

VOLUME 5 | ISSUE 1



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Pub Talk – The first spin survivor (NO, not the drink!)

THE FIRST SPIN DOCTOR DISCOVERS A COUNTERINTUITIVE CURE

July 5, 2002 by Jeff Pardo

source: https://www.aopa.org/news-and-media/all-news/2002/july/flight-training-magazine/the-first-spin-survivor#;~:text=The%20first%20known%20spin%20recovery,returning%20to%20tel%20the%20tale.

Back in aviation's formative years, spins were viewed as inevitably deadly because once you were caught in a spin, there was no known way out.

The first known spin recovery, made in 1912 by Royal Navy test pilot Ensign Wilfred Parke, was a breakthrough. His entry was precipitated by maintaining back pressure while still in a steep turn, and when he applied opposite rudder and then had only a dive to contend with, he recovered, returning to tell the tale. Unfortunately, he was killed a few months later, trying to return to the runway after an

On the morning of Sunday August 25, 1912 Lieutenant Wilfred Parke RN (1889–1912) was flying an Avro Type G biplane as part of the British Military Aeroplane Competition taking place at Larkhill Aerodrome on Salisbury Plain. He had carried out a three-hour endurance trial, accompanied by Lieut. Le Breton, R.F.C., and was approaching the aerodrome in order to land. Just after 9.00am he was flying upwind an altitude of about 650 feet, Parke entered a spiral gliding approach and closed the throttle without switching the engine off. Having turned though a half circle and more or less flying into wind, Parke thought the aircraft was too nose-up and also insufficiently banked for the turn he was making. He therefore applied up elevator and possibly applied the wing warping control, and at once the aircraft entered a spin. Parke attempted to recover from the spin by increasing engine speed, pulling back on the stick, and turning into the spin, with no effect. The aircraft descended 450 feet and

observers braced themselves for a fatal crash. Parke was disabled by centrifugal forces but was still considering a means of escape. In an effort to neutralize the forces pinning him against the right side of the cockpit, he



applied full right rudder, and the aircraft levelled out fifty feet above the ground. With the aircraft now under control, Parke climbed, made another approach, and landed safely. British pilot Fred Raynham had already made a successful recovery from a spin, but the event was unobserved. 'Parke's Dive' is recognised as an important milestone in the development of flying techniques.

engine failure
on climb out.
Another name
that appears in
the literature
is that of an
Australian,
Harry Hawker,
who entered
and recovered
from an
intentional
spin in 1914.

But the real unsung hero is someone else.

Frederick A. Lindemann was a bespectacled theoretician smitten with flying, but he was initially rejected by the Royal Flying Corps because of poor vision. He succeeded in getting a pilot's license by using his prodigious memory to memorize the eye chart (like Donald Sutherland did in the film *Space Cowboys*). He was soon appointed director of its Experimental Physics Station at Farnborough. His poor eyesight was actually only one handicap. Another, which he regarded as far worse during the war with Germany, was his surname and the fact that he actually had been born in Germany while his mother was vacationing in Baden-Baden. He later used his family's influence to join the scientific staff at the Royal Aircraft Factory.

It wasn't all peerage and puffery, however. Lindemann initiated a study of instrument indications and pilot actions that appeared to cause spin entries during turns, and with little flying skill of his own, he successfully determined the causes of stall/spin occurrences as well as the control movements needed to counteract them. His contributions to aviation actually occurred during a relatively brief period in his life. After the war, he was a professor of philosophy at Oxford University and the director of the Clarendon laboratory. He made contributions in thermodynamics and quantum theory, was a close friend of and scientific advisor to Winston Churchill, was Great Britain's leading scientific advisor during World War II, and created his country's Atomic Energy Authority.

In 1956, he became the Viscount of Cherwell. He was also formal to nearly a comical degree, never emerging from an airplane without a full coat, umbrella, and bowler hat.

The demands of war necessitated rapid advances in the study of flight, taking it from an art to a science, and Lindemann became one of the key individuals in transforming the military's languid interest in airplanes to the realization of aviation's strategic value above the battlefield. His conclusion regarding spins was the correct one; namely that a pilot's instinctive responses were the wrong responses. One must, he reasoned, apply and maintain full opposite rudder while the nose was pointed at the ground. Furthermore, one should not pull back until the spin stopped.



