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MAY
2022

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



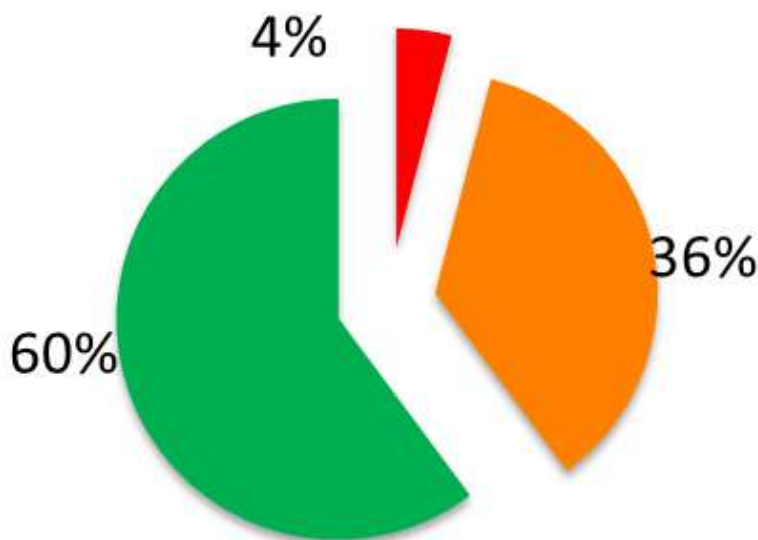
www.ncaa.com.na



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 or in cases of enforcement for gross negligence or willful misconduct.

Safety Statistics

Type of Risk



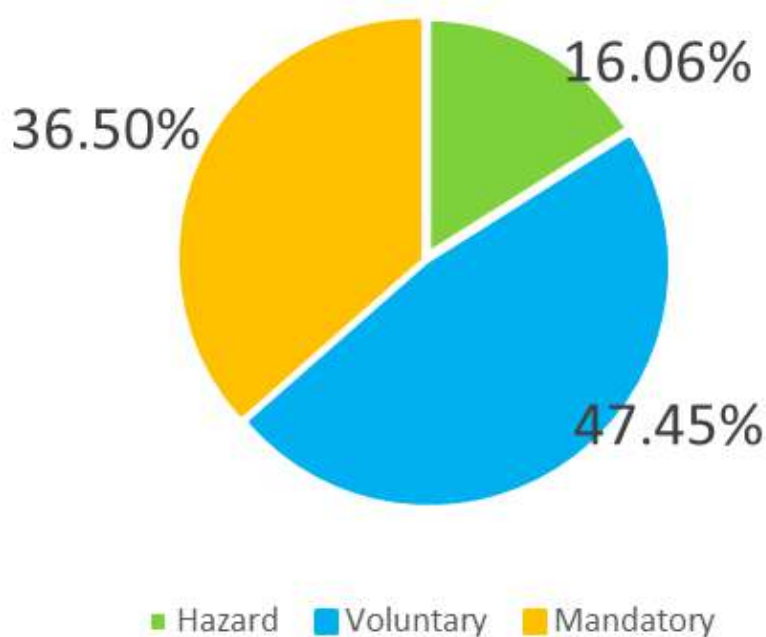
May 2022

In May we had 30 safety reports, of which 16 were low risk resulting in a total of 60% YTD, 13 were medium risk, and there was one high risk event. There was one accident, classified as CFIT, which we are investigating for mitigation strategies and recommendations will be included once they are available.

For more about classifications of risk see the definitions in Safety Bulletin 1-22.

Graphs included in this document show year to date figures unless specified.

Classification of Occurrence



In May we had 21 voluntary reports, one hazard report, and eight mandatory reports, including one accident, bringing the total year to date of 63.5% non-mandatory reports, an increase from the April figure. It should be noted we are still falling slightly below our target of 10% above 2021 levels for voluntary reports.

