Issue 1, March 2010

ISO 9001:2008 Certified

AVIATION SAFETY BULLETIN

A Publication of:

Civil Aviation Authority of the Fiji Islands
PRIVATE MAIL BAG, NAP 0354,
NADI AIRPORT, FIJI ISLANDS
Phone: (679) 672 1555, Fax: (679) 672 1500

CHIEF EXECUTIVE'S MESSAGE

Thank you for allowing me to communicate to you again through this Aviation Safety Bulletin (ASB). 2010 is an exciting year for Civil Aviation in Fiji and as you are aware, a number of events are already taking place to improve aviation safety and security in Fiji.

Civil Aviation Reform

Firstly, we are happy to announce that we have finally concluded the Civil Aviation Reform which commenced in 1999. We are now in the final stages of handing over the housing estate to Airports Fiji Limited. The reassignment of shares of Air Terminal Services to the Ministry of Finance and the transfer of the airport land to Airports Fiji Limited were completed last year. The Authority can now focus on its safety and security regulatory and oversight functions.

Safety Management System (SMS)

The Safety Management System (SMS) training which was conducted in two one-week sessions starting 18 January 2010 was a success. Some 35 participants from 12 organisations and 15 CAAFI staff attended the training. We hope that you are now applying the lessons you have learnt in your work environment and influencing those who work with you and your organisation to apply the same.

Based on our inspectorate team assessment, there has been a slow but steady progress in the implementation of SMS in the last 3 years. We urge those who have yet to fully embrace SMS principles to do so. SMS is a proven system and when applied correctly, offer significant benefits in an aviation business environment. To those who are progressing, we encourage you to continue to work with the CAAFI team to achieve phase IV SMS implementation by the end of 2010. We thank those who have fully implemented SMS and we hope that you are beginning to realise its benefits.

It is often said that we cannot effectively manage if we cannot measure performance and aviation is no different. To this end, one of ICAO's current focus is to move contracting State's regulatory oversight away from a purely compliance method to one that is supplemented by a performance based approach. This would mean that we will have to collect data to establish performance measurement and metrics to determine safety levels. More importantly, the safety data will also drive the prioritisation of our oversight resources to those areas of greater concern or need.

Safety will always be difficult to quantify in a tangible form, but it is agreed that at least it can be managed to an acceptable level through implementation of proven management systems and processes. To achieve this, the ICAO requires that all contracting States develop a State Safety Programme (SSP).

State Safety Programme (SSP)

The purpose of the SSP is to supplement the industry SMS particularly the risk assessment component which aims to ensure that individual industry

Inside this issue: **Pg**

organisations maintain their risks at a tolerable level or as low as reasonably practicable (ALARP). Subsequently, the Authority and each operator or service provider can agree to establish an acceptable level of safety (ALoS) based on individual operator's unique operational condition and environment. This is a major undertaking for Fiji which will require partnership, particularly in the sharing and free flow of information and data. We thank the operators who are already participating in providing data monthly which will become the primary source of information and backbone of the SSP.

Release of Safety Information

Additionally, we are pleased to advise that in terms of the protection of information provision under Section 4A of Civil Aviation Act (CAP 174), as amended by Civil Aviation (Amendment) Promulgation 2008, the Attorney General has authorised the release of safety information based on the stipulated criteria. The information once ready will be part of the ASB in future. We acknowledge that some safety information may be sensitive even in its de-identified or summarised form. However, the Authority will ensure that the guidelines given by the Attorney General under the Act for the release of such information will be strictly adhered to.

Industry Consultation Mechanism

On 19 February 2010, we successfully concluded our consultation with you on the new consultation mechanism that we will use in future for developing aviation laws and standards. We thank you for your comments and support in introducing this new process. The proposed mechanism will give industry the opportunity to independently review and discuss all changes to aviation laws and standards that are passed through the consultation process with input from the Authority. The Authority wishes to remind that empowerment under this arrangement comes with greater responsibility, commitment, integrity and accountability and requires the display of good faith by all parties.

Whilst consultation may not always mean full agreement by all parties, a general consensus would be essential if it is to be effective. To address this, the new consultation machinery provides a vehicle to ensure that the industry concerns and disagreements on any of the proposed changes are quickly reviewed, analysed and justified. We acknowledge that the major drivers for industry contention will be the cost and commitment of resources. However, safety impact assessments will also be needed to provide the balance so that the targeted safety enhancements or the objectives of the changes are placed in the right perspective and not compromised in the process.