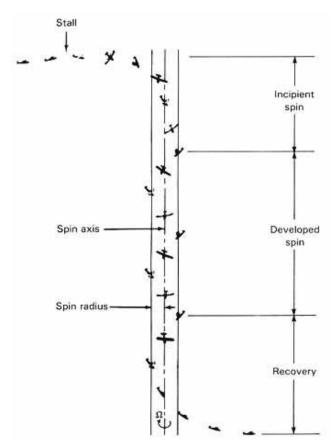
Ah, but how to test this? Here is where Lindemann entered the realm of greatness, testing his theory with himself as the test pilot. Observers from the Farnborough Aerodrome saw him take a spindly B.E.2 biplane up to its service ceiling (depending on the model, this was between 10,000 and 14,000 feet), deliberately enter a fully-established spin, and then put his theory to the ultimate test. Not only did he come out of it, but he then climbed back up and recovered from a spin in the opposite direction. There are differing accounts as to when this occurred; according to the book *The Prof in Two Worlds*, by the second Earl of Birkenhead, it was in the summer of 1916 or 1917.

In His Own Words:

Anyone watching a spinning plane could see that the rate of turn did not increase on the way down. I concluded therefore that the lift on both wings must be equal; and this could only be true - since the outer wing is beating against the air whereas the inner is not - if its effective angle of incidence was on the high side of the angle of maximum lift, whereas for the inner wing it was the other way round. This being so, if the speed were increased the aeroplane would no longer spin...therefore the pilots were taught to push

the stick forward - the very opposite of the instinctive reaction of pulling it back in order to get the nose up - and to straighten out the rudder and then pull out of the dive in the ordinary way.

The only merit I can claim in carrying out these experiments is that (unlike the professional pilot, who had usually not got a very good head for figures) I was able to remember the readings of the airspeed indicator, the bubble, the angle of incidence on the two wings (measured by tapes on the struts), the height at the beginning and ending of the spin, the time taken and the number of turns, and to write them down in my note-book when I had straightened out the plane again.



For a while, the British kept this military secret and used it much to their advantage. Whenever a British pilot was outnumbered and needed to escape, from the perspective of his German opponents he would seemingly commit suicide and spin away and down, only to recover close to the ground and speed safely away. Pilots talk, however, and soon the secret was out.

If Lindemann hadn't documented his discovery, someone else would have figured it out sooner or later. While knowing how to get out of a spin is of great value, this can be academic because most spin accidents (which have somewhere around an 80-percent fatality rate) occur at an altitude too low for recovery in all but about 5 percent of the cases. Perhaps this is what the Civil Aeronautics

Administration had in mind when it deleted spins from the list of required maneuvers in 1949. Since an airplane cannot spin unless it is stalled, emphasis was shifted from spin recovery to stall recognition and recovery. Today, only CFI applicants are required to have actual exposure to spin entries and recoveries - but private pilots, and even student pilots, can seek spin training if they want.

As long as pilots fly, there will probably always be two schools of thought regarding spins. As Benjamin Disraeli reportedly said, there are three kinds of lies: lies, damned lies, and statistics. One study showed that many stall-spin accidents occurred in conjunction with aerobatics and buzzing (though half were associated with takeoff and landing). The journal *Aviation Safety* published a study in 1983 which showed that the percentages of stall/spin accidents actually increased as flight time increased. And an analysis of stall/spin accidents involving instructional flying showed that in more than half the mishaps, a CFI was aboard. What really tells the tale, however, are the general accident data during the years before the CAA

eliminated spin training, and then afterwards: From 1945 to 1948, almost half of all fatal accidents were stall/spin-related. Two decades later, the comparable figure was about 22 percent. Since then, stall/spin accidents have stabilized at about 10 percent of all accidents, but 25 percent of fatal accidents. (And slightly over half are still associated with the takeoff and landing phases of flight.) So yes, the shift to stall and spin avoidance is supported by the numbers.

Just what is a spin? A spin is an aggravated stall resulting in autorotation around the yaw, or vertical, axis. (Autorotation means the downward helical path wherein both wings are stalled, one more than the other.) Two factors working against us are that near critical angles of attack, roll damping vanishes, so not only do ailerons lose effectiveness, but they begin to work adversely. The inner wing is at a greater angle of attack than the outer wing, and it is the greater drag on the inner wing that causes rotation about the vertical axis. The motion involves elements of roll, pitch, and yaw, where the airplane is in somewhat of a sideslip.

