Issue 4, December 2010

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AVIATION SAFETY BULLETIN

A Publication of:

Civil Aviation Authority of the Fiji Islands
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CE's Message

2010 has been a difficult year for the aviation industry and while international passenger arrivals increased to record numbers in 2010 based on the feedback received many aviation stakeholders could not fully realize the commercial benefits for this increase.

It is therefore essential that we collaborate closely to streamline and improve our safety and security processes. This is vital for making quick and quality decisions so that aviation could harness commercial benefits offered by tourism and businesses, and support the growth of Fiji's economy without compromising safety and security standards.

Looking back at our performance in 2010, the Authority is pleased with it's overall achievements to effectively manage the safety and security of aviation activities. A number of milestone goals were achieved some of which worth noting are:

- No accident were recorded for Fiji Registered Aircraft last year. *(Statistics shown on page 9 of this Bulletin).*
- The Fiji ANR harmonization project began with the drafting of the proposed Fiji ANR Parts in February 2010. By December 2010 the drafting of 20 out of 32 parts and 51 Standard Documents were completed and the same were given to industry for consultation using the new consultation procedures.
- In May, 2010, the new consultation process to be followed when introducing new requirements was agreed and finalized. Under the new system the Air Safety and Ground Safety industry consultation committees were formed to be chaired by Captain Matereti Tuisue and Mr. Luke Koroi respectively.
- In October 2010, Airports Fiji Limited successfully replaced its ATM system with the new Aurora system. The 2nd part of their ATM replacement programme is now in progress which involves the upgrade of the of the surveillance system, to ADS-B capability and to extend the same benefit to modernize the domestic airspace surveillance and enhancing safety.
- Joint stakeholders meetings conducted throughout the year and implementation of effective wild life and bird control proved successful resulting in minimum damage to aircraft recorded in 2010.
- Steady progress in the Safety Management System introduction was noted in all of the operators' implementation plans. Where significant progress and maturity of safety culture were noted, the Authority was able to reward operators. For the first time in our history the Authority extended Air Pacific Air Operator's C certificate validity period to two years instead of the traditional one year.
- The Authority introduced Screeners Certification for aviation security screeners in December 2010.
- A total of 88 out of the 92 ICAO Universal Safety Oversight Audit Programme findings were closed for the audit conducted in 2006.
- Two new AOC holders joined the industry in 2010 including a 2nd helicopter operator. As a result, CAAFI for the first time hired Helicopter expert to improve its helicopter surveillance and licensing capacity.

The above and many others could not have been achieved without the good will, dedication and commitment of all our aviation stakeholder partners and staff. However, it was noted and identified through exchange of safety information and reporting system that the Authority needs to focus attention in a number of areas and carry out improvements.

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(CE's message continued from page 1..)

Threats to aviation safety and security are many and will continue to challenge us on every front. We are confident that with the Safety Management System (SMS) maturing in our organizations, we are able to establish systems to monitor and predict negative trend changes and become proactive in our mitigation and corrective actions. This however, can only be achieved if SMS becomes an integral part of all our business activities and is driven from top down and implemented across our organization and disciplines.

On behalf of the State and the Civil Aviation Authority of Fiji Islands we thank you for your support.

Flying Safely This Summer..

Following are extracts of article from an NZCAA Safety Magazine.

Summer is when many of us head back into the great blue beyond after winter hibernation. But before doing that, make sure you and your aircraft are ready. Here are some general tips and reminders.....

Pilot

Currency

It's not just your aircraft -you also have to be current.

Are you current on type? Do as much armchair flying as you possibly can. Revisit the location of all the controls with your eyes closed. Mentally run through the emergency procedures and any skills that have become rusty through disuse. Take every opportunity to re-familiarise yourself with the aircraft's features and performance capabilities.

Medical Conditions

Is your medical certificate current? If it isn't, you may have to allow extra time to complete the tests required.

All medical conditions that might affect you in the short or medium-term, and any changes in existing conditions, have to be reported. According to regulation 56 (2) of the Air Navigation Regulation the holder of the licence who experiences a known medical deficiency, an increase in a known medical deficiency, or a medically significant condition, for longer than seven days, should be examined and certified by a Medical Examiner before flying again.

