

AVIATION SAFETY BULLETIN



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ISSUE 4 | 2020

An official publication of the Civil Aviation Authority of Fiji



Drone Safety This Festive Season

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

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MENTAL WELL-BEING IN AVIATION



INTERNATIONAL CIVIL AVIATION DAY



CYCLONE SEASON IS HERE ARE YOU PREPARED

Cover Photo from CAAF

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From the Acting Chief Executive

Bula Vinaka and welcome to the Civil Aviation Authority of Fiji's fourth and final edition of Aviation Safety Bulletin for 2020.

As we approach the end of the year and prepare to embark on 2021, it is an opportune time to reflect on the year that has been, take heed of lessons learnt and make plans for the year that is to be.

This year has brought with it many challenges. Fiji's aviation industry entered 2020 with much enthusiasm and anticipation; forecast growth in air traffic and activity, entry of new aircraft on the scene, implementation of air navigation service and aerodromes initiatives to enable more efficient use of airspace and aerodromes, implementation of new aviation security initiatives and a review of the Civil Aviation Authority's legislation, standards, structure and work plans to improve the effective implementation of our safety and security oversight responsibilities.

The rapid outbreak of the COVID-19 pandemic in the first quarter of this year threw a spanner in the works. The immediate decline in air travel as a result of COVID-19 related travel restrictions and quarantine requirements caused a ripple effect, disrupting best laid plans for the acquisition of new aircraft and implementation plans of identified initiatives. The aviation industry, including CAAF, has had to readjust its plans and implement measures to ensure the survival of our industry; including the restart and recovery of Fiji's aviation industry so that it is done in a safe and efficient manner, moving in parallel with the public health situation and taking into account expert medical advice, as well as existing safety and security precautions to ensure that the procedures we implement now are fit for purpose and sustainable.

Fiji's Harmonisation Project; review of the secondary aviation legislation i.e. Air Navigation Regulations, embarked on by the CAAF, had been put on hold pending further review as a result of the duration of time the

project had taken and the numerous amendments to the International Civil Aviation Organisation's (ICAO) standards and recommended practices during this period. The ICAO Coordinated Validation Mission (ICVM) on Fiji conducted in August 2019 highlighted the need for a full review of Fiji's primary aviation legislation. This I am happy to report, with Government's assistance, was commenced in 2020 and it is envisaged that this activity will be completed in the first quarter of 2021. Following this, the next phase will be the review of the secondary aviation legislation.

CAAF's focus moving into 2021 will be to continue to discharge its responsibilities under the Civil Aviation Act 1979 (as amended), with a greater focus on improving the implementation of the eight critical elements of our safety and security oversight system. This has commenced with the review of the primary aviation legislation and will flow on to the review of the secondary aviation legislation, standards documents and industry guidance material.

Moving forward, we will continue to engage meaningfully with stakeholders in 2021. The proposed establishment of an Aviation Industry Consultation Committee features strongly in our plans and demonstrates our ongoing commitment to quality service delivery.

Fiji is also scheduled to undergo an aviation security audit as part of ICAO's Universal Security Audit Programme in 2021 and to this end CAAF has commenced preparations for this and will be engaging more widely with stakeholders on this front.

I hope you find this Issue 4, 2020 of the Aviation Safety Bulletin interesting and informative. We are open to suggestions on the types of articles you wish to see published in the future and we welcome your feedback.

Finally, I take this opportunity to acknowledge the CAAF staff for their hard work and commitment to aviation safety and security through-out the year and of course, to you, the Fiji aviation community for the role you play in ensuring safe skies for all.

Vinaka

**MS THERESA LEVESTAM
ACTING CHIEF EXECUTIVE**

MENTAL WELL BEING

In Aviation

During The Covid-19 Pandemic

The following information has been uplifted from the International Civil Aviation Organization (ICAO) Electronic Bulletin 2020/55 issued 10th November 2020 under the authority of the Secretary General.

The ICAO has developed guidance specifically to promote, maintain and support mental well-being in aviation during the COVID-19 pandemic.

COVID-19 has changed the aviation operational environment and the travel experience for both aviation personnel and passengers. The implementation of additional processes, procedures, public health measures and border control measures has increased the stress imposed on all concerned.

The COVID-19 pandemic, with all its associated consequences, has had a significant impact on the mental health and well-being of both passengers and aviation personnel, which could impact operational safety.

It is the responsibility of all aviation stakeholders to play a proactive role in maintaining aviation safety while preventing the transmission of COVID-19 and safeguarding the health and safety of aviation personnel and passengers.

In the context of providing a psycho-socially safe and supportive aviation environment for aviation personnel and passengers, "aviation personnel" refers to personnel such as pilots, cabin crew, air traffic controllers, technical operations personnel, ground service personnel, aerodrome personnel and aviation medical examiners (AMEs).

Stakeholders are requested to encourage the application of the principles to support aviation personnel and passengers and consider the peer support guidance described in the following pages.

Principles To Support Aviation Personnel And Passengers During The Covid-19 Pandemic

All Stakeholders

Collaborate in multi-sector, multi-stakeholder activities to promote, maintain and support mental health and well-being in aviation personnel to ensure operational safety by:

1. Recognizing that there are different cultural approaches and promoting a common understanding of supportive behaviors and activities;
2. Acknowledging the wide range of emotions in response to COVID-19; these are accepted as normal reactions to an abnormal situation; and
3. Providing a psycho-socially safe and supportive environment.

National Aviation Authorities

1. Ensure collaboration between the aviation authority, aviation medical examiners, aviation medical assessors, other healthcare professionals, peer support groups and aviation personnel to support the mental health and well-being for all aviation personnel;
2. Provide appropriate guidance and support to aviation medical examiners to manage the impact of COVID-19 on mental health and well-being in a consistent manner;
3. Encourage stakeholders to make available appropriate resources and tools to minimize the mental health impact of COVID-19, including peer support programmes, by referring to ICAO guidance and other relevant supportive material; and
4. Communicate on a regular basis to all stakeholders the means to maintain licensing and proficiency to enable safe performance of duties.

Professional and Industry Associations

1. Provide access to appropriate services to support health and well-being; and
2. Make peer support programmes available to all aviation personnel.

Industry Service Providers (e.g. aircraft operators, airports, air traffic control organizations, training organizations, etc.)

1. Raise awareness among leadership and management to support well-being among aviation personnel;
2. Continue to offer existing resources to support aviation personnel including peer support, employee assistance programmes (EAP) or other programmes;
3. As far as possible extend access to supportive resources to aviation personnel that have been furloughed, laid off or made redundant;
4. In the absence of employer-based resources, inform aviation personnel of other available resources;
5. Facilitate access to support programmes for all categories of aviation personnel (e.g. pilots, cabin crew, air traffic controllers, ground crew, maintenance personnel, aerodrome personnel etc.);
6. Educate on fitness for duty, self-care and the availability of peer support and encourage training programmes in this regard;
7. Ensure that the safety management system (SMS) addresses COVID-19 related concerns including the biological and psycho-social risks and its interactions with flight safety; and

8. Identify the best channels to reach out to passengers and provide the relevant information to assist passengers in their preparations to travel.

