

AVIATION SAFETY BULLETIN

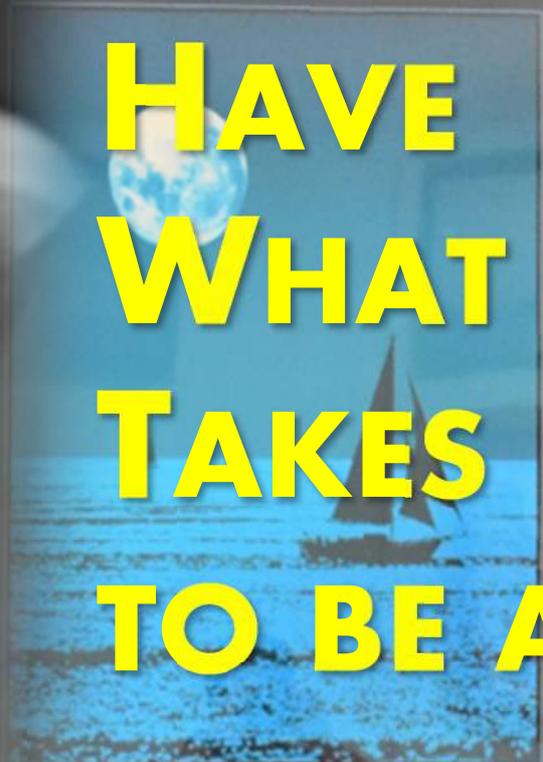
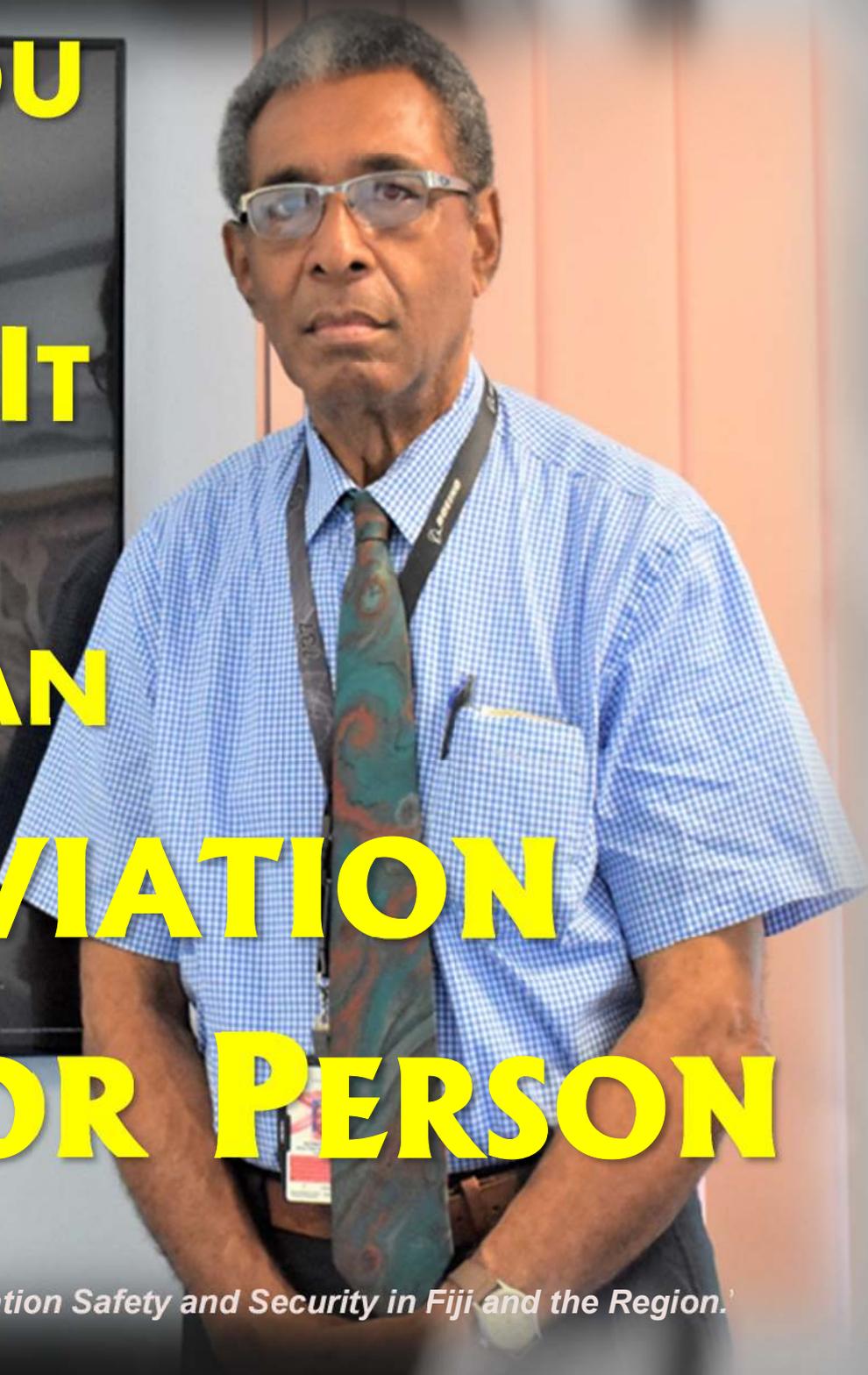


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DO YOU HAVE WHAT IT TAKES TO BE AN AVIATION SENIOR PERSON



YOU CANNOT DISCOVER NEW OCEANS
UNLESS YOU HAVE THE COURAGE TO LOSE SIGHT OF THE SHORE.

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



FOREIGN OBJECT DEBRIS



WHY AUDIT FINDINGS HAVE TO BE APPROPRIATELY ADDRESSED IN A TIMELY MANNER



TOP FIVE LAME TRAPS



DEVELOPING GLOBAL STANDARDS TO CERTIFY WATER AERODROMES FOR SEAPLANE OPERATIONS

Cover Pic: CAA Fiji

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From the Acting Chief Executive

Bula Vinaka and welcome to the Civil Aviation Authority of Fiji's (CAAF) and final edition of its Aviation Safety Bulletin for the year. The Bulletin serves as an important tool in assisting operators; sharing best safety and security practices and keeping operators informed of developments across the aviation spectrum. The Bulletin has served this purpose thus far. It is envisaged to become even better in 2023.

As the curtains for 2022 draw to a close, we reflect on the year that has been with gratitude, note the lessons learnt and commence planning for the new year ahead so that we can better serve you.

This year has been eventful with operations ramping up to meet the demand for air travel following the re-opening of Fiji's Borders at the end of 2021. It has been a complete turnaround from the two years downtime and preparatory work for the restart of air travel in Fiji. We have seen a steady increase in international passenger numbers, and since September 2022 these numbers have surpassed 90% of the passenger numbers for the same period in 2019, a very positive indication that we are truly on the road to recovery and a return to normalcy.