Flight Planning

Your flight planning should always include a check of the current *AIP Supplements* and NOTAMs.

Make sure you have the latest information to use while flight planning. Is your *AIP*, up to date? Are your charts up to date?

As summer is always a busier time, make sure you are familiar with airspace categories and restrictions. .

Weather Checks

Summer might be 'fine' weather, but it is still a time of gusty winds, aggressive thermals, and towering cumulus cloud formations.

Make sure you study area forecasts (ARFORs), as well as aerodrome TAFs and METARs, to see the big picture.

Fuel Requirements

Civil Aviation Regulations specify minimum fuel requirements, but it is a good idea to always have some more for "mum and the kids".

General Tips

- Take daylight saving time into account while interpreting weather reports, and planning your flight.
- Remember that high summer temperatures can adversely affect aircraft performance, so always carry out performance calculations.
- Always check the weight and balance.
- Alcohol and flying don't mix. AIC 08/01 gives you more information regarding effects of drugs including alcohol and kava.
- Dehydration is another issue in summer. Make sure you always have drinking water with you in the aircraft.

Aircraft

Documentation

Is all your documentation and paperwork up to date?

- Is the Flight Manual up to date?
- Has the Review of Airworthiness been completed?
- Is the Tech Log accurate?
- Have you kept up with all Airworthiness Directives requirements?
- Has the routine inspection (100-hour check) been done?

Emergency Equipment

It is a good idea to check that all emergency equipment, including the ELT, is in working condition.

Every engine manufacturer has their own advice on how best to preserve engines. For example, Textron Lycoming recommends that air-cooled engines fly at least one hour per month (excluding taxi, takeoff and landing time). More detailed instructions on engine preservation are available on the Textron Lycoming web site, www.lycoming.textron.com.

Check your aircraft engine manufacturer's web site for information on how best to preserve your aircraft's engine.

Nests

Spring time is nesting time for birds. It is up to you to make sure that your aircraft is still a nest-free/bird-free zone. Check all aircraft cavities thoroughly, especially the tail cones and engine bays. Often, the only clues to the presence of birds in your aircraft are bird droppings and/or strands of grass.

General Tips

- Check the aircraft battery to see if it is fully charged. If you have a nickelcadmium (Ni-Cad) battery, thermal runaway, although a rare occurrence, is another issue to keep track of.
- Is the aircraft clean? Take it outside and give it a good wash and a clean - that is a good way to spot a possible problem.
- Keep your windscreen clean of bugs – keep a clean cloth with you to wipe the windscreen when required.
- Check the condition of your tyres to see if they are inflated and are at the right pressure.
- Have a good look at the brake discs for any corrosion of the joint between the disc and the drum that is bolted to the wheel.

Operational

Carburettor Ice

Generally, carburettor ice can be expected when the outside temperature is between -10'C and +30'C, with high humidity and visible moisture present. It is most likely between +10'C and +15'C, with a relative humidity of about 40 percent, so watch out for this over summer.

Grass Runways

More grass runways are available for use in summer, but they could still be soggy. This will increase your takeoff roll, and affect your braking ability on landing. Make sure the runway length is sufficient, given these conditions.

Positively identify the grass runway you intend to use to avoid landing on a strip of grass between the sealed and grass runways, or between the grass runway and a grass taxiway.

Another point to keep in mind is that the amount of grass seed increases in summer. Grass seeds can get into carburetors, generally due to carb heat being selected to HOT while on the ground. So take extra care while operating on grass runways and taxiways.

General Tips

- Sun strike can happen even in summer, although it is more common in winter when the sun is lower in the sky. It is more likely during sunrise or sunset.

Always remember that flying VFR is 'see and be seen' -keep a good lookout at all times.

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Pilot Safety

Pilots including those who fly any type or size of aircrafts are sometimes exposed to dangerous situations in the course of their jobs. But a pilot's job can be long and rewarding provided he/she pays careful attention to the hazards, prepares well, and keeps safety in mind before leaving the ground.

The need for maintenance and preflight checks is critical to the safety of the aircraft and its occupants. As a pilot, you should always check over your aircraft prior to every takeoff. Use a comprehensive checklist to examine the leading edge, fuel tank, flight controls, instruments, tire inflation, and other critical systems. Be prepared for an emergency in the air by carrying fire extinguishers, a small tool kit, and a first aid kit.

