

# **AVIATION SAFETY BULLETIN**

A Publication of:

Civil Aviation Authority of Fiji PRIVATE MAIL BAG, NAP 0354, NADI AIRPORT,

REPUBLIC OF FIJI

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This is our final bulletin for 2011 and I would like to take this opportunity on behalf of the Authority, to thank all our industry stakeholders and public partners for the support rendered this year in our efforts to regulate to deliver safe and secure aviation services and environment to the travelling public.

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# **Message from Chief Executive-CAAF**

In this bulletin, we would like to report the progress of some of the work we are doing to enhance our management of safety.

#### **Safety Performance**

We recorded two accidents in 2011 compared to none in 2010 and also did not record any fatalities for four years in a row since 2008. Our primary role is to maintain zero accidents and reduce incidents and events that inconvenience the travelling public. We are confident that jointly, we can meet our safety tar-

One way to achieve this is to develop a safety culture that consistently and voluntarily supports the implementation of safety policies, practices, and standards that are designed and proven through appropriate risk analysis to produce safety outcomes.

Fiji's tourism industry and economy rely heavily on air transport which brings in more than 95% of tourists to Fiji per year and expected to continuously grow in volume. A single accident, unsafe occurrence or disruption would have a significant and negative impact on the Fiji's tourism and economy.

#### **Service Charter**

The CAAF has developed a Service Charter which can be viewed on the CAAF website and measured against 6 monthly service delivery achievements.

The Authority wish to thank all opera-

tors who have participated in our last service delivery survey. Your feedbacks have identified some areas we need to improve on to enhance our regulatory services and these would be attended to in the New Year.

This year based on the 75 activities measured under our service charter, the Authority achieved an overall 82.41% in its service delivery which is 11.2% short of the target of 93.68% and we acknowledge some of your comments that this service level is unacceptable.

Our analysis revealed that the shortfalls exist both with the Clients and CAAF. One major factor that contributed to the shortfall is the lack of advance notice by the Operators' of their business plans which had major impact on CAAF resources. Additionally, the absence of clear project plans which identify critical requirements, tasks to be carried out and responsibilities (state of design, state of operator, state of register, operator etc) before implementing business decisions further compounded our joint efforts to handle and conclude projects in a timely manner.

To correct this, the Authority will request that stakeholders meet early and discuss their business plans. Additionally, stakeholders are requested to submit their project plans where the nature and complexity of the project require such plan. The plan should clearly identify all key tasks and assign responsibilities and risks to rightful process owners.

(CE's Message continued from previous page..)

#### **ICAO Global Report**

The release by ICAO of its first ever public report on "The State of Global Aviation Safety" is another major milestone for the global regulator. It sends a clear message that sharing of safety information amongst the aviation community and the public is essential if we are to enhance our efforts to maintain and sustain, the safety level that air transport enjoys today.

Such information provides the basis for informed, accurate and timely decisions on how best to continue improving aviation safety outcomes.

Further, by providing this information in a clear and easy-to-understand format, ICAO has sought to promote improved accountability while ensuring consistency with its strategic objectives.

# Risk Based Safety Oversight Approach

In the past decade, the aviation community, in partnership with ICAO have been developing and implementing pragmatic, risk-based approaches to address safety issues. The evolution of these strategies is critical to ensure that air transport remains the safest mode of transportation.

Under the this approach the ICAO has mandated that States establish State Safety Programme (SSP) to complement and support the implementation of Operator and Service Provider Safety Management System (SMS)

#### **State Safety Programme**

From the beginning of next year, the Authority will begin developing the State Safety Programme (SSP) to supplement Operators and Service Providers Safety Management System (SMS). The legal provision for developing the SSP has been submitted to government for promulgation and CAAF will proceed with this work soon after to meet our international safety obligations.

Under the SSP, the Authority will strengthen the existing system of reporting and sharing of safety information and data. One key focus is to enhance our capacity to

collect, collate and analyse safety information/data in a timely manner and, measuring the same to produce meaningful safety performance indicators and/or targets to support safety decisions. Safety data is sourced from industry and we will require your support to allow us to access or obtain the information through a method acceptable to you.

Similarly, operators and service providers are expected to do the same for their operations under their SMS and share safety outcomes with the Authority. The Authority will also interact and share safety information on-line with ICAO under both the SSP and the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA).

## Operator and Service Provider Safety Management System

The Authority has been communicating to the stakeholders since 2006 and have mandated the implementation of safety management system across industry under the ICAO four phased approach. Some organisations have embraced the concept and have made significant strides to put this system in place. However, based on our audits, others are still in transition between Phases 3 and 4 of the SMS implementation phase and have yet to grow past these stages and set safety goals and targets.