This increase in activities as a result of the rapid demand for aviation services has put undue pressure on our aviation system. There is a shortage of competent personnel across the aviation sector, driving the need to reemploy and retrain former aviation personnel to regain proficiency, as well as employ new employees with quicker onboarding and training turnaround time. Also, there is the challenge to retain existing technical personnel who often become the subject of competing recruitment agencies. With this lingering pressure, incidents are bound to happen and CAAF is addressing this through increased audit and surveillance programmes. The importance of the role of an Aviation Senior Person during this time cannot be overemphasized. This edition provides valuable information on the Aviation Senior Person and expectations of this role and its contribution to a safe and secure aviation landscape. Equally important is the need for perpetual vigilance and collaboration at all levels.

The 41st Assembly of the International Civil Aviation Organisation Council (ICAO) was held in the last quarter of this year and attended by over 2000 delegates consisting of ministers and senior government officials representing 167 States, as well as regional and global air transport industry organizations. I was fortunate to have attended this important aviation event in person and witness the award to Fiji of the ICAO Council President's Certificate in a special ceremony.

This award is a testament to the efforts and dedication of CAAF employees, both past and present, and the support and collaboration of the Fiji aviation industry to maintain a high level of safety. It is testimony of the unique partnership we share to make aviation safe all the time.

The commemoration of International Civil Aviation Day this year, on the 07th December, was an opportune time to celebrate Fiji's award and acknowledge the contribution of our staff and industry partners in promoting innovation in aviation and supporting the mission of the Civil Aviation Authority of Fiji in promoting effective aviation safety and security in Fiji and the region.

As we enter the festive season with the continued increase in aviation activities, we are all reminded that there are no shortcuts to protecting and sustaining a safe and secure aviation system for Fiji.

It has been rewarding working with you all this year and I thank you for giving us the opportunity to be of service to you. I extend CAAF's well wishes to you and your loved ones this Christmas and also wish you a happy, healthy and rewarding 2023.

Stay Safe ■
Vinaka,

MS THERESA LEVESTAM
ACTING CHIEF EXECUTIVE



Do you have what it takes to be a Senior Person?

You're joining the management team as a senior person. It's your chance to have a real, positive influence in the organisation. Here's some guidance on that.

Introduction

There is nothing mediocre about this position and it is certainly not for the fainthearted!!

Desiring to be a senior person is honorable, this position opens up an opportunity to understand, create and maintain safety boundaries. This leadership role would add value to any industry in retaining its safety performance within an acceptable level.

The position cannot be underrated for it requires one who could blend in and express the pivotal safety responsibilities of holding authority and being fully accountable with it at the same time. A senior person is also referred to as a post holder in an aviation organisation.

The recent surge of aviation activity in this post-pandemic juncture has definitely moved latent risks into active risk factors hence the need for competent senior persons is extremely vital.

Who is a senior person?

The term 'senior person' describes someone accountable for the safe outcome of an aviation activity.

Other authorities and other sectors use terms such as 'accountable executive', 'nominated post holder', and 'nominated person'. 'Senior person' means the same thing. You're a person specifically approved by the CAA to be held accountable for safety at the highest levels of the organisation.

Staying on top of the role

In the same way an initial private pilot licence is regarded as a 'licence to learn'. Being accepted as a senior person means you have met the minimum requirements for acceptability.

This is just the beginning of your journey. This article elaborates on what it takes to be an aviation senior person. It would be remiss of a newly appointed aviation senior person to think that that are now 'through the gate', that they can take their foot off the pedal.

The Role

Given the increasing complexity of the global air transportation system and its interrelated aviation activities in Fiji it is pivotal to define this safety critical role for the success of any organization.

A senior person is a postholder who has been granted entry into the civil aviation system by the authority (CAA Fiji) under its acts and regulations. The senior person is deemed to be fit and proper and more importantly competent to effectively manage the function(s) associated with the operation and foster the safety culture of the organization.

A senior person position is intended to provide public assurance around the safety of participants operating within the Fiji civil aviation system.

A senior person would have proven to be honest, knowledgeable, skillful and able. They would have developed good behavior, attitude, credibility and importantly have a good past conduct which would determine and assure a good future conduct.

The rules require a senior person, identified as the Accountable Manager, to be responsible for ensuring that the activities of the organization can be financed and carried out in accordance with the rules. With the introduction of Safety Management Systems (SMS), the Accountable Manager also has ultimate accountability for the implementation and effectiveness of the SMS.

Depending on the type of certificate, other senior persons are responsible for certain supervisory functions. In the case of an air operator, this would include: air operations, supporting ground operations, training and competency assessment, the control and scheduling of maintenance, the system for safety management, air operator security, conducting occurrence investigations, and ensuring the organisation complies with its exposition.

While not necessarily senior in years, senior persons are experienced, skilled, and knowledgeable. They have sufficient time, resources, and Authority to fulfil their responsibilities.

By their actions and words, the Accountable Manager and the senior management team – which includes senior persons – set the boundaries of acceptable performance for the organisation's personnel.

Senior persons need to emphasise and support the adherence to safe practice, policies and procedures, and open sharing of information and concerns.

They must understand human factors, and find the right balance between managing human error and holding individuals to account.

They have a responsibility to create a positive organisational culture to enhance safety performance, and prevent accidents.

An essential part of the Certification process

As already noted, the nomination, and Authority's acceptance, of suitable senior persons is an essential part of certifying an aviation organisation.

Approval of a nominated senior person is never automatic, and it's not uncommon for a senior person candidate to be declined by the Authority.

Often that's because they, or the applicant on whose behalf they are applying, or both, have insufficient understanding of what the role involves.

One candidate, having been initially declined as a senior person, was at first aggrieved by the decision. Later, however, after more experience in the role – supervised – and in management, they admitted that being declined was understandable: that in the beginning, they literally didn't know what they didn't know.

But being turned down by the Authority is stressful to the candidate, an added cost to the applicant that has put them up for the interview, and can cause delays in certification.



It is the responsibility of the chief executive to ensure only capable and qualified senior person candidates are nominated. Putting the 'right' person forward for senior person will maximise the likelihood of a successful application.



....a positive attitude towards Communicating is essential...

The Accountable Manager can minimise such unhappy situations by considering, in good faith, whether their candidate:

- has the necessary experience, knowledge, and expertise to fully carry out the role;
- has the time and attention to fully carry out the role;
- is fully prepared for the senior person interview;
- understands the obligations of the role;
- will be able to carry out the role unimpeded by any barriers or behavioral problems;
- doesn't just meet the regulatory requirements, but has the good character, the right culture, and the ability to lead by example (Fit and Proper Person).

That last trait is particularly important. It's not enough for the senior person to say 'everyone must act safely'. The candidate must be able to demonstrate to the Authority that they live and breathe that.

To that end, a positive attitude towards communicating, including and importantly with the Authority, is an essential trait in a senior person.

The Authority will be asking things like:

- what is the candidate's attitude to employees reporting problems to them?
- what is their response to employees offering good suggestions about improvements?

- what is their attitude to employees reporting occurrences to the Authority?
- if they had a serious occurrence or deficiency at their organisation, who would they talk to about that?