A pilot should not leave the ground until all of the aircraft equipment is in place and working properly. Even in emergency situations, such as firefighting, police work or a rescue, you can't afford to skip this crucial step unless you're prepared to become part of the problem yourself. Also, ensure that baggage and cargo are stowed and secured properly. Never carry more than the aircraft is rated or fueled to load.

Once the aircraft has checked out, begin to plan your flight. Work with flight dispatchers and aviation weather forecasters to determine the weather conditions at your point of origin, en route, and at your destination. Based on the weather information, choose a route, altitude, and speed that will provide you and your aircraft the safest and smoothest flight. Know the altitude and topography of the airports that you will access. Be aware of potential hazards such as power lines and construction and remain alert whenever entering a new air space.

Make sure you're equally prepared for either a takeoff or a landing. Before taking off, **wear your seatbelt**. Make sure that there are enough belts for everyone on the aircraft. During takeoffs and landings, concentrate on the runway, your speed, and the wind direction. Plan to use your instruments in bad weather. Make sure that you're rated to fly by instrument. Be aware of the hazards of visual illusions such as spatial disorientation, false horizons, flicker vertigo, fascination with a fixed object, ground light confusion, and others that can occur at dawn, dusk, during bad weather, and in low contrast situations such as flying over water or desert. To combat this problem, learn about all of the potential disorientation hazards and cross check your instruments frequently while in flight.

An aircraft pilot should be alert at all times. Make sure that you're adequately rested before each flight. Working at odd hours or for long shifts can cause fatigue, which in turn, can lead to mistakes. If you're under the weather or feeling the effects of drugs, medications, or alcohol, stay on the ground.

FCAIR

FIJI CONFIDENTIAL AVIATION INCIDENT REPORTING

FORMS AVAILABLE ON WEBSITE

www.caafi.org.fj

OR FRONT DESK, CAAFI HQ

Aviation Security Screener Certification Programme

The first batch security officers who attended the screeners certification programme examination

The Civil Aviation Authority of the Fiji Islands achieved a historic milestone on 23rd December 2010 when the first batch of aviation security officers attended the screener certification programme examination and tests, in order to be certified as aviation security officers.

ICAO Annex 17, Standard 3.4.3 requires that each Contracting State shall ensure that persons carrying out screening operations are certified according to the requirements of the National Civil Aviation Security Programme to ensure that performance standards are consistently and reliably achieved.

To establish this programme, it had indeed been a long and difficult road. The Authority's Aviation Security & Facilitation department (ASFD) adopted a phased approach in managing this project, and it took a few years before we finally arrived to the implementation phase. The Authority had since issued the first batch of aviation security screener certificates in January 2011.

Since the ASFD is now progressing on the implementation phase, it is timely to take this opportunity to thank the Board & Management of the Authority for the support given to this programme. We also wish to acknowledge the contribution of industry stakeholders, and last but not least, to the staff of the ASFD who managed the project. Without this support, this objective would not have been possibly achieved.

Controller Aviation Security & Facilitation, Mr. Etuate Rakuro.

FREE CALL
SAFETY MESSAGE LINE
Phone your safety concerns to CAAFI – 0800 6725 799

Reporting of Mandatory Occurrence Reports (MOR)

The Authority wishes to remind the operators and persons listed under sub regulation 71(1) of the Air Navigation Regulations (ANR), to make a report to the Authority of any occurrence of the types outlined in sub regulation 71(2), of which such person has knowledge in such time and in such means as notified by the Authority. This as stated under sub regulation 71(3) of the ANR is within 96 hours of the occurrence, in a current form approved by the Authority.

It is noted that on numerous occasions, MORs get reported to the Authority in a time which is well beyond the 96 hour requirement. This inhibits the CAAFI inspectors to initiate timely investigations while the event is still fresh and ensuring that corrective actions implemented as soon as possible.

Note: This requirement does not prevent the operator(s) involved to carry out their own safety investigations and implement immediate safety measures to prevent the reoccurrence of similar events.

