



SKYwatch

SAFETY BRIEF

12TH EDITION | MARCH 2024

EDITORIAL NOTE BY THE DIRECTOR OF CIVIL AVIATION

KEEPING OUR SKIES SAFE



Dear Aviators,

As we head into the end of autumn and welcome in a new financial year in the calendar of our government, it is my greatest pleasure to present you with the 12th edition of the SKYwatch publication.

This period each year is also one where aviation plays an integral role

towards our agricultural markets. As you may know, aviation aids farmers in managing crop production. Agriculture relies on the aerial applications of organic or non-organic chemicals for purposes of weeds and pests' control and fertilisers. Each of these different applications works to ensure that the State produces the best crops possible for local and international consumption and trade.

As we prepare to witness this year's event, we carry an article that reflects on the Annual Nampo Harvest Week that took place last year in Bothaville, Free State where the organisers attracted 81 945 visitors for the event. Annually, the Nampo Harvest Week hosts 800 exhibitors and 80 000 visitors each year and is the largest agricultural show in Sub-Saharan Africa. Our GA team provided support to the event by ensuring that safety was upheld by the many aircraft that transported participants to the event. The SACAA will be participating at the 2024 Nampo Harvest week. Read more about this in this issue.

In this edition, we will also reflect on two important subject matters – cybersecurity and the non-reporting of medical conditions in aviation.

Cybersecurity is essential for maintaining the integrity, safety, and resilience of the aviation system. While we embrace innovation in this sector, we are equally mindful of cyber threats and are collaborating more to effectively mitigate risks and enhance cybersecurity across the sector. The South African Civil Aviation Authority (SACAA) has established regulations under the Civil Aviation Regulations (CARs) that requires operators to identify aviation critical assets and data, conduct risk assessments, implement security controls, and provide a solid foundation for building a robust cybersecurity posture.

With regards to non-reporting of medical conditions within the aviation space, research has shown that a growing number of fatal accidents is due to mental health with the most recent one that caught the global attention being the 2015 German Wings accident, which resulted in the European Union Aviation Safety Agency changing legislation that impacts various stakeholders. The magnitude of mental health disorders in aviation is unknown, with ICAO and many aviation authorities having now established regulations that will ensure there is advancement in research, awareness, and support on the subject to ensure that global aviation continues to ensure safe operations.

We are also celebrating some good aviation stories from the previous year as we give another reflection to the International Civil Aviation Day celebrations that took place in King William's Town in the Eastern Cape that closed off Year 2023.

Please enjoy this informative copy. Until next time.

Ms Poppy Khoza
Director of Civil Aviation

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WHICH IS WORSE — C.G. TOO FAR AFT, OR TOO FAR FORWARD?

Johan Lottering writes deciding which condition is worse, a too far forward or too far aft Centre of Gravity (CG), is like picking your poison. Either way, THE PILOT OF AN IMPROPERLY LOADED AIRCRAFT COULD BE IN TROUBLE. Which is worse? Outside the permissible limits, BOTH conditions are negative to safety and performance. Understanding the inherent nature of the two extremes is vital.

EFFECTS OF C.G. BEHIND AFT LIMIT

In a twin engine aircraft, the lower drag associated with a far aft C.G. can be compared to lower weight, which will reduce V1 (decision speed to abort or continue take-off), Vr (rotation speed), V2 (best single-engine climb gradient speed), and Vs (stalling speed). Due to an aft C.G. (within limits) presenting certain benefits, fuel is transferred from forward to aft tanks in long-haul aeroplanes.

A too-far-aft CG leads to an increased tendency to enter into an inadvertent autorotative state and subsequent spin. The real danger here is the flat spin from which it may be more difficult or impossible to recover. The longitudinal axis would be almost parallel to the horizon, preventing the airflow from re-attaching to the control surfaces or wings to allow control over

the spinning movement. During a spin, the aircraft is stalled and remains in a rapidly descending condition while simultaneously pitching, rolling, and yawing toward the spin axis. The primary recovery objective would be to stop the yawing movement with the opposite rudder as the gyroscopic movement and collective momentum involves both the wings and the body and seconds later to restore the airflow with forward pitch. (A discussion for another day). The point is that in contrast with the CG in front of the forward limit, the aircraft will stay uncontrollable.