Given the critical nature of the supervisory aspect of the senior person role, it's important any candidate can demonstrate how they are prepared to go beyond simple compliance with the rules, describing how they would raise the safety bar at their organisation. SMS provides a framework to assist them.

Don't delay

Nominating an Accountable Person is just one thing an Operator can do to make sure becoming accepted and approved is a smooth process.

They also need to nominate their senior person candidate early in the application process. It's not uncommon for an organisation—having made a major financial commitment, and putting themselves in a position of having to general cash flow sooner rather than later—to overlook the basic requirement of the certification process of nominating appropriate senior persons. Sometimes, an organisation considers the personnel requirements so late that-while everything else may be in place-their application is much delayed. If an operator has no one they can nominate from within their own organisation, they can contract from outside-at least until such time as someone else gathers enough experience to apply successfully to be a senior person.

Do your research

The Civil Aviation Act 1976, Civil Aviation Authority of Fiji Reform Act 1999, Occurrence, Reporting and Investigation Regulation 2009, Air Navigation Regulation (CAP 174) are the primary legislation underpinning aviation safety in Fiji, and a good understanding of its requirements is essential.

The candidate must have an in-depth knowledge of their company's exposition, and a good working knowledge of the applicable rules and standards documents.

Some other fundamental requirements for the nomination of senior persons are found in the ICAO Annex 6 Part 1, 2, & 3, ANR 43, AIC 02/19 Effective 28 MAR 2019 and SD-AOC Chapter 1.

The candidate must be a natural person (not a body corporate) and must be employed, contracted or otherwise engaged to work sufficient hours so they can fulfil the senior person functions appropriate to the size and scope of the organisation's business.

The person nominated by the operator also has to be experienced in the particular area they will have oversight of.

Having the time

Any candidate for senior person should be assessing whether they have the time to do justice to the role they're going to be employed or contracted to do.

In asking that question of themselves, if the honest answer is 'no' they should be having a talk with their Accountable Manager before their application gets to the Authority.

Since people often hold multiple roles in an organisation, or multiple roles within industry, the Authority needs to be convinced the candidate will have enough time to be effective. For instance, if not full time on site, will they spend enough time there, will they dedicate enough time to do the job properly? The Authority needs confidence that not only is the candidate capable, but they're actually going to be dedicating sufficient time to their responsibilities.

Senior persons, particularly in a small organisation, don't have to be on site all the time. In an era of mobile phones and internet meetings, a certain amount of time can be spent away from the base of operations. As they're in a supervisory role, however, it's very hard to promote change, and to supervise and monitor the organisation completely from afar. So it's expected they will exercise visible leadership and allocate an appropriate amount of time to on site activities.

If not full time, and with perhaps multiple roles in industry, will a senior person candidate spend enough time on site?

Will they dedicate enough time to do the job properly?



Senior persons need to emphasise and support the adherence to safe practice, policies and procedures, and open sharing information and concerns.

The Interview



CAA will assess a nominated person during a formal, recorded, more-or-less 90-minute interview, to establish the candidate's competence to perform their designated roles and to ensure the continuing safety of the operation.

Chapter 1 Part A subsection 1.1 of the SD-AOC requires the applicant for certification (that's the aviation organisation) "and any person who is to have or is likely to have control over the exercise of privileges under the document (that's the organisational certificate) is a fit and proper person to have such control". It also provides for the Authority to be satisfied that granting the document "is not contrary to the interests of aviation safety".

To help establish that, the Authority will assess a nominated person during a formal, recorded interview, to establish the candidate's competence to perform their designated roles and to ensure the continuing safety of the operation.

Following an initial review and discussion of the applicant's qualifications and experience, the candidate will be expected to be able to:

- describe how their experience and skills are relevant and applicable to the intended position
- give an accurate overview of their intended role
- demonstrate their knowledge of the organisation, its activities and its exposition
- demonstrate their knowledge of the intended duties, their responsibilities and accountabilities and position description, and the extent of their Authority to make decisions, including any financial Authority
- explain what resources are available to them to fulfil their role
- describe the time they will dedicate to the role, and how any other commitments that could interfere with the exercise of their responsibility will be managed. They may even be asked to quantify the hours they plan to spend carrying out the role
- explain where they will be living in relation to the organisation's location, and whether this could impact on their ability to perform in the role
- demonstrate a working knowledge of the Act, Regulations and describe how the various regulatory requirements apply to their intended position
- demonstrate a working knowledge of applicable standards and best practices
- demonstrate knowledge of hazards and risks applicable to their organisation and role, and how those risks will be managed
- explain and demonstrate their attitude toward compliance and safety by their understanding of safety and risk, and how they intend to achieve good safety performance within their area of responsibility
- describe how any potential conflicts of interest will be managed.

Usually within a few days, the Authority will review the outcome of the interview and complete any required follow-up before providing the candidate with the results of their assessment.



And then...



The Authority is always interested in the ongoing ability of the senior person to do their job.

Senior persons are expected to keep themselves up-to-date with professional development, with rule changes, and with changes to their company's exposition.

They are expected to attend AOC and stakeholders meetings or relevant professional gatherings. They need to stay ahead of the game.

It would be a mistake for a newly appointed senior person to think they were now 'through the gate' and they can take their foot off the pedal. Attitude is demonstrated through behaviour so a senior person must, to retain the position, constantly illustrate that they are positive, proactive, and constructive.

Their ability to effectively carry out the role will continue to be monitored, as will their ability to meet the fit and proper person requirements. It's definitely not a matter of a box tick every five years.

Good senior persons can be trusted by the Authority to get on the phone to the Authority to discuss anything concerning them about their organisation. They're trusted to communicate quickly, clearly, and not to 'manage' the message. The Authority will be interested to hear what they have done, or intend to do, to address the issues in terms of corrective or preventative actions.

They must also demonstrate authentic leadership skills. But, rather than asking, 'how does this person's leadership skills contribute to the organisation's bottom line?' the Authority asks, 'how does this person's leadership skills contribute to developing an effective safety culture?' are moving on.

If your senior person changes

Because a certificated organisation's senior persons are named in its exposition, if they change, so too must the exposition.

That change must be formally notified to the Authority on specific documentation, and approved by the Authority, before executing the change. For more, visit www.caaf.org.fj and search on 'forms'.

And we recommend that if you're a senior person leaving an organisation, you make sure you receive written acknowledgement from that organisation, of your intended departure date.

It is also appropriate to let the Authority know that you are moving on.



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Civil Aviation Authority of Fiji

Source: Guidance of article from NZCAA, CAAF Fit & Proper Persons Policy and Guidance.

Linking States Through Inspections

AOC Variation inspections are one of the few important tasks carried out by state technical personnel involved with the State's obligation on oversight and management of Security (ICAO Annex 17) and the Safe transport of dangerous goods by air (ICAO Annex 18).

On the 13th to the 21st of November 2022 the Senior Aviation Security and Facilitation Inspector Mr. Mosese Tuisa and the Dangerous Goods and Cabin Safety Inspector Mr. Joseph Konrote were in Vancouver, Canada to conduct the AVSEC survey inspection and AOC variation inspection respectively.