***Report may be sent through the following*:**

Technical Officer (Records & Standards),
CAAFI,
Private Mail Bag (NAP 0354),
Nadi Airport.
Email: tors@caafi.org.fj
and/or standards@caafi.org.fj
Fax: (679) 672 7429

CAAFI's quality section is keen to hear from you regarding our levels of service. If you believe you have constructive ideas on how we can improve our service, or would like to report instances where we have failed to meet your expectations, please send your feedback to CAAFI, preferably using the QA 108 form that can be accessed from our website. This can be sent to CAAFI by faxing it to Quality Assurance Manager on 6727429, dropping it in the feedback box in the foyer of CAAFI HQ, or emailing to standards@caafi.org.fj.

Your suggestions for improvements to this publication are also invited. CAAFI also invites you to submit valuable information or articles that you would like to have published through this bulletin for the benefit of readers. Your name will be appropriately acknowledged. Please use the email address stated above.

Articles Prohibited In The Cabin of an Aircraft and in the Security Restricted area for Security Reasons

A) GUNS, FIREARMS AND OTHER DEVICES THAT DISCHARGE PROJECTILES

Devices designed to cause serious injury by discharging a projectile, or capable of being mistaken for such devices, including:

- Firearms of all types, including pistols, revolvers, rifles, shotguns
- Toy guns, replicas and imitation firearms capable of being mistaken for real weapons
- Component parts of firearms (excluding telescopic sights)
- Compressed air and CO2 guns, including pistols, pellet guns, rifles and ball bearing guns
- Signal flare pistols and starter pistols
- Bows, cross bows and arrows
- Harpoon guns and spear guns
- Slingshots and catapults.

B) STUNNING DEVICES

Devices designed specifically to stun or immobilize, including:

- Devices for shocking, such as stun guns (e.g. teasers) and stun batons
- Animal stunners and animal killers
- Disabling and incapacitating chemicals, gases and sprays, such as mace, pepper or capsicum
- spray, tear gas, acid sprays and animal repellent sprays.

C) OBJECTS WITH SHARP POINTS OR SHARP EDGES

Objects with a sharp point or sharp edge capable of being used to cause serious injury, including:

- Items designed for chopping, such as axes, hatchets and cleavers
- Ice axes and ice picks
- Razor blades, box cutters
- Knives with blades of more than 6 cm
- Scissors with blades of more than 6 cm as measured from the fulcrum
- Martial arts equipment with sharp points or sharp edges
- Swords and sabres.

D) WORKERS TOOLS

Tools capable of being used either to cause serious injury or to threaten the safety of aircraft, including:

- Crowbars
- Drills and drill bits, including cordless portable power drills
- Tools with blades or shafts more than 6 cm. capable of use as weapons, such as screwdrivers,
- chisels
- Saws, including cordless portable power saws
- Blowtorches
- Bolt guns and nail guns.
- A-2

E) BLUNT INSTRUMENTS

Objects capable of being used to cause serious injury when used to hit, including:

- Baseball and softball bats
- Clubs and batons, such as Billy clubs, blackjacks and night sticks
- Martial arts equipment.

F) EXPLOSIVES AND INCENDIARY SUBSTANCES AND DEVICES

Explosive or incendiary substances or devices capable of being used to cause serious injury or threatening the safety of the aircraft, including:

- Ammunition
- Blasting caps
- Detonators and fuses
- Replica or imitation explosive devices
- Mines, grenades and other explosive military stores
- Pyrotechnics, including fireworks
- Smoke-generating canisters or cartridges
- Dynamite, gunpowder and plastic explosives.

G) LIQUID, AEROSOL AND GELS[1]

- Liquids, aerosols and gels, unless in individual containers with a capacity not greater than 100 milliliters (or equivalent) and contained in one transparent resealable plastic bag of a capacity not exceeding 1 litre (or equivalent). The contents of the plastic bag shall fit comfortably and the bag shall be completely closed. Exemptions should be made for medications, baby milk/foods and special dietary requirements.