Due to the minimal or non-existing nose-down/nose-heavy moment, the horizontal stabilizer will not create so much negative lift, so horizontal stabilizer drag will be less with a too-far aft CG which could be a 'pro'.

THOSE 'JOLLY' BONNIES

The benefits that an aft CG within permissible limits has to offer is precisely why the designers of the highly popular Beech F33, V35, and A36 Bonanzas originally opted for the peculiar characteristic of those relatively short noses and why these aircraft have traditionally fared so well in performance races! (Another discussion). Having less stabilizer drag the engine will not have to work so hard and the lower power setting will lead to lower fuel consumption, increased endurance, and range.

Aircraft models with club seating like the Piper Saratoga and the younger Cherokee Six or Big Six series offer the same benefit indirectly. If only one person occupies a second-row (aft-facing)

seat the forward-facing most aft seat offers a legs leisurely stretched seating pose with that person unwittingly reducing tail drag. However, landing and take-off should not be attempted as a too-far aft CG might cause a tendency to over-rotate and a 'nose-light' condition.

The lower drag associated with a far aft CG can be compared to lower weight, which will reduce V1 (decision speed to abort or continue take-off), Vr (rotation speed), V2 (best single-engine climb gradient speed), and Vs (stalling speed). Due to an aft CG (within limits) presenting certain benefits, fuel is transferred from forward to aft tanks in long-haul aeroplanes.



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TOO FAR FORWARD C.G.

Not only are the stability and maneuverability of an aircraft with a too-far forward CG reduced, overall performance is also impaired, to the point of being extremely unsafe. If the CG is displaced towards the nose, the drag is increased as the horizontal stabilizer has to compensate for the nose-down moment. The negative force on the tail will cause an increase in 'tail drag' requiring more power, higher fuel consumption, etc. The higher total drag can be compared to a higher weight with corresponding increases in the speeds V_1 , V_r , V_2 , and V_s . A too-far-forward CG has an overall negative impact on performance. [End]

CG Influence on Performance

BEHIND AFT LIMIT	AHEAD OF FORWARD LIMIT
Drag — less	Drag — more
Fuel consumption—less	Fuel consumption — more
Range — more	Range — less
Stalling speed (V_s) — lower	Stalling speed (V_s) — higher
Rotation speed (V_r) — lower	Rotation speed (V_r) — higher
Source: EASA ATPL Training; Mass & Balance, Jeppesen, Sanderson	



GAARS

Second General Aviation Accident Reduction Seminar

Submitted by Claudette George



The SACAA hosted a successful General Aviation Accident Reduction Seminar (GAARS) in Gqeberha, Eastern Cape, on the 28th of February 2024. Topics discussed with industry on the day include:

- The General Aviation Safety Strategy's and GAARS's history and philosophy where the goal is to enhance competence, professionalism, and airmanship. An overview of accident statistics as per their operational category and their causal factors.
- The GAARS handbook is aimed at creating a broader perspective for the pilots, having more realistic assessments, and containing holistic content while recognising certain interdependencies.
- How to overcome the shortcomings in education and training in areas that are not covered by conventional curricula.

The SACAA's SMS Technical Officer, Ms. Bongi Mtlokwa, also addressed the industry, announcing that the result of the safety culture survey will be shared following an extensive process to ensure effective implementation of the Civil Aviation Safety Plan.

Senior Manager: General Aviation, Mr. Neil De Lange, said:

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“This GAARS initiative by the regulator is critical in ensuring the importance of following safety regulations and procedures to achieve accident reduction in the GA sector.”

Training pilots, instructors, and commercial pilots in attendance all agreed that the content shared was of the utmost importance and that the knowledge imparted to them from all the experience contained in the room was profound.

The SACAA looks forward to hosting more of these seminars, as the lives saved could be yours.

SECURING THE SKIES IN THE AGE OF CYBER THREATS

Written by Dikeledi Mzimba and Given Shingange



As the aviation industry moves towards new technological horizons, the need for robust cybersecurity has never been more critical. From cutting-edge avionics and in-flight entertainment systems to interconnected ground control networks, every digital thread in the fabric of air travel presents a potential vulnerability. With malicious intent, Hackers could disrupt flight paths, manipulate data, or even compromise sensitive passenger information. To ensure the millions of travellers' continued safety and security annually, the aviation industry must prioritise a proactive approach to cybersecurity. This starts with recognising the interconnectedness of our skies, implementing rigorous security protocols across all facets of operation, and fostering a culture of awareness and vigilance among passengers, airlines, and regulatory bodies alike. Only by working together can we safeguard the digital arteries of the skies, ensuring that every journey takes off and lands seamlessly every single time.