Harmonising the Fiji Air Navigation Regulations 1981 (ANR)

We have begun the work of Harmonising the Fiji Air Navigation Regulations with globally accepted practices, numbering system and contents. This is in response to government and industry desire to modernise the Fiji ANR with other countries. Further explanation is given inside this bulletin under 'Harmonisation'.

Breach of Security

Security will continue to influence the safety of civil aviation operation and environment. The events of December 2009 remind us of the existence of elements that are determined to threaten the safety and security of aviation. Needless to say, that the ability for such threats to infiltrate the security defenses, in-spite of the best security and intelligence system in place, is worrying.

We will need to focus our efforts and strengthen our capacity on early identification of people with suspicious behavior and suspected cargo. This requires the enhancement of skills and processes in people profiling, assessment of advance passenger information and intelligence networking so that we can quickly respond to intelligence information and threats not normally captured in routine risk assessment.

Conclusion

Whilst it is true that air transport is still the safest mode of transport we cannot be complacent and assume that all is well in any aspect of the aviation business. The travelling public has made the choice to use air travel and accordingly pay for the service to keep the wheels of aviation business turning. The challenge is for us to reciprocate and support and/or provide the guarantee through all our efforts, a safe, secure, timely and seamless gate to gate journey by air to all destinations within and outside our shores.

On behalf of the Authority, I thank all our industry stakeholders and partners for maintaining safety and security through your activities and operations. We solicit your usual support again as we continue to journey together in 2010 and beyond.

FREE CALL

SAFETY MESSAGE LINE

Phone your safety concerns to CAAFI – 0800 6725 799

HARMONISATION

What does this mean, to what does it relate and why should Fiji do it?

The legal definition of harmonisation is cooperation between governments to make laws more uniform and coherent.

Whilst there were isolated efforts at the harmonisation of the aviation legislation in the 1920s and 30s, principally in Europe, it was not until 1944 that there was initiated a world wide effort for harmonisation of aviation standards and practices. The key event was the signing in 1944 of the Convention on International Civil Aviation (the Convention) at Chicago by some 30 odd countries from around the world. This led to the foundation of the International Civil Aviation Organisation (ICAO) and the development of ICAO's 18 Annexes containing civil aviation Standards and Recommended Practices (SARPS) that are binding on ICAO Member States - unless they have 'filed a difference' under the provisions of Article 38 of the Convention. The number of member States is now close to 200 and includes almost all countries in which aviation takes place.

Whilst ICAO was promoting harmonisation of civil aviation legislation by all States, it was slow to take effect. Many European States still had significant differences and this led to the formation in Europe of the Joint Aviation Authority in the early 50s to facilitate commercial aviation between its member states. The Joint Aviation Regulations were primarily about aircraft, their airworthiness and maintenance and their crewing. They did not cover aspects that occurred in individual States such as their ATC and their aerodromes.

Closer to Fiji, moves were made in the late 1980s in New Zealand to update their legislation after a high level review of civil aviation (the Swedavia McGregor Report) found that the legislation was outdated and complicated. A Project Team was formed in the early 1990s and recommended that New Zealand adopt the style of legislation used by the regulator of the world's largest aviation industry – the Federal Aviation Administration of the United States of America. New Zealand's neighbor Australia was also in the process of reviewing its legislation and there were efforts made to carry out the work in unison but this failed to materialise as the Australian style of legislation and process for its development were significantly different from that of New Zealand.

The New Zealand Project was basically completed by a team that at its highest numbered around 12 specialist experts and lawyers and industry moved over to operating under the new legislation.

Since that time the New Zealand Civil Aviation Rules have been adopted, and in some cases 'adapted', by a number of Pacific Island States, the Pacific Aviation Safety Organisation (PASO) and some other more distant States.

In October 2009, the Republic of the Fiji Islands, through the Cabinet made a decision to update its ANR to international best practice, part numbering system using existing texts or contents with improvements where necessary.

With industry consultation in 2008, it was agreed that New Zealand Part numbering system will be used as a benchmark in accordance with the guidelines given by the Government. The New Zealand style has been founded on a 'user friendly' 'keep it simple' and 'easily understandable' approach.