I urge that you work with the Authority team to put in place the SMS system that suits the size, complexity and scope of aviation activities relevant to the nature of your operations and establish safety targets. Full implementation of SMS is essential if consideration is to be given for longer term validity of certificates.

#### Harmonisation

The Authority has concluded the drafting of the 38 Air Navigation Regulation (ANR) Parts in October 2011 that were identified as relevant to Fiji and conducted two months of education for the stakeholders briefing on each Part and the associated Standard Documents (SD's). The Parts are now available on the CAAF website for viewing.

Many positive comments have been re-

ceived from those who attended the education briefings. Those who did not attend are urged to review the draft ANR Parts and associated SD's and submit their comments to the Authority, particularly those relevant to their operations.

#### Consultation

The consultation process that was introduced to review the changes to aviation laws and standards did not work out as planned. This was due to the withdrawal and the non availability of the two personnel who were appointed as the Chairpersons of the Air Safety Committee and Ground Safety Committee respectively. As a result the Authority had to change the consultation process during the year where all comments were sent directly to the Authority Legal Enforcement Manager instead of the two committees.

The Authority also introduced the education briefing which gave the stakeholders the opportunity to provide direct feedback and comments during the briefing to CAAF. All comments received during the education briefing and those sent directly to CAAF are now being reviewed and a summary of responses will be provided soon.

The consultation on 12 ANR Parts and associated SD's released to industry in early 2011 was closed in December 2012. The Authority will soon be advising you of the time frame given to you to comment for the remaining 26 ANR Parts.

#### **USAP Audit**

The second cycle of the ICAO state Universal Security Audit Programme audit will take place between 19<sup>th</sup> to 29<sup>th</sup> January 2012. In this audit the ICAO will review the State's aviation security systems and compliance against Annex 17 and security provisions of Annex 9 standards and recommended practices against the ICAO eight critical elements of an effective oversight system. The audit time table has been disseminated to all stakeholders during the AVSEC and Facilitation meetings. Stakeholders are requested to contact the National Coordinator (CAAF Controller Aviation Safety & Facilitation) should you wish to know more about the audit and how it will affect you.

Issue 4, December 2011

(CE's Message continued from previous page..)

#### **Certification of Security Screeners**

In 2011 the Authority implemented the ICAO requirements for aviation security screeners' certification. Under this requirement all personnel performing aviation screening of passengers and hold baggage must undergo screeners examination set by the Authority. These requirements are essential so that international flight movement into and out of Fiji are accepted by countries these carriers fly to particularly USA, Australia, New Zealand and in Asia. The Authority has extended the date for initial certification examination for those security officers that are yet to be certified.

#### **CNS/ATM**

Fiji's Air Navigation Service Provider (ANSP), Airports Fiji Limited (AFL) had made significant investments to upgrade and modernise Fiji's CNS/ATM infrastructure to enhance safety and efficiency of air traffic. A number of separate initiatives are expected to roll out of this upgrade to fully realise the safety benefits and expected returns on these investments. This is essential in order for Fiji to fulfil its obligations to ICAO as manager of the Nadi FIR and particularly those initiatives that are driven by the Global Air Navigation Plan (GANP).

#### 1. Global Air Navigation Plan

Fiji has aligned its CNS/ATM plans to the Global Air Navigation Plan and early this year, the Authority and AFL developed and submitted to ICAO Fiji's plan in the ICAO format or National Performance Framework Form (NPFF). This is essential so that Fiji fulfils its obligation to ICAO as manager of the Nadi FIR. The NPFF identifies some key initiatives that are either accomplished and closed or will be rolled out by Fiji's ANSP (AFL) to improve safety, efficiency, continuity of traffic flow and are environmentally friendly.

# 2. ADS-B Surveillance in Domestic Airspace /TMA

The Authority is working with AFL to

review the earlier exemption issued by the CAAF to defer the ANR 23 requirement for the installation of ADS-B Mode S transponder with extended squitter on all Fiji registered aircraft to the end of 2013. The project plan is currently being reviewed and should there be a need to move the date forward, consultation with industry will begin as soon as an agreement is reached between CAAF and AFL.

#### **Foreign AOC**

Another new requirement introduced by the Authority in 2011 was the issuance of AOC to Foreign Operator's in the ICAO format. This was successfully implemented during the 1<sup>st</sup> quarter of 2011 to comply with the ICAO mandate. New foreign carriers that are granted flights to Fiji under the ASA with foreign countries will now require to hold a Fiji AOC.

