Namibian Civil Aviation Authority

4 Rudolf Herzog Street
P/Bag 12003
Auspannplatz

Safety Promotion and Quality Department

spq@ncaa.na
Ph. 083 235 2511 or 083 235 2468

MAY2024

Safety MATTERS

Providing the Namibian aviation industry and users with vital information on the latest aviation safety statistics and reports for the continuous improvement of safety systems:

Shared Knowledge = Improved Safety

www.ncaa.com.na

This monthly publication will keep industry, NCAA, license holders, and the general public updated in terms of what has occurred in safety monthly within the industry. All reports are de-identified and no attempt should be made to identify the reporter in this or any other avenue unless specific authorisation is given.

Contents

Safety data trending is essential in aviation safety. Only with adequate data on proactive and reactive mechanisms can we move towards prediction. By analysis of key events and processes through appropriate metrics we can grow and develop - moving closer to achieving our goal of maximum achievable safety levels and minimum undesirable events.

Safety Statistics

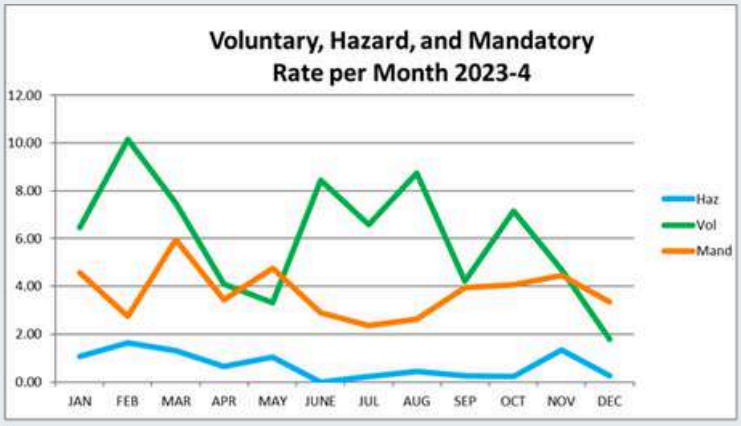
May 2024

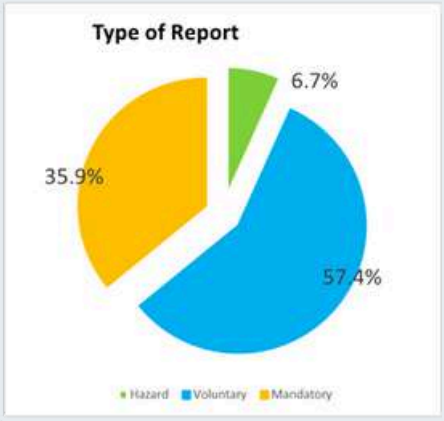
In May there were 39 occurrences and events filed for 4844 movements, resulting in a report rate of 8.05 reports per 1000 movements.

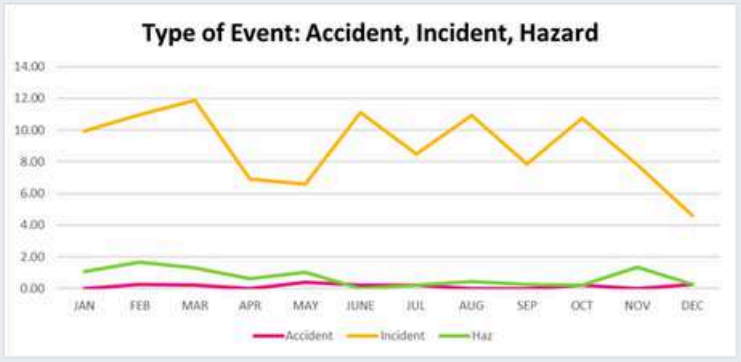
There were thirteen medium risk events, slightly higher than normal, however including five bird strike events. There were three high risk events. More details are in the occurrence section and the trends will be reviewed within the SSP Steercom and SSP TWG.

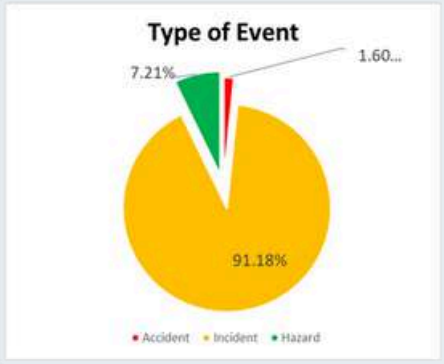
The total breakdown of report type included 16 voluntary reports, including five hazard reports, and the remaining 23 were mandatory reports.