This is an opportunity to bring the Fiji legislation as close as possible to the ICAO documentation.

It should also be mentioned that New Zealand has Advisory Circulars (ACs) supporting their Rule Parts that are the equivalent to Fiji's Standards Documents. These will also be put through the harmonisation process so as to have a full suite of legislation or supporting documents available. But the style of the NZ ACs appears to be changing from a text and narrative style similar to the present Fiji SDs to the European style of an Acceptable Means of Compliance (AMC) or Informative or Explanatory Material (IEM) where such is deemed desirable for each regulation within a Part. The project does not currently make provision for converting text and narrative material to the AMC/IEM style—that may well take place later as the Standards Documents are reviewed.

There will be full consultation for each Air Navigation Regulation Part with appropriate industry stakeholders before the new legislation is finalised and comes into effect but the new material will keep Fiji's industry aligned and harmonised with international best practice.

FCAIR

FIJI CONFIDENTIAL AVIATION INCIDENT REPORTING

FORMS AVAILABLE ON

www.caafi.org.fj

OR FRONT DESK, CAAFI HQ

SAFETY MANAGEMENT SYSTEM (SMS)

CAAFI had organised a SMS course conducted by Jose Castellanos, an IATA accredited instructor with more than 40 years of experience in the aviation industry. Approximately 50 participants attended the course from 13 different organisations including CAAFI. The following are some of the things covered in the course. This article in series gives you a better understanding of what the SMS comprises.

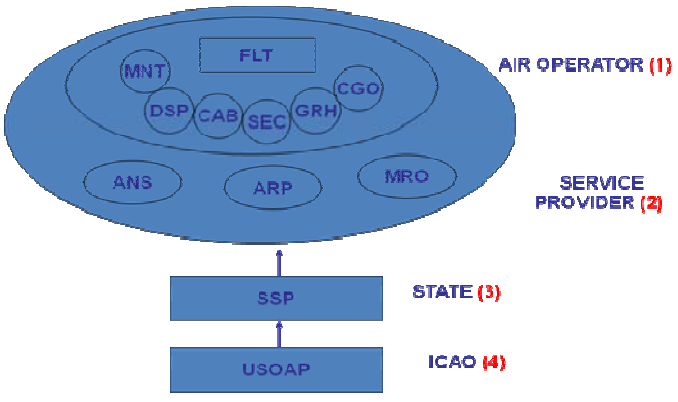
Safety Management System Definition

Safety – is the state in which the risk of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management;

Management – is a process that is used to accomplish organisational goals; that is, a process that is used to achieve what an organisation wants to achieve through planning, organising, directing and controlling;

System – A group of interacting, interrelated, or interdependent elements forming a complex whole. A condition of harmonious, orderly interaction. Organisation of functionality interactive elements for the achievement of a common goal.

Operators, State & ICAO



(1) Operator SMS – used to only have 'Flight Safety Programme' which only focused on flights. Now looks at all the other components and processes of an airline operation that contribute directly towards the actual flight and the risks are identified and managed in each of these processes. e.g. cabin, maintenance, security, etc.

(2) Holistic approach to SMS – Includes management of risks of those activities/processes that are carried out by other organisation, but either directly or indirectly contributes to the flights, e.g. Aerodrome, ATC, Maintenance Organisation, etc.

(3) The state CAA monitors 1 & 2 above through State Safety Programme (SSP) – a move from prescriptive to performance based regulations.

(4) ICAO audits the States SSP through Universal Safety Oversight Audit Programme (USOAP).

ICAO SMS Framework

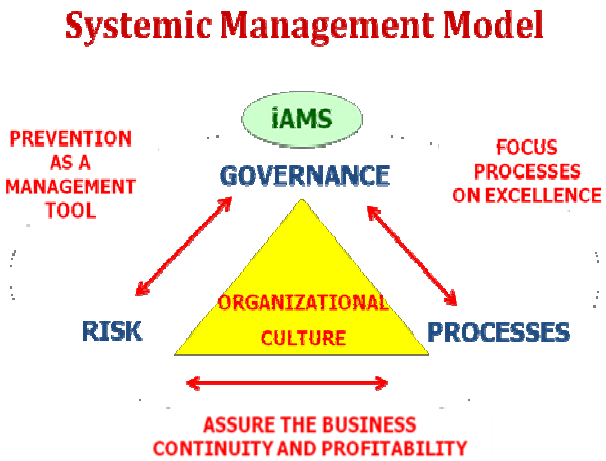
The key components of ICAO SMS Framework are:

(1) Safety policy and objectives *(Management commitment, safety accountabilities, key safety personnel & documentation)*
(2) Safety risk management *(Hazard identification, risk assessment and mitigation)*
(3) Safety assurance *(Safety performance monitoring & measurement, management of change, continuous improvement)*
(4) Safety promotion *(Training & education and safety communication)*

There are other useful frameworks such as FAA & CASA that can also be used to structure the SMS.