The specific AVSEC survey inspection was arranged by Controller Aviation Security & Facilitation, Mr Rigamoto Aisake, with Transport Canada Senior Program Officer – International Program, Mr. Roxane Poirier who is based in Ottawa, Canada.

The inspection in general was kindly facilitated by Transport Canada specifically Transportation Security Inspector Tammy Hamilton. The inspection included meeting the personnel of the following organizations and a tour of their facilities: YVR Airport, SAMSIC Assistance Canada, Swissport, Fiji Airways and dnata.

It was a success in that the required information was obtained via interviews of personnel, document review, facility inspection and also observation of processes and procedures.

On Friday the 18th November the CAAF Inspectors had the honor of meeting the Canadian Minister of Transport the Honorable Omar Alghabra, MP at YVR airport. The Canadian equivalent of CAAF is Transport Canada for which their line Minister is the Honorable Omar Alghabra, MP. The Transport Portfolio is made up of fifty-three organizations.

The Honorable Omar Alghabra, MP whilst passing through YVR airport was advised that CAAF Inspectors were at YVR and agreed to meet. The CAAF Inspectors were warmly welcomed to Canada by the Honorable Omar Alghabra, MP who was excited to have a Fiji airline operate direct flights to YVR, Canada. The Honorable Omar Alghabra, MP gave his assurance of being available to provide any assistance that may be required by CAAF and wished CAAF and Fiji Airways well.

Building up the value of professionalism in our individual teams assures the ability of our inspectorate staff to engage in different capacities as they perform their individual state obligated tasks. As a Civil Aviation Authority organization, we have the unique opportunity and responsibility to be the link to all stakeholders involved in aviation ■



Left to Right: Mr J. Konrote, Honorable Omar Alghabra, Mr Tuisa

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 via email or dropping it in the feedback box in the foyer of CAAF HQ, or

emailing to :

info@caaf.org.fj

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Why Audit Findings have to be appropriately addressed in a timely manner

There are various reasons why aviation audit findings have to be appropriately addressed in a timely manner. Below are five (5) reasons why this is so.

1

Seal gaps and vulnerabilities that exist in a system

When aviation audit findings are raised by an auditor, it means there are gaps and vulnerabilities that exist in the system that need to be appropriately addressed in a timely manner to prevent a weakening or worsening off the situation. It is therefore critical to implement corrective action that seal the gaps and vulnerabilities and enhance aviation safety and security. Every operator engaged in aviation has a duty of care to the travelling public to ensure compliance to existing legislations and standards.

2

Strengthen organisation safety and security culture

By appropriately addressing audit findings in a timely manner, each operator is able to strengthen their organisation's safety and security culture, and in turn, contribute to the overall safety and security chain which protects aviation from acts of unlawful interference. An operator that has a robust quality control system will ensure that audit findings are not left unattended but addressed as a matter of urgency and priority.

3

Process of continuous improvement

The best operators in aviation have robust quality control systems which focus; amongst other things, on the process of continuous improvement. Audit findings and corresponding corrective action plans in a timely manner support continuous improvement. As part of the process of continuous improvement, each operator has a responsibility to address audit findings in the quickest possible manner.

4

Maintain integrity of Fiji's aviation processes

When operators appropriately address audit findings in a timely manner, they help maintain the integrity of Fiji's aviation systems and processes. In fact, this builds confidence amongst the travelling public and the global community.

5

Save unnecessary costs

There is a cost factor involved when operators do not take the time to appropriately address audit findings in a timely manner. The Authority may conduct re-audits, almost on a monthly basis and reduce the life or duration of the certificate or approval. This is a costly exercise for both the operator and the auditor who have to spend a lot more time and resources. Good operators understand the importance of saving and reducing costs to their operations and strive to address audit findings as soon as possible ■



Foreign Object Debris

What is Foreign Object Debris?

Foreign Object Debris (FOD) is any inanimate object within the movement area which has no operational or aeronautical function, and which has the potential to be a hazard to aircraft operations.

Why is FOD dangerous?

FOD located in an inappropriate location in the airport environment has the capacity to injure airport or air carrier personnel and damage aircraft. FOD within the movement area poses a significant threat to the safety of aircraft operations and has the capability to cause loss of human life.

A piece of FOD at the wrong place at the wrong time can;

- Shred blades when ingested into turbojet.
- Blow out aircraft tires at high speed.
- Damage aircraft engine if ingested.
- Damage delicate components when trapped inside of an equipment housing.
- Damage the airframe (fuselage, nose, radome and windshield).
- Injure or cause death when Jet-Blast propels FOD at high speed.

Any damage attributed to a foreign object that can be expressed in physical or economic terms which may or may not degrade the products safety and/ or performance characteristic is known as **Foreign Object Damage**.

Typical example of Foreign Object Debris includes:

- Tools, parts and loose hardware
- Building Materials
- Paper, Pens, Coins, Badges
- Broken pavement pieces
- Rubbish, bottles, containers,
- Rocks, Sand and loose vegetation
- Baggage tags and luggage pieces
- Hats and Gloves
- Wildlife
- Humans

ICAO Requirements

The procedures on carrying out daily inspections of the movement area and control of FOD are given in the PANS-Aerodromes (DOC 9981), the Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476) and the Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual (Doc 9830).

ICAO Doc 9981 Aerodromes Chapter 5 Foreign Object Debris (FOD Control) provides procedures and processes pertaining to the control and management of Foreign Object Debris (FOD) at aerodromes, including the establishment of FOD Control Programme to address the following;

- Prevention
- Detection
- Removal
- Evaluation

The appendices to Chapter 5 of DOC 9981, provide details of FOD related training, FOD sources, methods and techniques of FOD detection, and its removal, evaluation and reporting.