Aviation Medical Assessors, Aviation Medical Examiners (AMEs) and related Healthcare Professionals

1. Provide a supportive environment for aviation personnel to address their well-being;
2. Proactively discuss work-related challenges during medical certification examinations;
3. Refer for further appropriate support (e.g., to Peer Support Programmes or specialist mental health support in a collaborative framework);
4. Actively collaborate with fellow AMEs to encourage support, scientific information exchange and inform decision making, which is consistent with national requirements;
5. Maintain awareness of peer support groups (if available) and keep contact details updated to facilitate referral of aviation personnel for appropriate support; and
6. Refer to health professionals, as appropriate, where peer support groups are not available or where more professional support is needed.

Aviation Personnel

1. Practice self-care in all dimensions including healthy nutrition, regular exercise, obtaining sufficient sleep, practicing mindfulness, reducing stressors, engaging in healthy behaviors and regular interactions with a personal support network; and
2. Seek support pro-actively to maintain well-being and encourage fellow employees to seek support as needed.

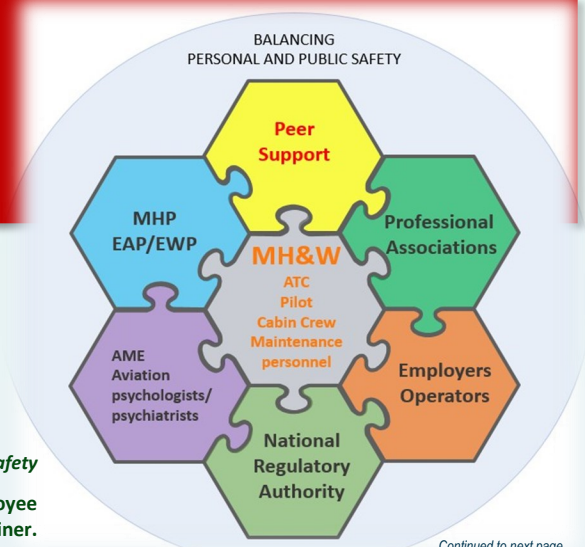
PEER SUPPORT: CONTRIBUTING TO A POSITIVE SAFETY CULTURE

Creating a Positive Safety Culture through promoting Personal Well-Being and Public Safety

The World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Mental health is further defined as a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

Diagram 1: Creating a Positive Safety Culture through promoting Personal Well-Being and Public Safety

Note: MH&W: Mental Health and Well-Being; MHP: Mental Health Professional; EAP: Employee Assistance Programme; EWP: Employee Well-Being Programme; AME: Aviation Medical Examiner.



Continued to next page...

Mental Well Being In Aviation During The Covid-19 Pandemic **cont....**

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At the centre of this jigsaw puzzle is the Mental Health & Well-Being of those who work in safety critical environments within the aviation industry. It is essential to promote psychosocial safety of persons *working within* the aviation industry to support the *safety goals of* the industry and the needs of its stakeholders and the public.

Aviation is a high risk, high reliability, safety critical industry. Poor health may pose a risk to the safety of the system and the public. The safety management system (SMS), as provided for by ICAO *Annex 19 – Safety Management*, is intended to support the identification of hazards and the mitigation of risks associated with the potential outcomes of those hazards. The effectiveness of an SMS depends on a positive safety culture and an environment, which supports the health and performance of all persons working *within* the aviation industry.

Without a psychologically safe environment, aviation personnel will be less willing to divulge the impact of stresses and demands and ensuing consequences on their health, well-being and performance for fear of stigma and other repercussions. This in turn will have an adverse impact on Operational Safety.

A basic need of every individual is safety, including feeling safe at work (i.e., an environment where policies exist in which the risk and threat to the individual's health and well-being are recognized and managed). A means to accomplish this is to build layers or components of protection and support into the system. One of those components is support from well-trained colleagues with appropriate skills (i.e., peer- based support).

Peer-support is an often-overlooked, under-valued and under-utilized component in providing a psychologically safe environment but can be a vital and critical first line of defense for personnel experiencing distress. Where appropriate or medically indicated, peer supporters may liaise with Aviation Health Professionals such as AMEs or Aviation Psychologists/ Psychiatrists to provide individuals with additionally required support.

The BEA accident investigation report for 4U9525, the Germanwings accident in 2015, stated as one of its safety recommendations: “promote the implementation of peer support groups to provide a process... to report and discuss personal and *mental health* issues, with the assurance that information will be kept *in- confidence* in a *just-culture* work environment, and that [they] will be supported as well as guided with the aim of providing them with help, ensuring flight safety” (BEA accident investigation report, 2016, p103). Although this recommendation was directed at pilots, it is applicable and appropriate to all safety critical personnel (i.e., pilots, air traffic controllers, cabin crew and maintenance personnel).

To maintain and improve operational safety a multi-faceted, collaborative approach to manage the health and well-being of aviation personnel needs to be strengthened. The services provided by the stakeholders in the jigsaw puzzle can work collaboratively to form a well-organized system. This system can support health and well-being and prevent health issues from having a negative impact to the individual's career and the organization's safety performance.

The Different Dimensions of Peer Support

Diagram 2 focuses on the Peer Support piece of Diagram 1, elaborating on its different elements and core topics.

Peer support is comprised of an array of different programmes whereby a colleague can obtain assistance regarding any topic that is impacting their mental health and well-being through the support of a fellow colleague.

A formal Peer Support Programme provides an emotionally safe, non-judgmental environment, where confidential information can be shared. Peers are well-trained and skilled colleagues, who are trustworthy, share common professional qualifications and experiences, may have encountered similar situations, usually works within the same or similar operational context and can relate to his or her colleague's situation.

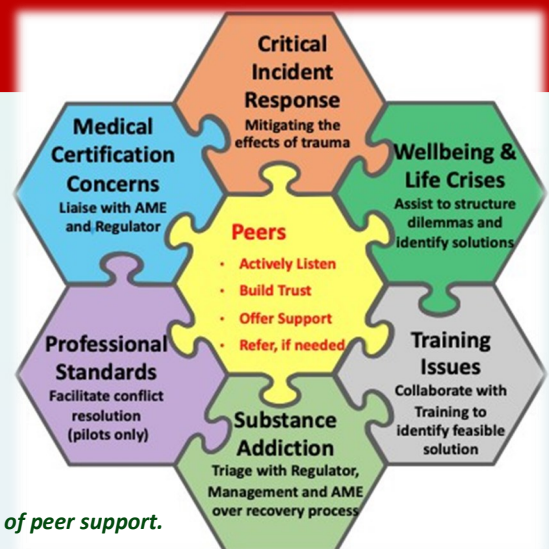


Diagram 2: The different dimensions of peer support.

The core tasks of the peer volunteer are to actively listen, offer support and refer to relevant appropriate professionals when the problem is outside the scope of their training and experience. It is recommended that the peer team are trained and supervised by a suitably qualified mental health professional.

