

Safety Link

A Publication of the SA Civil Aviation Authority

March 2009

SOUTH AFRICAN



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CAHRS
Confidential Aviation Hazard Reporting System

The Confidential Aviation Hazard Reporting System

by CAHRS Investigations Section, (AIID).

The SACAA would like to share the dynamics and dimensions of the Confidential Aviation Hazards Reporting System, (CAHRS). The CAHRS is an organ of the Authority which aims to proactively identify hazard trends before they become occurrences and compromises the safety of our skies.

This System was re-launched on the 27th September, 2005. It is a statutory and gazetted entity under the Civil Aviation Regulations, (CARs) Part 12.01.8. Our country is a member State to ICASS; (International Confidential Aviation Safety System) which is in line with The Safety Management System and therefore has to conform to the principles of this vital and non punitive system in order to improve the level of safety and to recommend corrective measures.

The system guarantees full confidentiality; non disclosure and the protection of the identity of the Source / Reporter. It is also non prejudice and safeguarding of information is ensured.

In order to promote and encourage full utilisation of this system; the CAHRS section will be embarking on a promotional and educational exercise to ensure that the public as well as the aviation community is aware of the system and understands the benefits of using it.

The past year (2008) has been very challenging due to trends and occurrences within General Aviation, Aircraft Training Organisations, Flying clubs, Chartered operations, Crop Sprayers and others. Analytic findings were established with safety taking the centre stage; which were overriding safety concerns; and this lead to latent organisational and individual factors as outlined in the popular safety model: "The Swiss-Cheese model".

Also, the past year was of great concern due to a spate of fatalities within general aviation, which were as a result of various reasons, e.g, commercial benefits and so on.

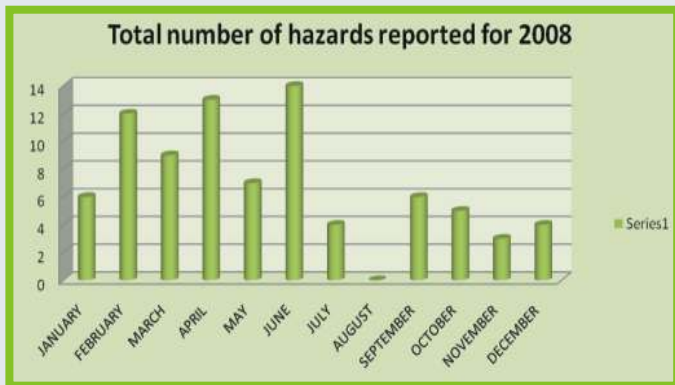
In conclusion, we therefore urge you all out there to join this partnership towards making aviation safer; because; together we can achieve more.

The Confidential Aviation Hazard Reporting System (continues)

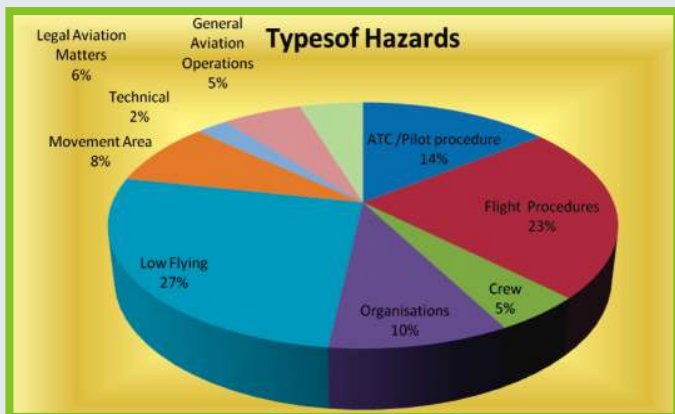
SOME FACTS ON SAFETY HAZARDS



This photo shows the same typical example of basic poor and lack of airmanship.



During the month of February, March, April & June the CAHRS entity received a substantial number of reports compared to other month in our yearly statistics.



FLIGHT PROCEDURES

Most reports submitted through CAHRS include:

- Airspace Violations
- Radio Proficiency
- Unauthorised low Flying/Disorientation
- Lack of proper training and screening of potential pilots
- Sub-standard training procedures

ATC/Pilot Procedures

- Non adherence to ATC instructions
- Unsupervised ATC Trainees executing their duties without being monitored for proficiency.