REPORTS = ACTION

Our aviation system users, service providers, and organisations are reminded that if you want to see action, you need to put things in writing: "If in doubt, Fill it OUT! "

Have you ever been wondering, why does such and such keep occurring, and I am seeing no results, but have you put your safety concern in writing and emailed it to NCAA? The NCAA internal procedure ensures we will follow up on your complaint no matter how it is received, so this provides for even where you are not sure about something, or don't have time to fill in a form, just drop us a line and voice your concerns!

incidents@ncaa.na



		Airprox/LOS	CFIT	Rwy Excurs.	Wildlife	LOCI	Rwy Incurs.	Maint & Tech
14620	Average	0.169	0.292	0.218	1.209	0.085	0.281	2.596
2363	JAN	0.846	0.423	0.423	0.846	0.423	0.000	0.846
2705	FEB	0.000	0.370	0.000	0.739	0.000	0.739	2.957
3552	MAR	0.000	0.000	0.000	1.126	0.000	0.000	0.845
3000	APR	0.000	0.000	0.333	1.667	0.000	0.667	3.667
3000	MAY	0.000	0.667	0.333	1.667	0.000	0.000	2.667
Target for 2022	Target	0.307	0.061	0.031	1.994	0.123	0.153	2.117
Average 2021		0.341	0.068	0.034	2.215	0.136	0.170	2.352
2021 Std DEV		0.428	0.171	0.085	2.533	0.206	0.248	1.206
Target 1 - not m	Alert 3	0.769	0.239	0.120	4.749	0.342	0.419	3.558
Target 2 - not m	Alert 2	1.198	0.410	0.205	7.282	0.548	0.667	4.764
Target 3 - Not m	Alert 1	1.626	0.581	0.290	9.815	0.754	0.915	5.970

Safety Performance Indicators

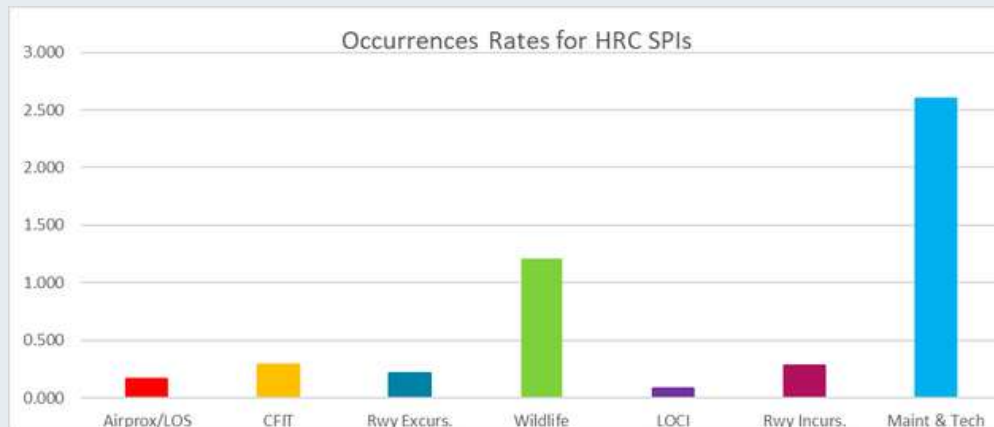
Of the seven selected and monitored HRCs, there was two alerts in May, CFIT and runway excursions.

Runway Excursion Alert

We have had the third alert on runway excursions this year. While runway excursions are potentially a very serious event, occurrences rates are potentially much higher and of less significant effects with trainers and private flights or light commercial flights such as the C210. The alerts are also potentially more frequent because of a much lower than normal level of occurrence in 2021, resulting in a very low target level. It should always be noted however, to consider the wind on approach and always go around if the approach is unstable.

CFIT Alert

There were two CFIT events in May causing an alert, both are considered very serious events and are under investigation, one resulting in an accident. See further details under occurrences.



Maintenance/Technical

The maintenance events remain our highest category, however they remain just slightly above 2022 target. We are still awaiting reports from the AMOs on causal factors to determine how to address these events.

