviation Controlled Flight Into Terrain Awareness cont...

IFR OPERATIONS IN IMC CONDITIONS ON AN IFR FLIGHT

These operations also pose special risks. Whether it is failure to follow safe takeoff and departure techniques, recommended en-route procedures — which includes loss of situational awareness — or failure to maneuver safely to a landing, IFR operations can be dangerous for those not prepared to operate or not current and proficient in the IMC and IFR environments. Many of these accidents result in fatalities. Techniques or suggestions for avoiding some of these IFR risk factors include:

- Importance of the pilot in command being qualified, current, and proficient for the intended flight.
- Importance of the aircraft being properly equipped for the intended flight.
- Having the proper charts and approach plates for the intended flight. VFR charts, although not required, should be onboard because they can provide important obstacle and terrain data for an IFR flight.
- Knowing the planned procedure well enough to know if air traffic is issuing an unsafe clearance or if the pilot flying, when a crewed aircraft, is not following the published procedure.
- If in a crewed aircraft, both pilots have adequately briefed the flight and operation of the aircraft, including shared responsibilities.
- Having complete weather data for the flight, including knowing where visual meteorological conditions exist or a safe alternative is since many GA aircraft flown IFR have limited range or speed to fly out of un-forecasted weather conditions.
- Importance of maintaining situational awareness, both horizontal and vertical, throughout the flight to avoid flying into hazardous terrain or known obstacles.
- Complete knowledge on how to operate all equipment onboard the aircraft. This includes the limitations and operations of new types of navigation equipment.
- If a multi-crewed aircraft, the crew is aware of and follows industry recommended and CAAF approved crew resource management principles. If a single-piloted flight, the pilot knows to use all available resources including air traffic control to help ensure a safe flight as well as any onboard resource such as a passenger or onboard charts or manuals.
- Pilot in command follows the rules for making a missed approach and is prepared to make a missed approach when conditions fall below minimums as specified in the regulations, company SOPs, pilot's personal minimums checklist, or the approach becomes destabilized.
- Knowledge of minimum safe or sector altitudes and of the highest terrain in the area.
- Pilot in command is aware of the risks involved when transitioning from visual to instrument or from instrument to visual procedures on takeoff or landing.
- Pilot in command uses all available safety equipment installed in the aircraft and on the ground.
- Pilot in command is aware of the risks involved in setting the aircraft's altimeter including inherent limitations of barometric altimeters.
- Knowing the air traffic control system well enough to be proficient in it.
- Knowing when not to fly.
- Properly using an installed autopilot, if so equipped, to reduce pilot workload.
- Proper use of checklists as outlined in the aircraft manual or if not listed, before reaching 1,000 feet above ground level (AGL) to minimize any distractions when operating close to the ground.
- The importance of flying a stabilized approach. A common definition of a stabilized approach is maintaining a stable speed, descent rate, vertical flightpath, and configuration throughout the final segment of the approach. Although originally designed for turbojet aircraft, a stabilized approach is also recommended for propeller-driven aircraft. The idea is to reduce pilot workload and aircraft configuration changes during the critical final approach segment of an approach. The goal is to have the aircraft in the proper landing configuration, at the proper approach speed, and on the proper flightpath before descending below the minimum stabilized approach height. The following are recommended minimum stabilized approach heights.

  (1) 500 feet above the airport elevation during VFR weather conditions.

  (2) MDA or 500 feet above airport elevation, whichever is lower, for a circling approach.

  (3) 1,000 feet above the airport or touch down zone elevation during IMC
- The increased CFIT risk of non-precision approaches.
- The increased CFIT risk of high descent rates near the ground.
- The importance of good communications between the pilot and air traffic control concerning any flight instruction or clearance. The old rule of asking for clarification whenever in doubt about any instruction or clearance applies.
- The dangers of complacency for the single-pilot, as well as multi-piloted crews, when making routine flights.
- The dangers of misunderstanding air traffic control instructions or accepting an incorrect clearance.
- The dangers of not knowing the safe altitudes for your en-route as well as your terminal/aerodrome area.

LOW-FLYING AIRCRAFT OPERATING IN VFR CONDITIONS

Although many of the factors listed previously apply to low-flying aircraft operating in VFR conditions, this is a special category for those pilots flying below minimum safe altitudes. Such operators include agriculture applicators and helicopter pilots who routinely operate near trees, telephone lines and power lines, or other such obstacles. In many cases, the pilot was aware of the obstacles but environmental factors such as time of day, minimal light, shadows, darkness, sun glare, cockpit blind spots, fatigue, or other such factors resulted in the pilot losing situational awareness and hitting an obstacle or impacting the ground. In some cases, pilots may have been aware of an obstacle, but because of some of these environmental factors, they were unable to avoid a collision because they did not see the danger in time or they saw the danger but failed to react in time to avoid an accident. Density altitude and aircraft performance limitations may also pose risk factors for such flights. These same factors can also result in a CFIT accident for someone flying in mountainous terrain. Some common low altitude CFIT factors are:

- Wind-shear and loss of flying speed.
- Density altitude.
- Failure to operate aircraft within operating limitations.
- Failure to check an area from a safe altitude before descending into it (high reconnaissance and low reconnaissance).
- Flying between hills or over rivers below hill tops can result in a CFIT accident if a power line or cable is strung between the hills. Not all such lines are marked or charted.
- Flying up a box canyon and not being able to fly up and out of it before impacting terrain.
- Flying over rising terrain that exceeds an aircraft's ability or performance to climb away from the terrain.
- Errors in pilot judgement and decision-making.
- Diversion of pilot attention.
- Buzzing/Fly-by.
- Crew distractions or a breakdown in crew resource management.
- Operating in an unsafe manner.
- Failure to maintain control of the aircraft when taking off or landing.
- Failure to properly pre-plan the flight.
- Operating in unfamiliar areas or depending upon untrained people to provide important destination/flight data.
- Not having an objective standard to make go-no go decisions for launching.
- Failure to review all available data for the flight (particularly applicable to medical evacuation/mercy flights).
- Lack of terrain knowledge and elevation of the highest obstacles within your immediate operating area.
- Failure to properly plan your departure route when departing from unprepared areas such as helicopters or aircraft operating off an airport. Such factors include weight and balance, aircraft performance, height of obstacles, wind direction, trees, density altitude, rising terrain, length of takeoff area, and safe abort areas.

POTENTIAL FLIGHT HAZARDS

This listing of major reasons why GA pilots continue to have accidents has remained constant over time. With the possible exception of subparagraph f, these factors can all be CFIT factors**.**

a. Inadequate pre-flight preparation and/or planning.

b. Failure to obtain and/or maintain flying speed.

c. Failure to maintain directional control.

d. Improper level off.

e. Failure to see and avoid objects or obstructions.

f. Mismanagement of fuel.

g. Improper in-flight decisions or planning.

h. Misjudgement of distance and speed.

i. Selection of unsuitable terrain.

j. Improper operation of flight controls.

DECIDE MODEL

Many CFIT accident reports discuss the lack of good decision-making on the part of the pilot or flight crew. The following D-E-C-I-D-E model is a popular acronym for decision-making.

a. Detect change (or identify problem).

b. Estimate significance (of the change).

c. Choose the (best) objective or outcome.

d. Identify options (that meet objective or desired outcome).

e. Do best option.

f. Evaluate (the outcome--if the outcome is not what is desired then do a new DECIDE model).