Organisation

- Lack of safety concern due to conflicting interest that leads to organisation's cheese holes.
- Disregarding the Manual of Procedures in terms of not complying or conforming to minimum safety requirements. i.e.: insufficient training/overworked pilots/Instructing pilots to take off with an aircraft above the takeoff weight and balance limit.

Low Level Flying

- Some individual pilots in the general aviation sector avoid filing a flight plan in order to evade paying administrative fees thus leading them to fly undetected on the radar system.
- Some individual pilots in the general aviation sector fly in obscurity; i.e the risky and hazardous game counting operations.
- Flying over built up areas is one of the most common aviation violations due to not conforming to the AIP procedures and / or a complete disregard by an individual to follow procedure as per the legislation.

Movement Area

- Lack of responsibility in collecting publications; i.e. Notams; by recipients.
- Detailed and concise notams classifying any activities in the movement area.
- Runway incursions i.e Vehicles entering the RWY without clearance due to insufficient training.
- Visible marking and FOD's

Risk Assessment	Risk Level
Very Serious	24
Serious	42
Moderate	17

The above table represents figures of a serious safety concern that will jeopardise the integrity of aviation safety.

Workshops should be considered to sensitise the safety awareness within the aviation community at large.

To report a hazard; to access forms and general enquiries; the CAHRS section can be contacted on:

CAHRS Department-AIID
 Private Bag x73
 Halfway House
 1685
 Tel: 011 545 1242 (Administrator)
 FAX: 011 545 1453
 Email: mooil@caa.co.za; nkosim@caa.co.za
 www.caa.co.za

From The Editor

by Ishmael Mokoena



The Concept of Safety

Vision Of The Future - Addressing Safety Pro-actively

As from January 2010, member states of The International Civil Aviation Organisation (ICAO), are expected to comply with the requirements of the Safety Management System. The primary objective of this requirement is to ensure an acceptable level of safety among service providers.

THE CONCEPT OF SAFETY

WHAT IS SAFETY:

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

STATE'S SAFETY PROGRAMME: (Safety programme + SMS = State's Integrated Safety System)

An integrated set of regulations and activities aimed at improving safety.

(i). STATE'S SAFETY PROGRAMME COMPONENTS ARE:

1. State's safety policy and objectives
2. State's safety risk management
3. State's safety assurance
4. State's safety promotion

1. STATE'S SAFETY POLICY AND OBJECTIVES

- 1.1 CAA safety standards
- 1.2 CAA safety responsibilities and accountabilities
- 1.3 Accident and incident investigation
- 1.4 Enforcement policy

2. STATE'S SAFETY RISK MANAGEMENT

- 2.1 Safety requirements for service providers (SMS)
- 2.2 Approval of service provider's acceptable levels of safety

3. STATE'S SAFETY ASSURANCE

- 3.1 Safety oversight (inspections, audits and surveys)
- 3.2 Safety data collection, analysis and exchange
- 3.3 Safety driven data and target-oversight on areas of greater concern.

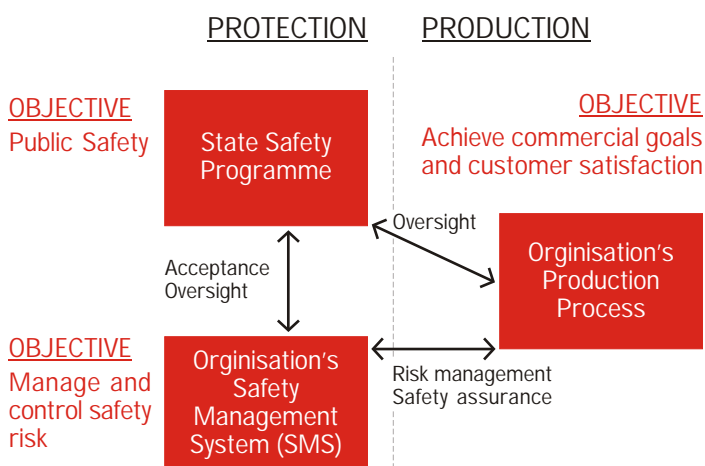
4. STATE'S SAFETY PROMOTION

- 4.1 Supports the integration of the State's Safety Programme activities; with the operation of service providers with regards to SMS:
- 4.2 Enhances aviation and security safety through continuous communication and dissemination of safety information;
- 4.3 Promotes a culture of safety thinking;
- 4.4 Addresses safety pro-actively;
- 4.5 Ensures a dual-track promotion
 - ✓ Within the CAA; and among service providers that the CAA oversees.