The recent attack on Kenya¹ Airways information systems, where hackers accessed passenger and operational data, served as a stark reminder of the vulnerabilities lurking within the complex ecosystem of the aviation industry. This incident was not an isolated event but rather a symptom of a more significant challenge: the need for robust and comprehensive cybersecurity measures to safeguard our skies.

Before delving into specifics, it is crucial to demystify the terminology often used interchangeably. While related, cybersecurity, information security, and IT security differ in scope and focus. Cybersecurity encompasses the broader protection of all digital systems and data from unauthorised access, use, disclosure, disruption, modification, or destruction. Information security is a subset of cybersecurity focusing on data confidentiality, integrity, and availability. Finally, IT security refers to protecting technology infrastructure and assets within an organisation.

Recognising these distinctions is vital for aviation stakeholders to implement appropriate safeguards across various operational domains.

The International Civil Aviation Organization (ICAO) has risen to the forefront of this global challenge. Its Cybersecurity Strategy is built upon seven pillars, which serve as a guiding framework for the industry.

These pillars include:

1. International cooperation: Fostering collaboration between states and stakeholders.
2. Governance: Establishing effective cybersecurity frameworks and policies.
3. Legislation and regulations: Developing and harmonizing legal requirements.
4. Cybersecurity policy: Implementing organisational risk management strategies.
5. Information sharing: Enhancing communication and threat intelligence exchange.
6. Incident management and emergency planning: Establishing protocols for response and recovery.
7. Capacity building and training: Equipping the workforce with cybersecurity skills and knowledge.

Furthermore, the ICAO Cybersecurity Action Plan outlines concrete steps towards implementing the strategy.

This plan focuses on five key areas which are:

- Cybersecurity risk management: identifying and mitigating threats.
- Cybersecurity culture building: raising awareness and promoting best practices.
- Technical measures: deploying robust technological solutions.
- Human factors: addressing workforce training and education.
- International cooperation: facilitating global collaboration and communication.

¹<https://www.businessdailyafrica.com/bd/news/kq-suffers-passenger-data-breach-in-cyber-attack-4485998>

Securing the skies in the age of cyber threats

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With increasing digitalisation, the aviation industry faces a diverse range of cyber threats, which include:

- **Cyberattacks on critical infrastructure:** Targeting air traffic control systems, flight management systems, and avionics to disrupt operations or compromise safety.
- **Data breaches:** stealing sensitive passenger and operational data for financial gain or to cause reputational damage.
- **Ransomware attacks:** Blocking access to vital systems and demanding payment for their release.
- **Supply chain vulnerabilities:** Exploiting weaknesses in third-party vendors or partners to gain access to aviation systems.
- **Social engineering:** Utilising deception to trick employees into exposing confidential information or compromising systems.
- **Understanding these threats is crucial for developing effective countermeasures.**

To bolster the aviation industry's cybersecurity defences? Several key strategies can be implemented:

- **Risk-based approach:** Prioritise efforts based on the cyberattack's potential impact and likelihood.
- **Layered defence:** Implement multiple layers of security, including firewalls, intrusion detection systems, and data encryption.
- **Security by design:** Integrate security considerations from planning and developing new technologies and systems.
- **Patch management:** Maintain systems with the latest security updates to address vulnerabilities.
- **Employee training:** Educate employees on cybersecurity best practices and phishing awareness.
- **Incident response planning:** Develop and test procedures for responding to cyberattacks.
- **Collaboration and information sharing:** Work with industry partners, governments, and cybersecurity organizations to share threat intelligence and best practices.

The South African Civil Aviation Authority (SACAA) has established regulations under the Civil Aviation Regulations (CARs). These regulations mandate for the identification of aviation critical assets and data, conducting of risk assessments, implementation of security controls, and incident reporting procedures, providing a solid foundation for building a robust cybersecurity posture.

By leveraging the ICAO framework, industry best practices, and existing regulations like CARs, aviation stakeholders in South Africa can build a robust defence against cyber threats, ensuring the continued safety and security of our skies.