Systemic Management Model

The following is the systematic management model that an organisation needs to adopt to implement a successful SMS.

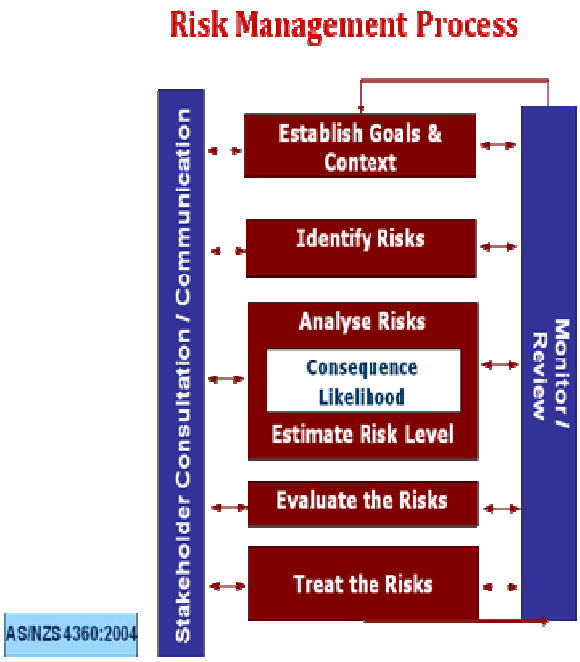


(1) Governance – Strategic Definitions (Operational Philosophy, Market, Product, Policies, objectives)
Monitor by: Performance indicators, control activities (revisions, audits, inspection)

(2) Process Management – Set of interrelated or interacting activities which transform inputs into outputs. Processes are oriented to make 'Governance' a reality. Therefore for organisations to function effectively, they have to identify and manage numerous interrelated and interacting processes.

- Often, the output from one process will become the input into the next process;
- Processes are functional (one function or area), cross-functional, transverse (across the organisation) and focus on generating value to the external customer.

(3) Risk Management – the culture, processes and structures that are directed towards realising potential opportunities whilst managing adverse effects. Risk management needs to be applied to each operational process (Operational Risk Management) and at organisational level (Strategic Risk Management). Following is the diagram for Risk Management Process.



Note – some risks may never be completely eliminated, but it needs to be managed to keep it to an acceptable level or 'as low as reasonably practicable' (ALARP).

(4) Organisation Culture – what is valued, leadership style, the language and symbols, the procedures and routines, and the definition of success that characterises an organisation. It represents the values, assumptions, collective memories, beliefs and norms.

Significance of culture – is a significant tool which can shape and ensure that defenses are in place and work.

Types of cultures:

- **Just Culture** – Tolerate error but not violations; (Note – when the same error is being committed repeatedly, it becomes a violation)
- **Informed culture –** When an organisation has just culture, there will be more reports submitted for the errors made near misses and incidents, therefore more data to analyse the problems.
- **Safety Culture** – Managing the data to put defenses so that errors and incidents are not repeated. For SMS to work, organisations need a safety culture. That is because SMS is about measuring and not only compliance.

Avoiding the Blame Cycle

- Organisations must avoid the blame cycle and realise that most errors and accidents are 'not' intended and could come about as a result of the structure they have developed for their staff to work in.
- Errors and accidents are consequences and not causes.
- We must look deeper behind the action.
- What we see could be a result of the situation we have put our staff in.
- Procedures and processes are easier to put right than your staff.
- We must have procedures and process that our staff understand and believe in, then we will see the work carried out as per the procedures. This is about letting the staff take ownership of the processes they are involved in.

This article will continue in the next issue of this bulletin focusing on the human factors and how it contributes to incidents and accidents.

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 Officer on 6727429, dropping it in the feedback box in the foyer of CAAFI HQ, or emailing to standards@caaf.org.fj.