(Reference: ICAO Safety Manual DOC: 9859)

STATE'S SAFETY PROGRAMME

AN OVERVIEW



NOTE: Please send us any subject that you would like to see covered or send in your success stories about aviation safety and security. Email: mokoena@caa.co.za Fax: 0865626658

The Importance of Doing a Proper Pre-Flight.

by Ishmael Mokoena

Aviation Safety and Security Promotions

In the aircraft operating manual, manufacturers call for a pre-flight check prior to each flight. The importance of a proper "walk-around" can not be over-emphasized. It is a fundamental of good airmanship. Sadly; most of us usually take it for granted. I have often noticed others just rush around the aircraft; "strap-in" and then crank the engine/s.

I have also been told by some that if you just "kick-it" and "it doesn't fall off"; it is considered fine. Well be warned!!!

Not so long ago; the consequences of this were experienced by one pilot whilst in the air when it was already too late.

On that particular aircraft; maintenance had been carried out on the aircraft's retractable landing gear. A wheel change was carried out on that aircraft. The wheel change included two wheel spacers; one on each side of the wheel. Instead of installing one spacer on each side of the wheel; both spacers were all installed on one side of the wheel. The wheel was installed; the washer; the wheel nut and the split pin and signed off.

For some very strange reason; this problem was not picked up during the "post-installation inspection" if this was ever carried out.

The aircraft was released for flight. The aircraft's first take off and flight were uneventful; however; it was during the landing approach that "trouble" was experienced.

The undercarriage got jammed and failed to extend as well as the cockpit indications. The aircraft became difficult to fly and to control. All attempts by the pilot to employ various means

to extend the gear were unsuccessful. The pilot was then cleared by the ATC and then elected to carry out a "belly landing" on the runway.

Fortunate enough, the aircraft was landed successfully without any injuries to the pilot and with very minimal damages to the propeller, the undercarriage and the fuselage.

It was later discovered the undercarriage's push-rod was severely bent; causing the aileron cables to jam as well.

During the maintenance on the landing gear; both wheel spacers were installed on one side; instead of installing one on each side of the wheel. This caused the wheel to be "off-center". This "off-centered wheel" on the starboard side is clearly noticeable standing next to the aircraft.

Lesson to be learnt here is that; the crew members should put more emphasis on conducting pre-flight checks. Especially when you know that work has been done on a particular component of the aircraft.

It really does not hurt to put an extra effort and spend few more minutes on your pre-flight checks. Since it is a requirement as per the aircraft operating handbook; it will not only be a thin line between life and death; it can SAVE YOUR LIFE!!!

A CASE IN POINT: Useful data!!

When accidents occur; it is important for them to be investigated so that we all reap the benefits of learning from them. This also helps us to improve the safety of our operations. In recent times; most aircraft are equipped with very useful pieces of equipment or devices to assist us in our missions and to aid us to

operate safely. These technological aids are at our disposal and can prove to be useless if not utilized appropriately.

One fatal aircraft accident comes to mind in which six people were fatally injured. Investigators often search for clues to uncover what went wrong. It is during their processes that they will appreciate any "informative-equipment" on board the aircraft.

In the aforementioned crash; the aircraft was equipped with the latest GPS device; (Global Positioning System). When the device was recovered from the wreckage and taken for downloading; it was discovered that the "recording" function was not activated and; as a result; no data could be downloaded from the device.

Although this is secondary and optional equipment; the information stored in this device is extremely valuable and could help investigators a great deal in their quest for bringing us valuable information we can all learn from. Such devices have also proven to be helpful in sending signals in case of a crash in remote areas; which would assist in locating the crash site more quickly and possibly rescuing people and saving lives.

The non-recording of the flight means that vital information such as track; heights; speeds; endurance; etc is all lost; which is a blow for investigators in solving the mystery and closing the loop; but most importantly; preventing the re-occurrence.