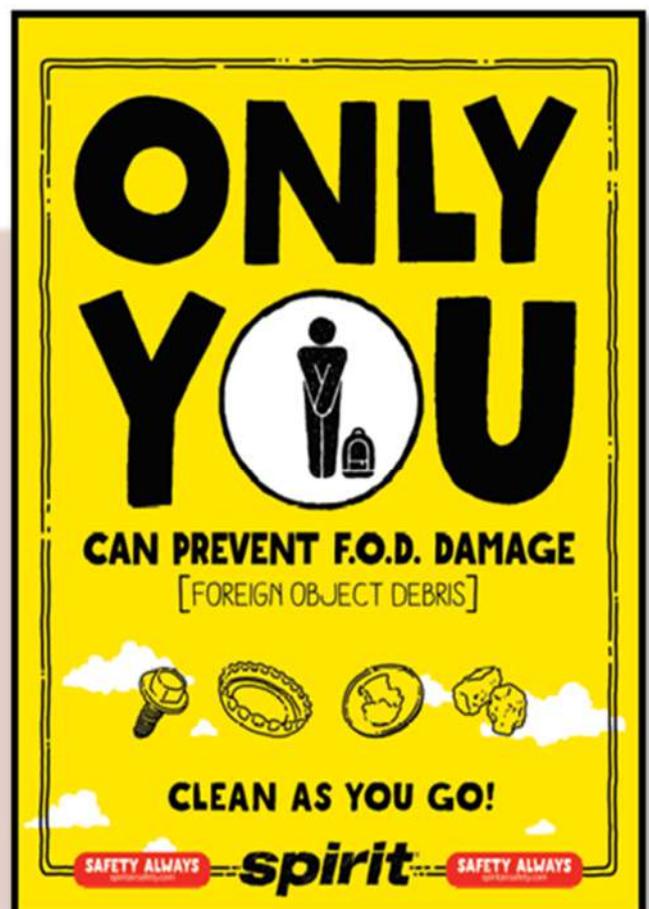
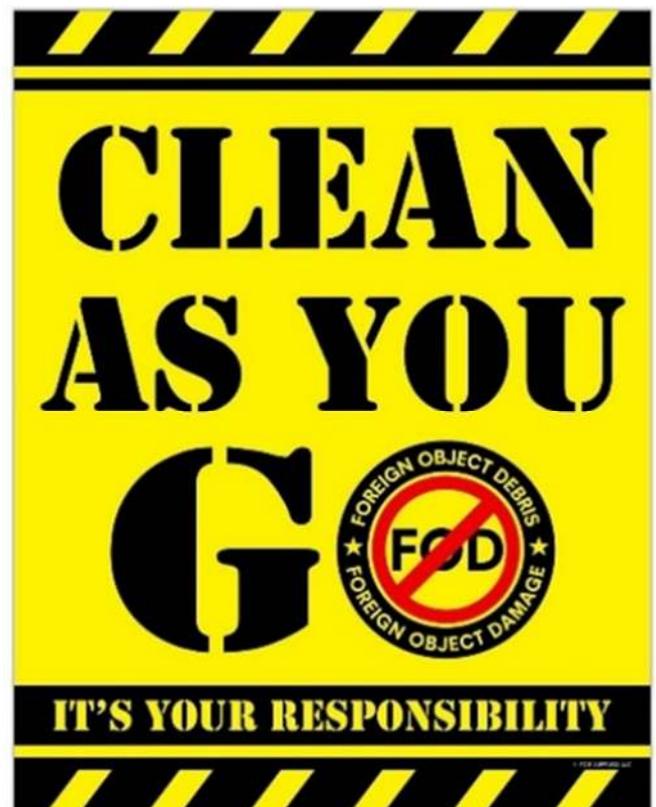
The ICAO requires a daily, daylight inspection of aircraft manoeuvring areas and removal of FOD. In addition to performing these inspections at the beginning of the day or shift, personnel on the airside should look for FOD during their normal shifts.

What Should You Do if You Find FOD?

All aviation employees who have access to Airside particularly the movement area which is a FOD Critical Zone has the responsibility of keeping an eye out for FOD. If you happen to find FOD, dispose it immediately in the FOD Bins provided. Relevant authorities should also be informed if the FOD resembles a bird carcass or an aircraft part.

FOD is a major concern in the aviation industry, as damage caused due to FOD cost millions of dollars and more importantly can cost people their lives. Thus, even though there are designated personnel to fight FOD, it is everyone's responsibility to keep an eye out on FOD for the safety the people and aviation stakeholders. ■

Source: Extract from Skybrary



Top Five LAME Traps

Here are the things you really **should not** do when maintaining an airplane.

1

ASSUME

How do you spell assume? There is a lot of truth in that somewhat inappropriate statement. The first trap that can get you in hot water is to assume anything. If you cannot help it, assume the part is faulty until your ops check it and deem it otherwise.

Let me tell you a story about an aircraft engineer who assumed the bolts he removed from a windshield were the approved part number, and therefore he re-installed the same ones he pulled and signed off the airplane.

The shift maintenance manager justified this omission by saying that he was quite satisfied that the bolts that he had removed were the correct bolts and that it would take so much time to find the correct numbers in the illustrated parts catalogue (IPC) that he did not feel justified in using the IPC in the circumstances of the job in question.

Thankfully there were no fatalities on [British Airways Flight 5390](#), in which that improperly installed windscreen panel separated from its frame, causing the captain to be sucked out of the aircraft. The captain has an incredible story to tell at the pub now, but I don't think it was worth it.

Nothing causes an engineer to swell with pride like spouting off torque values from memory as they retrieve a torque wrench from the rollaway and strut up to the task in work. Should you be impressed? Nay says the International Civil Aviation Organization (ICAO).

In 2003 the ICAO published the *Human Factors Guidelines for Aircraft Maintenance* manual. As a testament to the thoroughness of this study, this first edition remains the latest and greatest. Section 4 addresses "Internal Factors Influencing Performance," specifically highlighting memory failure as a "psychological error mechanism" and contributing to the failure.

Not only is boasting about memorizing aircraft data points, measurements, and values uncouth, it is also illegal. Remember, even if time doesn't fade your memory—and it will—values vary between specific models, and sometimes manufacturers update technical data. Although rare, it does happen, and you do not want to be the one that risks your career, or another's life so that you can show off.

2

EXECUTE A TASK MEMORY

3

FAIL TO REPORT A MISSING TOOL

In February of this year, I introduced you to the concept of tool control in aircraft maintenance. You can see first-hand why I chose this topic early in this series. Without tool control, things tend to GUE, you know—*get ugly early*.

The mantra for a good tool control program is a place for every tool, every tool in its place.

During our tool control discussion, we addressed shadowboxing. Larger aircraft maintenance facilities companies looking to mitigate risk from lost-tool foreign object debris (FOD) enact these programs, often eliminating the need for mechanics to acquire personal tools. Toolboxes containing pre-cut foam inserts show when a tool is out of place. Before a shift ends, a quick look at the toolbox drawers ensures everything is accounted for. If a blank exists where a tool is supposed to go, stop the presses.

Perhaps the maintainers of N158WA in 2017 could have benefited from a program like this. Under a proper tool control program, the mechanic would have noticed a blank space where the screwdriver should have been and possibly returned to the aircraft before it departed. No one was injured, but the airplane sustained damage after this wayward screwdriver hit the propeller of the Swearingen Metro II during the takeoff roll in Boise.

4

SUCCUMB TO OWNER OR MANAGER PRESSURE

I honestly cannot believe I even need to highlight this, but here we are. Although the instances were not typical, I have been there, and the offending party and I quickly parted company. That is the beauty of owning a shop. You talk crazy, and you join my no-fly list. Do not stand for that static. Most providers are safety first—cut ties with the haters and find a good one. On the flip side, don't be that person holding up a job under the guise of safety because of a grudge. You make it harder for everyone else.

*“Maintenance records: Falsification, reproduction, or alteration.” Allow me to summarize it for you: **DO NOT DO IT. IT IS A CRIMINAL OFFENSE UNDER THE FIJI CRIMES DECREE TO FALSIFY DOCUMENTS WITH FINES UP TO f\$10,000 AND 10 YEARS IMPRISONMENT.***

Seriously folks, if I have to explain this, or provide examples of how bad this is, then we have no hope. Everyone has heard horror stories of pencil whipping, selective inspections, and drive-by annuals. If an owner/operator ever approaches for a quote to “freshen up” a component, drop what you are doing and run for the hills.