THE IMPORTANCE OF EATING BREAKFAST

The last 20 – 30 years have seen great strides in the development of technology, for example computers and mobile telephones, which are all supposed to make life easier. One could question this and argue that in fact the only change which has occurred is the increased pace of life and as Gandhi once said "there is more to life than making it go faster".

Pilots are also subjected to the quickening pace of life in that airline departure schedules require them to wake up early and prepare for a possible 12 hour duty day facing all the challenges that arise from irate passengers, weather and commercial demands.

As the human being experiences the most restful part of sleep at around 4 – 5 am there is probably reluctance on the part of some people to get out of bed at an early hour, the desire being to catch another 10 – 15 minutes of sleep.

However, extra time spent sleeping means less time to prepare at home for the day's activities and if any item is dispensed with during the preparation it is usually breakfast.

According to medical research, a lot is happening in the human body around 4 – 5 am and after a number of hours sleeping in the horizontal position a person's blood pressure rises as does the sugar level. After getting up from bed and physically preparing for the day the blood pressure decreases however, the rise in the sugar level continues until food is consumed.

Office workers and administrators are good everyday examples of what happens if breakfast is not consumed before starting work. From 8 am as the pressure of work mounts, employees appear to become more argumentative and short tempered until 10 am when a tea break is taken. Food is normally consumed at the tea break.

After the tea break the employees are found to be jovial and generally of good humor so what happened? Well, the consumption of food lowered the body sugar level.

Another factor associated with a high body sugar level is the sensation of light-headedness and the difficulty in mentally focusing on a particular task with this becoming more prevalent as the morning progresses. A reduction in mental performance is of particular concern to pilots who may be required to engage in concentrated mental activity to address an in-flight emergency or marginal weather conditions at a destination airport.

Agricultural aviation boomed in New Zealand during the 60's and 70's and this required pilots to fly laden aircraft in close proximity to the ground, over undulating terrain and at a normal operational speed. Light -headedness associated with high body sugar levels was found by accident investigators to be a major factor in agricultural aircraft accidents which occurred at around 10 am.

Pilots begin their day by carrying out preparatory duties before commencing flying and this is done by way of an aircraft pre-flight inspection. As part of good aviation practice pilots should ensure they do the same for their bodies before leaving home for work and this is done by eating breakfast.

Although this article is aimed at pilots the principles also apply to workers in all walks of life.

Article by Captain Norman Walding (Senior Flight Operations Inspector – Domestic, CAAFI)

Safety Risks associated with use of unauthorised/counterfeit aircraft, helicopters component/ parts

CAAFI reminds operators of the forbidden practice of reusing or rebuilding (without proper authorisation, oversight or regulatory compliance) aircraft or aircraft components that have been destroyed, substantially damaged or, more problematically, non-visibly damaged in an accident.

With the growth of the internet, such unauthorised practices have proliferated. Purported well known brand component parts and airframes (such as EUROCOPTER), without any certification documents or even identifying information, are now regularly posted on several websites. Safety Information Notice (SIN) No. 2L52-S-OO issued by EUROCOPTER again reminds all operators, pilots and maintenance personnel of the serious risks associated with the sale and use of unauthorised aircraft and helicopter component/parts.

Airframe elements are very complex and built to very specific tolerances. A failure during service can be potentially catastrophic. For these reasons, the manufacture and repair processes must be closely monitored to ensure that the repaired elements meet all necessary safety standards. Repair centers carrying

out such activities, must fulfill specific, stringent requirements in order to guarantee that their work complies, for safety reasons, with manufacturer standards, rules and technical data.

According to the SIN by EUROCOPTER, it sometimes receives reports of incidents and even accidents that have occurred as the result of the use of aircraft parts that were not provided by EUROCOPTER or any EUROCOPTER-licensed or authorised source. Similarly, several cases have been reported in which original EUROCOPTER components (even parts that were scrapped as the result of an incident or accident) were reworked by third-parties without EUROCOPTER approval or oversight, and then resold as "airworthy".

Accidents can cause irreversible damage to aircraft parts, especially life limited parts, and that such damage might not always be detectable through non-destructive test procedures, even those procedures specified in the Maintenance and Repair Manuals. Therefore, there is always a danger that parts showing no evidence of damage during testing may still not be airworthy, thus constituting a safety hazard.