ARTICLES IN BAGGAGE PROHIBITED IN THE HOLD OF AN AIRCRAFT FOR SAFETY REASONS[2];

EXPLOSIVES AND INCENDIARY SUBSTANCES AND DEVICES

Explosive or incendiary substances or devices capable of being used to cause serious injury or threatening the safety of the aircraft, including:

- Ammunition*
- Blasting caps
- Detonators and fuses
- Mines, grenades and other explosive military stores
- Pyrotechnics, including fireworks
- Smoke-generating canisters or cartridges
- Dynamite, gunpowder and plastic explosives.

* *Note:* With the approval of the operator, certain cartridges may be permitted for transport in checked baggage under conditions specified in Part 8, Chapter 1, paragraph 1.1.2 of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).

[1] Without prejudice to the intention to remove liquids, aerosols and gels from the PIL once technologies that can determine if LAGs are dangerous or not have been developed and deployed at airports.

[2] It is noted that rules granting exemptions under defined circumstances may exist.

2010 CAAFI Client Survey

The Authority conducts annual customer surveys where a standard questionnaire is sent out to all stakeholders with the aim of identifying improvement opportunities, enhancing service delivery and improving overall customer satisfaction. In 2010, the survey was carried out in June. The aim of this extract is to summarise some of the comments / suggestions that were received through the June 2010 survey and the Authority's comments to these suggestions.

Feedback: CAAFI uses different standards for different airline.

CAAFI comment: *All airlines oversight are based on the air navigation regulation and standards document AOC. Any difference in the application of the regulation and standards would be in relation to size of the airline/organization and/ or the type of operation.*

Feedback: CAAFI should make more frequent visits to the operators and ANR 145 maintainers.

CAAFI comment: *CAAFI airworthiness team schedules a visit to all the CAAFI approved ANR 145 maintenance organizations (AMO) at least once a year and this is considered sufficient given the number of staff we have. Also, most AMO's have a safety management system in place in addition to the organization Quality system to regulate safety. Further, the CAAFI airworthiness team conducts regular meetings with AMO personnel (QAM and Chief Engineer) to discuss other matters in general.*

Feedback: There needs to be qualified EIR inspector or consultant engaged to deal with these important issues as there are many and the advancement of technology in this area changes on a daily basis.

CAAFI comment: *Shortage of qualified avionics engineers and the inability of the CAAFI to attract the same has made it difficult for CAAFI to hire a full time avionics engineer. However, CAAFI has hired a graduate who is now undergoing training in the avionics engineering field.*

Feedback: Industry to be given grace period to comply without being termed as non-compliant. Clear process to be put in place.

CAAFI comment: *The CAAFI audit procedures defines the period given to operators to correct audit findings as follows:*

Level 1 – 1 month
Level 2 – 3 month
Level 3 – 6 month

There is also a differentiation of audit findings and not all findings are classified as non-compliant. These are:

Non-compliant
Non-conformance
Observation

Feedback: Regulatory service can be further improved by fresh local personnel that understand / appreciate the disparity that exist between Fiji and other foreign CAAs.

CAAFI comment: *We have inspectorate staff who have local industry knowledge and experience and are familiar with Fiji standards and regulations.*

Feedback: EGPWS and ADS-B compliance as important as it is for the rest of the world (and ICAO) does not seem to be urgency especially for the number of aircraft operating in and around Fiji without radar coverage.

CAAFI comment: *CAAFI agrees that there are enormous safety and financial benefits that can be obtained from the implementation of ADS-B. However, the implementation programme and time table is managed by and will be decided by the Fiji Air Navigation Service Provider (ANSP), depending on their level of readiness to support the safe operation of the ADS-B surveillance system.*

Feedback: A committee should be formed with clear mandate, checklist, etc for building proposals around airport, made up of CAAFI, AFL and other national bodies with regular meeting schedule.

CAAFI comment: *CAAFI has established a process to manage off-airport developments and delay in getting approval for this type of development from the CAAFI would be significantly reduced.*

Feedback: Regular joint road show for aviation including operators.

CAAFI comment: *CAAFI will consider this proposal in its oversight activities and programme.*

Feedback: A consistency in service provision especially in the certification and approval mechanism/process.

CAAFI comment: *CAAFI has developed guidance for its certification process and the first that has been developed is contained in AW105 C which could be downloaded from CAAFI website. AIC 01/11 also documents the CAAFI Audit procedure which clearly defines the steps involved in a certification audit.*

The Authority wishes to thank all who provided their valuable feedbacks to this survey and look forward to your feedbacks in future surveys.