5

FALSIFY AIRCRAFT MAINTENANCE LOGS / RECORDS

During Engineering school, I studied under Jack Moore, an absolute Jedi Master of aircraft maintenance. He was looking to procure a Beechcraft Baron and found one nearby for a reasonable price. As he reviewed the logbooks, Jack asked the seller how much total time the airframe had. The guy popped out an ink pen, clicked it open, grinned, and replied, “How much time do you want?” Do you recognize any of these scenarios? Perhaps you have additional commentary or feel like I am way off-base. Do you have an aircraft maintenance trap to add? Drop us a line and share your experience ■

Developing Global Standards to Certify Water Aerodromes for Seaplane Operations



Water Aerodromes

In addition to providing recreational access and evacuation in emergencies, seaplanes are the most ideal mode of transportation for States with geographical isolation. International provisions are required to further improve safety and encourage a strong civil aviation sector that can promote and sustain social and economic progress through responsible tourism, which is one example of the major economic drivers for Small Island Developing States (SIDS) and other States that depend heavily on water aerodrome operations.

At a global level, seaplanes are being utilized more frequently to support islands with larger aircraft that offer scheduled services. In more recent times seaplanes have been adopted for multi-purpose roles that include firefighting in large inaccessible forests and ocean search and rescue. The number of commercial flights originating from water aerodromes in-

creased to more than 2,000 unregistered water aerodromes and there are more than 150 commercial floatplane operators that operate 450 registered aircraft within the Pacific region. With an estimated 500,000 passengers travelling by scheduled seaplane flights each year, these figures highlight the need for specific requirements for water aerodromes.

As part of ICAO's No Country Left Behind (NCLB) initiative, ICAO has an interest in supporting the 57 Small Island Developing States (SIDS). A strong civil aviation network promotes and sustains social and economic progress through responsible tourism, which is one of the major economic drivers in SIDS.

Given the magnitude of water aerodrome operations worldwide, many countries identified the growing global need for standardized regulations and procedures to certify water aerodromes for seaplane operations. That said, ICAO has not yet developed global standards related to the design, certification and operations of water aerodromes for seaplane

ICAO's 40th General Assembly

As part of an effort to provide guidance for the certification, operations, management, safety and reporting requirements of water aerodromes, Indonesia and Canada proposed a partnership to develop global provisions.

The 40th session of the Assembly requested the Council to review the existing SARPs related to aerodromes and to develop specific Standards and Recommended Practices to address the design, certification, management, safety and reporting requirements for water aerodromes operations.

International Maritime Organization

From a technical point of view, it was important that ICAO recognized the importance of including the International Maritime Organization (IMO) in the development process. Aircraft are considered vessels when operating on the water, under IMO provisions, and they are aircraft under ICAO provisions once they are airborne.

Indonesia is of the opinion that ICAO cannot address this area without the cooperation of a team of State aviation and maritime experts, working under the auspices of ICAO and IMO, to ensure harmonization.

The International Convention for the Safety of Life at Sea, signed in 1974, stipulates that IMO and ICAO have agreed that any craft capable of flying outside the influence of ground effect at an altitude of more than 150m, should be subjected to the rules and regulations of ICAO.

Registering Water Landing Sites (WLS) For Seaplane Operations in Fiji

Though water aerodrome certification is required for States before they open to the public, the procedures differ from State to State. There is a need for global harmonization. Currently, there are no guidelines for seaplane docks, ramps and supporting facilities. The imposed requirements by States for water aerodrome licensing also requires global harmonization.

The registration of WLS for Seaplane Operations is a mandatory requirement for all WLS in Fiji. Section 10 of the Civil Aviation Reform Act, 1999 stipulates that a person shall not operate an aerodrome except under a certificate or registration approval issued by the Authority. The Act defines an aerodrome as: "a defined area on land or water (including any buildings, installations, and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft".

ICAO Annex 14 does not differentiate between land and water as a surface from which aircraft can operate. Furthermore, Annex 14 defines that an aerodrome can be an area of land or water. Operations of airplanes on water differ significantly from those conducted on land, and the criteria used for certification/registration approval of land aerodromes may not be appropriate for registration approval of water aerodromes.

Water aerodromes requirements are different: all seaplanes are considered vessels (boats) while operating on the water; seaplanes are subject to marine rules on water and civil aviation Standards/regulations in the air; different aircraft rescue and fire-fighting (ARFF) procedures/equipment; water aerodrome markings under IMO Requirements;

Fiji has established Appendix 12 of the SD AERODROME which prescribes the Water Aerodrome requirement for all Sea Plane Operators and Water Landing Site Operators and the details on the design, operations, and how to proceed with the registration is available online on the CAAF website. CAAF has coordinated Water Landing Site requirements with the Maritime Safety Authority of Fiji for water operations.

WLSs Operators are required to obtain registration approval from the CAAF and must comply with the requirements for registration approval as set out in the Standards Aerodromes.

Given the high risks involved in the operation of WLS, the authority highly recommends to all WLS operators to contact the authority through email at info@caaf.org.fj or cgs@caaf.org.fj prior to the commencement of the registration process■

Source: Article extracted from UnitingAviation.com



**WATER
AERODROMES**



DECEMBER INTERNATIONAL CIVIL AVIATION DAY



On the 07th December each year, **International Civil Aviation Day** is celebrated. The theme for the period 2019-2023 is :

“ADVANCING INNOVATION FOR GLOBAL AVIATION DEVELOPMENT”.

The purpose of International Civil Aviation Day is to generate and reinforce worldwide awareness of the importance of international civil aviation to the social and economic development of States, and of the unique role of the International Civil Aviation Organisation (ICAO) and Civil Aviation Authorities around the world have in helping States cooperate and realise a truly global rapid transit network at the service of all mankind.

The United Nations has adopted Agenda 2030, a pledge for the reduction of pollution with the goal of a new era in global sustainable development. ICAO recognises that innovations carry significant potential in improving aviation safety, efficiency, security, facilitation, environmental sustainability, and economic development of air transport. The importance of aviation as an engine of global connectivity has never been more relevant to ICAO's objectives to look to international flight as a fundamental enabler of global peace and prosperity.

For this year's International Civil Aviation Day, the Civil Aviation Authority of Fiji takes this opportunity to thank all industry partners and stakeholders for their contribution and continued commitment to ensuring a safe and secure civil aviation system. Through all our collective efforts, Fiji was awarded the prestigious ICAO's Council President Certificate in a special ceremony at this year's 41st Session of the ICAO Assembly.

Fiji was one of six States recognised for significant progress in improving our safety oversight system. States are awarded the Certificate based on the outcomes of ICAO's Universal Safety Oversight Audit Programme (USOAP) which reflects the States effective implementation of ICAO Standards and Recommended Practices. In 2019, following the ICAO In-Country Validation Mission, Fiji improved its effective implementation rating from 60.55% to 76.3%, a rating that sits above the Asia Pacific average of 64.6% and the Global average of 67.5%.

This award is in recognition of the efforts of the Civil Aviation Authority of Fiji's staff, past and present, as well as our aviation partners, in effectively implementing ICAO's Standards and Recommended Practices.