#### **FNU AME Training School**

The Authority has issued an Aviation Training Institution Certificate to Fiji National University (FNU) Aircraft Maintenance Engineering (AME) School. The Certificate was issued based on FNU satisfying the requirements of Standards Document - Aeronautical Training Institution (ATI) for AME training based on its capacity to conduct the courses

its capacity to conduct the courses it currently offers to its students. The Authority will continue to offer and conduct exams for FNU AME School graduates who wish to sit the exams for the CAAF Aeronautical Maintenance Engineering Certificate.

Fiji's aviation environment is small but unique with its own challenges. The Authority acknowledges that you have a business to operate and your ultimate goal is to maximise shareholder's return on investments. Integral to business goals is the need for safe and secure operations and environment. Together we believe we can achieve our safety goals of zero accident and fatality with minimum disruptions and damages.

The year 2012 will be another challenging year and the Authority looks forward to your support as we work together to maintain a safe aviation environment for Fiji now and in future. We will need every resource and talent we have and strengthen our partnership to provide safe and secure aviation services for all. The Authority wishes all of you a successful and prosperous 2012.

# When to Decline an ATC Clearance or Instruction

Recent fatal accidents abroad have highlighted the issue of Air Traffic Control (ATC) clearances or instructions and when to decline them. Recommendations from an Investigating Authority's report into one of the accidents was to remind pilots and "... flight training organisations that they should actively teach pilots to recognise when they should decline an ATC clearance or instruction, and how to request an alternative clearance." This article, which has been localised for applicability purposes, discusses a number of factors that can influence a pilot's decision to decline a clearance or instruction.

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CAAF's Standards 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 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 Quality Assurance Manager on 6727429, dropping it in the feedback box in the foyer of CAAF HQ, or emailing to

standards@caaf.org.fj.

Your suggestions for improvements to this publication are also invited. CAAF 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.

### When to Decline an ATC Clearance or Instruction .....

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#### **CLEARANCES**

An ATC clearance is defined in ICAO Annex 11 as "An authorisation for an aircraft to proceed under conditions specified by an ATC unit." In Fiji, It is defined in Air Navigation Regulation 2 as "Authorisation by an air traffic control unit for an aircraft to proceed under conditions specified by that unit, and "clearance" prefixed by the words "taxi", off", "take "en-route", "approach" or "landing" shall be construed accordingly.

A clearance is usually comprised of a series of directives issued by ATC in response to a request initiated by a pilot. They involve a series of steps that require the pilot to understand and read back the details before they are actioned. A clearance is generally associated with operations on the manoeuvring area of a controlled aerodrome, within controlled airspace, or with enroute procedures.

Clearances, for example, apply to aircraft taking off, landing, or crossing a runway. Clearances must always be obtained before entering class A, C or D airspace (IFR or VFR).

The purpose of a clearance in controlled airspace is to provide IFR and VFR traffic with adequate separation and traffic information, so as to allow their safe and orderly operation.

Note that a clearance that requires a read back will not become effective until it is read back correctly – the controller concerned should ensure that you do read it back correctly.

It is the failure to obtain a clearance which results in most airspace infringements. The causes can be navigational inaccuracies from poor map-reading skills, straying off track, using out-of-date charts, or relying too heavily on GPS.



It should be pointed out that complying with a clearance does not allow you to break any rules or to compromise the safety of your flight. Fiji Air Navigation Regulation 103, states that:

- The pilot in command of an aircraft shall cause a flight plan to be communicated to the appropriate air traffic services unit and obtain an air traffic control clearance prior to operating a controlled flight, or a portion of a flight as a controlled flight.
- Whenever the pilot in command of an aircraft has requested an air traffic control clearance involving priority, a report explaining the necessity for such priority shall be submitted, if requested by the appropriate air traffic services unit
- 3. The pilot in command of the aircraft shall fly in conformity with the air traffic control clearance as amended by any further instructions given by the air traffic services unit unless for the purpose of avoiding immediate danger deviation from such clearance is necessary. The pilot in command shall in such event, as soon as practicable, inform the appropriate air traffic services unit of such deviation from the clearance and, if necessary, obtain amended clearance from the unit.