Peer support for safety critical personnel is becoming a common concept globally and is developing across a variety of organizations and industries. During the COVID-19 pandemic specifically, but in the future in general, peer support could provide benefits to all aviation personnel engaged in safety-critical activities.

Confidentiality is a core principle of peer support; however, it should never be at the expense of aviation safety. Peer Support Programmes need to maintain independence to ensure that they are trusted by the users and its independence should be supported by management.

They also require endorsement and validation as part of an organization’s safety policies, and specifically, integration into the aspects of SMS, which support aviation personnel in performing their duties. In order for Peer Support Programmes to contribute to safety, anonymized data from peer programmes should contribute to the organization’s safety performance monitoring mechanisms.

The topics identified in Diagram 2 reflect the key dimensions where aviation personnel may need support:

- Critical Incident Response (mitigation of possible trauma following accidents and incidents);
- Substance Use and Dependency Programme;
- Well-being topics;
- Aeromedical concerns;
- Training and Performance Assistance; and
- Professional Standards.

Significant information on the design and implementation of Peer Support Programmes is contained in the following resources:

- The International Federation of Airline Pilots’ Associations (IFALPA) Pilot Assistance Manual, 2018 (<https://www.ifalpa.org/media/2271/pilot-assistance-manual-march-2018.pdf>).
- The European Pilot Peer Support Initiative (EPPSI) Guide on Pilot Peer Support, 2020 (<http://eppsi.eu/news/eppsi-guide-on-peer-support>).

Levels of care in the Mental Health and Well-Being Spectrum

This diagram describes the relationship between an individual’s perceived sense of mental well-being, the spectrum of mental health and well-being (deteriorating from optimal health to mental ill health or mental disease) and the level of intervention that might be needed by an individual.

It illustrates that at any point in time, individuals may vary as to where they locate themselves on the spectrum of mental health and well-being. Different levels of intervention might be needed at different points of the mental health spectrum, with different options of assistance being available to them.

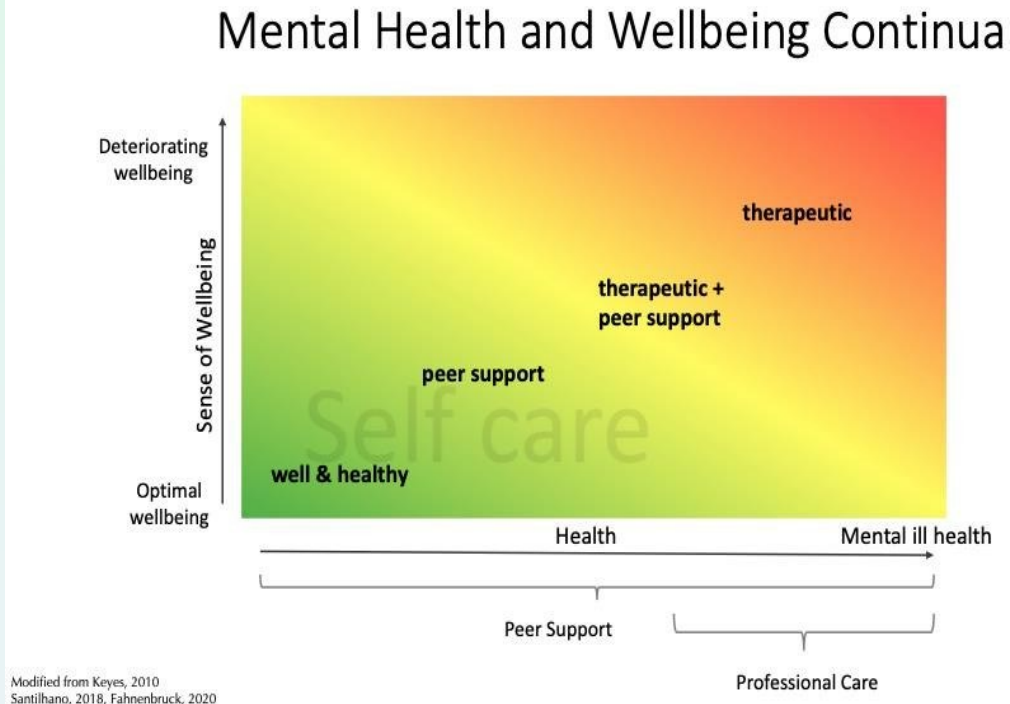


Diagram 3: Levels of care in the Mental Health and Well-Being Spectrum.

Mental Well Being In Aviation During The Covid-19 Pandemic **cont....**

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Self-care is a critical component of maintaining mental health and a sense of well-being at all points on the spectrum. The WHO defines self-care as “the ability of individuals, families and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a healthcare provider”. Peer support can play a role in the early identification of a deterioration in mental health or well-being. Peer support plays a critical role throughout every stage of the spectrum to guide the person in need and facilitate early access to the appropriate level of support and intervention. It is also important in recovery and return to work

processes.

Peer support offers a personal safety net that is non-threatening, preventive and empowering. However, should an individual deteriorate in their perceived sense of well-being (e.g., having difficulties coping with daily life or experiencing negative feelings) or exhibit symptoms or signs of a mental illness, therapeutic support and professional care is necessary.

Professional support from either an aviation medical practitioner, aviation psychologist/psychiatrist or a mental health professional remains relevant at any stage.

Dimensions of Self-Care



HOW TO KEEP MENTALLY WELL

Fitness to Fly – A Medical Guide for Pilots (International Civil Aviation Organization), 2018

Diagram 4: Dimensions of Self-Care

The processes and techniques of the different aspects can be self-taught through various accessible self-help resources or taught by others through information sharing and education. Such knowledge can enable individuals to identify their needs and determine the most effective means of self-care (specifically applicable to them) to support and optimise their health as an ongoing process throughout life.

Each separate dimension is important and forms part of a holistic approach supporting a balanced life. Specific dimensions may vary

in importance or significance depending on the individual’s motivation and circumstances.

Aviation Medical Examiners, aviation psychologists/psychiatrists, Peer Support Programmes and Crew Resource Management Programmes should all promote self-care and reinforce the need for all aviation personnel to address all the dimensions as important components of health (and building resilience), contributing to aviation safety. ■



07th December

International Civil Aviation Day

Seven December each year is recognized around the world as *International Civil Aviation Day*.

The anniversary this year will be remembered as a pivotal point in the history of the global civil aviation sector, given that the COVID-19 pandemic has resulted in an unprecedented loss of jobs and revenue, and of the air connectivity that underpins sustainable development and many humanitarian efforts worldwide.

At this unique moment in the history of international aviation, ICAO's Council President Mr. *Salvatore Sciacchitano*, and its Secretary General Dr. Fang Liu, join [United Nations Secretary-General António Guterres](#) in highlighting the important air transport priorities now facing the world.