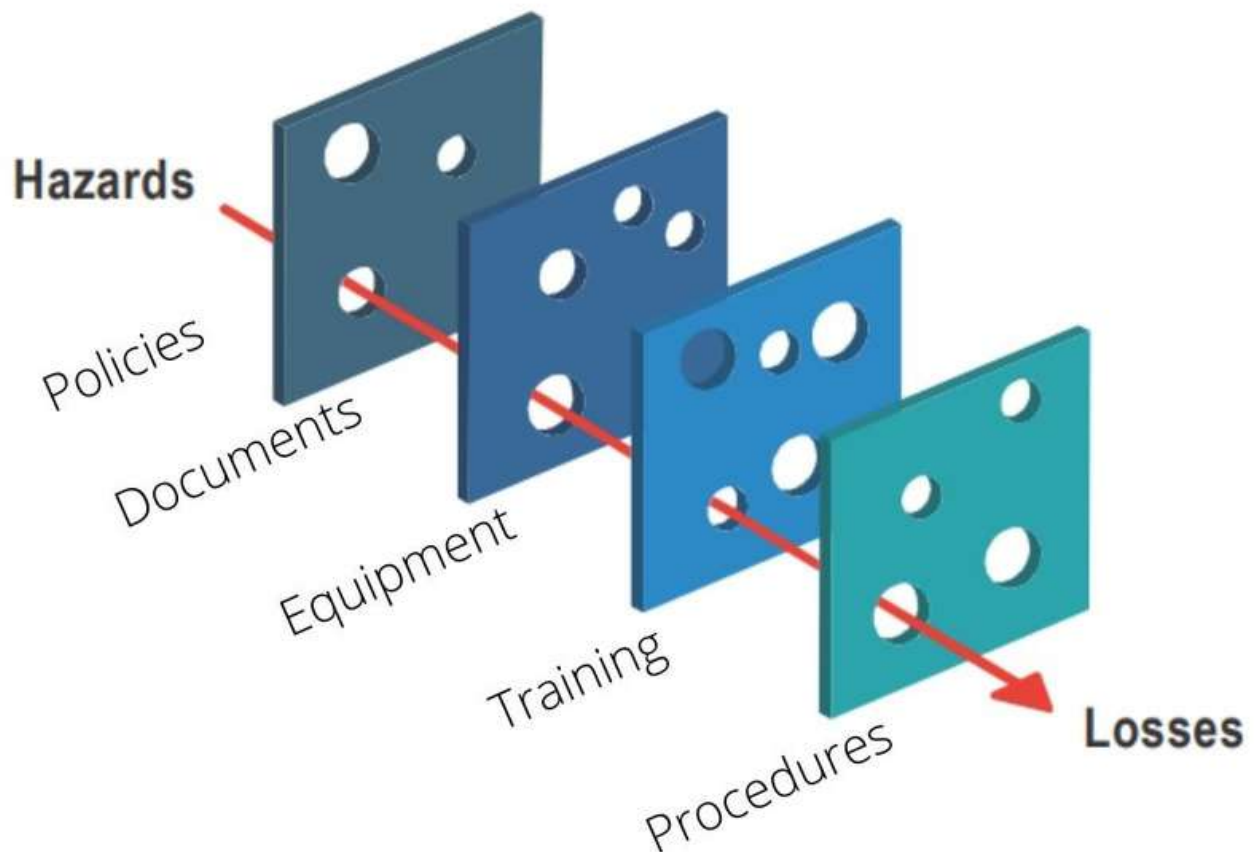
Safety Thought for the Month

"Truly superior pilots are those who use their superior judgement to avoid those situations where they might have to use their superior skills."

Stay Safe!

Reporting

How strong are your defences?