TECHNICAL SOLUTIONS

The development of the first Ground Proximity Warning Systems (GPWS) has contributed to a marked decline in CFIT accidents in airline operations. The use of GPWS and the newer generation Terrain Awareness and Warning Systems (TAWS) in GA aircraft has the potential to provide a similar savings in lives and loss of GA aircraft. As noted in various CFIT documents, the proper use of terrain awareness and warning systems is important to their effectiveness. Pilots are expected to execute the proper emergency escape manoeuvres when their ground warning system activates.

ANR 23, Scales W1 and W2 mandate the installation of terrain awareness warning systems in turbine-powered aircraft and for aircraft of less than 5700 kg but approved to carry 10 to 19 passengers and fitted for ADS-B surveillance, TAWS Class A or TAWS Class B as defined in TSO-C151A or any replacement of it is acceptable to the Authority. as outlined in the appropriate section.

The type of operation also includes specific passenger seat requirements/limitations for the operations involved as well as the required type of equipment.

As digital-mapping systems combined with satellite positioning data become less expensive, GA pilots may soon be able to graphically see their horizontal and vertical location at all times. Expanded situational awareness should help pilots avoid some types of CFIT accidents. Then the challenge will be to eliminate descent type CFIT accidents during the landing phase of flight.

General Aviation Controlled Flight Into Terrain Awareness cont...

SUMMARY

Controlled flight into terrain, normally occurs at speed with the result that many such accidents are fatal. A common thread throughout this ARTICLE is the importance of proper planning, good decision-making, and being able to safely operate the aircraft throughout is entire operating range. Since CFIT implies that the aircraft is operating properly, the main reason for such accidents is what is commonly called pilot error. Therefore, it is the pilot's responsibility to ensure that he or she is qualified for the flight, that the aircraft is properly equipped for the flight, and that the flight is flown according to the appropriate regulations and aircraft operating limitations. According to CFIT Data, about 25.0 percent of all accidents occur during the takeoff and initial climb segment of flight. Approximately 7.0 percent of the accidents occur during the climb portion. Only about 4.5 percent occur during cruise. About 19.5 percent occurs during descent and initial approach. But 41.4 percent of the accidents occur during final approach and landing. Takeoff, initial climb, final approach, and landing represent only about 6.0 percent of the total flight time of a given flight. But as these numbers point out, that 6.0 percent of a flight's total time can be deadly. Ground proximity warning systems and the newer terrain awareness and warning systems using GPS have the potential to reduce CFIT accidents on takeoffs and landings. These systems provide one more tool for pilots to use to increase their safety margin when operating close to terrain and obstacles. However, every pilot must know the limitations of his or her database and what objects are included in the database.

The solution to combating CFIT accidents starts on the ground. Pilots need to properly prepare to safely execute the manoeuvre's required during takeoff, initial climb, final approach, and landing phases of flight. Whether VFR or IFR, each flight has critical flight segments. How the flight segments are planned for and handled determines, to a great extent, the safety of the flight.

RECOMMENDATIONS

i) Non-instrument rated VFR pilots should not attempt to fly in IMC.

ii) Know and fly above minimum published safe altitudes. **VFR**: Fly a minimum of 1,000 feet above the highest terrain in your immediate operating area in non-mountainous areas. Fly a minimum of 2,000 feet in mountainous areas.

iii) If **IFR**, fly published procedures. Fly the full published procedure at night, during minimum weather conditions, or operating at an unfamiliar airport.

iv) Verify proper altitude, especially at night or over water, through use of a correctly set altimeter.

v) Verify all ATC clearances. Question an ATC clearance that assigns a heading and/or altitude that, based upon your situational awareness, places the aircraft in a CFIT environment.

vi) Maintain situational awareness both vertically and horizontally.

vii) Comply with appropriate regulations for your specific operation.

viii) Don't operate below minimum safe altitudes if uncertain of position or ATC clearance.

ix) Be extra careful when operating outside the designated areas of your approved AOC region or Route Guide or in an area which you are not familiar.

x) Use current charts and all available information.

xi) Use appropriate checklists.

xii) Know your aircraft and its equipment■

Source: IATA Controlled Flight Into Terrain Accident Analysis Report 2008-2017 Data; AIC 05/18; AIC 06/18; Controlled Flight Into Terrain (CFIT) - by Capt. VanderBurgh; FAA AC 61-134

Aircraft Maintenance Engineer Licence Renewal Process

1

APPLICATION — Submit PL102F form with supporting documents (Human Factors/Performance certificate) with relevant fees paid.

*Application Forms can be accessed from our website www.caaf.org.fj

2

EVALUATION — Form is checked for completeness, accuracy and payments, then assessed as per the Standard Document.

3

PROCESSING — Licence is processed and forwarded for endorsement.

*it takes 3 working days for renewals to be processed, from date of receipt.

4

ENDORSEMENT — Licence is verified and endorsed. Post procedures are conducted.

5

COLLECTION — Licence is ready for collection.

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Contact CAAF
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Obstacle Limitation Surfaces

ICAO Annex 14 and the Fiji Standards Document – Aerodromes define obstacle limitation surfaces (OLS) as a series of surfaces established around an aerodrome to define the limits objects may project into the airspace; i.e. the airspace around an aerodrome to be maintained free from obstacles so as to permit the intended aeroplane operations at the aerodrome to be conducted safely and to prevent the aerodromes from becoming unusable by the growth of obstacles around an aerodrome.

It is thus necessary that any development; building or structure, proposed to be erected in the vicinity of an aerodrome, be assessed to ensure the OLS is not penetrated.

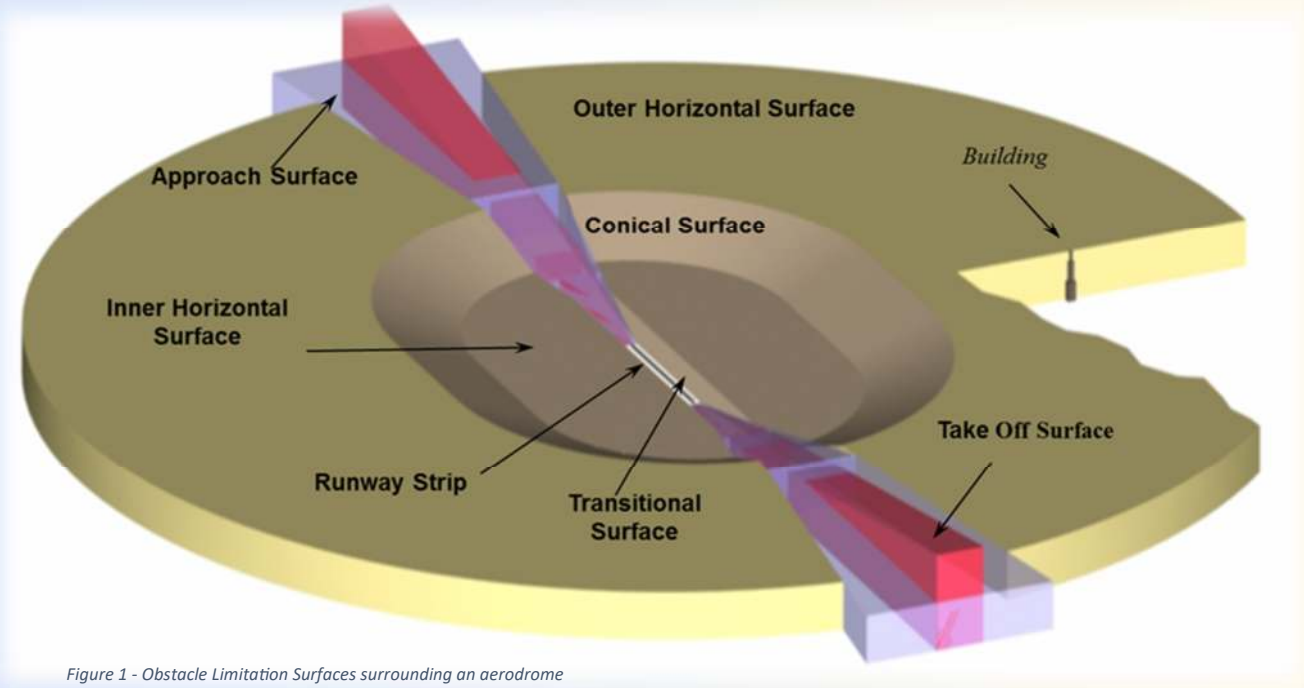


Figure 1 - Obstacle Limitation Surfaces surrounding an aerodrome

Maintenance of obstacle limitation surfaces

It is an aerodrome operator's responsibility to ensure that obstacle limitation surfaces are established for the aerodrome in accordance with Appendix 4 of the Standard Document - Aerodromes. In this process, the aerodrome operator conducts obstacle limitation surface surveys yearly to identify and document obstacles.