Although the view of the ground through your windshield can be initially disconcerting, a spin is strictly a one-G maneuver. The typical recovery technique is to determine the direction of rotation, then neutralize the ailerons and close the throttle. Next, apply full opposite rudder, and briskly move the yoke or stick forward (though in some airplanes, just neutralized), holding this until rotation stops. Then pull out of the dive. The opposite rudder produces a yaw moment that counters the direction of rotation, and the forward yoke movement gives a nose-down moment that reduces the angle of attack.

What can we do to improve the safety picture? One would be to practice slow flight and stalls on a regular basis. Another would be to pay more attention to airspeed and coordinated flight, especially during takeoff and landing. It would be beneficial if the FAA required flight instructor applicants to undertake more than two logged spins. Finally, we should rise above minimum acceptable training standards and seek out spin training from qualified instructors as part of our continuing education.

Jeff Pardo is an aviation writer in Maryland with a commercial pilot certificate for airplanes, and instrument, helicopter, and glider ratings. He has logged about 1,100 hours.



Recent Events

FIRST SOLO!







Luke Wilson

SOLO in ZU-SAA on 30/01/2021

SOLO in ZU-SAA on 21/02/2021

Kyle Bezuidenhout
SOLO in ZU-WES on 28/03/2021

NEW PPL's!

It is with great joy we welcome Leon Cronje and Brandon Slow to the ranks of PILOT! Leon passed his



Initial PPL Test in ZU-SAA on 19 March 2021, and Brandon completed his in ZS-KNI on 20 March 2021.

WELL DONE!! They will officially be receiving their Wings and Certificates at our Year End Event.

Safety Meeting & Quizz Night fun night

Safety Meetings at Pmb Aero Club are certainly not dreary lectures on boring topics. They are relevant, insightful, helpful, and entertaining!











John Campbell,
SAA Pilot with
over 24,000 hours,
and who owns
three single
engine Cessna's,
demonstrated
how to perform a
prop swing safely.

This was preceded with a talk on the safety aspects. The whole thing was less than 20 mins long, but will remain in all the spectators' minds for their lifetime!

Visit the link on the Club website to benefit from John's experience here:

https://www.pmbaeroclub.co.za/flight-safety

A big thank you to John Campbell for the Prop Swing Demo and to Kevin Donnellan for a fun quiz evening. It was a tough one! Please make it easier next time Kevin!

Thanks ONCE AGAIN to Grant van Staaden of Kitchens, everyone was well fed and watered with a delicious and satisfying burger, chips & beer (or cooldrink) for only R50.

Next Quizz night - TBA

New Instructors on board!

It is with DELIGHT that we welcome Dylan Hatting (left) on board as our new, full time Grade 3

Flight Instructor! He officially started training with us on 24 Feb 2021. Dylan hails from

Bethlehem, and is experienced in Fire Spotting, so has some experience to back up, unlike

a lot of fresh Grade 3 Instructors. We are very happy to have him on board.

Gavin Barry (right), a Grade II Instructor has joined us to help out with

Dual Checks, Flight Tests and Advanced training. He is a Training Captain and Part 121 DFE 3 for SAA, Part 121 DFE Great to have him on board!

Iain Rennie – Club Member, Pilot & AUTHOR!



lain Rennie has written the loveliest children's story about Tango the Tri-Pacer, who is witness to a real-life drama with a happy ending. It is beautifully illustrated by Darryl Legg.

The book is perfect for 8- to 10-yearold readers, and like any good children's book, can even be enjoyed by adults!

The book is available at the Pmb Aero Club for R150.

Recent adventures

Bryan Hawksworth, our Club Vice Chairman was recently treated to a spin in a Mustang. Here is how it came to pass in his words:

We flew in to Joburg for my flight in the P51 Mustang yesterday, 23 Jan 2021

I bought a raffle ticket two years ago, arranged



by Felix Gosher, who is the driving force behind the Children's flight at Grand Central.

I won first prize and had to wait since the flight is offered when Menno Parsons positions Mustang Sally for an airshow. With Covid most airshows were cancelled – so the flight was delayed.