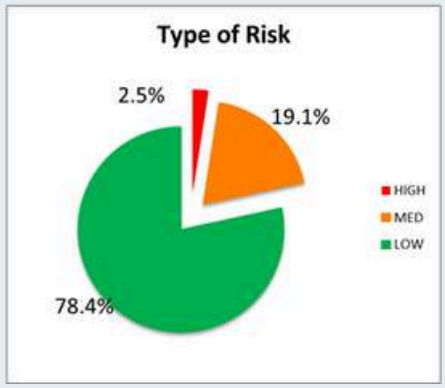
For more about classifications of risk see the definitions in Safety Bulletin 1-22. Graphs included in this document show 12 month rolling figures unless specified.

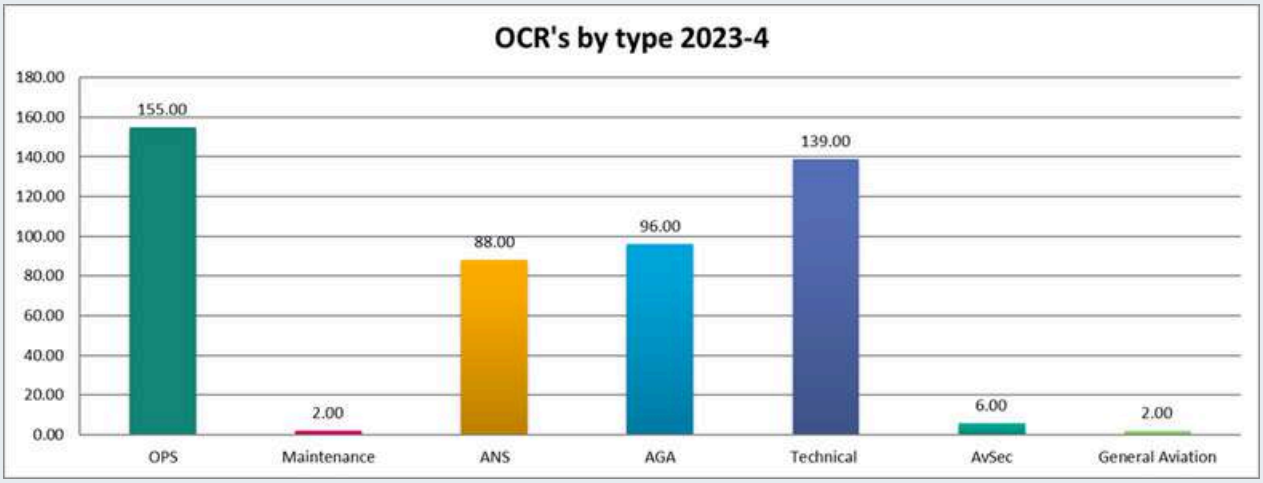












Safety Dashboard

First let me reiterate my profound sympathies for the family, colleagues, operator, and all those involved in, or affected by the tragic accident of V5-ASB in May. Accidents bring to us the reflection of everything the safety system is trying to prevent and are a reminder that safety is not only not negotiable, but it must be at the forefront of all our thinking, all our actions, and all operations.

At NCAA audit processes are ongoing with all safety sections, steered by CRR and the NCMC, working very hard on corrective action plans (CAPs). I must note that we are in no way resting on the laurels of a successful outcome but working hard to close CAPs and work towards an even higher effective implementation in the next event.

During May we were pleased to report participation by a number of staff and senior management in the AFI-RASP and NASP implementation workshop arranged by the ICAO ESAF office. Namibia presented a topic on the SSP progression and was upheld as an example of positive progress in safety to other States. A big pat on the back for all those both internal in NCAA and external from our stakeholders, who assist in the SSP Steering Committee, technical working groups, document development, and workshops, helping make the State Safety Programme a success.