Remember; if your aircraft is equipped with technological devices, such as the GPS; activate them while flying. After all; they are meant to assist us and make our operations safer.

Current HIV/AIDS Protocol Applicable to Aviation Personnel.

by Aviation Medical

BACKGROUND

HIV infection is a pandemic with cases reported from virtually every country. If untreated; the infection usually leads to Acquired Immunodeficiency Syndrome (AIDS) with opportunistic infections or associated illnesses. A 2007 report from UNAIDS/WHO estimated that 33.2 million people are living with HIV. There were 2.5 million new infections in 2007 with 1.7 million of these occurring in Sub-Saharan Africa and most increases in Eastern Europe and Central Asia, were there are some indications that the infection rates have risen by more than

50% since 2004. In 2006, 2.1 million people died of AIDS defining illnesses. According to the International Civil Aviation Organization, the prevalence of HIV infection among aviation personnel is unknown.

HIV and AIDS is one of the main challenges facing South Africa today. It is estimated 5.4 million are living with HIV in South Africa in 2005, 19% of the working age population (15-49) affected. Women are disproportionately affected; accounting for approximately 55% of HIV positive people. Women in the age group 25-29 are the worst affected with prevalence

rates of up to 40%. For men; the peak is reached at older ages, with an estimated 10% prevalence among men older than 50 years. HIV prevalence among younger women (<20 years) seems to be stabilizing, at about 16% for the three years. There are geographic variations with some provinces more severely affected.

CAUSATIVE AGENT

In 1984, the human immunodeficiency virus type 1 (HIV-1) was discovered as the primary causative agent. In 1986, a second type of HIV, called HIV-2, was isolated from AIDS patients from West Africa.

Current HIV/AIDS Protocol Applicable To Aviation Personnel (Continues)

Both HIV-1 and HIV-2 have the same modes of transmission and are associated with similar opportunistic infections and AIDS. In persons infected with HIV-2, immunodeficiency seems to develop more slowly and milder. HIV-2 infection is predominately found in West Africa and there is less known about managing the infection and prediction outcomes, than for HIV-1.

The aetiological agent is a retrovirus and the CD4+ T-lymphocytes is the primary target for HIV infection. The CD4+ T-lymphocytes coordinates a number of important immunological functions, and a loss of these functions results in progressive impairment of the immune response. Studies of the natural history of HIV infection have documented a wide spectrum of disease manifestations, ranging from asymptomatic infection to life threatening conditions characterized by severe immunodeficiency, serious opportunistic infections, and cancers.

TRANSMISSION

HIV is transmitted by sexual contact (both homosexual and heterosexual), by blood products, and by infected mothers to infected either intrapartum, perinatally, or via breast milk. The South African HIV and AIDS epidemic is defined as a generalized one, with ability to propagate on its own in the general population if unchecked. The vulnerable groups and the factors involved have been discussed, but some groups (commercial sex workers, men who have sex with men, commercial migrants, refugees, intravenous drug users, and others), may be at higher risk than the general population.

COURSE OF HIV INFECTION

The typical course of the HIV-infection in untreated patients presents in different stages. In primary HIV infection, virus replication in CD4+ T cells intensifies prior to the initiation of an HIV-specific immune response, leading to a burst of viraemia and to rapid dissemination of virus to other lymphoid organs, brain and other tissues. 3-6 weeks after primary infection, 50-70% of patients experience retroviral syndrome (Acute HIV Infection). The hallmark of acute infection is a high level of HIV ribonucleic acid (RNA) or viral p24 antigen in conjunction with a negative HIV enzyme-linked immunosorbent assay (ELISA) test, negative or evolving Western blot test, and subsequent demonstration of full antibody seroconversion. Seroconversion typically occurs within 21-28 days after exposure (range 7 days to 12 months).

The most common symptoms include fever, fatigue, myalgia/arthralgia, pharyngitis, lymphadenopathy, rash, anorexia, non-specific gastrointestinal complaints, and sometimes neurological symptoms. Symptoms spontaneously resolve in most patients. There is evidence that the persistence of the acute retroviral syndrome beyond 14 days, as well as a shorter incubation than 21 days, are predictors of a more rapid progression to AIDS.