The aviation industry must recognise that cybersecurity is not a cost but an investment in the future of safe and secure air travel. By embracing a proactive approach, prioritising risk management, and fostering collaboration, the industry can navigate the turbulent skies of cyber threats and soar towards a future where passengers and cargo confidently take flight.



NON-DISCLOSURE OF MEDICAL CONDITIONS

Submitted by Dr Fatima Alli

Flying is a highly skilled job that involves a complex interaction between the aviator and the machine in an environment that is full of stressors.

Even though the flying machine may fail occasionally, it is the human component that is the cause of aviation accidents more than 70% of the time. The aircraft environment differs from other occupational environments with respect to altitude stressors such as hypoxia, noise and vibration, low humidity leading to dehydration, fatigue, decompression syndrome, acceleration, and spatial disorientation.

Due to these stressors, the aircrew is required to maintain a high level of physical as well as mental fitness and is legally required to assess their medical fitness in order to carry out their professional duties. If they are not medically fit, they have duty to notify either their aviation medical examiners or the South African Civil Aviation Authority (SACAA).

Aviation medicine combines aspects of preventative, occupational, environmental, and clinical medicine with the physiology and psychology of man-in-flight.

The medical standards and policies of the SACAA must be compliant with the Standards and Recommended Practices, or SARPs, as stipulated by the International Civil Aviation Organization (ICAO) Regulations, Chapter 6, Annex 1.

The ICAO performs safety oversight audits on Contracting States on a regular basis where they monitor compliance with the minimum SARPs, with States required to notify ICAO when there is an inability to not meet there SARPs.

Most potential pilots with a significant risk of incapacitation (e.g., Epilepsy) are screened out at the time of the initial examination. The Civil Aviation Authorities locally and internationally permit aviation personnel with certain medical conditions to be medically certified, provided that such permission does not compromise aviation safety.

Part 67.00.9 of the South African Civil Aviation Regulations 2011 stipulate that: "The holder of a medical certificate shall without undue delay, notify the designated body or institution of any – injury; hospitalisation; surgical operation or invasive procedure; regular use of medication; pregnancy; absence due to illness for a period of more than 21 days; or psychiatric treatment, which renders such holder unable to comply with the appropriate medical requirements and standards referred to in Part 67.

"The holder of a medical certificate shall, before such holder resumes the exercising of the privileges of the licence held by him or her, furnish the designated body or institution with proof that he or she has fully recovered from the decrease in medical fitness."

This means that any change in your health status needs to be reported to your Aviation Medical Examiner or to the SACAA.

Being fit for duty means that one is physiologically and mentally prepared and capable of performing assigned duties at the highest degree of safety. Medically unfit pilots pose a real danger to themselves and the public. Non-disclosure of medical conditions results in a decrease in aviation safety and potential increase in adverse events and accidents.

The consequences of a pilot's failure to disclose a medical condition includes loss of aviation medical license and hence, the pilot's license; civil litigation; implication on the insurance coverage, and even criminal exposure if a pilot is found to have knowingly misrepresented a medical status, or to have fraudulently obtained/or maintained a pilot's certificate.

One of the recent aircraft accidents relating to non-disclosure took place on 24 March 2015, when the co-pilot of a German Wings Airliner deliberately flew a plane into the French Alps, that eventually led to the pilot killing himself and 149 others onboard.



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Globally a number of surveys/studies /research have been conducted: A Cross-Sectional Survey investigating under-reporting of self-reported medical conditions in aviation personnel was conducted in Norway. The study showcased that from the 1 616 respondents, 188 individuals (12%) admitted to under-reported information that was related to one or more categories - including mental (3%) or physical health (4%), medications (2%), and drug use, including alcohol use (5%). In total, 50% of non-initial applicants reported that they have colleagues that had under-reported their medical information. ¹

A study conducted by the Federal Aviation Administration of the United States on 264 military pilots showcased that 111 (42.5 %) had misrepresented or withheld information on a written health care questionnaire. It further showed that 89 (33.7 %) had flown, despite experiencing a new physical or psychological symptom that they felt probably should be evaluated by a physician. From this list, 30 of the personnel, or 11.4 %) reported a history of undisclosed prescription medical use. ³

Some of the reasons for under-reporting is a fear of losing employment, a financial income and possibly incurring a negative social perception. Non-disclosure can be averted by education on medical protocols, on acceptable medical conditions as well as medication.