The theme for *International Civil Aviation Day 2020* is:

"Advancing Innovation for Global Aviation Development"

A commitment to innovation has always been at the heart of aviation, and it has been instrumental to the continuous performance improvements countries have realized, through ICAO, for aviation safety, security, efficiency, and the economic and environmental sustainability of international operations.

Innovation will also be at the heart of our recovery strategies and partnerships as we build back better post-pandemic, establishing a renewed global network that is greener and more resilient in the face of future pandemic threats, and more dependable in terms of the significant socio-economic benefits which air connectivity delivers to modern societies.

Today, the ICAO Council, including its Council Aviation Recovery Taskforce, continues to encourage innovative and

prudent measures to help countries respond to and ultimately recover from COVID-19. This work is being supported by the ICAO Secretariat, which has been innovating its own special adjustments to global aviation standards to keep vital operations possible, and establishing dedicated pandemic resources and monitoring tools to keep countries effective and coordinated in their air transport responses.

Together these actions are keeping crucial air cargo supply chains functioning when the world needs them most, facilitating the provision of vital humanitarian and repatriation air services to bring families back together, helping to protect passengers and air crew each and every day, and are being heavily relied upon to move vaccines and other perishable and high-value goods.

Looking forward to a post-pandemic world, innovation will be at the very heart of the new era in aviation which is now dawning, and to the advances in autonomous aircraft, renewable power and propulsion sources, sub-orbital flight, artificial intelligence, additive manufacturing, big data, blockchain, and many other exciting developments which are changing the face of flight as we know it.

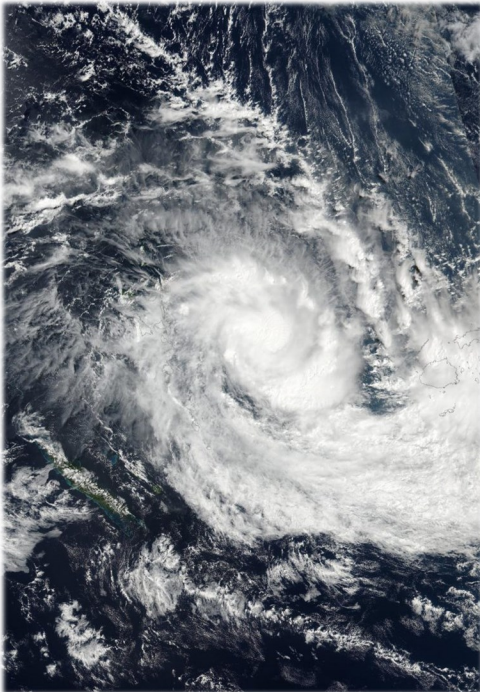
Success in such efforts has always relied on a worldwide commitment to the standardization, harmonization, and cooperation which countries and industry achieve together at ICAO. These duties and capabilities are more important than ever today, as we confront together the dual challenges of controlling COVID-19, and mitigating the incredibly severe socio-economic effects it has led to by restricting air connectivity for both developed and developing societies.

The Board, and Staff of the Civil Aviation Authority of Fiji takes this opportunity to thank all industry partners for your contribution to civil aviation and your continued commitment to ensuring a safe and secure civil aviation system. ■



THE CYCLONE SEASON IS HERE

ARE YOU PREPARED?



A GUIDE TO CYCLONES & FLOODING

WHAT THEY ARE

Severe cyclones are the greatest natural storms known to humankind. In the Fiji Islands each year they mainly occur from November through to March and sometimes in other months.

WHAT THEY DO

Cyclones often convert harmless items into deadly missiles. A sheet of galvanized iron for example, on becoming mobile, may become a guillotine. A coconut, a cannon ball. Stones have been known to become embedded up to 150mm (6") deep in tree trunks.

Rain often causes direct damage and contributes to wind damage by lifting foundations and undermining trees. Rain quickly brings heavy flooding. The greatest danger for people is being drowned in swollen rivers or creeks.

In coastal areas, the sea may rise considerably above normal levels by as much as 3-6 meters (10-12 feet). The risk of drowning in these areas is also very high.



POINTS TO REMEMBER:

- (1) Cyclones don't always give hours of warning. Sometimes they form just offshore. Therefore follow warnings issued by Fiji Meteorological (Met) Office on Radio Fiji or at www.met.gov.fj.
- (2) Beware of the "Eye". If the center ("Eye") of a cyclone passes overhead, there will be a sudden drop in the wind. This may last for a few minutes up to an hour or two. Then, the wind will blow again just as hard as before, but this time from the opposite direction. During the calm period, make emergency repairs but stay close to shelter.
- (3) A cyclone can completely or partly change its direction of travel. Sometimes they double back on themselves. Also, they have been known to stay in one place for several hours. It is important therefore to keep listening to your radio at all times, even after the cyclone has passed.

By taking early action and following the simple precautions, the damage to life and property can be reduced. These rules you should know NOW. Study the information presented and know exactly what to do if a cyclone warning is issued. Employers need to hold cyclone drills to protect staff and minimize damage to buildings, equipment and exposed materials. There is a cyclone safety job – and a responsibility – for every member of the community. Many of the precautions listed here can be taken immediately.



PRECAUTIONS TO TAKE:

(1) During Cyclone Season (November to end of March)

Keep trees trimmed back from overhead wires, windows, buildings, etc.

Remove any temporary structures as soon as they are no longer needed.

Cut coconuts from all trees located in your area.

Remove all loose items such as wood, building materials, gardening implements, etc. from outside secure indoors.

Have available cyclone screens, shutters or boards to protect windows. Practice putting shutters up at the beginning of the season. Make sure that they are all in good repair and that all openings are protected.

Have available the following items:- wood saw * hammer and nails * spade or shovel * cane knife * torch and batteries * nylon rope * large plastic bags or sheets (heavy gage) * portable radio and batteries * clean containers for water * first-aid kit * fuel for lamps and stove * a supply of canned or dry food. Other useful items include tarpaulins, sheets of plywood and 75x50 mm timber for battening down.

Ensure that doors and window catches are in good condition and that building sheathing is in good repair.

(2) During a tropical Cyclone Alert

Plan what you will do in the event of a cyclone.

Listen to latest bulletins on Radio Fiji or at www.met.gov.fj otherwise continue normal activities.

(3) During a Gale, Storm or Hurricane Warning

Check your emergency supplies.

Store drinking water.

Protect windows with screens, shutters or boards.

Open and secure a small window on the lee or sheltered side of the building. This could reduce damage should a window or door fall during the cyclone.

Haul boats to safety or moor them securely.

Dismantle all temporary structures and either tie down or remove to indoors, any other loose articles.

Fill up fuel tanks of any vehicles.

Remove any animals to high ground.

(4) During a Cyclone

Stay indoors while there is danger of flying debris.

Keep away from drains, culverts, streams, rivers, beaches and coastal areas, as you may be swept away by exceptionally heavy flooding or high tide.

Make emergency repairs if the wind drops suddenly, as the "eye" of the cyclone may be passing overhead. However, stay close to shelter and be prepared for the wind to blow again from the other direction. Reverse the procedures for opening a small window.