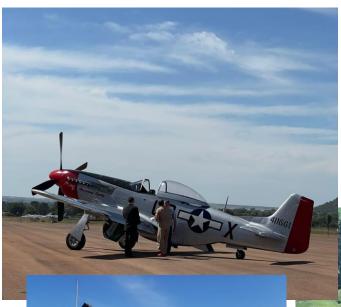
Yesterday was the funeral for the gentleman who founded a very well-known restaurant at Wonderboom, I think it is called Giovannis. Menno was to do a fly-past over the church and the restaurant. I got the Rand-Wonderboom leg and another winner the Wonderboom-Rand leg.

Menno has a large collection of aircraft, one being a PC12 that was having power issues.



Menno asked if Adam
Winter, Mike Agnew
and I would like to come
along for the test flight,
which we did before my
Mustang flight.

Mike and Adam flew my aircraft, to fetch me, and we flew back via Kitty Hawk yesterday afternoon.



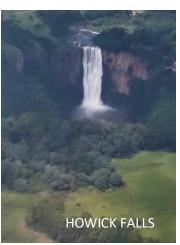
When I originally won the prize, I was going to fly Rand-Nelspruit as Menno was flying in an airshow in Swaziland. However, the Swazis didn't come up with the cash in time so Menno cancelled.

The Mustang can fly at 508 miles per hour at an economy cruise of 67 gallons per hour.



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Where to go?

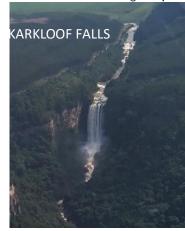


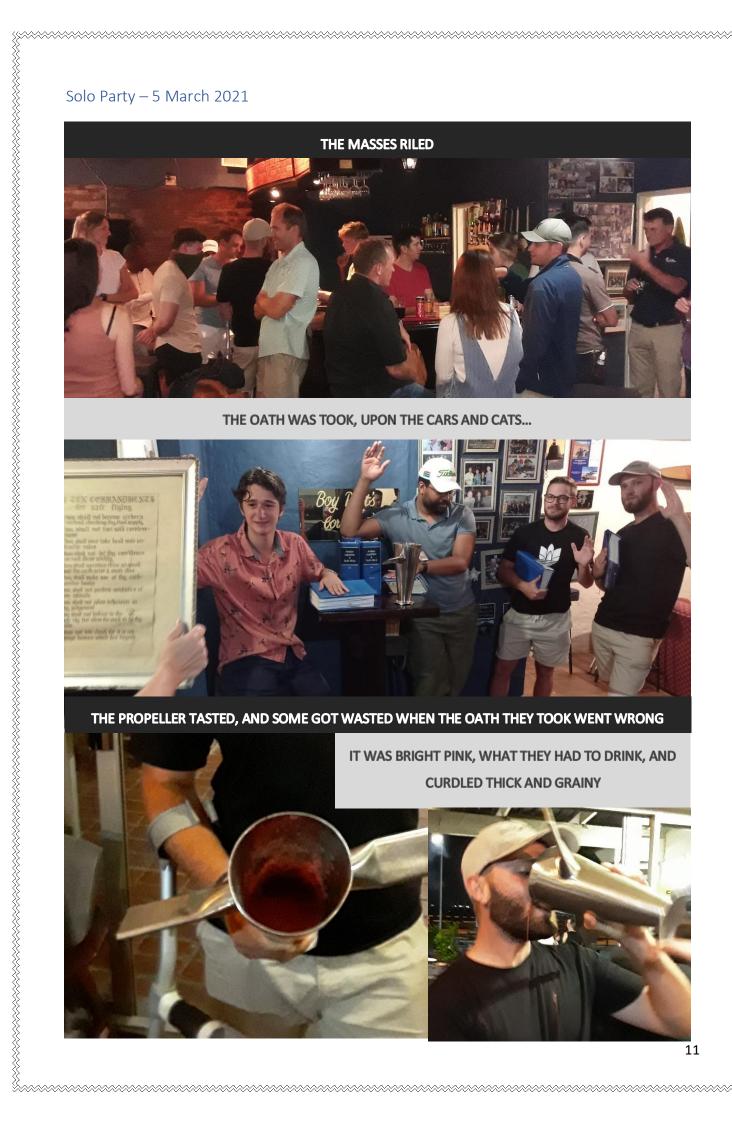
If you want to take someone on an impressive jolly, that isn't too far away, then consider doing a waterfall tour... start with Albert Falls, they are a beautiful horseshoe shaped waterfall just below the Albert Falls dam wall. Then move to the north-east corner and follow the stream up to the Karkloof Falls. Remember to climb to min 5000ft to avoid being an