In commemorating this year's International Civil Aviation Day, the Civil Aviation Authority of Fiji encourages the support of all industry partners and stakeholders in promoting innovation in aviation and supporting the mission of the Civil Aviation Authority of Fiji in promoting effective aviation safety and security in Fiji and the region ■



The Civil Aviation Authority of Fiji Team 2022

CAUTION



ISO 9001: 2015 CERTIFIED
CIVIL AVIATION AUTHORITY OF FIJI



NEVER AIM LASER POINTERS AT AIRCRAFT!

WHY?

Temporary Flash

blindness:

Visual field is temporarily knocked out and may cause 'afterimages'.

Distraction and Startle:

Distracts a pilot during a night time take-off or approach/landing.

Glare and Disruption:

Interferes with vision; night vision starts to deteriorate.

Any person who is caught is liable to a fine of upto \$1,000 and/or imprisonment for a term of upto 6 months.



DON'T RISK THE LIVES OF OTHER PEOPLE!

If you see anyone pointing a beam of light towards an aircraft, report it immediately to the nearest Police Station.

If faced with an engine failure Remember your ABCs

It was Fulghum who authored the New York Times bestseller, *All I Really Need to know I Learned in Kindergarten*. The simple and beloved creed has guided many in their personal and professional lives and offers a valuable lesson in efficiency and effectiveness. Its wisdom has been applied to everything from home life to business dealings and has its place on the flight deck as well.

When an emergency strikes, seconds matter. Indecision is the enemy and reduces your options and likelihood of a positive outcome. My advice is not to say one can't alter plans in a dynamic situation such as an engine failure; however, the new choice should be obvious as evaluating any new plan will cost precious time.

While complete engine failures are not common, the stakes are high which is why pilots train extensively for such occurrences and why they get evaluated as part of a check ride. If faced with an engine failure, or training for your next engine failure with your instructor, act quick and decisively by remembering what you learned in kindergarten – your ABCs.

A

Airspeed

Establish best glide speed. Do it quickly. If you can gain precious altitude in the process of slowing to your best glide speed even better. Altitude affords us more options and perhaps an opportunity for some trouble shooting. Trim for your best glide speed so that your focus can quickly shift to B (best glide) and be strict in your adherence to speed. There are many options to lose altitude quickly, but nothing you can do in an engine failure to gain it back.

B

Best Place to Land

Pilots should always be considering adequate landing locations so maybe some of your work is done. If not, scan the entire area around you for preferably, an airport, but if not, a location that will best ensure your successful outcome – ideally, a flat, open field absent obvious approach obstructions such as trees, powerlines or structures. Remember, your best landing location could be behind you so don't ignore natural blind spots in your search. If you're flying with a GPS navigator or charting app, familiarize yourself with the emergency functions to assist in locating an emergency landing area.

As basic as it sounds, pilots can become paralyzed or reluctant to accept the dire circumstances. An obstacle that can be overcome through good training. But don't delay or move on to our next checklist item until the aircraft is flying toward your landing area at best glide speed.

C Checklist

Your aircraft checklist includes memory items. Needless to say, if a manufacturer has identified an item as being so critically important it should be committed to memory even as seconds matter, not only should the items be rehearsed, but a flow around the flight deck should also be committed to memory to increase your lowlihood of accomplishing these items. In a low altitude situation such as just after takeoff, you me fortunate to even make it through the memory items.

An emergency at altitude, could offer a window to consult a written checklist. This will offer a double check of the appropriate memory items and allow you to explore other potential causes for the failure in an attempt to regain power.

There are some universal elements of the emergency, engine failure checklist some of which are covered by our ABC checklist.

- Best glide – establish best glide
- Landing site – identify your best site AND fly towards that site
- Fuel – switch tanks (if able), check fuel shutoff, enrichen the mixture
- Master – if executing a landing, ensure electric is off to reduce fire risk

Declare an emergency. If unable to raise Air Traffic Control, provide as many details of your location as possible so that help can be provided. Even if speaking openly on the local frequency or emergency frequency, another aircraft may hear the transmission and be able to call for additional ground assistance.

D Declare

In the case of ATC, you could ask or even be provided with information on available landing locations. Take extreme caution in the natural tendency to second guess your chosen landing location. Only if absolutely sure you can make a better location for landing, should your original plan be altered. As a matter of standard course, ATC may ask certain questions such as the nature of your emergency, fuel on board and number of souls on board. Don't feel pressured to respond. Your first obligation is to maintain positive control and FLY THE AIRPLANE. Navigation comes next in the hierarchy of pilot duties and a distant third is communication. In other words, you're in charge as the PIC. Respond only if able and don't hesitate to ask for information you may need.

Continue flying the airplane throughout the approach and landing. If time is available to maneuver, consider wind direction, slope of the chosen field and any obstacles. When compromises must be made, opt for the wind and obstacle combination that permits additional margin for error on your final approach.

Positive control is essential throughout so that you can minimize damage to the cabin structure which will increase your odds at escaping injury free. Don't become obsessed of fixated on salvaging the aircraft itself – only the cabin structure.

Flaps are recommended if they can be deployed so that you can minimize your forward speed. Minimum forward speed lessens the severity of the deceleration process. Avoid low level, aggressive maneuvering and minimize sink rate.

E Execute

Much of what we have discussed relates to complete engine failure at altitude. In the case of an engine failure after takeoff, options are greatly reduced. It is usually NOT advisable to turn back to the runway, but instead, to select a landing location directly in front or slightly left or right of your flight path.

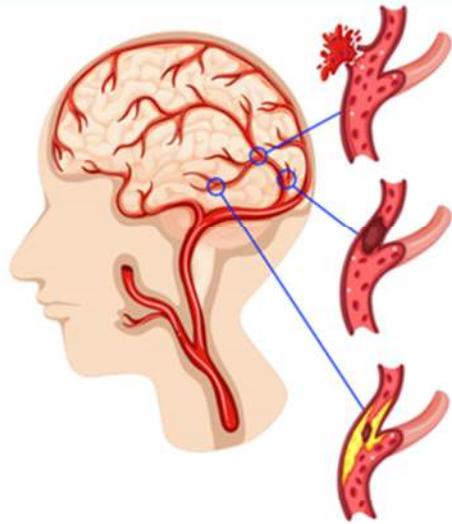
The decision to continue straight ahead versus turning back is often difficult to make due to the variables involved such as wind direction and altitude lost in the turn which can be affected even further by other atmospheric conditions, technique, and reaction time. If you've not trained for a simulated engine failure with a return to the airport, this would be a valuable exercise so that you can make more informed decisions about what altitude you would need to reach before considering a return to the airport.

No matter the event and no matter the circumstances, these fundamental aviation principles apply:

- Aviate
- Navigate
- Communicate■

STROKE

(Cerebrovascular Accident)



STROKE



Stroke occurs when blood supply to a part of the brain is interrupted or reduced. Brain cells begin to die in minutes as oxygen and nutrients fail to reach brain tissues. This is a medical emergency as prompt treatment and early action can reduce brain damage and other complications.