What are protection areas of instrument flight procedures?

Each instrument flight procedure has associated protection areas to ensure that the flight path is sufficiently protected.

Within protection areas an obstacle clearance needs to be provided in order to define the lowest flight altitude for the instrument flight segment. Therefore, every new or modified (height or location) object in the vicinity of an aerodrome requires a thorough analysis to determine the possible impact on published IFPs.

Evaluating new and existing obstacles against the OLS and protection areas of the IFP is a safety-critical activity. It is essential to determine the impact on aircraft operations which may entail necessary measures such as imposing restrictions on obstacle parameters, changes to existing instrument flight procedures or in particular cases a conduct of an aeronautical study.

Objects outside the obstacle limitation surface

A person who proposes to construct a building or structure, in areas beyond the limits of the obstacle limitation surfaces, the top of which will extend to a height of 150 metres or more above ground level, shall consult with the CAA Fiji of that intention and the proposed height and location of the building or structure. Such buildings or structures should be regarded as obstacles unless a special aeronautical study, as required by Appendix 4 section 4.0 of the Standards Document Aerodrome, indicates that they do not constitute a hazard to aircraft operations.

What is an aeronautical study?

An aeronautical study is a process, that is allowable under the Standards Document – Aerodromes and is intended to address situations where applicable regulations or aviation standards cannot be fulfilled. It consists of detailed analysis of the aeronautical problem, identification of all possible safety concerns and presentation of solutions that are acceptable without degrading safety of aircraft operations.

Notice of obstacles

It is the aerodrome operator's responsibility to take all reasonable measures to ensure that obstacles at, or within the vicinity of the aerodrome are detected as quickly as possible. If the operator becomes aware of the presence of an obstacle, or any development or proposed construction near the aerodrome that is likely to create an obstacle, the operator should inform the CAA Fiji immediately, providing details of the height and location of the obstacle with amended declared distances and gradients, if runways are affected and action taken to mitigate this. NOTAMs shall be issued as appropriate.

Hazardous objects

CAA Fiji may determine, in writing, if an obstacle, or any proposed development or other proposed construction that is likely to create an obstacle; or if a building or structure (actual or proposed), the top of which is 150 metres or more above ground level, is or will be, a hazardous object because of its location, height or lack of marking or lighting.

CAA Fiji may determine in writing that a gaseous efflux having a velocity exceeding 4.3 metres per second is, or will be, a hazard to aircraft operations because of the velocity or location of the efflux. If the authority makes a determination, than it shall coordinate to have published in the AIP or NOTAM particulars of the hazardous object or gaseous efflux to which the determination relates; give written notice of the determination.

What is CAA Fiji's role?

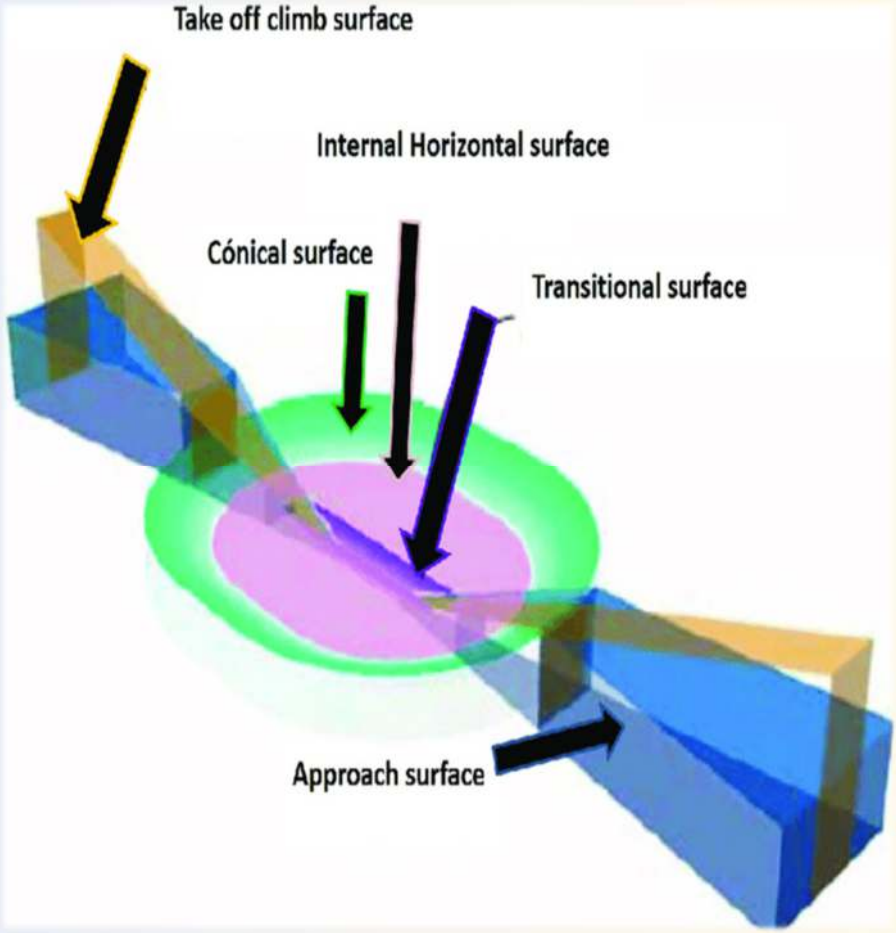
- Obstacle assessment in accordance with ICAO Annex 14 and Standards Document - Aerodromes obstacle limitation surfaces (OLS).
- Obstacle impact assessment on instrument flight procedures.
- Conduct of aeronautical studies.
- Assessment of objects which could cause interference with communication, navigation and surveillance (CNS) facilities.
- Off Airport Development assessments pertaining to new building/equipment installation within or close to the aerodrome and submitting this to the Department of Town & Country Planning.

Application Process

Submission of appropriate documents along with payment of the appropriate processing fee with the CAA Fiji.

Assessments are normally conducted within 20 working days.

The documents required consist of a request for assessment letter, land title, engineering drawings, topographical survey plan of the lot, and location details ■



Modernisation of Lighting System at Nausori Airport

In the words of the Honorable Prime Minister, Mr. Bainimarama, during his speech at the ground breaking ceremony for the Nausori runway upgrade and extension project in 2018; *"…a modern, world-class airport in Nausori will attract more tourists, diplomats, and business travellers to come directly to Suva, and by becoming another primary gateway to Fiji, the people in the communities around us stand to gain in a very big way."*

The Nausori runway upgrade and extension project is a complete upgrade of the airport's existing runway and pavement infrastructure. The runway length has been extended from 1,670 metres to 2,140 metres, and widened from 30 metres to 45 metres. Work has also been done on existing taxiways, apron area, runway strip and runway end safety areas as well as the installation and upgrade of associated navigational aids, the diversion of existing road infrastructure, new perimeter security fencing and paving of a new perimeter road, all of which will contribute to a well-planned, safer, and more efficient airport.