Another key event in May was the Regional Workshop on Carbon Emissions organised as part of the European Union financed technical cooperation project, mitigating greenhouse gas emissions from the civil aviation sector in Africa and the Caribbean countries, and assisting with implementation of the ICAO CORSIA standards. This was attended by NCAA, MEFT, Fly Namibia, and NAC representatives.

With the strong support of all our stakeholders, together we can be a pillar of excellence in the African aviation safety oversight arena.

Yours in safety, Ms Toska Sem, Executive Director

Safety in Flight, Confidence in Compliance!

NCAA TRAINING IN MAY

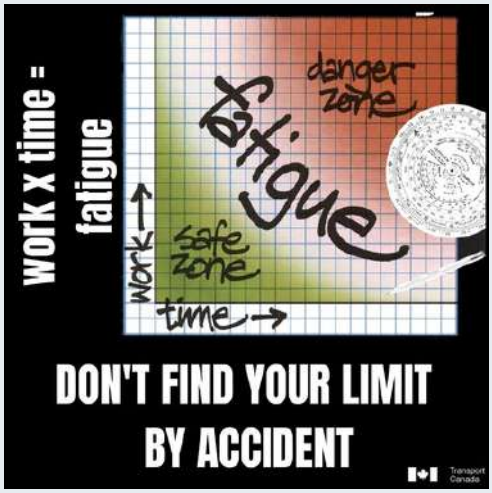
Training in aviation is a fundamental pillar in ensuring the safety and efficiency of air travel. Given the complexity and high-stakes nature of the aviation industry, continuous and rigorous training is essential for all personnel, including pilots, maintenance technicians, air traffic controllers, and ground support staff. Through comprehensive training programs, aviation professionals gain critical skills in safety management, emergency response, regulatory compliance, and operational excellence. These training initiatives not only enhance individual competencies but also foster a culture of safety, vigilance, and continuous improvement within the aviation community.

In May 17 NCAA staff members participated in eight intensive training programs and workshops defined below, designed to bolster safety standards, improve operational procedures, and ensure compliance with aviation regulations.

1. ICAO Convectional Cartography, EASA-Nairobi Kenya (x1)
2. EU CORSIA Africa and Caribbean Project Sub-Saharan Regional Workshop, Addis Ababa, Ethiopia (x3)
3. ICAO Accident Investigation Workshop, Dakar, Senegal (x2)
4. Molit Support Program- Aviation Policy for Women, Seoul, Korea (x1)
5. Regional Workshop on Air Workshop Cargo Security, Zanzibar, Tanzania (x1)
6. Aviation System Block Upgrade Fundamentals Workshop, Mbabane, Eswatini (x5)
7. Data Integrity Specialist AIP Specialist -EASA-KCAA, Nairobi, Kenya (x2)
8. ICAO Workshop on NASP Development Driving AFI RASP Implementation, Nairobi, Kenya (x2)

The aviation training courses and workshops our staff members received in the month of May have greatly improved our staff's understanding and preparedness for safety oversight. By incorporating these practices into our daily operations and cultivating a culture of continuous learning and development, we can create a safer and more efficient aviation environment.

Safety is paramount, and thorough training is the cornerstone that supports this unwavering commitment.



THOUGHTS ON COMPLACENCY

Complacency is number two in the human factors 'dirty dozen' and for very good reason. When complacency creeps in we are no longer proactive in attending to safety hazards, and if we are not proactive, we are passively engaging in hazardous practices.

Complacency arises when we routinely carry out the same tasks many times without any event. It also arises when we are not improvement orientated, the phrase "we've always done it like this, so what is the problem" comes to mind. The world is a changing place and there are errors creeping in everywhere and there is *always* scope for improvement. Only when we are focusing on continuous improvement are we capable of continuous reduction in rates of undesirable events and avoidance of complacency.

Let me reiterate that, it cannot be said enough, safety management is an active system and requires full participation by everyone within an organisation for significant success. When you are working in any capacity in aviation, remind yourself to *stay vigilant*. Don't let complacency creep in, always think "what if?", and "Am I giving full attention?" - be the best you can be in your position and keep striving for excellence.

Finally, don't forget the importance of hazard awareness and reporting has as a countermeasure for complacency. If we all keep vigilant all the time, we will all improve our safety status and reduce undesirable events.