Providing more information about the necessity of the medical process, the nature and treatment timeline of a possible medical condition can also help in lowering a pilots' levels of stress and anxiety.

In order to mitigate non-disclosure, Part 67 of Civil aviation legislation stipulates that aviation personnel are required to complete a medical examination form which contains a declaration by the applicant stating that the medical information provided is complete and correct and that they have not withheld any relevant information or made any misleading comments. The Declaration Further stipulates that an incorrect statement or failure to provide medical reports may be grounds for denying or revoking a medical certificate and enforcement action being imposed.

Despite the declarations, the SACAA receives a number of anonymous tips off from various sources reporting different categories of medical certificate holders who either fly knowingly that they have been declared medically unfit, or

those who fail to disclose medical conditions to either their designated aviation medical examiner or to the SACAA. These cases do end up with enforcement action being imposed by the civil aviation Regulator.

Aviation personnel are required to notify the aviation medical examiners and the SACAA Medical Department on medical status changes that may have occurred while they are holding a valid medical certificate. It is the duty of an aviation personnel to remain cognisant of their responsibility to report changes in their health.

In some instances, aviation personnel may not have enough information to determine if a particular illness or treatment may render them unfit for flying. These conditions may include illnesses - even minor ones- that can seriously de-grade performance.

These illnesses can produce symptoms, such as a fever, which has a potential for impaired judgement, memory or alertness, and the ability to make correct calculations.

Prescribed and over the counter medication, alcohol, fatigue, stress, and emotional issues are some of the factors that can impair an aviator's performance or to make them more susceptible to the effects of altitude, thus compromising safety. If uncertain, aviation personnel must contact their aviation medical examiner, or contact the Medical Department of the SACAA for guidance. It is best to err on the side of caution, but should there be serious issues, these can put lives at risk. Non-disclosure of medical symptoms or conditions to the aviation medical examiner negates the safety benefits.

For more information on the requirements for medical certification of aviation person, please contact the SACAA's Medical Department or visit www.caa.co.za, click industry information and click aviation medicine. Alternatively aviation personnel can access the regulations and technical standards on the CAA Nexus Lexus under Part 67 Regulations and its associated Technical Standards.

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EASTERN CAPE LEARNERS AND EDUCATORS GET UNIQUE OPPORTUNITY – ICAD CELEBRATIONS AT BHISHO AIRPORT

Written by Mr Moses Mushovholwa

(Aviation Development and Stakeholder Relations Officer at the South African Civil Aviation Authority)

The National Department of Transport in partnership with different transport entities including the South African Civil Aviation Authority (SACAA) and stakeholders celebrated its annual International Civil Aviation Day (ICAD) at Bhisho Airport, King Williams Town, Eastern Cape province, on 8-9 December 2023.

In terms of the highlights, the event started with the arrival of enthusiastic learners as early as 8:00am. They were ushered to the main hangar by marshals where presentation about a plethora of careers in aviation was presented to them by Moses Mushovholwa, JAAP Co-ordinator, affectionately known as “Pastor of Aviation” in the Aviation industry, from the South African Civil Aviation Authority.

Purpose of the day was given by Seolebaleng Mashodi from the Department of Transport, who addressed the learners explaining the purpose of the gathering, and the background about the celebration of International Civil Aviation Day (ICAD). The platform laid down the foundation for both the learners and exhibitors to understand the purpose of gathering every year in different provinces, to commemorate ICAD through career exhibitions and airshows.

“In 1996 the International Civil Aviation Organization (ICAO) which is the international body for civil aviation matters declared the 07th of December, the International Civil Aviation Day. The purpose of the International Civil Aviation Day is to recognize the importance of aviation, especially international air travel, to the social and economic development of the world. Aviation connects people, cultures and economies not only in South Africa but across the globe. Another important reason why we celebrate ICAD is to raise awareness about the important role of ICAO in global air transport and to bring aviation to those who are less exposed to it”, said Mashodi.

“ICAD is celebrated on a rotational basis between provinces. We chose to celebrate it the South African way by taking aviation to the youth, especially those who live in rural areas. We last hosted ICAD in the Eastern Cape in 2011, we felt we should come back again this year. The theme for this year is **“Advancing Innovation for Global Aviation Development”**, added Mashodi.