The upgrade will not only allow for operations by larger aircraft but also for operations in instrument meteorological conditions with a lower aerodrome operating minima due to the navigational aids installed, including the runway and approach lighting system and its associated aids.

This article focuses on the modernization of the airfield lighting system at Nausori airport.

Figure 1: Nausori Airport Runway 28 threshold lighting

History of Airport Lighting Systems

Airports begun using lights in the late 1920s when landing fields were marked with rotating lights so they could be found after dark. In the early 1930s, airports installed the earliest forms of approach lighting and these indicated the correct angle of decent and whether the pilot was right on target.

Nausori Airport served as a fighter base during the second world war. The initial development took place at a slow rate however, it gained momentum with the withdrawal of the flying boat base at Laucala Bay, Suva and with the expansion of Fiji Airways, later Air Pacific and now Fiji Airways again.

In 1975, the primary power to all facilities at Nausori Airport was provided by the Suva City Council and the secondary power was being fed from two, three-phase Lister HA6 diesel engines with automatic starting in the event of mains failure. Only one generator would start automatically when the Suva City Council power failed.

If the first generator failed, the second duty plant would not start automatically as there was no provision for automatic starting. The restoration of the Suva City Council mains supply is presently done remotely from the Nausori Meteorological Office at the Nausori Tower base.

In 1975, major works to improve the airfield lighting system was undertaken:

a. Visual Ground Aids; high intensity runway lightings, approach lightings, taxiway lightings, apron lightings and obstruction lightings,

b. Control Tower Lighting; signal lamp and minimum lighting so that tower personnel could carry out their duties,

c. Powering navigational aids,

d. Communication Systems – Communication and receiving stations, and

e. Terminal Building Lighting.

Approach Lighting

In 1986, Nausori Airport underwent a major upgrade to bring it to international standards.

Due to the non-existence of approach lighting at Nausori Airport, the airport was rated by the International Federation of Airline Pilots Association as having a serious deficiency class 2 “Red Star”. Thus the major upgrade planned included the installation of runway 10 approach lighting system. This included the acquisition of land where the lights were to be installed.

However, this was finally realized in 2013 when the runway 10 approach lighting system was installed.

Figure 2 - Part of the Nausori Approach lighting installed in 2013

Runway Edge Lights

Pictured in figure 3 is the omnidirectional high intensity HIR 4/3 elevated runway edge light fitted at Nausori airport in the 1980s. It used AF7/2, 6.6A, 200W lamp. This fitting was in use for more than 30 years until the supplier, Thorn Airfield Lighting stopped supplying due to high cost of spares.

Figure 3 - HIR 4/3 runway edge light fitting

Pictured in Figure 4 is the EL-AH bidirectional high intensity elevated runway edge light which replaced the HIR 4/3 fitting. It uses pre-focused halogen Pk30d lamp. The main advantages is the low power consumption (only 150 Watts), lamp life is greater than 1,000 hrs. at 6.6 amps, greater resistance to jet blast complying with ICAO requirement (300 mph) and easy maintenance.

Figure 4 - EL – AH runway edge light fitting

VASI and PAPI Lightings

VASI Lights were used at Nausori in the 1980s. VASI stands for Visual Approach Slope Indicator. It was replaced by PAPI Lights in the 90s. PAPI stands for Precision Approach Path Indicator. Today, the PU3L model PAPI (shown in Figure 5) is the latest in use at Nausori Airport.

Figure 5 - VASI & PAPI

Modernisation of Lighting System at Nausori Airport cont...

Nausori Airport Runway Extension and Upgrade Lighting Project

The runway extension and upgrade highlighted the need for improved lighting systems at Nausori Airport. This was carried out with the following objectives:

- Ensure integrity and reliability; the cables were installed in conduits around the runway with interleaved circuits. Ensuring that if one lighting circuit fails, other circuits are still available.
- Reduce the effects of high voltage surges due to lightning strikes; cables were installed in conduits around the runway.
- Address the environmental limitations of components of the system installed; most cable connections to the AGL transformers are of waterproof type and in special concrete housing.
- Standard light bases; installed as per Standards Document Aerodrome requirements – within 3m from runway pavement edge.

Figure 6 - Nausori Airport Runway 28 End Identifier Lights

As Fiji Airports approaches the end of the extension and upgrade project, CAA Fiji is monitoring and conducting checks to ensure the ICAO requirements for international aerodromes as prescribed in ANNEX 14 and the CAAF Standards Document -Aerodromes is met.

Fiji Airports is working tirelessly to meet its target to have the project successfully completed by the end of November 2021■

Figure 7 - Nausori Airport Runway 10/28 Edge Lights

CAA Fiji is keen to hear from you regarding our levels of service. If you believe you have constructive ideas on how we can improve our services, or would like to report instances where we have failed to meet your expectations, please send your feedback to CAAF, preferably using the QA 108 form that can be accessed from our website. This can be sent to CAAF by faxing it to the Executive Office on 672 1500, or dropping it in the feedback box in the foyer of CAAF HQ, or emailing to :

info@caaf.org.fj

FCAIR

FIJI CONFIDENTIAL AVIATION INCIDENT REPORTING

FORMS AVAILABLE ON WEBSITE

www.caaf.org.fj

***OR* FRONT DESK, CAAF HQ.**

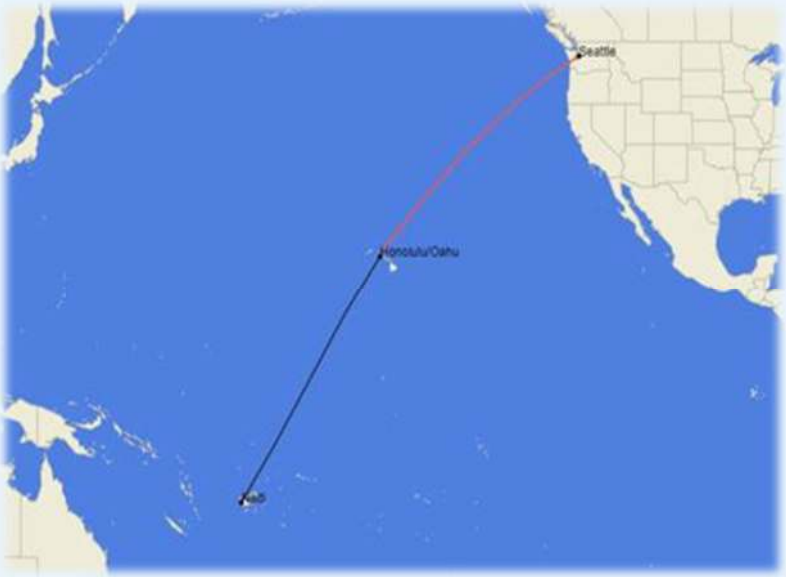
B737 Max Deliveries

Fiji Airways has taken delivery of the last of five Boeing 737 MAX 8 aircraft, which it had on order. The latest delivery touched down in Nadi late on 04th July 2021 after a long journey across the Pacific Ocean from Boeing's Seattle 737 facility.

The world's fleet of Boeing 737 MAX aircraft was grounded in March 2019, prompting Boeing to pause deliveries of the type. Late last year, the aircraft was recertified by the FAA and gradually more authorities around the world. This allowed the manufacturer to resume deliveries of the type, while airlines could resume flights with the type.