***The next accident is waiting to slip
through any potential holes in your system***

SAFETY AWARENESS

SAFETY OCCURRENCES

MAY 2022

TECHNICAL FAULTS (MANDATORY, LOW RISK, AIR)

There were seven technical events reported in flight technical faults in May, as follows:

- There were two RCFs with the same aircraft, AIR is investigating
- There was one gear failure
- There was one brake failure
- There was one electrical failure resulting in a RCF
- There were two flat tyres

We very much hope to hear more from our AMOs to close these reports. For our engineers, please see last month's article on SDRs and MORs, and note that nearly all unscheduled failures require a incident report.

EXPIRED CERTIFICATE OF AIRWORTHINESS (MANDATORY, MEDIUM RISK, OPS)

On a ramp inspection on the 5th May, an aircraft was found to have an expired C of A (29/1/22), Radio License (31/12/21), Insurance (31/1/22), and the pilot did not have his license on him.

OPS is investigating for possible enforcement action due to willful non-compliance.

CFIT ACCIDENT (MANDATORY, MEDIUM RISK, OPS)

On turn out after departure, in day VMC, the main rotor blade of a helicopter struck the roof of a vehicle.

OPS is investigating.

SAFETY OCCURRENCES

MAY 2022

FLIGHT IN IMC WITHOUT IFR PROCEDURE (MANDATORY, **HIGH RISK**, OPS)

A South African registered C402 was observed by an NCAA inspector departing in IMC conditions, with very low visibility, out of an airport without IFR facilities or departure procedures.

OPS is investigating and this matter is being taken very seriously, as flight below MSA without a published procedure or IFR facilities is a high risk precursor for a CFIT accident.

WILDLIFE STRIKES (VOLUNTARY, **MEDIUM RISK**, AGA)

There were 5 wildlife strikes reported in May, one jackal strike at FYWH, and at FYWE there was one aborted takeoff due to guinea fowl, one collision with a squirrel on taxi, and two bird strikes on landing. None of the events had reported any damage to the aircraft.

This resultant trend is just slightly above the ICAO recommended level of one per thousand movements, but currently well below the target set for 2022.

Active wildlife prevention programmes are in place at FYWE and FYWH, AGA is in liaison with Namibia Airports Company over continued mitigation means and the results of a full risk assessment completed in response to high bird strikes last year.

STATUS OF AIRPORT, FYOA, FYOG (HAZARD, **LOW RISK**, AGA)

There was a report of apron damage at FYOG from which a corrective action plan has been received from the airport manager.

There was a report of taxiway damage at FYOA in late May.

SAFETY OCCURRENCES

MAY 2022

PARTIAL ENGINE FAILURE, SUCCESSFUL OUTCOME (MANDATORY, MEDIUM RISK, AIR/OPS)

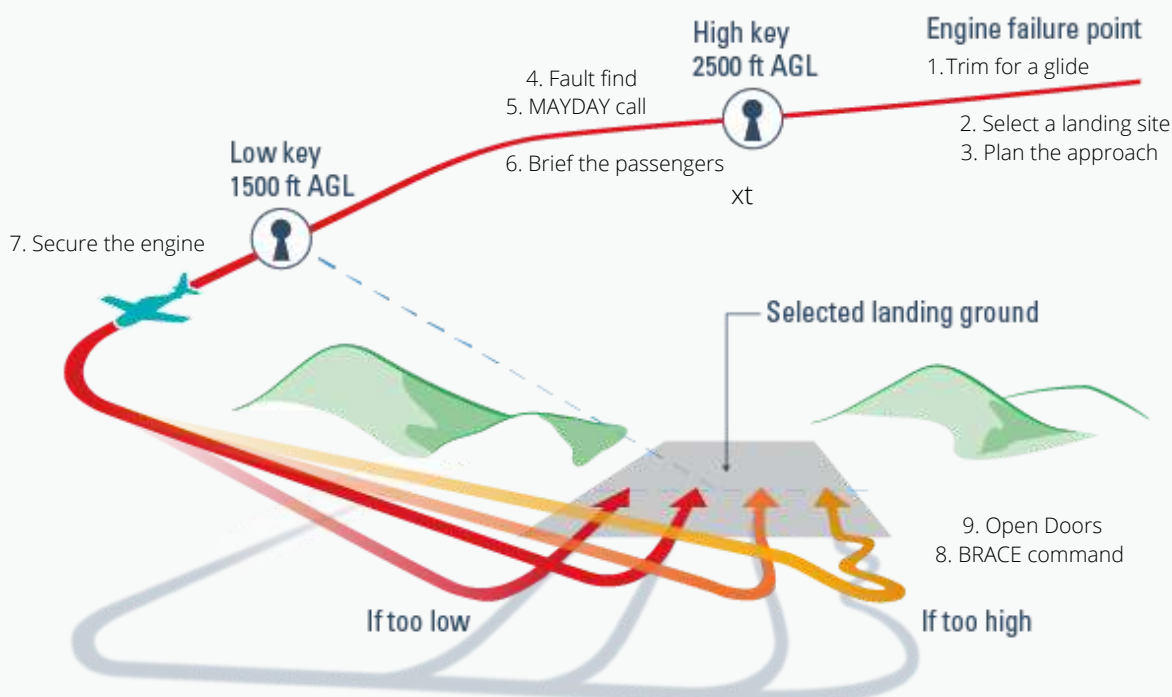
An aircraft experienced a power loss and intermittent engine failure on a routine commercial flight with passengers.