The Cyclone Season Is Here

Are You Prepared? cont....

(5) After The Cyclone

- **Avoid** fallen power lines, report these at once. Report all damaged sewerage, water pipes, bridges and road washouts etc.
- **Check** for spoilage of refrigerator food, however keep your deep freezer door closed if power not restored. The freezer should keep food frozen for 12-24 hours if the door is not opened.
- **Beware** of flooding as some streams may still be rapidly rising.
- **Report** to management as to injuries; state of buildings; impairments of utilities; community services and conditions (e.g., roads, sewers, water, etc)
- **Secure** the site. Where possible, lock doors and fences.
- **Inspect** roofs (entire area and perimeter) , roof mounted equipment, walls, windows (outside and inside), doors and entire yard.
- **Clean** roof drains and remove debris from roof to prevent drainage problems.
- **Eliminate** safety hazards such as leaking gas or flammable liquids, hazardous materials releases or live wires.
- **Visually** check damaged bus bars, conductors and insulators before reenergizing main electrical distribution systems. In case of doubt, contact an electrician. Do not touch or move exposed wires.
- **Check** foundations and piping.
- **Repair** damage to automatic fire sprinkler systems and restore protection as soon as possible. Use impairment monitoring systems whenever automatic fire sprinklers and water supplies are impaired.
- **Cover** computer, machinery and stock with tarpaulins and waterproof covers.
- **Get** as many goods as possible off the floor, or ship them out of the building
- **Isolate**, neutralize or remove any chemicals that can react violently with each other.
- **Contact** the gas utility where applicable, to determine if it is advisable to turn off gas valves .

TROPICAL CYCLONE ALERTS AND WARNINGS

The Fiji Meteorological Service maintains Tropical Cyclone Warning Centers that serve the southwest Pacific region. When a tropical cyclone appears to be developing in an area where it could become a danger to Fiji, the Tropical Cyclone Warning Centre will issue a TROPICAL CYCLONE ALERT and give progress reports until either specific warnings become necessary or the threat ceases.

The ALERT gives an opportunity to check on emergency supplies, to plan any final action that may be needed. Please follow developments through news bulletins broadcast from Radio Fiji | www.met.gov.fj.

If WARNINGS becomes necessary for any part of Fiji, they will be designated by international conventions as GALE WARNING, STORM WARNING or HURRICANE WARNING, according to the maximum wind force expected in the specified areas.

Wind speeds when quoted, refer to sustained average speeds: speeds of momentary gusts may be considerably greater, especially in hilly areas.

WARNINGS

- GALE / CAGI KAUKAUWA / ATI TEZ HAWA** (Winds over 33 knots but under 47 knots): Expect very rough seas with danger to small boats, minor damage on land, broken branches etc.
- STORM / CAVA / ANDHI** (Winds over 47 knots but under 63 knots): Expect high seas and heavy surf, some damage to trees, overhead wires, bures, etc., also heavy rain and flooding.
- HURRICANE / CAGILABA / TOOFAN** (Winds over 63 knots): Expect very high seas and heavy surf, possibility of exceptionally high tides, severe damage to trees and buildings, also torrential rain and flooding. When STORM or HURRICANE WARNINGS are in force, new warnings will normally be issued every three hours.





FLOOD AWARENESS

The impact of floods, like other natural disasters can be lessened if there is an effective emergency plan and if flood control measures are taken.

DURING THE FLOOD

- Check dikes/flood walls every hour (if safe).
- Check doors/windows/air intakes/ grates.
- Check yards/basements.
- Check electrical control rooms from the outside.

NOTE: Do not operate electrical equipment if floor or equipment is wet or moist. Do not enter wet control rooms if equipment is energized.

AFTER THE FLOOD

- Contact your Marsh Account Manager.
- Call your electrical and moisture control contractors.
- Recall employees as needed. Important Note for Recovery • Contact customers and suppliers.
- Contact your community engineering department for information on roads, water, waste and sewage services.
- Contact your utility companies for information on gas and electrical supplies.
- Start salvages clean-up operations immediately.

- Rent or buy: dumpster; shovels, high pressure hoses/nozzles; mops; high volume fans.
- Clean, dry and lubricate equipment.
- Remove sandbags, flood gates and other temporary equipment.
- Restore electrical power only after inspection by electrician.
- Are hazardous/flammable tanks secure, not leaking?
- Relocate undamaged materials to prevent further damage.
- Restore fire alarms/protection equipment.
- Remove all combustible materials used in clean-up.
- Permit hot work (cutting/welding) only after fire protection equipment is restored.
- Contact community health department for information on sanitizing water, food and sanitary facilities. ■



PREPARE AND PREVENT, DON'T REPAIR AND REPENT.

BOEING

Boeing

737 MAX

RETURNS TO SERVICE

FAA Administrator Steve Dickson on **18th November 2020**, signed an order that paves the way for the Boeing 737 MAX to return to commercial service. Administrator Dickson's action followed a comprehensive and methodical safety review process that took 20 months to complete. During that time, FAA employees worked diligently to identify and address the safety issues that played a role in the tragic loss of 346 lives aboard Lion Air Flight 610 and Ethiopian Airlines Flight 302.

Throughout the transparent process, the FAA cooperated closely with its foreign authority counterparts on every aspect of the return to service. Additionally, Administrator Dickson personally took the recommended pilot training and piloted the Boeing 737 MAX, so he could experience the handling of the aircraft firsthand.

In addition to rescinding the order that grounded the aircraft, the FAA published an Airworthiness Directive specifying design changes that must be made before the aircraft returns to service, issued a Continued Airworthiness Notification to the International Community (CANIC), and published the MAX Pilot training requirements. **These actions do not allow the MAX to return immediately to the skies.** The FAA [and

foreign authorities with their respective airlines] must approve 737 MAX pilot training program revisions for each U.S. airline operating the MAX and will retain its authority to issue airworthiness certificates and export certificates of airworthiness for all new 737 MAX aircraft manufactured since the FAA issued the grounding order. Furthermore, airlines that have parked their MAX aircraft [FJ has two in Alice Springs, Australia and three in Seattle, USA] must take required maintenance steps to prepare them to fly again.

The design and certification of this aircraft included an unprecedented level of **collaborative and independent reviews by aviation authorities around the world**. Those regulators have indicated that Boeing's design changes, together with the changes to crew procedures and training enhancements, will give them the confidence to validate the aircraft **as safe to fly in their respective countries and regions**. Following the return to service, the FAA will continue to work closely with all foreign civil aviation partners to **evaluate any potential additional enhancements** for the aircraft. The FAA and Foreign Authorities also will conduct the same rigorous, continued operational safety oversight of the MAX that both provide for the entire global commercial fleet. ■



YOUR FLIGHT STARTS BEFORE YOU GET IN THE AIRCRAFT

1



Licence valid? Validity, IR, Approvals & Medical to be current

2



Fit to fly? Must be physically and mentally ready for flight.