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Mandatory Occurrence Briefs

This column has briefs of selected occurrences from 4th quarter of 2010 in a de-identified way. These briefs are published in the interests of improvement to aviation safety and not to apportion blame.

Alleged Deviation from Track

ATC gives clearance to a B777 for a weather deviation of up to 30NM left and right of track. An hour later, ATC's air situation display shows that the aircraft's ADS track as being more than 40NM off track and immediately advises the aircraft of this deviation. The aircraft responded that cockpit indications show them to be well within clearance limits.

Action: Investigation in progress.

Fuel Spill on the Apron

During the refueling of a B737 on Gate 8, fuel overflowed onto the Apron area covering approximately 4 square meters. The refueling process was immediately halted, fuel spill cleaned and 5 minutes later refueling recommenced. It was alleged that the fuel line was not correctly connected to the ground fueling port.

Action: The operator involved underwent refresher training on aircraft refueling using a hydrant dispenser. Prior to connecting hydrant dispenser vehicle input coupling to hydrant pit ground unit, operators are to make sure that equipments must be clear of any obstruction, equipment, or loose item that may cause fuel spillage during fuel transfers.

Runway Excursion

A student pilot was carrying out various exercises within the circuit in preparation for his CPL Flight Test. The student had completed five take-offs and landings consisting of two glide approaches, two flapless and one short field landing. On his sixth approach, after touch down at the threshold, during the roll, the student noticed the aircraft veering off to the right. Upon stopping the aircraft, the student discovered the right main wheel tyre had burst.

Action: Investigation in progress.

Doors not armed prior take off

After take-off on a particular flight, one of the Cabin Crew members working in the aft of the aircraft notified the Purser that they (Cabin Crew in the rear of the aircraft) had armed their doors. The call from the Cabin Crew in the aft of the aircraft made the Purser realise that the standard operating procedure of arming and cross checking the relevant exits was not conducted prior take off.

Background:

1. ANR 23 Scale B(2) Requires aircraft used for public transport of passengers of which the sill of any external door intended for the disembarkation of passengers is more than 1.83 metres (the distance from the door sill of a B767 to the ground is over 4 meters) from the ground (with the undercarriage in normal position for taxiing or when the undercarriage or any part thereof should collapse) to have device or devices (in this case slide rafts) which will enable passengers to reach the ground safely in an emergency while the aircraft is on the ground, and can be readily *fixed in position for use*.

2. Fixed in position for use – in this case means to 'arm' (attach the slide pack in the door bustle to the floor sill of the exit/door either by use of a mechanism in the door or manually attaching the girt bar to the floor brackets) the door when advised to do so by the Purser (number 1 operating Cabin Crew member or CA1). The arming of the exits prior take off is standard operating procedure documented in the operators' flight operations manual.

3. Confirmation of the arming of all relevant exits is conducted by way of 'cabin secure notification from the CA1 to the Flight Crew.

4. When an 'armed' exit is opened fully this action causes the slide to be pulled out of the slide pack and should inflate, giving passengers and crew a means to reaching the ground.

Action: Investigation in progress.

TCAS RA Warning

An aircraft, while cleared direct to SLI VOR and cleared to descent to 8000 feet, were advised by ATC of traffic at 12 o'clock climbing to 7000 feet. TCAS TA warning came on followed by RA warning: "Adjust vertical speed" which was promptly followed. After being clear of conflict, descent continued to 8000 feet and pilots advised ATC.

Action: Investigation in progress.

Aircraft Wing Hitting Garage Door at Savusavu

After landing and disembarking the passengers, the crew noticed hydraulic fluid sipping from Port Main Wheel fairing. The pilots checked the pressure which was 1000 PSI so decided to reposition and shutdown. While taxing, the aircraft Port Wingtip hit the Fire Station Garage door. The wingtip fairing was damaged due to the impact.

Action: A few months earlier, both the undercarriages were removed and overhauled. During the installation of the undercarriages, brackets associated plumbing and fittings, the left hand undercarriage plumbing were not installed as per the IPC. A bracket and fairlead was not fitted. Instead a clip and bracket was used to secure the pipe.