Stroke is the fifth leading cause of death in the USA and the leading cause of adult disability.

Stroke is broadly classified into 2 types – ischaemic and haemorrhagic.

Ischemic Stroke accounts for 80-85% of cases and commonly results from occlusion of the lumina of the cerebral vessels by a thrombus (clot) or embolus.

Covid 19 infection may increase the risk of Ischaemic Stroke but more research is needed.

Haemorrhagic stroke, seen in 15-20% of cases typically result from rupture of a cerebral blood vessel. It is further classified into 2 subclasses – Cerebral or Subarachnoid, depending on the site of the blood leakage.

Factors related to haemorrhagic stroke include;

- Uncontrolled High Blood Pressure;
- Overtreatment with blood thinners (anticoagulants);
- Aneurysms;
- Trauma (eg. car accident).

Signs and Symptoms

- Trouble speaking (slurred speech) and understanding what others are saying.
- Paralysis or numbness of the face, arm or leg. Often affects one side of the body only. One side of the mouth may droop and inability to close the eye as eyelids get paralysed.
- Double vision (seeing two images of one object) or blurred or no vision in one or both eyes.
- A sudden severe tearing headache accompanied by vomiting, dizziness or altered consciousness.
- Stumbling or losing balance while walking, sudden dizziness or loss of coordination.

Risk Factors

- Obesity
- Physical inactivity (lack of exercise)
- Heavy/Binge alcohol drinking
- Cocaine /Methamphetamine use
- Hypertension
- Cigarette smoking
- High cholesterol
- Diabetes
- Obstructive sleep apnoea
- Heart failure, Heart defects, Heart infection, Arrhythmias (Atrial fibrillation)
- Personal or family history of stroke, heart attack or transient ischaemic attack.
- Age above 55 years
- Use of estrogen birth control pills

Transient Ischaemic Attack (TIA)

Sometimes known as a Mini-Stroke, is a temporary period of Stroke-Like symptoms that typically resolve to normal within 24-48 hours and doesn't cause permanent damage or complications.

Consider a TIA as a warning that a full-blown stroke is imminent.

Stroke Risk Rises With Years of Drinking In Young Adults - A Korean Study published Nov 2, in "Neurology" journal.

Using data from a Korean national health database, the researchers identified roughly 1.5 million adults aged 20-39 years (mean age 29.5 years, 72% male) who had four consecutive annual health examinations during which they were asked about their alcohol use.

During a median follow up of roughly 6 years, a total of 3153 individuals suffered a stroke (1773 ischemic and 1535 hemorrhagic).

After multivariate adjustment accounting for other factors that could affect the risk for stroke, such as hypertension, smoking and body mass index, the risk of stroke increased steadily with the number of years of moderate to heavy drinking, defined as 105 grams or more of alcohol per week.

Compared with light drinkers or teetotalers, stroke risk increased 19% with 2 years of moderate to heavy drinking and 22% and 23%, respectively, for 3 and 4 years of moderate or heaving drinking.

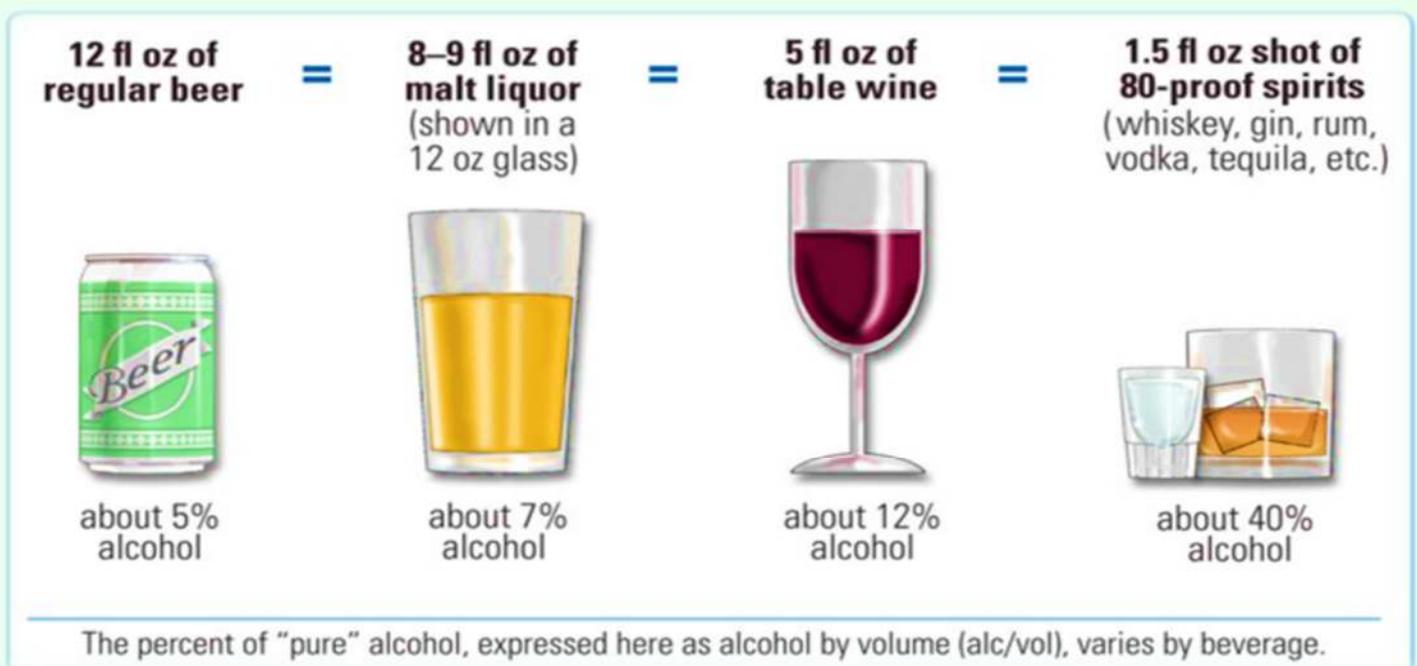
Moderate to heavy drinking is defined as 105grams or more of alcohol per week which is equivalent to;

- ⇒ **7 cans of beer** (1 can = 12 ounces of 5% alcohol content)
- ⇒ **5 glasses of table wine** (1 glass= 5 ounces of 12% alcohol content)
- ⇒ **1 shot distilled spirits** (1 shot = 1.5 ounces of 40% alcohol content)

At any age, if you are drinking more than 1 can of beer, 1 glass of wine or 1 shot of spirits DAILY, you are putting your brain health and heart health at risk with the longevity of drinking in years.

In the United States, one "standard" drink (or one alcoholic drink equivalent) contains roughly **14 grams of pure alcohol**, which is found in: 12 ounces of regular beer, which is usually about 5% alcohol. 5 ounces of wine, which is typically about 12% alcohol. 1.5 ounces of distilled spirits, which is about 40% alcohol■

Author: Dr Isireli Biumaitotoya





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Civil Aviation Authority of Fiji

Be In Control Of Your Workspace



Put Tools Back In Their Proper Place

More info @ www.caaf.org.fj