- 4. Where a pilot in command, whilst conforming with an air traffic control clearance, is operating in Visual Meteorological Conditions, it shall be his responsibility to avoid collision with:
  - (a) any aircraft flying in controlled airspace under Visual Flight Rules, which is not receiving an air traffic control service; and;
  - (b) any aircraft which is in the aerodrome traffic zone or on the manoeuvring area of the aerodrome.
- The issue of an air traffic control clearance shall not exonerate a pilot in command of an aircraft from compliance with the provisions of these Regulations or any directions or orders issued under these Regulations.

As a pilot you must decide if the clearance you are given complies with the Regulations and is in the best interests of safety.

Further information on ATC clearances can be found in the Fiji AIP. The following shall always be read back:-

- a. ATC Route clearances;
- Clearances and instructions to enter, land on, take off from, hold short of, cross and backtrack on any runway; and
- c. Runway-in-use, altimeter settings, SSR codes, level instructions, heading and speed instructions and, whether issued by the controller or contained in ATIS broadcasts, transition levels.
- d. Other clearances or instructions, including conditional clearances, shall be read back or acknowledged in a manner to clearly indicate that they have been understood and will be complied with.

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#### **INSTRUCTIONS**

An instruction is a directive issued by ATC for the purposes of getting a pilot to carry out a manoeuvre that will facilitate the safe and orderly flow of aircraft. Unlike a clearance, the pilot does not request an instruction, but instead is being commanded by ATC to carry out a specific task. Ignoring or failing to follow an ATC instruction may result in an incident where safety is jeopardised. There are instances, however, where a pilot may question the validity of such an instruction.

ICAO defines an instruction as "A directive issued by ATC for the purpose of requiring a pilot to take specific action". An example is, "Vacate via Taxiway Golf after landing". You must take Taxiway Golf as instructed; otherwise you may hear the aircraft following you making a go-around and then find yourself having to explain your actions. A similar instruction could be to "descend immediately and maintain 1000 feet". This, again, is a direct instruction and will tend to be used only in cases where there is a possibility of conflicting traffic. Do not descend at your leisure, as the instruction said immediately, and you need to comply - that is, if you feel it is safe to do so.

#### **CONTEXT AND SITUATION**

A point worth discussing is the subtle difference between receiving a clearance or an instruction. Both have similar meanings but are used in different contexts, depending on the situation. An ATC instruction generally needs to be complied with more quickly than a clearance.

Take avoiding a collision for example. If a controller sees a potential collision between two aircraft in the aerodrome circuit where both pilots are unaware of the danger, the controller will require a very quick response on behalf of the pilots. This response will involve recognising the dynamics of the situation and

taking action while reading back the instruction. Initiating a go-around, commencing a takeoff immediately, descending to avoid infringing airspace and vacating the runway immediately are further examples. All of these instructions are time critical. A clue to the importance of an instruction may be in the tone of urgency expressed in the controller's voice!



We often find that we have more time to comply with a clearance. Examples would include; takeoff and landing clearances, level changes, flight plan alterations, and a clearance to transit through a control zone. Many of these clearances are often associated with the separation standards that ATC have to apply to aircraft to maintain an orderly flow. While we will generally need to comply with a clearance without unnecessary delay, the nature of the situation dictates that we have a reasonable amount of time to consider if the clearance we are about to read back is a sensible one for us.

It is important to note that the two terms will be used differently (often simultaneously) depending on the urgency of the situation. It is therefore always worth considering what exactly a controller might be asking of you and how best to respond to the wide range of circumstances that you are likely to encounter. If you maintain situational awareness, that is, you have a mental picture of how your aircraft fits in with other traffic movement, you should be able to understand why you are given a particular instruction or clearance.

#### **INABILITY TO COMPLY**

Inability to comply with an ATC clearance or instruction can spring from factors such as terrain, climb performance, turbulence, poor visibility, or the need for oxygen.

The ability of an aircraft to maintain a satisfactory climbout path, particularly in the case of a multi-engine aircraft carrying out a Standard Instrument Departure where an engine may fail, is a good example and relates to some of these variables.

Fiji's mountainous areas can present difficulties when endeavouring to comply with ATC requirements. Pilots finding themselves in a difficult depar-

ture scenario will need, before takeoff, to take into account rising terrain, climb performance, false horizons arising from terrain features, and downdraughts.

An important point to remember is that not all controllers are pilots, and, while they endeavour to always issue an acceptable clearance, they may not appreciate the performance capabilities of your aircraft. If you are cleared to use a runway where your takeoff distance exceeds the runway available, or your climb out path is compromised, do not accept the clearance. Request the use of an alternative runway that accommodates your needs keeping ATC informed of the reason for your request. Simply because you have been cleared to use a particular runway does not mean that you must proceed.