Temporary Repairs:

- Hydraulic line was repaired by removing the damaged section and joining a new length by flaring.
- Temporary repair was carried out on the wing tip and damaged ribs. This was approved by the aircraft Manufacturer for a single ferry flight.

Permanent Repairs:

- Replacement Structural and Hydraulic components were identified and ordered strictly per the OEMs IPC and aircraft was grounded until permanent replacements/repairs could be effected.
- Permanent repairs were carried out & aircraft released to normal service.

Power Loss in Flight

Aircraft took off from Turtle Island. On approaching Vuda, the pilot felt light vibration coming from engine which became rough after 30 seconds and started backfiring. As a consequence, around 30% power was lost. The pilot immediately switched the fuel selector to the front tank, tried left and right magnetos and applied different power settings, but the problem remained. The pilot took the decision to perform emergency landing which was done near Vuda in calm water and passengers were transported to the Vuda Marina by a boat. The engineering inspection of the engine at the base identified that # 3 cylinder head had cracked and separated from the barrel.

Action: Engineering investigation in progress.

False Indication from PAPI

Three reports have been received of a false 'fly down' indication from the NAN runway 27 PAPI during visual approaches. The reports were received from flights which arrive in NAN between 6:50 and 7:00. The PAPI lights appear as 4 whites despite the aircraft being on or below slope (as measured by other visual cues).

Investigation considered the following:

The report was made from one source only. Investigation tried to get confirmation from other sources but all reported PAPI to be normal.

Investigations from the Ground Aids perspective took the following path: -

- All PAPIs are scheduled for regular ground and calibration flight tests. The records of this scheduled test provide an insight into the health of the facilities. Any abnormalities would be recorded.
- Flight Calibration testing was carried out which gave the 27 PAPI a clean bill of health.
- Routine monthly ground maintenance records from August to October recorded no abnormalities.

In the report there was a suggestion that moisture and/ or the angle of the sun in relation to the lenses at that hour of the morning could be contributing to the peculiarity. It was informed by experience maintenance technicians that moisture sometimes builds up but would have next to no impact at all. However to disprove or prove this suggestion requires replicating the exact conditions experience by the pilot on the day (s) in question.

Investigation conclusions are based upon the proven data from Calibration Flight Testing and Scheduled ground test.

There are two main fault reporting systems available to users of ground radio facilities.

- The MOR is one but technician's response times will be much slower than if reported "as a fault with tower".
- MORS filed by users find its way firstly to the Regulator who assesses the report before forwarding onwards to the technical officers (experts) for rectifications or investigation if need be.

However abnormalities as reported in this case require quicker response times from technicians so as to enable them the opportunity of making a examination of the suspect facility in the same or near same conditions experienced by the pilot.