EUROCOPTER have also noted many purported 'EUROCOPTER" component parts and airframes posted on such internet sites as eBay. In the notice, EUROCOPTER has warned all of its customers that the usage of parts in EUROCOPTER helicopters that have not been provided by EUROCOPTER or its qualified and authorised manufacturers or service centers may be unlawful, may adversely, and seriously, affect the airworthiness of the aircraft, may pose a serious risk of property damage, injury and/or death and will transfer the full responsibility of any related accidents or injury to the user of such unauthorised parts.

If you have any doubts about the integrity or authenticity of any item being sold, it is recommended that you:

(1) not use the product;
(2) make a note of where you purchased the product, or where you saw it for sale;
(3) consult the manufacture about the issue; and
(4) consult the CAAFI Airworthiness section.

Submission of aircraft and aerodrome data

The ICAO has developed safety standards and recommended practices (SARPS) which require that States develop a State Safety Programme (SSP). The safety management SARPS introduce the notion of an Acceptable Level of Safety (ALoS) as a way of expressing the minimum degree of safety that has been established by the States and has to be assured by the SSP and, the notion of safety performance as the way of measuring the safety performance of a service provider/ operator Safety Management System (SMS).

In order to implement the above requirement, the Authority is currently undertaking a project of formatting and customising its Aviation Quality Database (AQD) to be able to generate safety reports and decision support information. The Authority believe that informed decisions, based on factual and objective information, are essential to maintain a healthy and effective aviation safety environment under the new SSP and SMS framework.

Ultimately, the aim is to integrate the existing compliance or prescriptive regulatory environment with a performance based regulatory approaches.

In view of the above the Authority, based on the Regulation 36 (2) of the Civil Aviation Occurrence Reporting and Investigation Regulation 2009, is seeking aircraft and aerodrome operators' support and is requesting that the Authority be provided with the monthly data for each aircraft (hours flown & sectors flown) and for each aerodrome (total movements).

The monthly aircraft information may be submitted using form CA 106A or in any form or format suitable to you as long as all the information in the CAAFI form CA 106A is included. The aerodrome summary may be submitted using form CA 106B or in any form or format suitable to you. Copies of the forms can be downloaded from the Authority's website. The monthly data should be submitted by the 5th of the following month.

The Authority also requests any data backdating till 2006 also be submitted. This will help us in doing better analysis of data stored since 2006.

Reports may be sent through the following:

Technical Officer (Records and Statistics),
CAAFI,
Private Mail Bag (NAP 0354),
Nadi Airport

Email: tors@caaf.org.fj and/or standards@caaf.org.fj

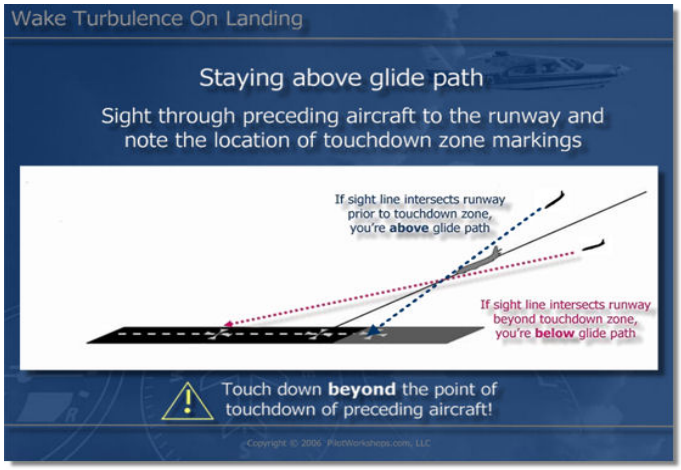
Fax: (679) 6727429

SAFETY TIPS FOR PILOTS

Tip 1 — Wake Turbulence and Landing

Pilots need to note the preceding aircraft's touchdown point, particularly if it is a large aircraft and need to land after that touchdown point. The glide path should at all times be above the glide path of the preceding aircraft, and be to the upwind side, so again, pilots need to know where the wind is coming from and which side of the aircraft the wind is from. We want to be on that upwind side.

"Well, how do we know we are in fact, above the glide path of the preceding aircraft? There are a number of ways to do it. One, if you have a glide slope capability in your airplane, note where you are on the glide slope of that runway, if it in fact, has an ILS installation. If it has PAPI or VASI lights, try to be slightly above that glide path. Again, you are assuming that the preceding aircraft is, in fact, on glide path."