For adults in developed countries, the average time of progression to the clinical signs and symptoms of AIDS is approximately 10 years in the absence of antiretroviral therapy. Progression is markedly age-related, with older patients doing much worse than younger patients. The latency period is characterized by large inter-individual variability in duration. Although the patient is asymptomatic during this period, in the majority of untreated cases viral load gradually increases and CD4 T cells gradually decrease, patients become symptomatic and clinically ill finally developing severe opportunistic infections.

Some 20% untreated persons develop AIDS defining illnesses within 5 years of infection, whereas others <5% have sustained long (>10 years) asymptomatic HIV infection without decline of CD4+ T cell count to <500. Perhaps 2% of untreated infected persons often called 'long-term non-progressors' seem to be able to contain HIV replication to extremely low levels and maintain stable CD4 T cell counts within normal range for lengthy periods (>12 years). The appearance of effective antiretroviral therapy, resulting in near-complete suppression of viral replication, has brought long term delay in the progression of AIDS defining illnesses and prevention of related conditions for many HIV-seropositive in the developed world.

RECOMMENDATIONS

FROM ICAO AND SACAA RESPONSE: DOCUMENT SA-CATS-MR

Document SA-CATS-MR contains the standards, rules, requirements, methods, specifications, characteristics and procedures which are applicable in respect of medical requirements. According to this document, any active disease of the lymphatic system or of the blood will be disqualifying unless acceptable and effective treatment has controlled any additional risk of functional disorder or sudden subtle incapacitation.

Those with chronic disease of these systems in a state of remission may be assessed as fit, provided appropriate specialist reports are submitted. Permit medical conclusions that the condition is not likely to affect the safe exercise of the privileges of the license. Applicants with any infectious diseases, the effects of which are likely to impede the safe exercise of the privileges of the licence or cause sudden or subtle incapacitation, must be assessed as unfit until such time as effective and acceptable treatment has removed such effects.

THE FOLLOWING SPECIFIC ASSESSMENTS ARE RECOMMENDED: IMMUNOLOGICAL STATUS

Two laboratory routinely tests are routinely used as surrogate markers of HIV disease progression to determine indications for treatment and to monitor the efficacy of therapy. These are the CD4 count and plasma HIV RNA (or viral load)

WHAT IS THE CD4+ COUNT

The extent of immune system damage is indicated by the CD4 T cell count, which is a measure for disease status and can enhance the assessment of the risk of developing opportunistic infections and other sequelae of HIV infection when used together with viral load determinations. CD4+ cell counts are subject to substantial variability due to both biological and laboratory methodologies and can vary up to 30% on repeated measures in the absence of a change in clinical status. It is important to monitor trends over time and repeat a test to confirm a value rather than take a decision on one specific determination.

The number of CD4+ cells varies diurnally, being higher in the morning, increasing slightly with smoking and decreasing acutely with stress and with intercurrent infection. A significant change between two tests (two standard deviations) is defined approximately as more than a 30% change of the count.

For practical values, a decline in CD4 count cells by 75 % a year is considered to indicate a higher risk for progression to AIDS, when the reference CD4+ cell count is <500. A CD4 T cell count of <200 is AIDS –defining even in the absence of any signs and symptoms of HIV disease.

WHAT IS A VIRAL LOAD

The rate of progression of HIV disease is predicted by the magnitude of active HIV replication, which is reflected by the viral load. Measurement of the viral load through the use of quantitative plasma HIV RNA assays permits relative risk of disease progression and time to death. However; plasma HIV RNA levels obtained within the first six months of HIV infection do not accurately predict disease progression. In contrast, plasma HIV RNA levels stabilize after approximately six to nine months of initial HIV infection and the viral set point is considered predictive of subsequent disease progression. Immunization and intercurrent infections can lead to transient elevations of plasma HIV RNA levels. Values obtained within 4 weeks of such episodes may not accurately reflect the actual plasma HIV RNA level. Two specimens should be obtained within one week.

ICAO & CAA RESPONSE TO HIV/AIDS

In its response; the government of South Africa endorsed the National AIDS Committee of South Africa (NACOSA) in 1994. This led to the appointment of provincial AIDS coordinators, the establishment of the Inter-Ministerial Committee on AIDS, and the launch of partnerships against AIDS by the Deputy President in 1998.