3



Check NOTAMs and Weather. Make a safe decision while still on the ground.

4



Weight & Balance calculated correctly? Stay within aircraft limits.

5



Thorough pre-flight to be conducted. Be mindful of FOD. Safety vests to be worn when airside.



The Year of Security Culture

Security is Everyone's Responsibility!

What is security culture?

Security culture is a set of norms, beliefs, values, attitudes and assumptions that are inherent in the daily operation of an organization and are reflected by the actions and behaviours of all entities and personnel within the organization. Security should be everyone's responsibility - from the ground up. Effective security culture is about:

- Recognizing that effective security is critical to business success;
- Establishing an appreciation of positive security practices among employees;
- Aligning security to core business goals; and
- Articulating security as a core value rather than as an obligation or a burdensome expense.

State of Play

The 40th Assembly designated 2020 as the *Year of Security Culture* (YOSC) making **security awareness** and **security culture** a priority.

The ICAO Council has approved a relaunch of the YOSC in **2021** due to COVID-19.

YOSC supports the **GASeP** priority action of “developing security culture and human capability”.

A Secretariat **Project Team** has been established to deliver and promote YOSC activities.

To ensure the YOSC is a success **global effort** are required.

Desire for a rolling worldwide programme of practical events to **raise the profile of security** in aviation.

Aims and Objective

- To encourage the aviation industry to think and act in a **security-conscious manner**.
- To embed security consciousness within normal airport operations - achieving a **balance of security, safety, facilitation and the passenger experience**.
- To promote an effective and sustainable security culture, as a critical core value endorsed from top management: **“security is everyone's responsibly”**.

A Global Effort

- **Global outreach** by Regions, States, Industry and Organizations is essential to help promote the YOSC and build momentum alongside AVSECP and Council support;
- Utilisation of **ICAO Networks** and **Stakeholders**: AVSECP POCs, ASTCs, ICAO-certified AVSEC Instructors, USAP-CMA National Coordinators, FAL contacts, and PMC Alumni.
- **Request for your support and feedback:**
 - to establish a calendar of worldwide practical security culture events;
 - to identify areas where ICAO might want to encourage States to do more in preparation for YOSC relaunch;
 - to promote local security culture campaigns and the benefits of a positive security culture.

Next Steps

- The **YOSC Project Team** is on hand to assist and share best practices.
- Activities include **Global Communications** with YOSC products (logo/banner/staff signatures/press releases) and a dedicated **ICAO security culture website** containing tools and resources.

Practical tools

- High-level endorsement of policies and procedures that define security culture and what effective security looks like.
- Flyers, posters, leaflets and advertising highlighting the importance of specific security measures.
- Exhibitions and workshops enabling all to better understand the importance/rationale of security culture.
- Public speaking, regular briefings and handouts that promote sustained security awareness.
- E-learning tools and digital media that reinforce messages on security culture.
- Internal communication platforms such as intranet articles, newsletters, brochures and videos that reinforce positive security culture.
- Reporting systems that guarantee the confidentiality of reports/reporters and an appropriate response. ■

Contact: yosc@icao.int

Source: *Uplifted from ICAO EB*

Security Is Everyone's Responsibility

Current ICAO Security Culture Resources



Security Culture Campaign Starter Pack



Security Culture Toolkit

For more information:

<https://www.icao.int/Security/Security-Culture/Pages/default.aspx>

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.



HOW MUCH HARM CAN A LITTLE LASER POINTER DO?

In recent years there has been a proliferation in the use of lasers outdoors for legitimate purposes such as laser shows and tests. More worryingly, there has also been an increase in the deliberate (and illegitimate) use of laser pointers to illuminate aircraft and sometimes air traffic control facilities.

With the holiday season upon us, the Civil Aviation Authority of Fiji (CAAF) wants to make sure your laser-light displays are not aimed into the sky.

Each year we receive reports from pilots who are distracted or temporarily blinded by residential laser-light displays. You might not realize this, but a well-meaning attempt to spread holiday cheer has the potential to create a serious safety risk to pilots and their passengers flying overhead.

So please make sure all laser lights are directed at your house and not into the sky. The extremely concentrated beams of laser lights reach much farther than you might realize.

If we become aware that your laser-light display affects pilots, we'll ask you to adjust them or turn them off. If your laser-light display continues to affect pilots, despite our warnings, you could face a civil penalty.

Laser strikes against aircraft continue to increase each year. Last previous years we received more than 100 reports of laser strikes against aircraft, and gradually decreases since we started tracking laser strikes and conducting public awareness on the safety risks it poses to the pilots.

Intentionally aiming a laser at an aircraft is a serious safety risk and violates national law. Many high-powered lasers can completely incapacitate pilots who are trying to fly safely to their destinations and may be carrying hundreds of passengers.

We work with the government, and local law enforcement agencies to pursue civil and criminal penalties against individuals who purposely aim a laser at an aircraft. We may impose civil penalties under CAA Act of up to \$1,000 per violation or imprisonment not exceeding 6 months.

CAA Fiji has worked with the national government to include national measures to restrict the sale, carriage and use of lasers as well as amending existing laws and statutes. Educating and awareness to the public in the safe use of pointers is part of the process and important as providing warning labels on the laser devices (especially those above 5mW) about the dangers of shining lasers at aircraft. ■