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Similarly, just because you have been assigned a cruising level by ATC, does not mean that you cannot request another level. If you find that you are picking up an unacceptable amount of ice at your assigned level, experiencing turbulence, or have been cleared above 10,000 feet (when your aircraft is unpressurised), then you can request another level that may alleviate the situation. Remember, you need to request an alternative clearance before a level change. Maintaining good situational awareness, particularly in busy airspace or at busy aerodromes, will help you to quickly identify any of the potential safety hazards around you. You can then make an informed decision (from a pilot's perspective) as to whether an ATC instruction might jeopardise your safety - or that of the traffic around you. Your controller may not see the variables that you can see from the air.

The confusion of light aircraft call signs by ATC is an example when not to comply with an instruction – especially in the circuit of a busy international aerodrome. If aircraft (A) is on short finals for Runway 27 and aircraft (B) is in the downwind position, but is about to conflict with a third aircraft joining base leg, and the controller requires aircraft (B) to "orbit right hand immediately" but uses the aircraft (A) call sign, then the result could be dangerous.

If you have serious reason to question the safety of an instruction, then as pilot in command you must decide what action you will take to avoid a hazardous situation. Your priorities should be to fly the aircraft first and then to question the instruction when time permits. Controllers can be under considerable pressure and may occasionally make mistakes – they are human after all.

#### **BREACHING RULES**

There are a number of rules that could be broken while trying to comply with an ATC clearance or instruction. Examples are, minimum height, safe conduct of the flight, airspace, VFR requirements and noise abatement. You should know what rules apply to your type of operation, and not assume that a clearance absolves you from compliance with them.

#### REQUESTING ALTERNATIVES

Let's have a look at some examples of when you should request an alternative clearance from ATC. This is by no means an exhaustive list, and your guiding principle should always be to maintain the safety of your flight. Do not just disregard a clearance, but rather advise ATC that you cannot comply, and wait until an alternative clearance is issued.

#### CONTROLLED VFR

Controlled VFR is flight in VFR conditions that requires an ATC clearance is class C and D airspace. It can be used to the pilot's advantage to transit through controlled airspace, to avoid cloud and turbulence, to gain favourable wind conditions, to operate at increased altitude and therefore increased TAS, or to provide an extra safety margin when crossing large stretches of water.

You should file your flight plan as VFR and ensure that you do not enter the controlled airspace until you have received and read back your clearance. The clearance may involve having altitude and track limitations imposed upon you. You must adhere strictly to

these limits. There may only be 500 feet between you and an IFR aircraft, and any height variations on your part will reduce this safety margin. While in controlled airspace you must maintain a continuous listening watch on the given frequency, as ATC may wish to change the conditions of your clearance.

Do not assume that you will always be granted a clearance, as traffic patterns may not allow it. Plan your flight to take this scenario into account. cloud".

Note: When flying VFR in controlled airspace, you must still maintain the appropriate VFR distance from cloud and VFR visibility requirements. If at any stage you consider that you may compromise these requirements, contact ATC and request a level change clearance. Do this well in advance. It may facilitate your request if you supply ATC with a reason for the amendment. For example "Nadi Tower, Quebec Victor, request descent to 3000 feet due cloud".

If traffic conditions permit you can request a block-level clearance, which allows you to operate at any VFR cruising level up to a specified altitude. This gives you the flexibility to maintain the VFR minima rather than repeatedly have to request level changes because of changeable weather. Be prepared for your request to be refused, as it is not always possible for ATC to accommodate a block clearance.

Finally, it is worth remembering that separation from IFR traffic is not always provided, for example in class D airspace. You may be given traffic information, but it is still your responsibility to keep a good look out for other aircraft.

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#### **WAKE SEPARATION**

There is a wide variety of mixed air-

craft operations at Nadi Airport; from large jet aircraft to smaller training aircraft. With the wake separation standards provided by ATC, there is every likelihood that a light aircraft will be lined up and cleared to take off behind a medium or high category aircraft. (See Fiji AIP for details on Wake Turbulence categories). If in this instance you feel that the separation being provided would be insufficient (e.g., conditions are

calm and the takeoff path of the heavier aircraft coincides with your climb out path) and you want greater separation then greater separation from the preceding aircraft may be requested. If possible, make this request before you enter the active runway, e.g. "Nadi Tower Quebec Victor Victor, request three minutes wake separation on preceding ATR-42". You will then be re-cleared to hold or to line up and hold, depending on the traffic. Remember that wake turbulence can be fatal; an extra minute's wait is only a small part of your journey.