A reminder of our Safety Culture Survey, and lest we not forget the incident and hazard reporting email: incidents@ncaa.na

Safety Performance Indicators 2024

SPIs

There were again a number of loss of separation events, one unmanned, one resulting from an adjacent FIR, and two others under investigation. Our year-to-date rolling total remains with six of the seven monitored categories below target. NCAA is actively working on developing more information on maintenance trends. Additionally proficiency programmes are being investigated for LOC-I events which are primarily on takeoff and landing.

Please note the figures are provided as a rolling total.

	Airprox/LOS A	CFIT	Rwy Excurs.	Wildlife	LOCI	Rwy Incurs.	Maint & Tech
Average	0.242	0.021	0.040	0.890	0.075	0.079	2.744
JAN '24	0.000	0.000	0.000	2.042	0.000	0.000	2.553
FEB '24	0.262	0.000	0.000	0.786	0.000	0.000	3.669
MAR '24	0.440	0.000	0.220	0.660	0.000	0.000	5.063
APR '24	0.431	0.000	0.000	0.431	0.000	0.000	2.585
MAY '23	0.826	0.000	0.000	1.032	0.206	0.000	2.064
JUN '23	0.483	0.000	0.000	0.966	0.241	0.000	3.381
JUL '23	0.000	0.000	0.000	0.471	0.235	0.471	1.177
AUG '23	0.000	0.000	0.000	0.438	0.219	0.000	2.408
SEP '23	0.000	0.000	0.263	0.525	0.000	0.000	1.838
OCT '23	0.238	0.000	0.000	1.192	0.000	0.477	3.815
NOV '23	0.223	0.000	0.000	1.116	0.000	0.000	3.348
DEC '23	0.000	0.256	0.000	1.026	0.000	0.000	1.026
Target 2023	0.248	0.137	0.111	1.615	0.110	0.124	1.958
Avg 2022	0.315	0.192	0.137	1.106	0.094	0.145	2.198
SD 2022	0.279	0.208	0.172	0.599	0.141	0.237	0.719
Alert 3	0.593	0.399	0.310	1.705	0.236	0.382	2.917
Alert 2	0.872	0.607	0.482	2.305	0.377	0.619	3.636
Alert 1	1.151	0.815	0.654	2.904	0.518	0.856	4.354

Safety Thought for the Month

"If in doubt, there is no doubt. If you are not sure - don't! " Anon

Stay Safe!

Reporting

SAFETY OCCURRENCES

MAY 2024

TECHNICAL FAULTS (MANDATORY, LOW RISK, AIR/OPS)

Of note in technical events there was another uneventful turbine engine failure enroute. The frequency is followed with investigation into the trend in PT6 faults. The reports were as follows:

No.	Fault	Type
1	Gear fault	piston
1	Flat tyre	piston
3	Engine failures	turbine, piston
1	Electrical failure	piston
2	Nose wheel shimmy	piston
1	Pressurisation fault	jet
1	Fuel leak	piston

The requirements in NAMCATS-SMS-140, Appendix A regarding reportable occurrences shall be noted, there is a large number of pages related to airworthiness defects that require reporting, and rather than look the lengthy list up every time, remember if in doubt report!

Further it is essential that all service providers, inclusive of AMOs, shall have an SMS acceptable to the Executive Director. It is essential that your SMS is a living system, built on trust and a reporting culture.

SAFETY OCCURRENCES

MAY 2024

WILDLIFE STRIKES (VOLUNTARY, MEDIUM RISK, AGA)

There were five bird strike events reported in May, including 3 events and two observations. There was additionally one game encounter.

Wildlife	Events and near misses		
No.	**AD**	**Phase**	**Details**
1	Kupferberg	Enroute	Vultures
1	FYWE	Takeoff	Crows
2	FYWE-FYWH	Enroute	Unknown
1	FYOG	Takeoff	FYOG
1	FYOQ	Landing	Springbok

The below table shows rates per 1000 movements as of the end of May.

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2024	2.042	0.786	0.660	0.431	1.032								
2023	1.346	0.823	1.398	0.696	0.623	0.966	0.471	0.438	0.525	1.192	1.116	0.500	42
2022	0.846	0.739	1.126	1.272	1.308	2.350	1.877	0.219	0.250	0.679	0.684	1.925	50
2021	2.864	7.380	8.123	2.052	3.745	4.223	0.000	2.778	0.000	1.855	0.835	0.000	74

SAFETY OCCURRENCES

MAY 2024

GO AROUNDS AND DIVERSION EVENTS (VOLUNTARY, LOW RISK, OPS/ANSSO)

The following table shows go around and diversion events for May.