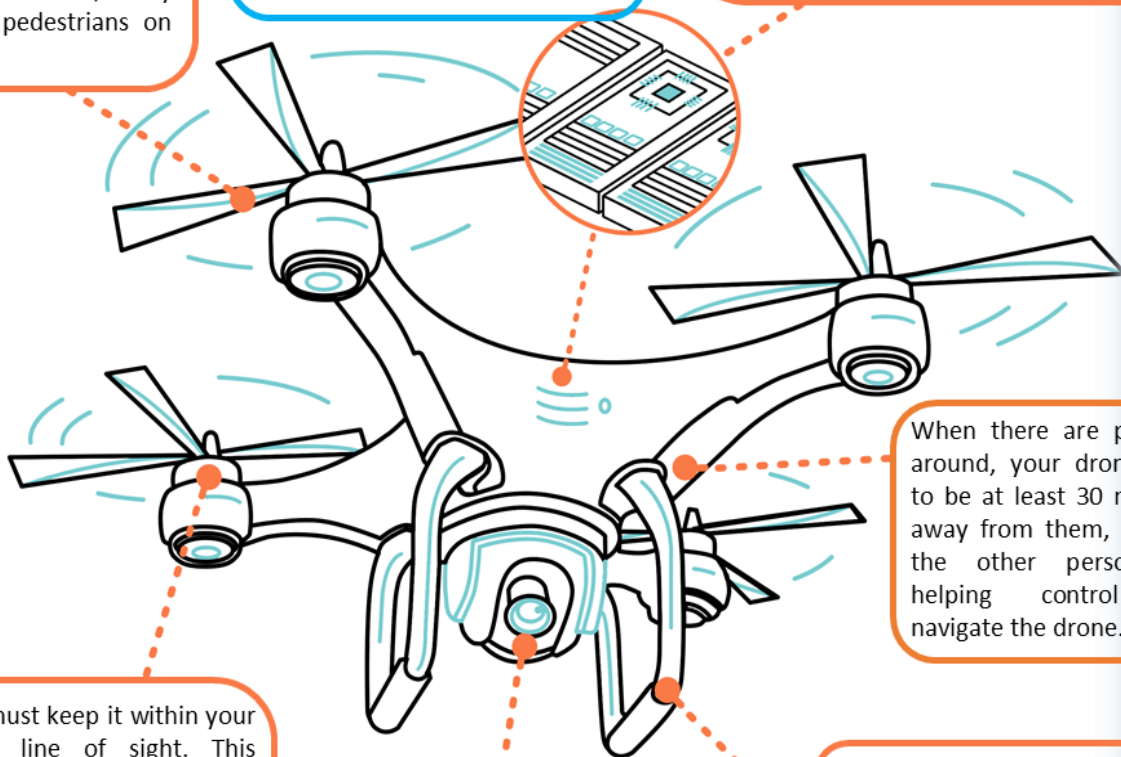
Drone Safety this Festive Season

Growing number of Fijians love their drones. In fact, there are more drones being flown above backyards, parks, and beaches than ever before. More drones in the sky means it's important that we all understand the rules that keep you and others around you safe, on the ground and in the air. Here are the rules that you need to know before take-off.

When your drone is up in the air, you can never fly your drone over anyone. This includes places like festivals, sporting events, populated beaches, busy roads and pedestrians on footpaths.

First and foremost, please register your Drone with the Civil Aviation Authority of Fiji. Seek further clarification by contacting the Authority on email info@caaf.org.fj or call 8923155.

If you're near a helicopter landing site or smaller aerodrome without a control tower, you cannot fly your drone within 3 kilometers unless it is a private airstrip or private helicopter landing site, and you have the permission of the owners or management of this sites to fly your drone. You must be aware of any flights that will be operating into these areas. You can only do this if manned aircraft are not operating in the area, if you are not within the airport itself or flying in areas where aircraft will arrive and depart, known as the approach or departure paths.



You must keep it within your visual line of sight. This means being able to navigate, orientate and see your drone with your own eyes at all times — not through a device like a video screen or goggles unless you have been trained to do so. You can fly with a VR screen in remote areas where there are no populous areas. Most drone crashes with VR happen because the pilot becomes disorientated and lose control of the drone.

Drones may be aircraft, but they can't fly anywhere near major airports. You must fly at least 5 kilometers away from an international / controlled airport, which generally have a control tower at them.

When there are people around, your drone has to be at least 30 metres away from them, unless the other person is helping control or navigate the drone.

You can only fly one drone at a time, and that drone can't go any higher than 61 metres — that's 200 feet or about half the length of a rugby ground.

Breaking the rules can also land you in trouble. You can be fined or even taken to Court. Drones are fun, and by following these simple rules, we can all enjoy the air together this festive season.

MOR Recorded

For The Year 2010 to 2019

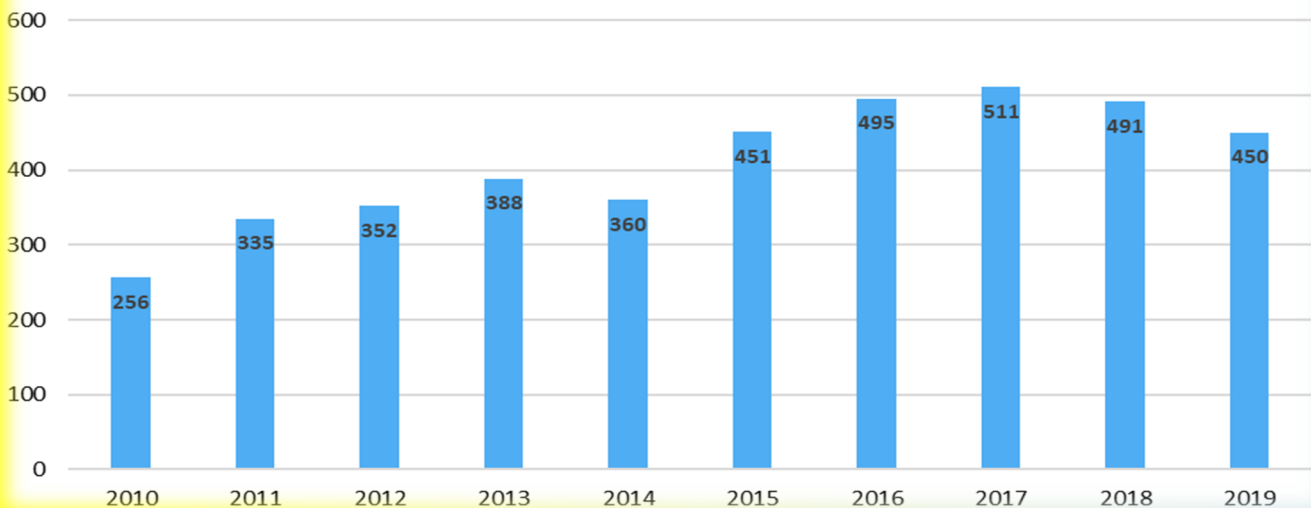
The Civil Aviation Authority of Fiji is involved in the process of receiving information or notification of an aviation related occurrence and the conduct of any subsequent reporting of the event and any investigation or assessment of the occurrence. It must be understood that the sole objective of accident and incident investigation is the prevention of accidents and incidents in accordance with ICAO Annex 13. It is not the purpose of this activity to apportion blame or liability.

It has been noted that over the years the number of aviation occurrences have been increasing and, in some cases, Fiji has experienced some very severe incidents as well as fatal accidents. As stated above that the purpose of an occurrence reporting system is for prevention of accidents and incidents within the aviation industry thus analyzing these occurrence data provides the Civil Aviation Authority and its stakeholders an insight of what went wrong where. With this, they are able to determine the causes of the problems and take actions to prevent future reoccurrence of same or similar incidents.

The following occurrences were recorded during 2010 and 2019:

YEAR	NO. OF INCIDENTS RECORDED
2010	256
2011	335
2012	352
2013	388
2014	360
2015	451
2016	495
2017	511
2018	491
2019	450

Total Number of MOR Received from Year 2010 to 2019



Over the years it evident from the graph that people understood the purpose of Occurrence Reports and also became aware that Occurrence Reports are treated confidentially to maintain full and free reporting from the aviation community and to protect the identity of the individual thus the number of reports being received has shown an upward trend. It also is an indication of the maturity of operators Safety Management System which encourages reporting of aviation incidents.

From 2017, there has been a decrease in the MORs being received as operators were addressing the issues not just using corrective actions but preventive actions are also being implemented which prevents future reoccurrence of similar or same issues. This shows the improvement in operators SMS. ■

2021 Pacific Regional Aviation Minister's Meeting Proceeding

PORT VILA:

Regional preparations are underway for a virtual Regional Aviation Minister's Meeting (RAMM) in April 2021 to progress Pacific aviation solutions, after the planned March 2020 RAMM in Papua New Guinea was postponed due to COVID-19 disruption.