NOTE:

For more information on the CAA HIV/AIDS Protocol; please visit the SACAA website on www.caa.co.za

(Reference material from: ICAO; World Health Organisation; Dept. of Health and; The International Labour Organisation).

Air Traffic Services: Unsung Heroes of the Sky?

by SACAA, ATS division

I remember it so clearly, as if it were yesterday. My parents were hosting a dinner party and I had just completed my National Service with the SAAF. I had recently been accepted as a Cadet Air Traffic Controller with the Department of Transport. I had been requested by my matriarchal mother to act as barman for the evening.

"So, is Robert going to 'varsity as planned?" Aunt Nellie asked with keen interest.

"No ways!" mom replied and with a determined, proud voice, announced to all, "Robert has been accepted as a Cadet Air Traffic Controller and begins his training on Monday. Ooh, he's such a clever boy!"

She was beaming! Her grin stretched from ear to ear across her lined face. This was not just any career. This was not just a job. This was a unique profession with extreme responsibility that required quickness and sharpness of mind. Only HER son could have been chosen as one of those unique few. The crème de la crème!

Mom gazed around the room like only a proud mother can while I squirmed behind the bar mixing a scotch and soda.

And then her special moment was shattered. Hiroshima all over again!

"Will he have to do some courses in order to work those bats when he parks the aeroplanes?" Aunt Nellie asked innocently, taking a bite of a sausage roll.

Strangely enough, this question has often come up during social discourses throughout my Air Traffic Control career, clearly indicating that many people then, and now, still do not understand exactly what it is that we do.

Anyway, after four very interesting years of theory and practice at the Aviation Academy, I graduated along with five others as an Air Traffic Controller. Sitting in a glass box high above the airfield, I was responsible for ensuring the safe separation of aircraft, not only landing or taking off, but also out there over the countryside.

Using radar, (my, how it has developed), and adhering to international standards set by the International Civil Aviation Organisation, (the United Nations of civil aviation), I would go about directing aircraft safely through the skies. These rigid and explicit rules coupled to a very strange language, had to be adhered to in order to maintain safety and continuity in terms of the global requirements.



Unfortunately, the control tower I worked in, left a lot to be desired. The building itself was quite derelict, the furnishings and air conditioners were sub-standard, and a prime piece of equipment that was most essential to our operation, a large Public Works Department clock, was left balancing on two bricks to protect it from falling over.

There was no oversight checking of us as controllers, (apart from an annual medical), or of those pieces of equipment that assisted us in doing our job. It was most difficult getting improvements or additions allocated to our control tower as the argument was always, "There aren't sufficient funds in the budget." However, we were special people (and still are), and persevered with unnoticeable disruption to the aircraft, using our Air Traffic Controlling services.

Whilst we went about our daily business of controlling, sitting in front of the radar screens dressed in Chinos and short-sleeved shirts, we witnessed the rapid development and arrival of new Boeing aircraft - and then the Airbus, with their latest technologies and dashing pilots in their pristine uniforms.

Where am I going with all this? Well, my operational days are over and I am no longer instructing aircraft as to what to do. Instead, I am now an Air Traffic Services Inspector, in the employ of the South African Civil Aviation Authority and am now tasked, amongst other things, to oversee and satisfy the SACAA that ATS providers country-wide are providing facilities to their controllers according to the minimum standards as required by the law. Also, to conduct the oversight checks of the controllers themselves and to ensure that they are appropriately licensed and qualified to do their jobs. Since the advent of the commercialisation of these facilities, it has made the task a lot easier.

Our section, Air Traffic Services, falls under the Air Safety Infrastructure Division, and my colleagues and I go about our daily business of ensuring that both the national and international standards and required legal minima in our field of work are meticulously maintained. Naturally, this can only be successfully achieved through the harmonious relationship that we share with our clients and service providers.

We really don't ask for much, nor do we make a 'hullabaloo' about things, because as professionals and what we believe in, the unsung heroes of the skies, we know exactly where we fit in and the contribution we make to that complex web called 'Aviation.'