No.	Details	Intended
1	Go around due to windshear	FYWH
1	Go Around due to unstable approach	FYWH
1	Go Around due to traffic	FYWH

ATS / MET RELATED EVENTS (MANDATORY, LOW RISK, ANSSO)

The following ATS / MET related events were reported in May.

ANSP	Fault	Area
1	Roster mix up	FYWB
2	Poor quality transmissions, frequency bleed	FYWE
2	Power faults	FYWH, FYLZ
MET	**Fault**	**Area**
2	Weather display fault	FYWE, FYWH

AERODROME RELATED EVENTS (MANDATORY, LOW RISK, AGA)

The following Aerodrome related events were reported in May.

No.	Fault	Area
1	Aircraft failed to clear customs	FYWE
1	Civilian on manoeuvring area during VIP movement	FYWB
1	Landing without airport rescue and fire fighting (ARFF) services	FYWE
1	Stock, people, children, cars, on the runway	FYOG

SAFETY OCCURRENCES

MAY 2024

ENGINE FAILURE (MANDATORY, MEDIUM RISK, AIR/OPS)

Enroute from Opuwo to Ondangwa, a twin turbine aircraft experienced a loss of torque and rpm followed by an oil pressure loss and oil pressure master warning annunciator. The Captain took control of the aircraft and the first officer declared an emergency with area control. The crew identified, verified, and secured the engine, completed the QRH checklist, and ran a decision-making model (FORDEC). As they were on the descent when the issue occurred they elected to continue to their destination. They requested emergency services on standby and briefed the passengers (5Cs). The flight continued without further incident.

With correct crew actions an engine failure enroute can be a non-event, always ensure you follow your emergency SOPs and apply appropriate airmanship as this crew did.

SAFETY OCCURRENCES

MAY 2024

NO AIRPORT FIRE FIGHTING SERVICES (MANDATORY, MEDIUM RISK, AGA/OPS)

An aircraft landed without firefighting services or air traffic services following an accident occurring in close proximity to the airport. The crew completed the company decision making model (FORDEC) and considered this was an acceptable option despite being a less safe option than diverting to HKIA and contrary to the flight operations manual.

Diversions are difficult for crew to elect to do since there is always an element of "Get-there-itus", no matter how determined we are not to have it, however it is noted that the safest option is normally the best option. When conducting a FORDEC, try to ask yourself, what would my passenger's families say if something happened as a result of this decision?

SAFETY OCCURRENCES

MAY 2024

WRONG AIRPORT (MANDATORY, MEDIUM RISK, AGA/OPS)

At an unmanned airfield, Sossusvlei Lodge, two aircraft inbound to the same destination were reporting inbound to different destinations. While one aircraft was reporting the registered name of the airport, the other aircraft was reporting the name of a nearby town, Sesriem. This caused confusion and a loss of separation when one aircraft observed the other aircraft in close proximity.

To avoid confusion the NCAA is working on a database with the details of all registered Category D airports.

LOSS OF SEPARATION EVENTS (MANDATORY, MEDIUM RISK, ANSSO)

There were three loss of separation events in manned or information airspace. All are under investigation.

SOP NOT IN ACCORDANCE WITH OEM (MANDATORY, MEDIUM RISK, OPS/PEL)

There was a report of some Standard Operating Procedures differing from the Original Equipment Manufactures guidance, namely the Aircraft Flight Manual (Pilot's Operating Handbook, Owners Manual, or Flight Crew Operating Manual).

It is essential that SOPs are drafted from the OEM and additionally taking into consideration any variations. When submitting SOPs for approval the OEM manual is always required to be submitted to ensure the documents are conversant. Further an SOP must be developed by the operations department, as subject matter experts, with this in mind however it must be checked by the quality department for accuracy.

SAFETY CULTURE HAZARDS (HAZARD, HIGH RISK, OPS)

A confidential report was raised as to a hazard of poor safety culture within a service provider. The report pointed to some occurrences in support of the allegation.

The NCAA takes safety culture very seriously, and while it is a difficult aspect to measure, additional surveillance to track potential systematic events stemming from the safety culture is underway.