"Aviation disturbance of disease-free buffalo in the Pietermaritzburg" as per

AIC 20.15. (If you don't know where to find that, please ask one of our helpful Flight Instructors). From there, make a bee line

to the Howick Falls, where you will also have an impressive view of Midmar Dam. From this position you are pretty much straight in for long finals 16, provided Airlink, or another IF flight isn't on the approach, in which case you will be routed for a base leg. Frequency 124,2 Durban SRA outside Pmb's CTR. It's a stunning trip under 60 mins.

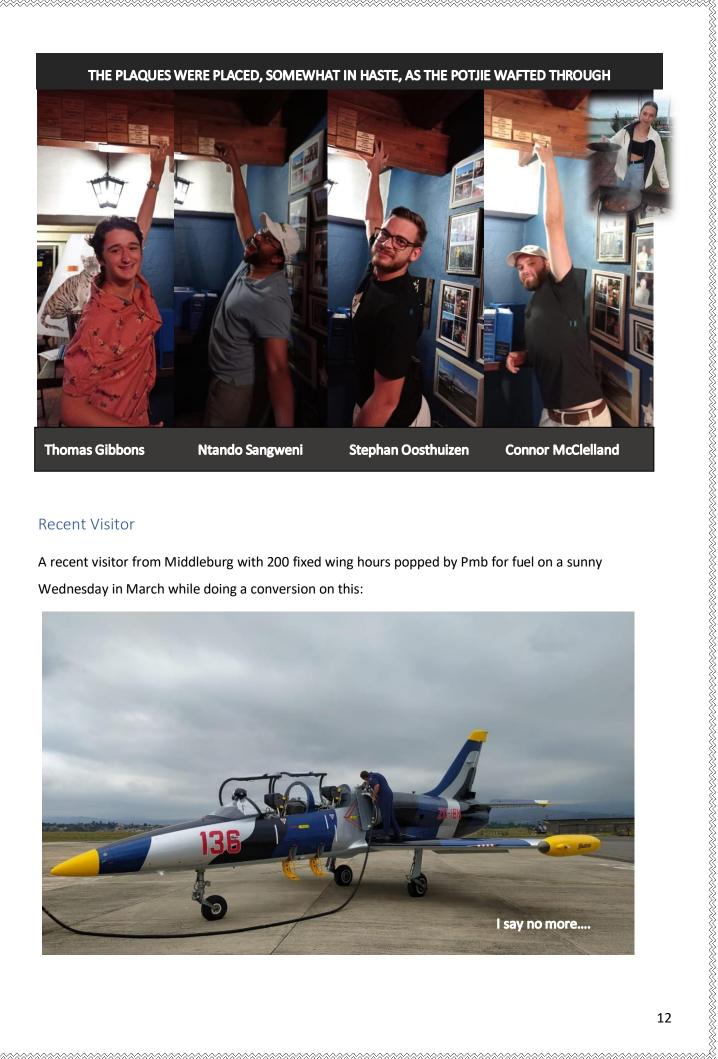












Recent Visitor

A recent visitor from Middleburg with 200 fixed wing hours popped by Pmb for fuel on a sunny Wednesday in March while doing a conversion on this:



Upcoming Events at

April 2021



3 April – Potjie Competition, KZN Passport Program launch, Scavenger Hunt Easter Air Rally

Come and join in a day guaranteed to be fun!

Starting from 9am, we will have breakfast buns on sale, the **potjie competition** will start, and potjie will be sold for lunch at R40 per plate after the Potjie King or Queen is crowned! Anyone may enter, but there are only 6 spots for the POT, and two are already taken... R150 entry fee. Hurry to join! The per plate fee is for the potjie-maker's pocket.

There will be a ticketed system for all the food. Bar will be open, (yes, we serve soft drinks too).