The Importance of Record Keeping in the Aviation Safety Chain.

by Aviation Maintenance Organisation of South Africa; (AMOSA)

Ask anyone in aviation what their biggest problem is, and you are likely to get a response that includes the words, technical record keeping. Either the business has a system that works for them or they have a mountain to climb to stay ahead of keeping track of aircraft maintenance. The fact that we in South Africa are required to keep all technical records for five years in itself presents a problem with storage space, then there are companies that keep records for a further five years either electronically or with a mass filing company.

Technical records are processed, data captured and entries made into logbooks from the work that has been carried out by technical personnel in their work packs. One way to look at it is as follows; to maintain a good record keeping means that the organisation has to have a good

preventative maintenance program. Such a program will be the road map to ascertaining the future maintenance/s required. Once the organisation has good maintenance records in place; which are regularly updated when work is carried out, carrying out of an accurate analysis to ensure that the organisation's resources are optimally utilized and deployed exactly where they are required will be possible. Remember: "Good record keeping takes the guesswork out of the equation".

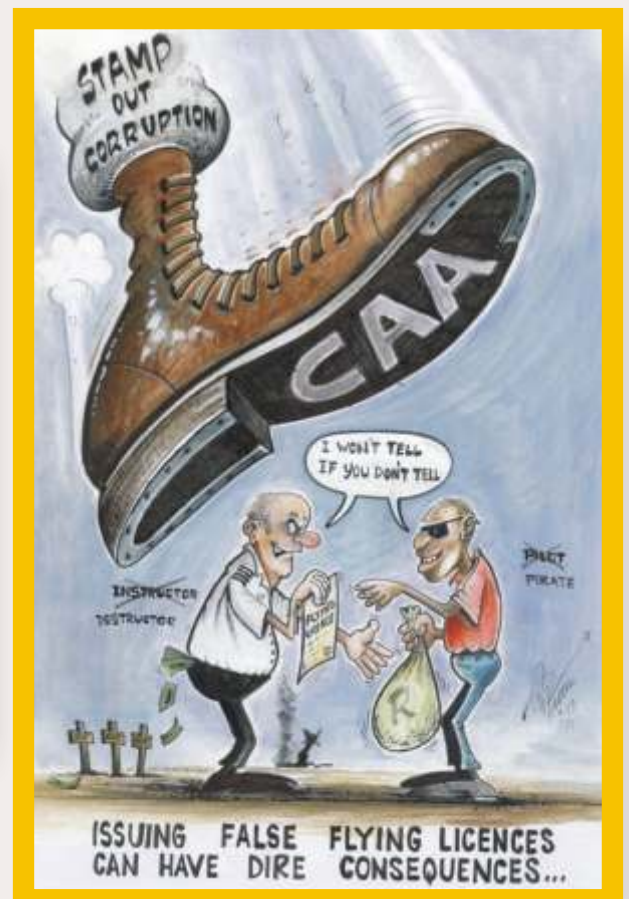
The need for record keeping is evident once the aircraft is put up for sale and the value of the aircraft is directly proportional to the state of the technical records, thus making technical records a vital ingredient during the sale of the aircraft. Lost or inaccurate records will not stop the sale of the aircraft, but the

commercial value will be significantly reduced and in some instances if repairs are made without the correct documentation, the aircraft might not be able to be traded off the African continent

What does the future hold for future technical record keeping? Paperless of course, there are a number of systems that has been developed and in October 2002, the FAA sent out an advisory circular (AC120-78) the title contains the acceptance of electronic signatures as well as electronic record-keeping. Programs which will transform the technical record departments into paperless departments. These programs share among others; the common benefits like tracking of labour, defect reports, spares tracking of SB's and AD's, and automated logbook entries.

"AVIATION HUMOUR" Cartoons

by Ryno Cilliers



Aviation Events Calendar 2009

In an effort to provide a complete service to the aviation business we are publishing the calendar as early as possible. Airshows have become some of the largest public participation events in South Africa pulling crowds that match other major spectator sports.

South African and international airshows, fly-ins and events featuring aviation displays.

South African Airshow events and Fly-Ins are subject to formal approval from the Aero Club of South Africa and confirmation of such approval needs to be sought directly from the organizers of each event.