Bob Nardiello provides a method that he uses to establish whether he is at, below, or above the glide path of a preceding aircraft (diagram shown above). It is pretty simple. Sight through the preceding aircraft to the runway. Note the touchdown zone markings on the runway and where your sight line intersects the runway. If it intersects beyond the touchdown zone markings on the runway, you are below the glide path of the preceding aircraft. If the sight line intersects prior to the touchdown zone that is painted on the runway, your glide path is above the preceding aircraft.

*(Safety tip by - **Bob Nardiello** - Assistant Chief Flight Instructor at the Part 141 Flight School operated by Interstate Aviation in Plainville, CT)*
Source - www.pilotworkshop.com

Tip 2—Value of Simulators

To keep your instrument skills sharp, it is a good idea to practice regularly with a simulator. The simulator does not necessarily have to be a fancy Level D but instead can be a simple desktop personal computer aviation training device. It is not too expensive and can simulate every failure, the way they really occur. A lot of people say, "Well, I can't log that. I can only log 10 hours of that towards my rating. Once I have my rating, I can't log any of that." Who cares about what you put in your logbook? **What's really important is what do you log in the way of experience and what is put in that experience logbook.**

What do these failures really look like? When a vacuum pump fails, what are you going to do? The attitude indicators starts to drift slowly. The heading indicator won't hold. You kind of wonder what's going on. Nothing's making sense. DG is turning one way; turn coordination is showing another. You are scratching your head. Did you remember to include the vacuum gauge in your scan? Let me guarantee you that if you go in a simulator and have somebody do this to you, actually fail the vacuum pump, you'll start to explore that.

Or, perhaps maybe they fail your oil pressure. Have you looked at your oil pressure on departure? You're going to take off into a 300 foot ceiling. On take off roll, your oil pressure is gone. Your engine's going to quit not too long into the flight. You didn't notice your oil pressure was gone. Well, if you've done this in a simulator, you can get up in the clouds and your engine will quit. And you know, you crash and you laugh, Ha, ha, but you've learned. Hey, I'll check oil pressure next time I take off.
So simulators can be incredible.

*(Safety tip by - **Doug Stewart** - A Master Certified Flight Instructor, Gold Seal Instructor and Designated Pilot Examiner - he owns and operates a flight school (DSFI) at the Columbia County Airport in Hudson, NY)*
Source - www.pilotworkshop.com

MANDATORY OCCURRENCE REPORTS

This column has briefs of selected occurrences in a de-identified way and the action taken after the investigation was completed. These briefs are published in the interests of improvement to aviation safety and not to apportion blame.

Operations after last light

An aircraft departed NFNM at 5:17 utc and estimated Bekana at 6:45 utc and NFFN at 6:51 utc. LFIS was advised that last light was at 6:41 utc. Thus SVFR clearance was given to LFIS to relay to aircraft to enter CTR via Bekana at A015. The aircraft crossed Bekana at 6:50 utc and landed on runway 09 at 6:57 utc.

Action: Captain counselled by CAAFI on the requirements to comply with Regulation 113 of the ANR (Operation of VFR Flights) at all times when exercising the privileges of his licence.

Aircraft Overload

On takeoff roll, the aircraft was uncomfortably heavy on lift off. Arriving at the destination, the bags were re-weighed and found to be 76kgs over from what the loadsheet had (27kg over aircraft maximum take-off weight).

Action: Capt. and F/O counselled by CAAFI to verify the accuracy of loadsheets before signing. They were also counselled on the wisdom of continuing the flight when they had knowledge that the aircraft was probably overloaded.

Leakage in aircraft

Aircraft departed for its destination and it was raining during the flight. Passengers sitting at the back had to move forward as they were being soaked by rain water that had started coming through fairly wide gaps along the top and bottom edges of the door, on the right hand side. A passenger also developed a serious ear-ache during the flight.

Action: Passenger Door seal inspected and found evidence of gaps around door edges. Door Seals were replaced where necessary. Door re-inspected and found nil gaps around the door aperture

Aircraft Taxiing on Wrong Taxiway

After landing on runway 09, the aircraft was given clearance to taxi to gates via taxiway 'B'. Pilot made a left turn and swung into taxiway 'H'. Because the aircraft was already inside 'H', it was given clearance to taxi "at your discretion" to the gate.