As the cooking commences, the briefing on the rules for the Scavenger Hunt Easter Air Rally (SHEAR) will

begin... Pilot and Navigator teams will receive their first clue once their engine is started. The goal is to complete the rally accurately, in a timeframe based on your nominated ground speed, and arrive with all the goodies you collected at each airstrip. You will have TWO cryptic clues before every leg... one that tells you where to go next, and one that tells



you which of the two envelopes you should choose at the next airfield to get the correct next clue. The prize? ALL the entry money. If no one wins, then the prize money will be rolled over to the next cryptic clue air rally! Are you up for the challenge? Entry fee per Aircraft R500. Max 20 Aircraft, potential prize – R10,000.



KZN Passport Program Launch – yes you can still join this program even if you miss the launch. The rules have been eased up since the last time. We have a number of lovely fields for you to visit, perfect if you are building hours, or just want somewhere lekker to fly on a sunny day. The bonus? Recognition! And ... of course... a hand held radio for the winner! All will be revealed at the launch.

24 April – School Open Day

A morning dedicated to introducing interested school pupils to the reality of sitting in the pilot seat. We offer a special deal, and a light lunch and cooldrink.

Keep an eye on the Pmb Aero Club Calendar on the Club Website. www.pmbaeroclub.co.za . When you RSVP it helps us plan for Catering.



Club Comms

New Club Members



A warm welcome to our new
Members, Oliver Bekker, Liam
Bekker, Barry Cromhout, Georgia
Marshall, Stephanie Schutte, Pranav
Pillay and Simone Nugent.



Our Aircraft News







We are experiencing a particularly wet summer. Lots of flights have been cancelled due to this. We have been down to two aircraft, low on hours and delays on the MPI in January due to OFS opening a week after our aircraft (KNI & SAA) both ran out of hours. With WES still in hospital for an unknown disease, we were aircraft-zero for almost two weeks in January. This has impacted negatively on flying hours in Dec 2020 and Jan 2021. Here is the low-down on each aircraft:

ZS-KNI - C172 ...



Turns out that the ADS-B Transponder compliancy discussion at the SACAA has been postponed to 2025. The ground installations to support the system are extensive, so 2022 will be here too soon for our Authorities. Thank you, Kenny O'Connor, for this information! It changed the game.

After a long search, our Chairman located an Avionics Man, Keith, from North East Avionics in Nelspruit. Keith has repaired KNI's Transponder. The new old transponder, in a noticeable cream, in working order, was successfully inserted in early March. (see left).

KNI's C of A was applied for on 18 December 2020. In spite of numerous attempts by ourselves and Aviation Assist to follow up on the progress leading up to the expiry on 28 Feb 2021, the CAA only started processing it after expiry on 1 March 2021, and we had it a week later. The club lost approx. R30,000 worth of bookings during this week while the aircraft was paperwork - grounded.

ZS-KVW - C172 ... Cessna 172...

As you may recall, local quotes to re-build KVW were not viable. OFS offered the Club R40,000 for the wreck.

KVW's wreck was posted on AvCom on 14 Jan 2021, and sold within 3 hours for R100,000.

She was trucked out the next day, and is being re-built in Johannesburg. Their plan to



complete the re-build in about 8 months has been stymied as there is no sheet metal available at present thanks to the impact of Covid-19 lockdown regulations.

SLING UPDATE

All our Sling Pilots should know by now that SLING now has an official ICAO DESIGNATOR! No more TC06's for Sling 2's registered for PPL flying or X333's for Sling 2's limited to 600kg and 75 litres fuel. All Sling 2's are now lumped together as SLG2.

ZU-SAA ...PPL Sling 2...

SAA has been pretty darn reliable. The interior is starting to look a bit shabby, and the metal brackets, though sturdier than the Velcro ones, to hold up the backrest of the seat, have torn into the upholstery. Please, please Students, take special care when removing the seat to avoid (or minimise) scratching the thin covering. SAA has flown 100 hours between mid Jan and end March as he just completed his second MPI for this year.

ZU-WES – Light Sport...Sling 2...

Many hours of checking wires, diodes, sensors, electrical power output, changing brains and checking blow-by's resulted in a big fat MYSTERY as to why WES just would not start since 17 October 2019 on that fateful day when he blew the main circuit breaker on the way out of the GFA. Student and Instructor were returned safely back to Pietermaritzburg, but WES, once shut down, would just not start up again!