The last Fiji Airways delivery

Fiji Airways went into the 737 MAX grounding with just two aircraft. These were sent to Alice Springs for storage where they remain today. Fiji Airways plan to bring the aircraft out of storage and return them to Nadi, Nov 21. However, the Fiji Airways fleet of MAXs is now five strong.



The latest arrival in the Fiji Airways fleet is DQ-FAF. The aircraft is already 1.79 years old. Having been firmly ordered by Fiji Airways in March 2017, the aircraft took its first flight on September 22nd, 2019.

CAAF had three representative that went to inspect, observed flight tests and certified the three aircraft – DQ – FAE, DQ – FAH and DQ - FAF. The two aircraft parked in Alice Springs are; DQ – FAB and DQ- FAD.

CAAF was represented by Senior Airworthiness and Engineering Inspector, Jim Samson, Cabin Safety and DG Inspector, Joseph Konrote and Fiji Airways B737 Technical Pilot, Capt Cavalevu.

The aircraft left Boeing Field in Seattle at 21:20 on Friday, July 2nd. The plane first flew for five and a quarter hours to Honolulu, landing at 23:36 to refuel. Following a break in Hawaii, the aircraft departed the next day at 16:08, landing in Nadi six and a half hours later at 20:43 on 04th July 2021.

The aircraft has a total of 170 seats onboard. At the front of the cabin are eight business class seats in a 2-2 configuration. These have a pitch of 51 inches. Behind the small cabin is the main economy cabin with 162 seats in the standard narrow body 3-3 configuration. These have 32 inches of pitch■

Approved Security Programme

Aviation Security Programmes (ASP) are mandatory operational documents which airport, aircraft and regulated agents prepare and submit for approval to the Civil Aviation Authority of Fiji (CAAF) as part of aviation security requirements under the International Civil Aviation Organisation (ICAO) Annex 17 – Security, Standards and Recommended Practices (SARPs). These security programmes also have their legal base in Fiji's civil aviation security legislations. They describe the measures that each operator will implement or comply with to protect airport, aircraft and cargo from acts of unlawful interference. Although ground handling service providers, air cargo operators and catering service providers security programmes are national requirements under Fiji law, they comply with international standards and best practices.

Your security programme describes the measures your organization will take to comply with the security requirements and protect persons, assets and facilities from acts of unlawful interference. It is important to note that your security programme should meet Fiji's security requirements and comply with the minimum requirements of ICAO Annex 17 – Security, SARPs.

All your security programmes shall be approved by the Authority before the programmes can be implemented. Similarly, any amendment to your security programme has to be approved by the Authority before your security programme can be amended and the change(s) implemented. Before any approval of your security programme takes place, a documented technical evaluation of your programme is conducted by a designated inspector to ensure that your programme complies with all the security requirements. The outcome of this evaluation is then communicated to you to amend the security programme where appropriate and resubmit three (3) copies for approval.

Previously, any amendments to your security programme were to be incorporated during your next security programme review and amendment cycle. However, it was noted that once the Authority approved the security programmes, many operators failed to implement the amendments in their next review cycle. Going forward, the Authority shall only approve your security programmes when you have incorporated all amendments from the technical evaluations.

If you have an approved security programme, it means that your approved security programme meets the minimum national and ICAO Annex 17 SARPs. You have the right to go beyond the minimum security requirements and implement more stringent measures if you decide to do so. This is your prerogative.

Another important aspect of your security programme is that it is a formal record of what you as the operator agree to implement to maintain the safety and security of aviation. The ASP is a binding agreement between the operator and the State, where the former undertakes to do all it possibly can within its powers to protect aviation from acts of unlawful interference. Put differently, it is the operator's commitment to uphold aviation security and protect the integrity of Fiji's aviation security measures.

Your security programme is a living document that has to be reviewed at least once every twelve (12) months to reflect Fiji and ICAO's new security requirements and to incorporate organizational changes to personnel, processes, procedures and structure. For example, if you intend to introduce K9 screening at Nausori and Nadi International Airports, this process has to be included in your security programme and submitted to the Authority for evaluation and approval. You will also need to justify the rationale for; and impact of the proposed change, taking into consideration existing security measures and the impact of the proposed change on these measures.

Your security programme should highlight in detail the measures that will be implemented by your organisation or your contracted security service provider so that they can be evaluated and approved in the security programme. Some security programmes make reference to other company manuals which contain additional security processes and procedures. This is not the best of practices in Fiji's context for the following reasons:

- Each type of security programme has a legal base which allows CAAF to evaluate the programme and approve it based on identifiable security elements; other company manuals that have additional security processes and procedures fall outside the ambit of the security programme and the enabling powers of approval. Put differently, the operator determines whether to share their manual with the Authority or not because there is no legal requirement for the manual or for the operator to submit the manual for approval, and the latter normally does not have access to the manual containing these additional security measures unless requested during an audit;

- It is critical that all security measures are included in one security programme in Fiji's context and submitted for evaluation and approval. After all, that is the whole purpose of the security programme; to document each and every security practice so that it can be understood, approved and implemented accordingly. Having different manuals which contain security processes and procedures that should be part of the main security programme, defeats the purpose of having one (1) security programme to capture all the security measures; and

- Additional security measures in company manuals are not binding on the security programme because they do not have a legal basis that is enforceable. This means they cannot be enforced in the same manner as the measures in the security programme.

Another important feature of your security programme is that you have to implement your security programme as approved. You cannot implement any changes in your security programme to processes, procedures, structure, manpower unless it has been approved by the Authority. Senior management have to be advised of the importance of implementing the approved security programme consistently. Where senior management intend to implement immediate changes to the approved programme, they have to follow the amendment and approval process so that they are not in breach of the requirements of their approved security programme. And, it is critical that the accountable security manager correctly advise senior management and management set the example in this respect.

Aviation security programmes have to set a timeframe for the appointment of key personnel with security functions if they have not already done so. For example, if the accountable security manager position has not been filled, the security programme should provide an approximate timeframe. For example, 'Sunray Regulated Agent does not have an accountable security manager now but it shall endeavor to appoint an accountable security manager within the next three (3) months'.

If your organization does not have a quality control system, you will have to indicate a timeframe when you will establish one. For example, Sunray Ground Handling Services Limited shall establish a quality control system within the next three (3) months and its quality control supervisor shall receive appropriate security training within the next three (3) months or earlier.

Given the nature of your security programme, it is given a security classification denoting the type of information that it contains and the corresponding level of protection required for the document and its contents from unauthorized disclosure and use. It is your duty to protect your security programme. Put differently, the onus is on you to ensure that the security programme is protected and shared only on a need to know basis with people who are responsible for implementing the measures in the security programme.

To protect the security programme, you must lock the programme in a secure receptacle, safe or drawer when not in use. This ensures that the security programme is not left lying on top of a table or book shelf and easily accessible to other staff and persons who do not have a need to know. Access to the key for the receptacle, safe or drawer also needs to be controlled. Equally important is the need for you not to discuss the contents of your approved security programme in the presence of persons who don't have a need to know and in public spaces.

Your ASP is an important living document that has to be read, understood and implemented consistently and protected. When implemented correctly, your security programme will enhance security measures and mitigate the risk of an act of unlawful interference from occurring ■

PASO NEWS

Enhanced Pacific Aviation Regional Collaboration Highlighted

PASO's new three minute video explores the complex challenges facing aviation in the Pacific.