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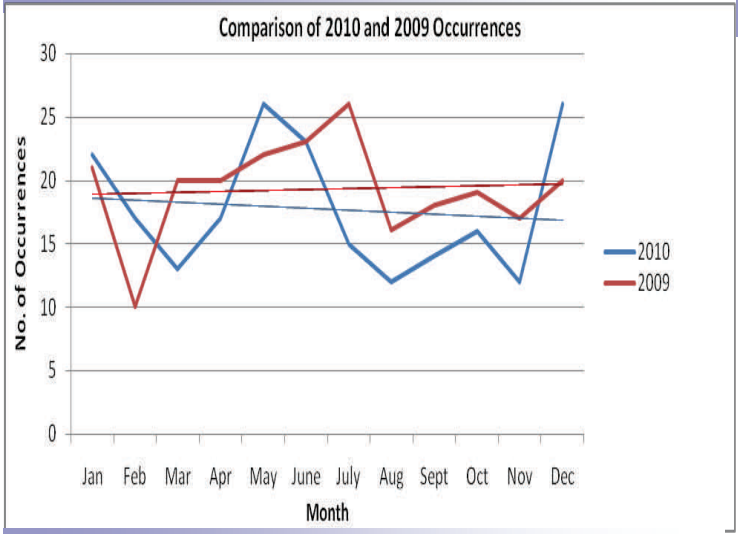
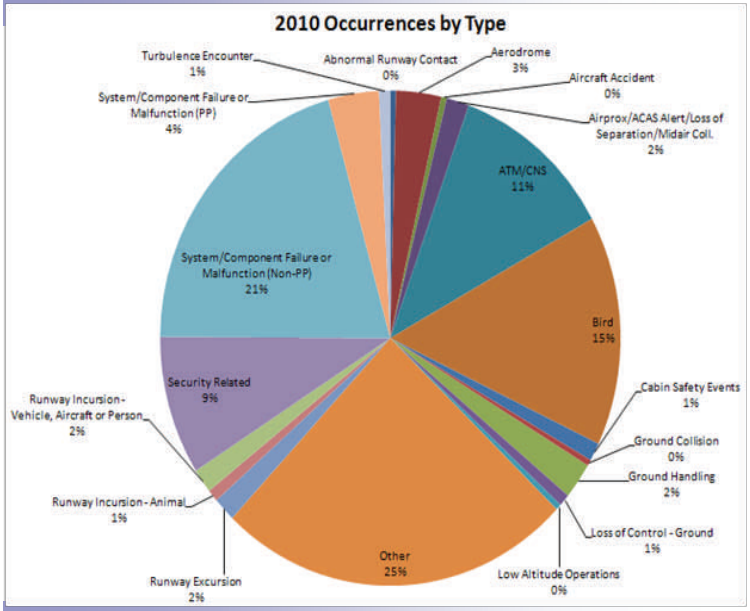
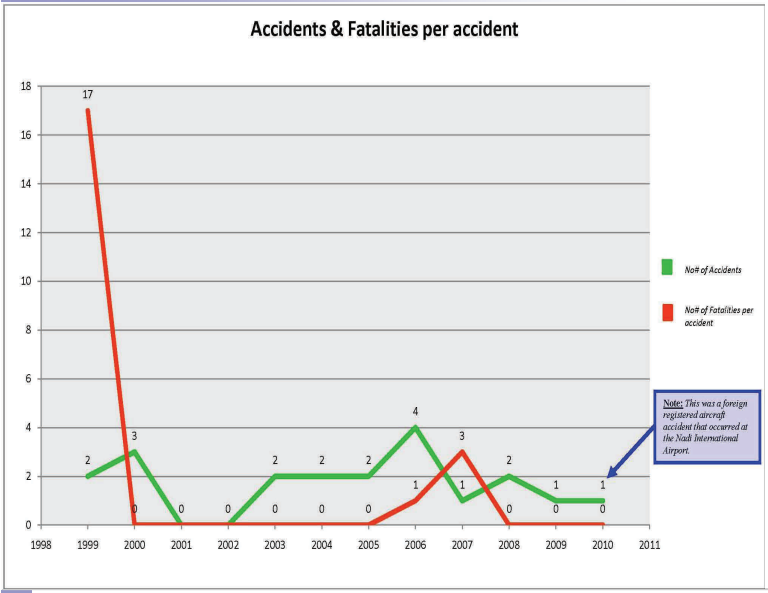
Occurrence Statistics 2010



Occurrence Type



Aircraft Accidents from 1999—2010



Review Cycles for Standards Document –2011

The review of following Standards Documents (SD) will start in 2011 in the months listed.

Standards Document Name	Interval (Months)	Start Month in 2011
Approved Maintenance Organisations	12	Jan
Single Engine IFR Operations	18	Feb
Carriage of Dangerous Goods	12	Mar
Air Operator Certification	6	Mar
Guidance and Procedures for Check Captains and Examiners of Airmen	12	April
Licensed Aircraft Maintenance Engineers	12	April
Aeronautical Telecommunications	12	May
Aeronautical Facility Technician Licence	12	May
Flight Crew Licensing	8	June
Safety Management Systems	12	June
Medical	12	June
Search and Rescue	12	July
Aeronautical Information Services	12	Aug
Air Operator Certification	6	Sep
Aerodromes	12	Sep
ATS Personnel Licensing	12	Oct
Air Traffic Services	12	Oct
Airworthiness of Aircraft	12	Nov
Aviation Training Institutions	12	Dec

The Authority plans to issue the schedule for 2012 early in the last quarter of 2011.