#### **CLEARED FOR TAKEOFF**

The same principle applies when cleared for takeoff. If you are not ready to initiate the takeoff roll as soon as you line up, do not accept an immediate takeoff clearance. Remember, however, to decline the clearance prior to entering the active runway. You will then be issued with a clear-

ance to hold at the taxiway holding position and line up in the next available slot. It is annoying for the pilot of another aircraft to have to go around because you are slow to roll.



If you are not "checks complete", don't accept an immediate takeoff clearance.

#### **RISING TERRAIN**

Nadi is an example of rising terrain near an aerodrome. Takeoff directions can be into rising terrain, with some takeoff paths being worse than others. A recent New Zealand TAIC accident report concluded that for the particular accident featured in the report it was a case of accepting the ATC clearance given without question. A safer alternative would have been available if asked for.

If you are unsure about the degree of hazard associated with a takeoff direction, and there is an alternative that would make your takeoff a safer one, then request it.

#### **EXPEDITE TAXI**

At any number of busy aerodromes you may be asked to expedite your

taxiing. This is an instruction not a clearance, and you must comply if you feel the instruction is a sensible one.

Do not let this situation vou unnecessary cause stress. An instruction like this from the Tower does not mean turn right or left immediately, but rather it means do not stop on the runway but make haste to vacate at the next available exit point. It is a good idea to check that you have your speed well under control before exiting, as a loss of control directional may mean you closing the runway anyway!

#### **IN SUMMARY**

Ask and ye may receive. If the clearance you are given makes you question your ability to operate safely and within the rules, then ask for an alternative. You are ultimately responsible for the decisions that you make regarding ATC clearances and. You are the pilot in command. You are responsible for the safe operation of your flight.

("CAANZ Vector Article rewritten by Air Safety & Ground Safety
Department-CAAF")

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

## Terrorists 'plan attack on Britain with bombs INSIDE their bodies' to foil new airport scanners

Britain is facing a new Al Qaeda terror threat from suicide 'body bombers' with explosives surgically inserted inside them.

Until now, terrorists have attacked airlines, Underground trains and buses by secreting bombs in bags, shoes or underwear to avoid detection.

But an operation by MI5 has uncovered evidence that Al Qaeda is planning a new stage in its terror campaign by inserting 'surgical bombs' inside people for the first time.

New weapon: To avoid detection by airport body scanners (above), Al Qaeda are said to be planning to surgically insert explosives into suicide bombers' bodies.

Security services believe the move has been prompted by the recent introduction at airports of body scanners, which are designed to catch terrorists before they board flights.

It is understood MI5 became aware of the threat after observing increasingly vocal internet 'chatter' on Arab websites this year.

The warning comes in the wake of the failed attempt by London-educated Nigerian Umar Farouk Abdulmutallab to blow up an airliner approaching Detroit on Christmas Day.

One security source said: 'If the terrorists are talking about this, we need to be ready and do all we can to counter the threat.'

A leading source added that male bombers would have the explosive secreted near their appendix or in their buttocks, while females would have the material placed inside their breasts in the same way as figure-enhancing implants.

Experts said the explosive PETN (Pentaerythritol Tetranitrate) would be placed in a plastic sachet inside the bomber's body before the wound was stitched up like a normal operation inciand allowed to

Failed attempt: Abdulmutallab tried to detonate a bomb sewn into his pants

A shaped charge of 8oz of PETN can penetrate five inches of armour and would easily blow a large hole in an air-

Security sources said the explosives would be detonated by the bomber using a hypodermic syringe to inject TATP (Triacetone Triperoxide) through their skin into the explosives sachet.

PETN - the main ingredient of Semtex plastic explosive - was used by Richard Reid, the British Al Qaeda shoe-bomber, when he unsuccessfully tried to blow up American Airlines Flight 63 from Paris to in December 2001. Miami

In November, a Somali man who attempted to board a flight carrying a syringe, liquid and powdered chemicals arrested before take-off.

The airliner had been due to fly from Somalia 's capital Mogadishu to Dubai .

The Somali was carrying a nearly identical package to that of Abdulmutallab, who tried to detonate it by injecting TATP from a syringe.

Abdulmutallab had stuffed explosives down his underpants as the Northwest Airlines flight from Amsterdam made its final descent to Detroit carrying 280 passengers.

But the detonator fluid set his clothes on fire rather than the device, and he was overpowered.

Security sources fear the body-bombers could pretend to be diabetics injecting themselves on airliners, Tubes or buses in order to prevent anyone stopping their suicide missions.