PORT VILA, Vanuatu:

Enhanced regional collaboration to resolve pressing Pacific aviation challenges and achieve needed safe and secure air connectivity is highlighted in a short video released today by the Pacific Aviation Safety Office (PASO).

Produced for the recent Regional Aviation Minister's Meeting (RAMM) in late June, the three-minute video clip explores the complex challenges facing the Pacific realising a safe, secure, and economically viable aviation sector and makes the case for change to achieve a better future for Pacific people.

"This year's Regional Aviation Minister's Meeting resulted in the *Port Moresby Declaration on Aviation Safety and Security*. This charts the way forward to successfully work together to overcome these obstacles and achieve a more resilient aviation sector," said PASO General Manager, Mr. Andrew Valentine.

Pacific aviation is recognised as an essential driver for economic development and social wellbeing. Regional and international air connectivity enables tourism and trade, and provides access for healthcare, education, and urgent humanitarian relief.

COVID-19 has magnified economic challenges throughout the Pacific, by closing borders and impacting on the aviation sector. The region faces significant air transport challenges with restarting post-COVID, meeting international aviation compliance obligations, harmonising regional policy and increasing advocacy, achieving sustainable funding arrangements, and responding to emerging issues.

An image from the new PASO video highlighting the importance of global air connectivity to the Pacific

The impact of the COVID-19 pandemic on the aviation sector and the Pacific's social and economic recovery is presented in the video as an opportunity to review and refocus how Pacific States collaborate to overcome these issues.

The video was made by PASO with the support of the Governments of Nauru, Papua New Guinea, and Samoa, the International Civil Aviation Safety Organisation (ICAO), the Pacific Tourism Organisation (SPTO), Civil Aviation Safety Organisation of Australia (CASA), Airports Vanuatu Limited, and Air Tahiti Nui ■

REGIONAL AVIATION MINISTERS MEETING

ABOUT PASO

The Pacific Aviation Safety Office (PASO) is an international organisation providing quality aviation safety and security service for Member States in the Pacific.

PASO is the sole Pacific regional organisation responsible for regulatory aviation safety oversight services for the 10 Pacific Governments who are signatories to the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST).

The PICASST signatories include the Pacific nations of Cook Islands, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu and make up the PASO Council. Associate Members of PASO are Australia, Fiji and New Zealand.

International agencies supporting PASO includes: Airways New Zealand, Asian Development Bank (ADB), Association of South Pacific Airlines (ASPA), International Civil Aviation Organization (ICAO), Pacific Islands Forum Secretariat (PIFS), USA Federal Aviation Agency (FAA) and the World Bank (WB).

PASO is a member of the Council of Regional Organisations (CROP) and has been hosted since its inception in 2005 by the Republic of Vanuatu. ■

iPack

ICAO Aerodrome Restart Capacity and Efficiency Implementation Package

The ICAO Aerodrome Restart Implementation Package (iPack) is a self-contained package to facilitate and guide Civil Aviation Authorities (CAAs) and aerodrome operators in the implementation of ICAO provisions. It includes relevant documentation, tools and an online course to facilitate aerodromes restart. A dedicated subject matter expert works remotely with the CAA providing guidance in their implementation efforts to achieve the objectives of the iPack. The level of progress made against each iPack objective is dependent on the availability of CAA and aerodrome operator resources to perform the work.

The goal of the Aerodrome Restart iPack is to facilitate and guide CAAs and aerodrome operators in applying Annex 14 and other relevant ICAO provisions, to ensure safety, regularity and efficiency of aerodrome operations after a partial or full aerodrome closure due to the COVID-19 pandemic.

After having successfully deployed this iPack, CAAs and aerodrome operators will be better equipped to review:

- the conditions of aerodrome infrastructure;
- the procedures relating to aerodrome operations;
- the status of aerodrome certification and compliance;
- the coordination and collaboration processes required at an aerodrome; and
- aerodrome related human resources, competency and training requirements, and initiate actions, as necessary, to ensure a safe and seamless restart of aerodromes.

Fiji was very fortunate to have been chosen by the ICAO Asia Pacific Office as a recipient of a Aerodrome Restart iPack which was fully funded by the Republic of Korea.

This iPack will see our CAA and aerodrome teams ready for the restart of international air travel to and from Fiji ■

The ICAO AGA iPack came at a crucial time for our small island nation, Fiji. A country whose economy relies heavily on tourism, the main enabler being air transport, it is crucial that our aerodrome operations are ready for the restart and recovery following the partial closures due to the COVID-19 pandemic. The AGA iPack has enabled the CAA Fiji to review its documentation and tools with the help of a dedicated ICAO expert who remotely provided guidance and assistance in line with Fiji's needs to ensure the objectives of the iPack were achieved. Much needed capacity building of key staff was also facilitated through this iPack. Fiji is privileged to have been part of this initiative ■

Theresa O'Boyle-Levestam
Acting Chief Executive
CAA Fiji

Juan Carlos Salazar Of Colombia

Begins his mandate as ICAO Secretary General

On August 1, 2021, Mr. Juan Carlos Salazar of Colombia officially assumed the office of ICAO Secretary General, succeeding Dr. Fang Liu of China. He assumes this role as CEO of the UN's specialized agency for civil aviation as the international flight network continues to assure the efficient global movement of food, vaccines, e-commerce, and other essential supplies and personnel, despite the air transport industry still being severely confronted by COVID-19, greatly diminished routes, and slowly rebounding international air travel and tourism.

"It is a great honour to be assuming this role at this time, and to have the opportunity to help governments and ICAO play an important part in how this sector builds back better and recovers from the global pandemic," Mr. Salazar commented. "We are still facing some tremendous challenges to the restoration of global air connectivity today, and with many regions and populations all over the world facing prolonged economic, social, and emotional hardship as a result."

Secretary General Salazar is a former Director General of Civil Aviation for Colombia, and speaks fluent Spanish, English, French, and basic Arabic. He has more than 26 years of experience in civil aviation, public policy, and the management of large and complex organizations, and plans to work closely with the ICAO Council to further strengthen the agency's governance and ethical framework, to review the organizational structure of the Secretariat, to build a digital transformation programme, and to modernize the working methods of the Organization to keep pace with aviation innovation.

He has also promised to further strengthen ICAO's global presence through its Regional Offices and support for key regional priorities, and to assure that special efforts are undertaken through the Organization to support developing States that have suffered the most devastating impacts of the pandemic. The Organization will further support Member States in the implementation of CORSIA and other capacity-building activities aiming at carbon offsetting and initiatives for reducing emissions from international civil aviation.

"It's important that ICAO remains a key partner for the countries of the world as they work with this agency to recover from the pandemic, to share their skies to their mutual benefit, and to continuously improve the global aviation standards and practices which keep those skies as safe, secure, efficient, and sustainable as the world expects. I will also work to innovate internally and improve the efficiency by which ICAO performs its important standard-setting role, and to assure that it continuously improves in helping governments, industry, and civil society advocates to effectively consult, coordinate, and achieve consensus together."

The President of the ICAO Council, Mr. Salvatore Sciacchitano (left), with the Secretary General of ICAO, Mr. Juan Carlos Salazar.

Mr. Salazar was appointed ICAO Secretary General in February of this year by the ICAO Council, after its comprehensive assessment of a number of international candidates■

ICAO News

ICAO Asia and Pacific (APAC) Office Welcomes New Regional Director

The Asia and Pacific Office was established in Melbourne, Australia in 1948 as the Far East & Pacific Office. The Office was relocated to Bangkok, Thailand in 1955 and renamed as the Asia and Pacific Office (APAC) in 1980. The Regional Sub-Office (RSO) was inaugurated on 27 June 2013 and is hosted in Beijing by the Civil Aviation Administration of China (CAAC).