SAFETY OCCURRENCES

MAY 2024

ENGINE FAILURE AFTER TAKEOFF (MANDATORY, MEDIUM RISK, AIR/OPS)

A Cessna 210 suffered an engine failure shortly after departure from FYWH. The pilot switched tanks and then applied the fuel pump resulting in a restart whereupon they returned immediately to the field and executed a safe landing with no further incident.

The engineer's report indicated no damage or fault with the engine and that the most likely cause was fuel starvation, and since there was fuel in the tanks, this was likely due to vaporisation or an unported condition.

It was noted in the report that the fuel selector had left, right, and both, rather than the traditional left, right, and off, whereas the checklist indicated to select the fullest tank for takeoff but the POH states to takeoff on both with this model. Thus, operators are recommended to always ensure checklists, SOPs, and training are specific to the model and tail numbers operated.

It is further noted, when taking off on the fullest tank in a low fuel situation, that sustained unbalanced turns in the direction of the selected tank can cause a situation where the fuel moves away from the drain point resulting in power loss.

SAFETY OCCURRENCES

MAY 2024

HAZARDS AT OPUWO AIRPORT (FYOP) (HAZARD, HIGH RISK, AGA)

It is noted that there are significant numbers of people, animals, cars, and even many children present at FYOP. Pilots to exercise extreme caution.

A NOTAM was published on the hazard while the airport operator is looking into security measures. It is noted that a new airport is in the planning stage which will have adequate security.

LOSS OF CONTROL ON LANDING (MANDATORY, HIGH RISK, PEL/OPS)

On landing a non-type certified aircraft (NTCA), a gust caused the aircraft to veer off the runway during landing resulting in substantial damage.

Very light and ultralight aircraft are significantly more susceptible to the effect of gusts than larger aircraft. Pilots are reminded of the importance of vigilance in gusty weather, training for gusty conditions, and keeping solid proficiency at all times to ensure skills for handling gusts remain at their best.

LOC-G, loss of control on the ground, a subsector of LOC-I since the aircraft is "in-flight" from the time the wheels move, is upgraded to high risk due to the frequency of events. NCAA is looking into mitigation such as proficiency programmes for the general aviation and NTCA sectors.

FLEET DIFFERENCES (MANDATORY, MEDIUM RISK, OPS/PEL)

A recent event highlighted the importance of ensuring your checklists and SOPs reflect differences in your fleet. Checklists, like briefing cards, are specific to a tail number, as even within a model series there can have been modifications, for example there could be two Cessna 210M's (C210M) whereupon one has been modified with tip tanks, a STOL kit, or an upgraded engine, all requiring vastly different operating requirements. Then it goes without saying that different models within the same series have different operating requirements, for example early C210s have a left, right, and off fuel selector, whereas later ones have a left, right, and both selector, whereupon a checklist item requiring the fullest tank for takeoff would be incorrect in the latter example.

Ensuring that both differences training throughout the company's fleet is completed and that SOPs and checklists are specific to an aircraft tail number, particularly where there are differences, is critical and all operators are advised to ensure this is carried out.

HUMAN FACTORS (MANDATORY, MEDIUM RISK, ALL)

The report on three loss of separation events were concluded. One causal factor identified was complacency. It is noted that this is, in all three cases, with respect to thinking the separation is fine rather than ensuring it was. Active separations were not applied and additionally aircraft concerned were not made aware of other traffic.

Human factors training has thus been put on the cards for all ATS personnel and pilots are reminded of the essential final safety net they play in these type of scenarios.

INTERNATIONAL OCCURRENCES

MAY 2024

RUNWAY EXCURSIONS

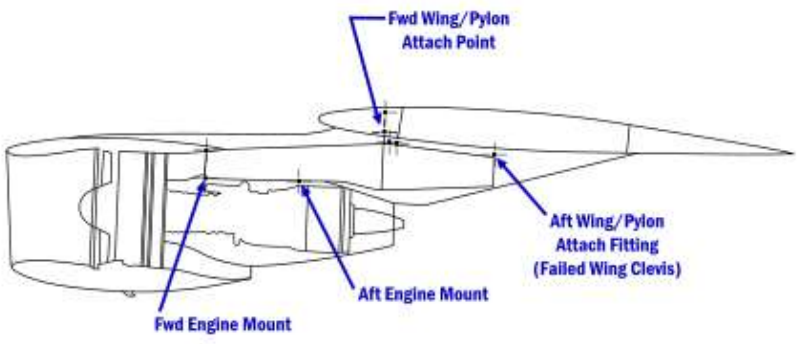
An Antonov AN-2R attempted to take off with insufficient runway available and ended up ditching in the melt water off the end of the runway. Fortunately, all occupants survived, the aircraft was substantially damaged.