Companies such as Smiths Detection International UK, which is based in Watford , Hertfordshire, manufacture a range of luggage and body scanners designed to identify chemicals, explosives and drugs at airports and other passenger terminals around the world.

These include high-specification X-ray equipment that could identify body bombs.

But one source with expertise in the field said: 'They can make as many pieces of security equipment as they like but there is no one magic answer that can spot every single potential terrorist passing through.'

Conservative MP Pat rick Mercer, chairman of the Commons Counter-Terrorism Sub-Committee, said: 'Our enemies are constantly evolving their techniques to try to defeat our methods of detection.

'This is one of the most savage forms that extremists could use, and while we are redeveloping travel security we have got to take this new development into account.'

Senior Government security sources confirmed last night that they were aware of the new threat of body bombs, but were not prepared to make any official comment.

> **Christopher Leake Mail on Sunday Home Affairs Editor** 30th January 2010

(Source: http://www.dailymail.co.uk/ news/article-1247338/Terrorists-planattack-Britain-bombs-INSIDE-bodies-foilnew-airportscanners.html#ixzz0eINltf5n)

## **FCAIR**

FIJI CONFIDENTIAL AVIATION INCIDENT REPORTING FORMS AVAILABLE ON WEBSITE

www.caafi.org.fj

OR FRONT DESK, CAAF HO



# Have you checked your Licence / Permit / **Validation** Expiry Dates?

- Period of Validity current?
- Medical Class current?
- Instrument Rating current?
- Instructor Rating current?

Any flights conducted with any of the above expired can result in you contravening the Air Navigation Regulations and thereby result in you being fined and/or convicted.

Civil Aviation Authority of Fiji

Promoting effective aviation safety in Fiji and the region

## **2011 CAAF 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 2011, the survey was carried out in July. The aim of this extract is to summarize some of the comments / suggestions that were received through the July 2011 survey and the Authority's comments to these suggestions.

**Feedback:** Some of the papers sent up to CAAF for them to approve took longer than anticipated or discussed. Papers that only need a stamp and signature.

**CAAF comment:** This issue has been noted and has been reviewed accordingly. It has to be highlighted that any stamp/signature process is only initiated following receipt of all information required from the operator. Nevertheless, the Authority will strive to complete all necessary processing within timeframe as stipulated by the CAAF Charter.

Feedback: I do not understand why our pilots have to do one base check every 6 months for both aircraft (single engine VFR — not complex) while for many years they were alternating each plane every 6 months. It doubles the cost of training (recurrent) without proper justification.

**Feedback:** Instead of only picking weaknesses, try to suggest ways to improve as well.

**CAAF comment:** This issue has been noted and has been reviewed accordingly. As the purpose of the flight test is to determine a person's competence to hold a licence — to ensure minimal subjectivity - the test is conducted against a stipulated set of standards. The feed-

back provided will be in relation to the set of standards. The Authority is also in the process of formalizing flight test standards guides in similar context to CAANZ as part of the harmonization process.

**Feedback:** Testing officers' standards are not similar and some students have to listen to informal statements which are unhygienic to flying of today.

**CAAF comment:** This issue has been noted and has been reviewed accordingly. As mentioned above, for the very reason to ensure that the above does not occur — to ensure minimal subjectivity - the test is conducted against a stipulated set of standards. Any feedback provided will be in relation to the set of standards. The Authority is also in the process of formalizing flight test standards guides in similar context to CAANZ as part of the harmonization process.

**Feedback:** Companies need to take part in more timely discussion in its future planning with CAA and I feel that CAA should encourage its staff in assisting the company representative (Better Communications).

**CAAF** comment: It is Authority's commitment to take part in timely consultations with industry. Every year, stakeholders are invited to inform the Authority of their future plans so that the Authority can plan and allocate resources to be able to better serve the customers.

Organisations are also required to conduct due diligence to facilitate an efficient and timely realization of company plans.

**Feedback:** CAAF Team must visit each organisation at least once every 6 months for compliance and audits. Would like to see a more proactive

approach than reactive when incidents happen.

**CAAF comment:** The Authority normally visits each organisation every 6 months and at times more often to do certification audits, follow-ups, Safety Management Systems (SMS) audits, ramp checks, route checks, etc, to ensure systems are in place to maintain adequate level of safety. The Authority also relies on the operators to fully implement their SMS that will ensure proactive approach to managing safety.

**Feedback:** Would like to see CAAF staff visit our organisation for familiarization quality and safety audits, equipment inspections and audits in relation to compliance.