The APAC Office is accredited to 39 contracting States, and maintains liaison with two Special Administrative Regions of China and 13 other Territories. The Asia/Pacific Region covers vast airspace, with 49 Flight Information Regions.

The primary role of the APAC Office is to foster the planning and implementation by the States of the ICAO provisions: International Standards and Recommended Practices (SARPs), Procedures for Air Navigation Services (PANS) and Regional Air Navigation Planning, for the safety, security and efficiency of air transport.

The diversity of the APAC Region as reflected in the different levels of air navigation system development and implementation of aviation security provisions, coupled with continued air traffic growth posed a major challenge. The attainment of safe, secure and environmental friendly air transportation across the Region will require a strong commitment and close collaboration amongst States, the aviation industry, and safety/security partners to ensure integrity, capacity building and support for ICAO initiatives.

The APAC Office pledges its support to stakeholders and will continue its efforts to oversee the highest levels of aviation achievement in the Region■

ICAO News

Mr. Tao Ma

INDUSTRY NEWS

Fiji Airports Secures Major Financing Facility through ANZ Fiji and the Australian Infrastructure Financing Facility for the Pacific (AIFFP)

Fiji Airports has secured a multimillion-dollar finance facility through ANZ in partnership with the AIFFP.

"The pandemic's toll on tourism and aviation has set back years of economic progress across the Pacific. With the support of Australia and other key development partners, Fiji's steady administration of vaccines is bringing a recovery within reach -- with a target to fully-vaccinate 80% of Fijian adults by the end of October. This finance facility ensures that Nadi International Airport is equipped with facilities to serve as the gateway to the new normal for the entire Pacific -- connecting our region to the world and connecting Fijians to each other," said the Fijian Attorney-General and Minister for Economy Aiyaz Sayed-Khaiyum.

Fiji Airports Chairman, Geoffrey Shaw said the loan facility funded in local currency, without the requirement of a Fijian Government guarantee, is recognition by our funding partners of the significant role that Fiji Airports and in particular Nadi International Airport, play as the aviation hub of the South Pacific.

“This loan facility provides Fiji Airports with financial certainty, enabling previously committed capital expenditure works commenced and well advanced under contract, to complete and assures our resilience for the future during these unprecedented times. This facility reinforces and provides assurance for our business, certainty for our employees and our long-term future”

“Nadi International Airport is aggressively gearing up for international tourism recovery once borders reopen. The completion of committed pre-COVID and future works, will enhance our capability, add to our capacity and reinforce our readiness to grow the future of tourism for the benefit of the broader economy. Additionally, this facility will provide for Government’s ongoing vision and our joint social obligation to provide air connectivity to remote outer islands to promote opportunity for business development for all Fijians.” Shaw said.

“Australia is pleased to be making an important investment in an organisation that will be critical for Fiji’s economic recovery. This investment will support local employment and ensure Fiji and the region are ready to receive visitors as soon as borders reopen”, said Australian High Commissioner, John Feakes.

Fiji Airports acting CEO, Isei Tudreu said the ability to commercially negotiate this innovative finance facility as a state-owned enterprise, is a demonstration of our commitment towards business recovery and confirmation by our finance partners of the future long term commercial viability of the company.

“Nadi International Airport plays an integral role in our economy. Pre COVID, the total international passenger movements were 2.2 million annually. We are anticipating a ramp up of operations and look forward to the resumption of air travel when it will be safe to do so.”

“Nadi International Airport has received Airport Health Accreditation from Airports Council International, a global trade representative of the world's airport authorities. This accreditation underscores our ongoing commitment and effort to build passenger confidence once travel resumes,” Tudreu said.

The loan refinance package is a take out of an existing loan balance and provides additional capacity for approved capital works projects.

“The greater part of the funding facility replaces our 2014 Nadi Airport Terminal Modernisation Project loan which we have been successfully paying down over the years due to a well-structured and profitable business enterprise,” Tudreu explained.

The funding facility will assist in the substantive off-gates project at Nadi International Airport to provide further accommodation for larger code E aircraft (A350s) and additional 737 apron parking leading to potential increased frequency, uplift and passenger numbers.

Additionally, the facility will provide for the completion of Air Traffic Management Systems upgrades and the capacity to invest in and further enhance our network of outer island airports’ facilities ■

For further queries please contact our Communications and Public Relations Manager, Christopher Chand on (679) 9989985 or email ChristopherC@fijiairports.com.fj

Fiji Airports Appoints

Acting Chief Executive Officer

The Fiji Airports Board of Directors have appointed Mr. Isei Tudreu as Acting Chief Executive Officer effective 01 July 2021, following a recent Board meeting.


Mr Isei Tudreu

Fiji Airports Chairman, Geoffrey Shaw said Isei presented as an ideal candidate, drawn from within the ranks of senior executives of the organisation, to fill this most necessary position and particularly so, given his extensive experience in the aviation industry.

"Fiji Airports has been without the benefit of a CEO since the tragic passing of Mr. Faiz Khan last year. In conjunction with my Board, we have provided management support in terms of guidance and direction for our organisation over the past 12 months. The Board will continue to lend its support and oversight in that sense, to ensure we position ourselves for the inevitable ramp up in business activity that will coincide with international borders' reopening," Mr Shaw said.

"Mr Tudreu has and continues to enjoy an impressive career, beginning his journey as an Air Traffic Controller to his appointment as our General Manager, Air Traffic Management & Operations in February 2015. Prior to his appointment as GM, he held the position of Controller Ground Safety at the Civil Aviation Authority of Fiji."

"The Board recognises the importance of having a competent and experienced person in the role of Acting CEO, the organisation being as it is, a major contributor to the Fiji economy. This position is particularly relevant as we seek to overcome the prolonged effect of COVID-19 and its impact on our business. The Board would like to congratulate and thank Isei for taking on this additional challenge during these unprecedented times," Mr Shaw said■

About FA

Fiji Airports (FA) is a fully owned Government Commercial Company established on April 12th, 1999 under the Public Enterprise Act 1996. FA owns and manages Nadi International Airport, Fiji's Gateway to the World. It also manages, on behalf of Government, the Nausori International Airport and 13 other outer island airports. For more information about Fiji Airports you can log on to our website at www.fijiairports.com.fj

*Our **TRAVEL SAFE** advisory is available on this link: http://airportsfiji.com/travel-advisory-aug-20.pdf*

INDUSTRY NEWS

Fiji Airways marks 70 years of flying

Fiji Airways, Fiji's National Airline, today commemorated its 70th anniversary. The occasion was marked by Fiji Airways staff connected virtually from around Fiji and global offices to reminisce the airline's 70-year history and rally around their commitment to ensure its survival post-pandemic.

Fiji Airways took off on its first flight one 1st September 1951, as founder Harold Gatty's 7-seater De Havilland Dragon Rapide, piloted by Captain Fred Ladd, took off from the Fiji's Luvuluvu airstrip (Nausori) to Drasa Airport (near Lautoka). From the bumpy one-hour Dragon Rapide flight 70 years ago to operating 20 jet and turbo-prop aircraft today, Fiji Airways has grown into an international airline with an extended network to 108 destinations globally.

Mr. Rajesh Punja, Fiji Airways Chairman said: "Fiji Airways has consistently broken new ground for 70 years, creating a bridge for Fiji to the world and the world to Fiji. COVID has grounded commercial flying temporarily, but cannot wipe our 70-year history. We thank our predecessors, our people, and partners old and new for their commitment and support over the years and we prepare to resume flying, hopefully in just a few months, and lead Fiji's tourism and economic recovery."