Performance calculations are absolutely critical to flight operations. Never attempt to takeoff or land in a situation that the flight manual prohibits.

FATIGUE CRACKING OF ENGINE MOUNT

May in History

A McDonnell-Douglas DC10 lost control after takeoff due to structural and hydraulic damage from the failure of the of an engine mount causing the engine to detach. All 271 on board perished. It was established that the cause of the failure was a poorly executed maintenance procedure, whereupon a forklift was used as an alternative to an overhead crane, resulting in damage to the engine mount during servicing. The procedure was adopted by two airlines whereupon investigation, similar damage was discovered in their respective fleets and appropriate repairs were enacted. The procedure was an approved deviation from the required procedure to reduce the number of disconnects, improving safety, however the security of the lifting device, that is the forklift versus overhead crane, was not considered. This ultimately led to the failure.



Whenever deviations from textbook practices are made, reviewed, and approved it is vital that all elements are considered including potential latent failures where tasks are complex.

SAFETY ARTICLE:

AERONAUTICAL DECISION MAKING (ADM) FOR AVIATION PERSONNEL

Aeronautical decision-making (ADM) is a complex and critical task in aviation and typically the earlier you are in your career the less support you will have. That is to say in an airliner there are always two or more crew to assist, charter pilots often have a ground operations frequency, whereas general aviation pilots may not have any resources except their own wits. For this reason, it is absolutely essential that the lessons are channeled vertically through the industry and that good decision-making practices are taught right from the very beginning of ab-initio training.

The first element of decision making which has assisted many pilot avoid peril is the concept of ***"if in doubt there is no doubt".*** Have you ever found yourself thinking, should I? Is it safe? If you are asking yourself, then there is doubt, and if there is doubt you more than likely *should not*. An extension of this thinking is to consider what you would tell your passengers families if you went ahead with the decision which you had doubt about and the worst happened. A survivor once quoted "it was like the pilots were playing chicken with our lives!" - that is, from the recordings it indicated they weren't 100% sure and thus later demonstrated they could not defend their decision as the right one. If you are ***not sure***, don't*!*

A second tool which stems from the airlines and can be applied to any aviation scenario is the "decision making model" (DMM). The DMM is a methodical process to prompt aviators to consider all the elements prior to making a decision. One of the most common is FORDEC, where one considers Facts, Options, Risk/Benefit, then Decide, Execute, Check. The critical last step enables revisiting the DMM if conditions change. If you work for a certificated organisation (AOC, AMO, ATO etc.) there is most likely a company DMM, taught during your induction, which shall be used. If you are flying recreationally, consider researching some of the DMM options and look at one you feel best fits your situation, or consider more than one for differing conditions.

Further research into ADM can be made by reviewing chapter two of the FAA Pilot's Handbook of Aeronautical Knowledge (PHAK) Chapter 2

Prepared by :
SPQ

NCAA Updates

NCAA again, invites **YOU** to keep a look out and report any hazardous observation, attitudes, or pre-cursor event. The more awareness of hazards the better our system moves from reactive to predictive. Together we can make the skies safer! And don't forget you can report online or via email.

Safety Culture Survey

A reminder to complete the safety culture survey available online. The survey is a short series of questions with a numerical rating which can then be converted into quantitative results. Take a few moments to complete this so we can address where problems may arise. The survey is generic and does not require your name or company. Safety Culture Survey.

Invitation to Contribute

Service providers and users are invited to contribute topics, ideas, articles, or questions to NCAA SPQ department for consideration in our safety publications or safety workshops. Remember the safety system only works with participation and information sharing is key to continuous improvement and achieving our global aviation safety goals.

Further information requests, submissions, or queries can be sent to:

email: spq@ncaa.na
phone: 083 235 2468