**CAAF** comment: All stakeholders are included in certain meetings with the Authority, however specific visits to organisations will be included in the surveillance plan for 2012 onwards. This is to form part of the CAAF education, persuasion then enforcement approach to safety.

**Feedback:** Would like to increase networking with CAAF.

**CAAF** comment: CAAF doors are open all the time to all our clients and we encourage networking and better communication and cooperation with all stakeholders.

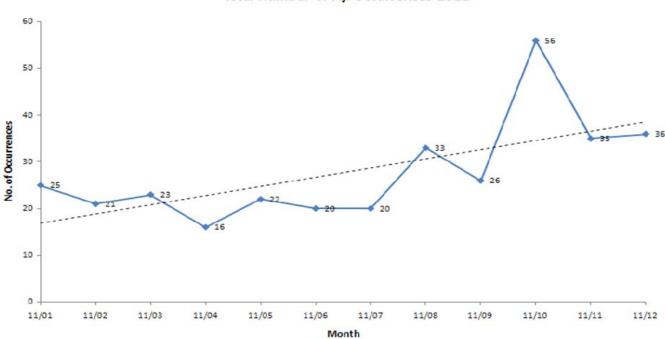
**Feedback:** All parties to be more practical in their approaches.

**CAAF comment:** It is the policy of the Authority to be practical in our approach but at the same time not to undermine or compromise Safety. CAAF encourages specific issues to be raised so that appropriate solutions can be worked out.

## **Fiji Aviation Occurrences Statistics**

#### Fiji Occurrences Trend - 2011

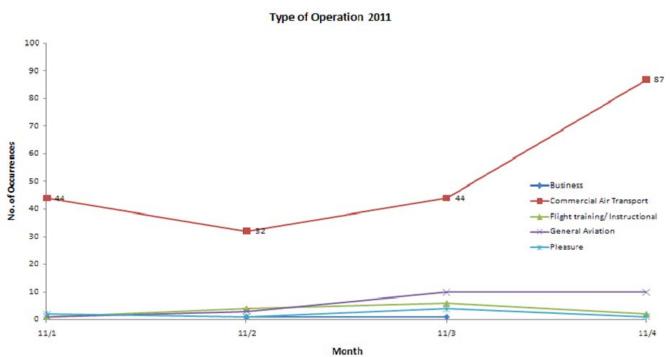
In 2011, the number of occurrences per month averaged around 28. The trend is slightly increasing over the 12 months especially due to substantial increase in the number of occurrences reported in October 2011. Bird strikes accounted for the major proportion of incidents reported in October at 17 strikes.



Total Number of Fiji Occurrences 2011

#### 2011 Occurrences by type of operations

The following figure shows the occurrence trend by the type of operation. Commercial Air Transport operations account for major proportion of incidents at 80%; General Aviation - 8%; Training/ Instructional operations - 6%; Pleasure - 5%; Business and Test Flight - 1%.

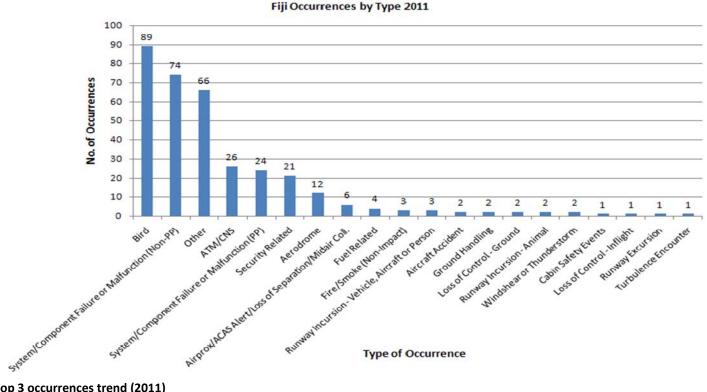


#### Fiji occurrences by Type 2011

The following figure shows the number of occurrences for each occurrence category.

Note: The Authority has adopted the occurrence categorization taxonomy developed by ICAO. The ADREP Occurrence category taxonomy is a set of terms used by ICAO to categorize aircraft accidents and incidents and allow safety trend analysis on these categories. For definitions of each occurrence category, refer to site:

http://www.skybrary.aero/index.php/Occurrence Category Taxonomy



#### Top 3 occurrences trend (2011)

The following figure shows the trends for top 3 occurrences types. Bird Strikes, System/Component Failure (Non-power plant) and ATM/CNS incidents account for 55% of all occurrences reported in 2011.