The pilot changed tanks, adjusted the mixture, throttle, pitch, applied the fuel pump, and checked engine parameters. He further communicated his problem via his GPS tracker, as he was out of radio range of ATC. The engine at times completely cut, and while following the forced landing procedure the pilot managed to restart with the pump selected and held on high and by adjusting the pitch.

While the engine still had power to maintain height, the pilot deviated to a flight path that would allow a safe forced landing if the situation became worse. He was thereafter able to land safely at FYSU.

It was determined that the engine failure was due to a mechanical fault with the engine.

Pilots are reminded of the forced landing procedure from our April edition.



SAFETY OCCURRENCES

MAY 2022

FUEL PLANNING (VOLUNTARY, MEDIUM RISK, OPS)

A VFR commercial flight from FYWE to FBMN departed with 3hr15min of fuel. Due to strong headwinds the aircraft diverted to FYRU.

A pilot successfully diverted back to the departure aerodrome due to weather with sufficient fuel for another attempt.

Pilots of commercial flights are reminded of the requirements of NAMCATS 121.08.17 and 135.08.17 both of which require fuel to be uploaded for a destination alternate (not an enroute alternate), regardless of flight status and weather.

WRONG QNH MANDATORY, MEDIUM RISK, ANSP)

A scheduled airliner, on approach to runway 26 at FYWH at night, was given the QNH of 1032. The crew noticed the slope of the runway looked low and commenced a go around. The QNH was confirmed with the tower and it was discovered that the QNH was in fact 1023.

The ANSP is investigating the occurrence and it is considered that the unavailability of MET display in the tower could be a contributing factor.

Crew are also reminded of the vital importance of the published final approach height checks on an instrument approach.

GO AROUND VOLUNTARY, LOW RISK, N/A)

Two aircraft commenced a go-around due to unstable approaches.

Crew are reminded of the importance of go-arounds when the aircraft is not in a safe position to land, for example stable approach, configured.

SAFETY OCCURRENCES

MAY 2022

RUNWAY EXCURSION (MANDATORY, MEDIUM RISK, OPS)

On a commercial scenic flight from FYSM to FYSL, the pilot joined overhead for a runway inspection. After the runway inspection the pilot selected runway 23 and joined downwind.

After completing downwind checks, including checking the brake pressure, the pilot turned final. It was noticed the ground speed was 91kts where as the airspeed was 70KIAS.

On landing the pilot applied brake but did not slow down. On approaching the end of the airfield and unable to stop the pilot elected to veer right as the terrain appeared more suitable. On exiting the runway the pilot immediately secured the engine and on stopping evacuated the passengers.