2008

6 December SA Gyro Pilots Association Fly-Inn at Kitty Hawk.
Contact: Gerrit Roux SA GPA Cell: 082 449 9651

2009

11–12 Asian Business Aviation Conference and Exhibition – ABACE
February Website: www.abace.aero Hong Kong.
14 March Bultfontein Fly-In
Contact: Piet Vermaak 082 571 3422
or e-mail: avermaak@absamail.co.za

7 March Wakkerstroom Mile High festival
Contact: Hannelie van der Walt 082 379 0346
or e-mail: hanneliev@placo.co.za

21 March Polokwane Airshow
Contact: Amanda 082 665 1505
or e-mail: amandan@polokwane.gov.za

9 – 13 Aviation Outlook Africa - Cape Sun
March Website: www.terrapinn.com/2009/aviationza
Contact: Genna Thatcher, Marketing Manager
+27 11 516 4940

2 – 5 April AERO Friedrichshafen - Germany
Website: www.aero.friedrichshafen.com
e-mail: mailto:besucher@messe-fn.de

22 – 24 Air Africa – Aviation Industry Rendezvous
April Website: www.airafricaexpo.com
Contact: Duma Exhibitions +27 11 788 9562
e-mail: info@airafricaexpo.com

25 April Parys Wings and Wheels day – Parys airfield
Contact: Pierre and Helle Boulogne 082 686 7209
e-mail: boulop@absamail.co.za

12 – 14 European Business Aviation Convention and Exhibition –
May EBACE. Website: www.ebace.aero Geneva, Switzerland.

17 May Rand Airport Airshow
Contact: Anton Kruger (011) 827 8884
e-mail: randairport@mweb.co.za

22 – 24 General Aviation Exhibition in Prague Letnany Exhibition
May Centre. Contact: www.expo.aero/prague/location.asp

28 – 31 President's Trophy Air Race – New Tempe Airfield
May Bloemfontein. Contact: Johan Naudee 083 492 8300
e-mail: johan.naude@mangaung.co.za

20 June Heidelberg Airshow
Contact: Andre Vorster 083 654 2793
e-mail: andre@wearcon.co.za

27 June Margate Airshow
Contact: Vicky Erasmus 083 222 5149
e-mail: Vicky@wozaniafrica.co.za

27 July EAA AirVenture – Oshkosh USA

2 August Contact: Neil Bowden: 084 674 5674
e-mail: neil1@telkomsa.net

1 August Swaziland Airshow at Matsapha International Airport
Contact: Neville Houreau 00 268 518 6660
email: airsprts@realnet.co.za/
CC Pocock 082 490 5721 email: cc@bushair.co.za

29 August Vredendal Air Show & West Coast Air Carnival
Contact: André de Waal Cell: 083 627 6401

29 August Bethlehem airshow

27 – 30 African Bush Pilots Fly-In & Airshow, Barberton Airfield
August Contact: CC Pocock: 082 490 5721
e-mail: cc@bushair.co.za
Website: www.bushair.co.za/fly-in.co.za

5 – 6 Vereeniging Airshow
September Contact: Sarie van den Bergh 083 449 3378
e-mail: svandenb@media24.com

3 October Mafikeng Airshow

6 – 8 National Business Aviation Association (NBAA) Orlando,
October USA Website: www.nbaa.org

1 November Vereeniging Fly and drive in
Contact: Sarie van den Bergh 083 449 3378

13 – 15 Test Flight and Development Centre Fly-in and airshow
November Contact: Martin Richards (028) 425 4170
or 082 2927144 e-mail: tfdc@telkomsa.net

2010

23 – 28 FIDAE International Air and Space Fair Bicentenary
March 2010 Santiago - Chile Website: www.FIDAE.cl

**AIRSHOW ORGANIZERS: PLEASE SUPPLY THE DETAILS
OF YOUR PLANNED EVENT TO AFRICAN PILOT**

ASSA - Air Show South Africa: Website: www.airshowsa.org.za
Information: Lee Holmes Telephone: 083 351 8580
e-mail: airshowsa@icon.co.za Lee e-mail: leeholmes@icon.co.za

Management & Airshow Authorization: Neil de Lange - Aero Club of
South Africa: Tel: 086 1018018
Website: www.aeroclub.org.za e-mail: neil@aeroclub.org.za