Addressing staff from their Nadi Head Office, Managing Director & CEO Mr. Andre Viljoen said the National Airline draws strength from its 70-year history, to fight the current existential crisis caused by the COVID pandemic.

"While we are not celebrating our 70th anniversary, or FJ 70 as we call it, with fanfare, we are commemorating the occasion quietly to recognise how far we have come as an airline. Our grit and determination to survive and thrive, as we have done for 70 years, is the foundation on which our airline will return to the skies post-pandemic."

He added: "The trailblazing achievements of our founder Harold Gatty created a legacy that has lasted seven consecutive decades. The commitment and resolve of our people, shareholders and partners will see us power through for another seven decades and more. We must acknowledge the critical and ongoing support we have had from the Fijian Government, especially our Prime Minister and Line Minister the Attorney General. We thank them for their unwavering commitment to the National Airline. Of course, we are eternally grateful to the people of Fiji for their faith in Fiji Airways throughout the 70 years."

Fiji Airways has been the most connected airline in the region throughout its history, linking to more Pacific Island countries than any other carrier. It flies directly to Sydney, Brisbane, Melbourne, Auckland, Christchurch, Wellington, Los Angeles, San Francisco, Honolulu, Hong Kong, Tokyo, Singapore, and regionally to Tonga, Samoa, Vanuatu, Solomon Islands, Kiribati and Tuvalu. Its wider network through its oneworld and bilateral partner airlines increases the airline's reach to 108 destination worldwide.

Mr Viljoen continued: "The world has changed and there will be a new normal for travel when most countries reopen their borders and we are ready for it. Through our Travel Ready programme, Fiji Airways has attained two distinct awards that will give confidence to our customers when commercial flying resumes."

"We are the only airline in the Australia-Pacific region, and one of only a handful in the world, to achieve a Skytrax 5-Star COVID Safety rating, as well as the highest "DIAMOND" or Hospital Grade certification for APEX Health Safety powered by Simpliflying."

Mr Viljoen said Fiji's vaccination rollout has helped accelerate the timeline, and a re-opening framework was being finalised in partnership with the Ministry of Health and the COVID Response Management Team comprising of key Permanent Secretaries from across Government.

"Our flight schedules will be released immediately following an official announcement by Government which outlines border requirements. One of these will undoubtedly be that visitors must be fully vaccinated, a position Fiji Airways strongly supports."

Meet CAAF's Newly Appointed Medical Assessor

The Civil Aviation Authority of Fiji is pleased to announce the appointment of ***Dr. Isireli Biumaitotoya*** (MBBS, MFCGP, ACCAM Aus.) as its new Medical Assessor (MA).

Dr. Biumaitotoya takes on the baton from Dr. Ponnu Goundar, who held the role of MA for CAAF for a period of twelve (12) years.

Dr. Biumaitotoya joined the aviation community in 2005 as a Designated Medical Examiner (DME). The DME was responsible for the conduct of medical examination of aviation license holders for which medical requirements are prescribed. Following a revision of the aviation medical roles via the Standards Document – Medical Standards, Tests and Certification in 2010, all DMEs, including Dr. Biumaitotoya, were reappointed as Approved Medical Authorities (AMA).

As the MA, Dr. Biumaitotoya will be responsible for providing the necessary oversight and quality assurance of the medical assessments conducted by the AMAs.

With over 16 years of experience as a DME/AMA and 33 years as a General Practitioner, Dr. Biumaitotoya brings to the role a wealth of experience and CAAF looks forward to working with him and the Approved Medical Authorities to strengthen Fiji's aviation medical standards and procedures ■

Dr. Isireli Biumaitotoya
(MBBS, MFCGP, ACCAM Aus.)

COVID-19 Vaccines Side Effects

Bula Vinaka Aviators I'm sure most, if not all, of you have received the Oxford-AstaZeneca Covid-19 vaccine that was rolled out by Fiji's Ministry of Health in March 2021.

Fiji became the first country in the Pacific Islands to receive the vaccine shipped via the COVAX facility, a partnership between CEPI, Gavi, UNICEF and WHO.

The governments of Australia and New Zealand also topped up our Oxford-AstraZeneca vaccine supplies in the ensuing months of April and June.

For those who haven't received the vaccine, just remember the mandatory 48 hours stand down period from active flying duty after receiving a dose of the vaccine. This is to mitigate the possibility of side-effects immediately following each dose.

AstraZeneca is a 2 dose Intra-muscular injectable vaccine given 4-12 weeks apart.

It is important to remember that though there are serious side effects of the vaccine, they are extremely rare and the benefits of all Covid-19 vaccines far outweighs the risks.

Image: Shutterstock

Mild Side Effects:

After a dose of the vaccine, it is common (affect 1 in 10 people) to feel pain at site of the injection, fever, chills, headaches, body aches, malaise, nausea, vomiting, diarrhoea, flu like symptoms and these mild side effects generally last 48 hrs.

Up to 1 in 100 people may feel sleepy, dizzy, decreased appetite, enlarged lymph nodes, excessive sweating, itchy skin, rash or hives.

Severe Side Effects:

For AstraZeneca vaccine, extremely rare cases (1 in 10,000 people) of blood clots with low levels of blood platelets (Thrombosis with Thrombocytopenia Syndrome – TTS) have been observed after vaccination. This included some severe cases with blood clots in unusual body locations and excessive clotting or bleeding all over the body. The majority of these cases occurred within the first 3-4 weeks following vaccination, but some have been reported after this period. Some cases had a fatal outcome.

If you experience any of the following from around 4 days after vaccination you should seek medical advice urgently.

- a severe headache that is not relieved by simple painkillers or is getting worse or feels worse when you lie down or bend over.
- an unusual headache that may be accompanied by blurred vision, confusion, difficulty with speech, weakness, drowsiness or seizures (fits).
- skin rash that looks like small bruises or bleeding under the skin beyond the injection site.
- shortness of breath, chest pain, leg swelling, leg pain or persistent abdominal pain.

Moderna Covid 19 Vaccine

Fiji is also receiving this vaccine for use in our population courtesy of the United States of America. The active substance in Moderna is mRNA encoding the SARS-Cov-2 spike protein embedded in lipid nanoparticles. It then genetically programmes our cells to produce viral spike proteins sparking the immune reaction.

Pregnant women and children from age 12 – 17 will be eligible to receive this vaccine.

Very rare cases of inflammation of the heart (myocarditis and pericarditis) have been reported following vaccination with Moderna. These have happened most often in younger men and shortly after the second dose of the vaccine. Most of these cases were mild and people recovered soon after with simple treatment and rest.

It is important that you urgently seek medical attention if you experience new onset of symptoms such as chest pain, shortness of breath, feelings of having fast beating, fluttering or pounding heartbeat.

Allergic Reaction:

Get urgent medical attention if you get any of the following signs and symptoms;

- feeling faint or light-headed;
- changes in your heart beat;
- shortness of breath;
- wheezing;
- swelling of your lips, face, tongue or throat;
- hives or rash;
- nausea or vomiting;
- stomach pain.

Other Side Effects:

- swelling of the underarm glands on the same side as the injection site;
- headache, muscle ache, joint ache and stiffness;
- pain and swelling at injection site;
- feeling tired, chills, fever;
- itchiness at the injection site.

Pfizer/BioNTech Covid-19 Vaccine

(Covid-19 mRNA vaccine BNT162B2)

Just like Moderna, very rare cases of inflammation of the heart (myocarditis/pericarditis) have been reported following vaccination with Pfizer Vaccine■

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Civil Aviation Authority of Fiji

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