“We hope that you will enjoy this day, and leave this place encouraged. We have brought you the transport industry (air, water, rail) they will share the different careers and bursary opportunities they have. We also have role models who will be sharing their journey with you. I would like to leave you with this quote by Brian Tracy- **“You begin to fly when you let go of self-limiting beliefs and allow your mind and aspirations to rise to greater heights”**. “Overcoming self-limiting beliefs and self-imposed limitations is often the biggest obstacle standing between you and the realization of your full potential”, concluded Mashodi.

The learners were introduced and guided on how they can access information pertaining to aviation careers and information on the South African Civil Aviation Authority’s bursary opportunities.

Educators from various schools were also beneficiaries of the teacher capacitation workshop conducted by Sabelo Mbuku from the Transport Education and Training Authority (TETA).

The objective of the workshop was:

- **Career Development Services Presentation:** Transport Sector Learner Guide mapping and navigation.
- **Life Orientation vs Career Guidance:** In-class relevant and practical examples.
- **Further Education Funding:** Funding opportunities available.
- **Educator Development Opportunities:** Further education and skills development for educators.
- **ICAD Exhibitors Overview:** Presentation of opportunities from all exhibitors.
- A total of **39 educators** attended the event over 2 days.

As part of exposing learners and guiding them in terms of career choices, role model session was aimed to achieve that. The following role models addressed the learners: -

- (A) Department of Transport: Kamogelo Mapheto – Statistical Analysis, Kutlwano Dikobe – Aviation Safety and Security.
- (B) EC Transport: Amanda Gill.
- (C) Air Traffic and Navigation Services: Zinzi Vitshima, Nosindiso Lilise, Ernest Madisa
- (D) South African Civil Aviation Authority: Nomathemba Khumalo – Aeronautical Engineer and Kwanele Solombela – Pilot.
- (E) SAPS Airwing – Captain Wisani Babane.
- (F) Airports Company South Africa – Brenda Fortein and Delano Van Rooyen.
- (G) Transport Education Training Authority – Elias Phale.
- (H) South African Airforce – Major Itumeleng Lephothe.
- (I) ARMSCOR – Mantwadi Motau.
- (J) 43 Airschool – Alex Todd.
- (K) Fuze Aviation – Leeche Emmanuel.
- (L) Future Flyers – Mosima Esther Khumalo.
- (M) Ntsu Aviation – Phaphama Nxumalo.
- (N) Hamba Nathi – Sanele Zulu.
- (O) Border Aviation – Sisipho Nofemele.



The event was part of the DOT's integrated career exhibition and promotional strategy to entice learners to the world of aviation. Learners also enjoyed helicopter flips. Unfortunately, they did not have an opportunity to enjoy the airshow as the weather on the day was not suitable for flying.

AVIATION CAREER EXPO & DRONE DISPLAY 2023

Inspiring the youth to take to the skies

Submitted by Aubrey Sepataka

The South African Civil Aviation Authority on an annual basis hosts a number of career expos to benefit the youth of South Africa on the world of aviation. As a national Regulator the SACAA partners with provincial departments of transport, education, local municipalities, etc. to bring this message of hope to particularly previously disadvantaged learners and communities.

One such event was hosted during the celebration of October Transport Month in partnership with the Mpumalanga Department of Public Works, Roads and Transport, Department of Education and the Emalahleni Local Municipality amongst many other stakeholders. For the first time in this particular expo in 2023, the SACAA also invited the youth from outside the Mpumalanga province to submit essays on aviation to stand a chance to win a trip to attend the expo. The five (5) winners were transported to the expo with their life orientation teachers to enjoy the activities.

Empowering Youth Through Knowledge:



The primary goal of the SACAA Career Expos is to inform students about the vast array of career opportunities within the aviation sector. By introducing them to these opportunities early in their educational journey, the SACAA aims to empower these students to make informed choices about their academic path.

A Day of Exploration:



The events feature career exhibitions by various companies involved in aviation, showcasing the diversity of career paths available in the industry. Participating exhibitors include SACAA, SAPS, ATNS, TETA, Drone Operators Provincial Departments of Education and Transport, and many other aviation companies depending on the each of these organisations play a vital role in inspiring the next generation of aviation professionals. The career expos also feature testimonies from young aviation professionals such as pilots, aircraft maintenance engineers, accident investigators, drone pilots, cabin crew, etcetera.