Eventually the difficult decision was made to replace the engine 200 hours early. The result is that WES starts, and runs very smoothly. There were a few problems still being dealt with... the nose gear was VERY sticky, that has been seen to, and the voltage on the main bus was starting too high, then dropping too low. Thanks to Jono Wing, who learned to fly here, and is now working for The Airplane Factory after qualifying as an Engineer, the charging problem has been solved and WES returned to active service on Friday 26 March 2021, a mere 5 months, 1 week and 2 days after he went into Maintenance, (160 days).



WES has been a problem child since shortly after the Club bought him in 2017 with the AMO's scratching their heads and pulling out their invoice books with every MPI and lane light illumination. We sincerely hope that this new engine, (which Mike at OFS assembled VERY neatly), that came with a new, well, everything-but-the-airframe-and-propeller, will be problem free. It certainly sounds very good!

Fleet Hours & Hire Rates

Fleet hours 2020 and 2021 are:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
						20	20						20	21
KNI	15.0	7.6	1.2	0.0	0.0	36.7	22.1	25.9	18.0	32.2	39.6	39.6	24.2	35.1
WES	10.2	20.2	31.7	0.0	0.0	51.5	57.4	30.8	3.5	15.2	n/a	n/a	n/a	n/a
SAA	22.8	30.7	31.6	0.0	0.0	0.0	5.5	48.2	36.6	23.6	36.0	38.7	7.2	46.1
	48.0	58.5	64.5	0.0	0.0	88.2	85.0	104.9	58.1	71.0	75.6	78.3	31.4	81.2

AIRCRAFT HIRE RATES effective 1 April 2021:

All prices are VAT inclusive.

C172 → R2200 p//h

SLING 2 \rightarrow R1610 p/h

INSTRUCTOR HIRE per hour → R402.50 (flying and briefing)

Trial Lesson C172 R1313 SLG2 R1070



Fuel Price

WW1 flight simulator



Fuel Prices per litre

incl VAT	Jun 2020 Rate	Jul 2020 Rate	Aug 2020 Rate	Sep 2020 Rate	Oct 2020 Rate	Nov 2020 Rate	Dec 2020 Rate
AVGAS	17.30	18.30	18.30	18.00	18.00	18.30	18.30
JET A1	14.30	14.30	16.30	14.20	14.20	12.00	12.00



incl VAT	Jan 2021 Rate	Feb 2021 Rate	Mar 2021 Rate
AVGAS	17.40	19.20	19.20
JET A1	12.30	12.70	13.20

"Mistakes are inevitable in aviation, especially when one is still learning new things. The trick is to not make the mistake that will kill you."

— Stephen Coonts, naval aviator and author.























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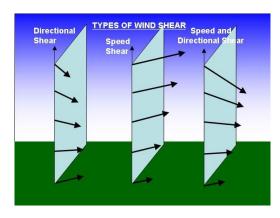


Instructor's Corner – Windshear on short finals Rwy 16, FAPM

The Instructor – Brett Mouton:

I have been flying many years in Pmb and have never experienced windshear like I did this week! (15 March) It would be worthwhile sharing because it happened so fast and if it was not caught quickly could have had extremely dangerous consequences.

Myself with student pilot in a C172 were busy with circuit training (with a steady South Easter blowing as indicated by the airfield windsock), and I noticed each time we were halfway down final approach we picked up a 10kt tailwind (GPS), which had caused us to overshoot and go around once. Given the windsock and ATC's wind report, we elected to continue using runway 16. On our last final approach to runway 16 we decided to arrive on short finals a little lower. We were indicating 65kts with 30° flap when



at about 100ft, just short of the numbers, we went from 65kt to the stall warning sounding and our right wing suddenly dropping (actually it was more than a drop, it was almost like a flick). We lifted out of our seats wide eyed, dry tongued and flabbergasted! I immediately reached for the control column and pushed forward and at the same time stood on the left rudder pedal and opened the throttle. Needless to say, all the stall and wing drop training paid off in that millisecond.

The best thing about the whole experience was that I was proud of my student's instinctive recovery reactions. It happened very fast!!!

All I can say is watch for the prevalent symptoms, (there was not a cloud in the sky - though it was hot), of possible windshear. In Pmb's case, the airfield is perched on a hill with a valley between it and World's View. Pmb sometimes has its own micro climate and I am guessing on that day some vortexing was taking place. Always be aware that even though you haven't driven your airy to the stall, she might just take you there!!...and if she does, be ready to recover very fast with minimum height loss, pick the wing up with rudder! Low down you have no chance if she pushes you over into a spin.