At a Pacific Aviation Safety Office (PASO) Special Council Meeting hosted virtually on Wednesday, 9 December 2020, regional officials from 13 Pacific countries and two regional organisations committed to the April 2021 RAMM and agreed on the meeting's scope, including an 'in principle' agenda.

Another PASO Special Council Meeting is being scheduled for late March 2021 to confirm final arrangements and recommend a suite of actions for the Pacific Aviation Minister's to consider and discuss.

This strategic approach is intended to enable conversations about a regional response to recommendations from ICAO's Pacific Small Islands Developing States (PSIDS) Aviation Needs Analysis, amendments to the Pacific Islands Civil Aviation Safety and Security Treaty (PICASST), as well as the future direction and scope of PASO.

A key focus of the Minister's Meeting will be to seek agreement to develop a "Pacific Aviation Strategy" underpinned by a framework articulating regional aviation priorities. The proposed Strategy aims to address aviation safety and security oversight, international compliance, and capacity development.

PASO will continue to work cooperatively with the PIFS, other CROP Agencies, non-PASO Members including the Northern Pacific States and French territories, and international aviation partners including the International Civil Aviation Organisation (ICAO)

and the International Air Transport Association (IATA) to progress arrangements for the RAMM.

As the only aviation-focused regional organisation in the Pacific, it was agreed that PASO will support and facilitate the Minister's Meeting.

The officials agreed that the intention of the Minister's Meeting is to provide an important platform for all participating States to request dialogue on wide-ranging civil aviation matters aimed at ensuring there is a sustainable and connected aviation environment for the Pacific.

Senior aviation and foreign affairs officials from Australia, Cook Islands, Fiji, Kiribati, Niue, New Caledonia, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu joined officials from the Pacific Islands Forum Secretariat (PIFS) and PASO at this week's virtual meeting to progress the RAMM's arrangements.

"Regionally we need to work inclusively to progress strategic solutions for Pacific aviation. We are very fortunate to have this opportunity to advance the future of air connectivity for our region - together. The COVID-19 pandemic has affected everyone, and it has clearly shone a light on the importance of aviation connectivity in our Pacific region, especially for small island developing States."

"The Regional Aviation Minister's Meeting provides a platform for all Pacific Forum Members to come together and agree on our future through a formal declaration and outcome statement," said PASO Chairman Mr. Magele Hoe J. Viali.

Achieving a robust Pacific Region aviation system that delivers safe, secure, efficient, reliable, affordable, and sustainable air services, including mitigating COVID-19 air transport disruption, are on the Ministerial Meeting's agenda for discussion. ■

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. ■

Stroke Can Result From A Long-Haul Flight

Airline passengers have been reported to be at risk of thromboembolic complications, including deep vein thrombosis (DVT), pulmonary embolism (PE), femoral arterial thrombosis, and sudden cardiac death. Internet and MEDLINE searches revealed only one previous medical case report of stroke occurring in association with an airline flight. Beighton and Richards described three patients who collapsed during or immediately after a flight and were subsequently diagnosed with non-haemorrhagic stroke. One had a patent foramen-ovale and DVT, from which a detached clot was presumed to have occluded the brain.

Case Report

A 35 year old flight attendant suffered LT sided Stroke following a long-haul flight from LA to Nadi in 2010. She was diagnosed with LT Basal Ganglion Infarct with RT Hemiplegia and Aphasia. Her permanent impairment was assessed at 64% WPI.

Discussion

A case-control study found that patients with DVT or PE were significantly more likely to have had a recent journey of 4 hours or greater (by airplane, car, or train) than controls.⁹ The condition of DVT, with or without associated PE, was dubbed “economy class syndrome” by Symington and Stack, based on the theory that tightly packed seating puts passengers at risk. It is postulated that precipitating factors include venous stasis from prolonged sitting, pressure from the aircraft seat on the back of the legs, and hemoconcentration due to diminished fluid intake and water loss in the dry atmosphere of airplane cabins. It is generally assumed that PE results from DVT, not from generalized hypercoagulability. Only five of 15 patients with PE who developed symptoms within 4 days of a flight, however,

had demonstrable venous thrombosis. None had any pre-existing clotting abnormalities. With the availability of newer, more sensitive measures of clotting activity, further study of the effect of airline travel on blood coagulability is warranted.

Recommendations

If flying increases the risk of stroke and other thromboembolic complications, what should passengers do? Common sense recommendations to prevent DVT, which might also prevent other thromboembolic complications, include drinking adequate fluids, refraining from cigarette smoking and alcohol consumption, changing position frequently, exercising the lower limbs, and getting up and moving around.¹⁰ For patients at high risk, wearing support hose or taking acetylsalicylic acid has been recommended. This makes empirical sense and is unlikely to cause harm, but no scientific evidence supports these recommendations.

Conclusion

A relationship between long-distance air travel and DVT has been previously demonstrated. Passengers tightly squeezed into economy class seats might be at particular risk because of cramped conditions, in addition to decreased barometric pressure and low humidity. This case report suggests that flying might also result in stroke. Given the popularity of long-distance travel among aging baby boomers and the increasing age-related risks of stroke, the relationship between thromboembolic stroke and air travel requires further study. ■

(Article by *Dr Rauni Tikoinayau & Dr John Charles Fatiaki*
from *Epworth Clinic*)

[9] A case-control study; Travel is a risk factor for venous thromboembolic disease.

[10] economy class syndrome; a survey of 19 cases.

Managing Communicable Disease in Aviation

Why does ICAO consider that preparedness planning in the aviation sector is the key to managing disease outbreaks?

The primary strategy of the World Health Organization (WHO) to mitigate the risks from a communicable disease is to contain the disease within the outbreak area. The main containment activities include heightened awareness of the public, mobilization of risk mitigation efforts by the community, including social distancing in the outbreak area (isolation and quarantine) and the application of prophylactic medication and vaccination. To increase the effectiveness of this approach, the aviation sector can assist by reducing the likelihood of individual with a communicable disease travelling outside the outbreak area. This may require the establishment of traveller screening procedures at airports, medical assessment of travellers determined by screening as potentially infected by the disease in question, and communication with the public so that they are aware of the risks before setting out on their journey. ■

Source: ICAO News Release



CIVIL AVIATION AUTHORITY OF FIJI

ISO 9001:2015 CERTIFIED

The Board, Management & Staff of the Civil Aviation Authority of Fiji takes this opportunity to wish you all a very

***Merry Christmas and a
Healthy and Prosperous 2021***

OFFICE HOLIDAY CLOSURE

17TH DECEMBER 2020
(04:00PM)

TO

04TH JANUARY 2021
(08:00AM)

The Authority can be contacted for matters requiring immediate attention and emergencies on

(679) 9995-201

(679) 9995-202

(679) 9992-128