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Drone Delights:



The SACAA incorporated a drone display into the career expos to introduce learners to the world of unmanned aircraft systems. The future is technology and drones are an opportunity to bring in as many learners into aviation thereby changing the face of aviation from a transformation perspective. One of the highlights in the career expo in Witbank was the mini drone display conducted by UAV & Drone Solutions using a DJI Matrice 600 aircraft. Although the weather was less than cooperative, it couldn't dampen the spirits of the attendees. Despite the challenging conditions, the DJI Matrice 600 soared into the skies, captivating a crowd of 800 eager onlookers. The display was expertly narrated by Mr. Madimetja Madi, a seasoned pilot holding a commercial pilot's license and a remote pilot certificate with ratings that included the Boeing 737 rating, and manned and unmanned instructor's rating.

Future Aviators:



The SACAA Career Expo and Drone Display in Witbank was a resounding success, achieving its primary objective of educating and inspiring young minds. By providing a platform for students to explore career possibilities within aviation and drone technology, the event encouraged them to dream big and aim high. The dedication of all the participating organizations and the enthusiasm of the attendees ensured that the event left a lasting impact.

The SACAA Career Expo and Drone Display demonstrates the power of education and inspiration in shaping the future. By introducing local students to the diverse career opportunities within the aviation industry, SACAA and its partner organisations plants the seeds of ambition and knowledge. As these young minds continue to grow, they may very well be the future pilots, engineers, and innovators who drive the South African aviation industry to new heights. This event was not just a celebration of aviation but also a celebration of dreams and aspirations taking flight.



NAMPO HARVEST WEEK:

SACAA ENSURING AVIATION SAFETY

Submitted by Solomon Banda

The Annual Nampo Harvest Week is the largest agricultural show in Sub-Saharan Africa, hosting about 800 exhibitors and 80 000 visitors each year. The event was held from the 16th to 19th of May 2023 in Bothaville, Free State and the organisers recorded 81,945 visitors.

Although it is an agricultural show, the event attracts several manufacturing exhibitors, including transportation manufacturers and service providers. This event attracts a lot of visitors, and this results in making it a mission to get into the venue. However, this event serves as an opportunity for the aviation industry to offer a prompt, safe and convenient means for visitors to not only arrive in style but also offer flexible and convenient means of transportation.

The organisers were designated into two sections of the park, allowing the aircraft to safely land, parking and take off. The East side of the airfield was designated and dedicated for helicopters and rotorcrafts while the West side of the airfield was designated for fixed-wing aircraft, including the 1200 metre long, grass-covered strip for landing and take-off.

The air traffic control services were offered by the Air Traffic Navigation Services (ATNS) special air event dedicated team and Cliff Lotter (Airfield Safety Officer) and his team offered marshalling and ground control services.

SACAA involvement

In all the events, the South African Civil Aviation Authority (SACAA) had a team of inspectors from the General Aviation Department to provide general oversight, including conducting ramp inspections. This not only ensures compliance with SACAA's regulations and requirements, but it also serves as an opportunity for the pilots to interact with the inspectors and ask pertinent safety related questions. All Pilots who were approached for ramp inspections received praise from the team of inspectors and all the first-timers, got "schooled" on a number of SACAA requirements, including which documents to carry on board as per **SA-CAR 91.03.1**.

A few Pilots received New Card licences and were assisted in downloading and navigating the app, in order to verify their licences and ratings.



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Future Endeavours

The presence of SACAA inspectors was welcomed and appreciated by pilots. Some familiar faces were present, and others volunteered their aircraft to be ramped and have their aircraft documents checked. The overall response and feedback was positive from the aviation industry.

The SACAA General Aviation is in the process of becoming more visible at such events and on the airside to promote safety and ensure compliance, including the much-needed assistance for pilots and aviation enthusiasts. This process supports the SACAA mandate by promoting safety and reducing aviation accidents.

Lastly, the GA Inspectors on site conduct ramp inspections by giving guidance to GA pilots, regarding the latest regulatory amendments, including accidents statistics and how these affects them and how to incorporate them into their daily practices.



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The SACAA and Safety Outreach FG would like to acknowledge the efforts and contributions of its own staff and other external parties involved for their dedication towards making this publication a success.

We welcome the submission of articles for publication in SKYwatch.
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