Action: CAAFI immediately phoned the Chief Pilot to inform him of the problem. Investigation found that pilot had landed at Nadi Airport for the first time and wasn't properly briefed prior to flight. Chief Pilot issued a Notice to all pilots on the use of taxiways at Nadi Airport.

Starboard Generator Failure

Departed at 13:09 (local) off runway 27. After making right turn to intercept track, starboard generator light was illuminated and voltage indicator was showing over voltage (29-31 V); after resetting the circuit breakers, the problem continued and a clearance to return and land was obtained.

Action: Diode (Anode) terminal was found to be broken. Diode replaced.

Dangerous Goods

During unloading of bags and cargos, a generator with residual petrol inside it, found in the forward cargo compartment.

Action: Investigation found that the packages were not checked prior acceptance for carriage. The ground staff reminded to check all packages prior to acceptance for carriage. The company already has procedures on this and all ground staff are DG trained/certified.

Flying Low (100 - 150 feet)

An aircraft was observed carrying out a right turn, after taking off on runway 09 at low altitude. Estimated to be 100-150 feet. This action contravenes ANR 97 (2).

Action: Pilot briefed on appropriate procedures and requirements of ANR 97(2) which states that—

"The pilot in command of an aircraft shall not turn after take-off until a height of at least 500 feet above ground has been attained, unless-
(a) a turn is necessary to maintain the required clearance from obstructions within the take off flight path; or
(b) a turn is necessary so as to be able to carry out a safe forced landing in the event of engine failure; or
(c) the turn is approved by the air traffic control unit in operation at the aerodrome."

PAX names not on manifest

Traffic staff loaded PAX and the aircraft took-off for destination. On reaching the destination found out that some PAX names were not on the manifest, rather different

names were. Yet the head count before departure was correct. Pilot asked traffic staff at the destination to clarify the misunderstanding and to confirm correct names. Incident was discussed with CAAFI Inspector.

Action: Investigation found that operator did not have a Passenger Handling Manual. Memo was issued to all staff detailing the passenger loading process. Operator was required to develop a Passenger Handling Manual.

Run off runway on landing

During landing on runway 16 in Kadavu as soon as power lever was selected into BETA, aircraft uncontrollably yawed left. Asymmetric BETA reverse, then the tiller was used to control yaw. The aircraft finally come to a full stop on the grass (LH Side).

Action: Main wheel assembly removed and replaced due to ware of tyre exposing canvas. Removal and replacement of main wheel was carried out in accordance with the Maintenance Manual. Operational checks of brakes and steering systems found satisfactory.

Gear problem on landing

On right base for RWY 20, the pilot selected gear down and had green indicator lights, established visual confirmation of gear down and called base with "gear down for runway 20". As aircraft turned on final, the green lights went out so the pilot cycled gear up and down. The green gear down lights came on with visual confirmation, so the pilot confirmed landing. During short final audio warning said "gear up" so pilot executed a go around. Pilot cycled gear up and down 4 times in the circuit with same results of visually down but green indicator lights would go out after 30-40 seconds. The pilot selected gear down on short finals, with green light and visual confirmation made. Landed with "wheels down" and audio confirmation established, aircraft landed without any further problems.

Action: Investigations carried out and found loose micro switch connection. Connection secured systems checked and found satisfactory.

Flaps could not retract

An aircraft's flaps did not retract during the flight. The pilots continually tried to retract the flaps during the flight but were unsuccessful to do so.

Action: Investigations found flap micro switch unserviceable. Micro switch was replaced and aircraft released to service.

Review Cycles for Standards Document—2010

The reviews of following Standards Documents (SD) will start in 2010 in the months listed.

Standards Document Name	Interval (Months)	Start Month in 2010
Approved Maintenance Organisations	12	Jan
Mercy Flights	24	Jan
Flight Crew Licensing	8	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
Safety Management Systems	12	June
Medical	12	June
Synthetic Flight Trainers and Flight Simulators	18	July
Search and Rescue	12	July
Extended Range Operations	18	Aug
Avoidance of Fatigue in Flight Crew	18	Aug
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
RNAV (GNSS) Approaches	18	Nov
Aviation Training Institutions	12	Dec