WRONG FREQUENCY? (MANDATORY, MEDIUM RISK, OPS)

A VFR flight from FYSM to FYML crossed the FYWB TMA at 3500ft, however the flight never contacted FYWB approach on 122.5 as is required. The FYWB air traffic controller attempted to contact the aircraft on 122.5 as well as 126.3 and 124.8 with no luck.

OPS is investigating. Pilots are advised to ensure they are operating on the correct frequencies and obtain required clearances.



IF IN DOUBT - REPORT!

Help us help you by reporting occurrence and hazards

The backbone of an effective SSP/SMS is a reporting culture and a just culture - instill this in your organisation!

incidents@ncaa.na



SAFETY ARTICLE:

HANDLING ABNORMALITIES

We have had some abnormalities handled well and some not so well by our flying community. Your actions can be the difference between landing safely and an accident when it comes to abnormal situations.

Herewith some tips and guidance to handling your next abnormality.

1. Climb out of the safety window. That is to say, never deal with an abnormality in the circuit or on approach. With the exception of a partial engine failure in a single engine or an engine failure in a twin, whereupon priority is on landing, abnormalities should not be dealt with in the circuit or on approach. Always climb through the safety window, that is above MSA for IFR or in VFR to a safe altitude, to run your checklists. Whenever possible height is your friend in a PAN-PAN situation.
2. Always follow the aircraft flight manual (AFM) procedures. Do not run abnormal procedures from memory. No matter how good you think your knowledge of the QRH or AFM is, there is no substitute for following the manufacturers procedures directly from the guidance material provided.
3. Brief your passengers. Ensure the passengers are not alarmed by what is going on. Remember to brief them thoroughly and ensure they know what to do in case of a requirement, for example to brace on command, and when not to interrupt you if you need to attend to your procedures.
4. Ensure ATC is fully informed of your situation and seek their assistance where required, for example, request emergency services to be on standby, alert rescue services, or even have them phone an expert.
5. In the event of a RCF consider using your cellphone it may take some of the guess work out of the incident.



We value your input and we have created this forum for answering questions industry may have or requests for publications. Feel free to drop us a line and enquire:

spq@ncaa.na

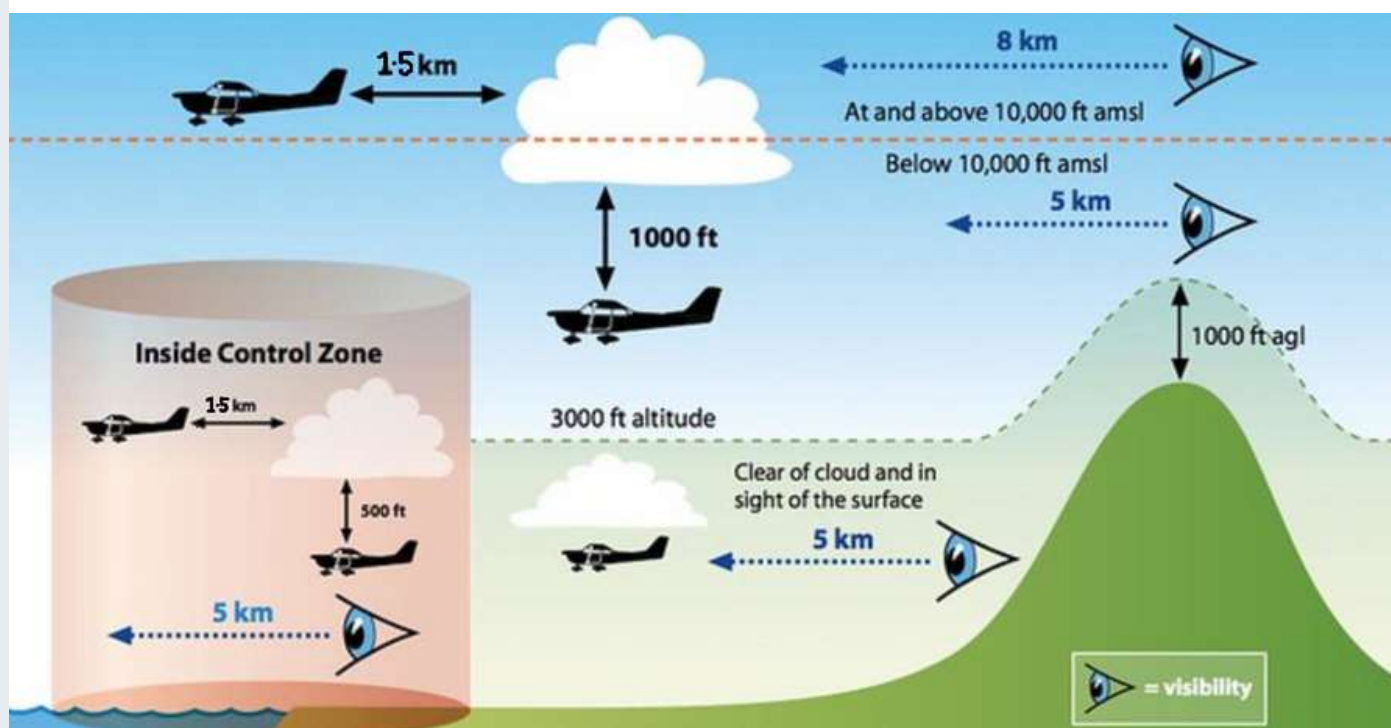
SAFETY ARTICLE:

SPECIAL VFR

The VFR meteorological requirements are covered in ENR 1.2. and NAMCAR 91.06.22. These specify visibility and distance from cloud required to maintain VFR. The picture below illustrates the requirements for VFR. Additionally in Class G airspace visibility may be reduced to 1500m when permitted by an ATS.

Special VFR (SVFR) is permitted for arrivals and departures within a control zone in the conditions specified in paragraph 2 of ENR 1.2 and NAMCAR 91.06.23. The requirements for SVFR are for a ceiling of 500ft and a visibility of 1500m. However, one must read further under NAMCAR 91.07.10 which specifies SVFR may only be commenced if the visibility is greater than 3km. This can be seen as a logical extension of the fact that SVFR may be used when arriving and weather conditions have deteriorated beyond those forecast and often the aircraft has little choice, whereas for departure, the option is always available to cancel the flight. So it should be remembered that SVFR departure has a higher minima than arrival.

Finally one further requirement of SVFR from the ATS Manual which is derived from PANS Doc 4444, is that currently only an approach controller can issue a SVFR clearance. This is applied because the separation of a Special VFR operation requires specific handling procedures that currently only an ATC with an approach rating is capable of providing. Any change will require a comprehensive risk assessment along with procedures and training for ATS. Should this occur it will be communicated to operators.

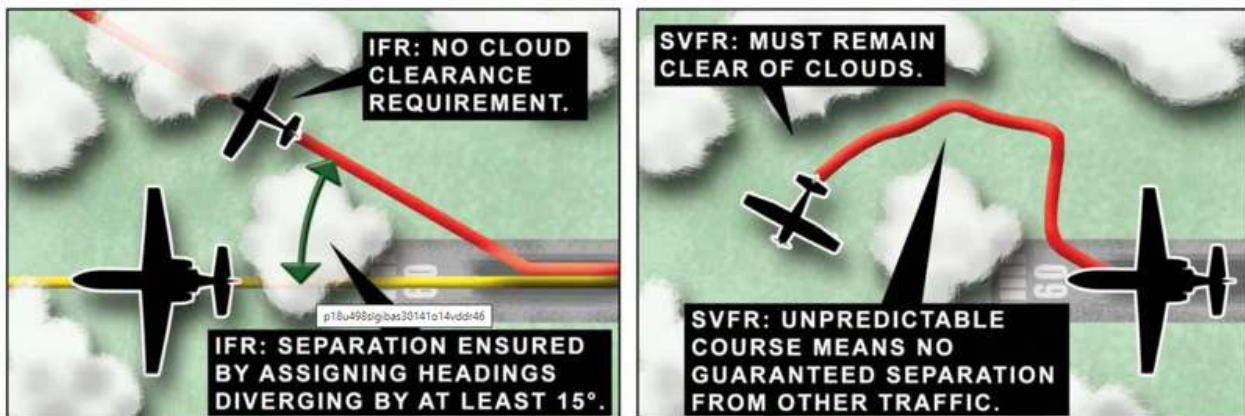


SAFETY ARTICLE:

SPECIAL VFR (CONTINUED)

The Special VFR rules have a few more provisions, some of which almost go without saying, and including the items above, are as follows:

- Two way radio contact;
- Day only;
- Must be specifically requested by the pilot;
- At the discretion of ATC to grant subject to IFR traffic;
- Only in compliance with the clearance issued (however it should be noted that SVFR are required to stay clear of cloud, so the pilot may need to request an amended clearance if deviation is required);
- Clear of cloud, with a visibility not less than 1500m, and a cloud base not less than 500ft for private flights, or 600ft for commercial flights (however minimum height requirements still apply, i.e. 1000ft over a built up area);
- Not commenced in less than 3km visibility;
- If departing a CTR, in accordance with pre-departure instructions issued by ATC;
- In a control zone, but clearance must be issued by an approach controller.



SVFR can be particularly useful when there is part of a CTR which is IMC, whereupon the controller is obliged to declare the whole zone IMC, but conditions are still safe and still permit SVFR. However, generally it should be seen as very "special", i.e. to be used only when you run out of other options.

While SVFR may be available to you, when weather is approaching SVFR minimums the ability to operate safely in VFR is marginal at best and it is particularly difficult for controllers if they have IFR traffic to separate you from. Another consideration, if you are rated and current, is to change to IFR, even if it means declaring an emergency. In very poor weather it *could be* much safer: rather handle the paperwork than become a CFIT statistic.

RECOMMENDATIONS:

HANDLING OF ABNORMAL SITUATIONS

From an accident report on an electrical failure, one recommendation is for pilots to leave the circuit to deal with abnormalities, particularly such as gear extension which require specific attention to the task whereupon flying duties should be reduced to a minimum. See further on page 11.

EMERGENCIES IN THE AIR VERSUS EMERGENCIES ON THE GROUND

During an accident report whereupon loss of control in flight (LOCI) was experienced after trying to avoid power lines, it was discovered that the pilot determined that landing and take-off on a public road was permissible because he was conducting surveillance of ground fires to determine fire-fighting needs.

It should be noted, that 91.06.1 specifies that a public road can only be used in the case of an *"(a) in the case of an emergency involving the safety of the aircraft or its occupants; (b) for the purposes of saving human lives; and (c) for civil defence or law enforcement operations."* If you are considering operating from a public road, within these parameters, remember that there are often significantly reduced safety margins and so it is important to note that *an emergency on the ground, in most cases, does not justify an emergency in the air.*



SSP Steering Committee

May saw the second meeting of the newly established State Safety Programme Steering Committee (SSP SteerCom). The group approved in principle the State Safety Programme Manual and Safety Policy. These are therefore now in the final stage of approval, that is, the hard copy is being circulated for approval signatures from NCAA and MWT. The group also established a technical working group to review the SSP Implementation Plan. Once these documents are reviewed and approved they will be provided on the NCAA website, and we will notify the industry of their availability.

Safety Workshop

On the 16th of May NCAA hosted a safety workshop for internal and external participants. The workshop was well attended with 24 attending in person and 66 joining on the virtual platform. The presentations, including CFIT Awareness, Runway Incursions, Wildlife Strikes, Radiotelephony, B737 Max, Human Factors Dirty Dozen, and SSP/SMS, are available for download from the NCAA website.

With the success of the first workshop, NCAA hopes to host a second workshop later in the year, and it has been proposed to be held in Swakopmund for our coastal participants.

Invitation to Contribute

Service providers and users are invited to contribute topics and ideas or articles 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