The Student - Ayden Shrives:

Windsheer runway 16, ZS KNI - a lesson for a life time - Monday 15 March 2021, 1300 LMT

Today I write to share an experience that will never be forgotten - a magnitude of lessons all rolled up into a split second above the threshold.

Today's flight started as all others have, a briefing with Brett followed by pre-flight and entry into the circuit for lessons 12 and 13.

The temperature was around 30 degrees and wind calm at around 4 to 6 kts. Our first take off was a short field example, we entered left down and at 3500ft I trimmed for level flight. This was the start of what seemed to be fair weather flying, blue skies, calm ground wind conditions. Within 20 seconds of trimming for level flight we had surged another 500ft, clear signs of thermal, vertical movement within the circuit pattern.

It was on the 5th circuit right downwind, when we were asked to orbit to allow Airlink to land, backtrack and park. We joined the base leg, 65 kts IAS, and entered the final approach. All was looking good; on short finals we noticed an approximate 9kt tail wind and all was stable.

Approximately over the threshold, it felt like the plane just sunk, (we floated) with an immediate drop in air speed from 65 to 40 kts, wing dropped and stall warning all within a split second, and I expected to end up upside down in the veld on the right.

I can't recall what inputs I applied for the recovery, however Brett's intervention of full power, opposite rudder and rolling level - all while gaining airspeed and flying her into recovery and a go-around, are the reason we are here in good spirits.

What I can now tell you is, I've learnt and experienced stall recovery within meters of the ground and that it is critical to ensure that you fly your aircraft <u>ALL the way</u> to a safe landing!

We did a tear drop reposition for runway 34 and Brett put us safely on the ground.

Don't be fooled by clear skies.

Fly your plane all the way to a safe landing.

Practice your recovery procedures until they become instinct.

THIS WAS A LESSON FOR A LIFE TIME.

Exam Writing Schedule Relief



It has taken only two- and a-bit years for the SACAA to run another Exam Invigilator Course, so WHOOOPEEEE! Kelly and Curtis attended the course on Monday 29 March 2021, in Jo'burg (only place it was running).

This means that exams can now be written EVERY WEEK DAY as we will have qualified Invigilators available!! (No exams on Public Holidays or Weekends).

Q&A PPL Confuser – select the correct answer:

Automated Weather Observing System- Weather only

- 1. AWOS
- 2. Hypoxia corrective action
- 3. Density altitude
- 4. How do you determine wind direction?

Spark plug fowling

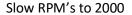
- 1. Over 30 mins, Pilot in command needs oxygen at
- 2. Run up RPM Drop: Less than 150
- 3. What do you do if you lose elevator?
- 4. Run up RPM Drop: more than 150 (rough)

The flaps are manual. Powered with a lever and mechanical linkage

- 1. What do you do if you lose flaps?
- 2. What is Class D Airspace?
- 3. What is left traffic?
- 4. What powers the flaps?

Avoid steep turns at low airspeeds because a high load factor raises the stall speed and also increases drag. Ex Traffic pattern.

- 1. What do you do if you lose ailerons?
- 2. What is traffic pattern altitude?
- When should steep turns be avoided?
- 4. In a minimal fuel emergency, what do you do?



Carb heat on

Slow to 1500RPM



Add flaps, 10deg at a time 20 deg

Air speed 65 MPH

Pull power to idle

Pull back pressure until stall horn/buffeting occur

Recover:

Release yoke/push yoke forward

Power to full/carb heat in

Pull back pressure

Remove flaps

Climb back to entry altitude

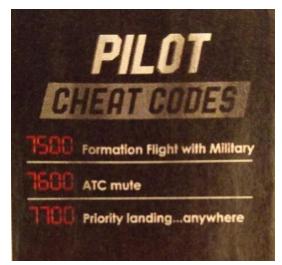
- 1. Rectangle Course Tolerances
- 2. Steps to perform a power off stall?
- 3. What do you do if you lose ailerons?
- 4. Explain hypoxia and its symptoms

Lack of oxygen in the blood

1. FBO

- 2. Definition of arm
- 3. Class B Weather Minimums
- 4. Hypoxia





Member's Submission

Help make our Telstar better... send in your own flying experiences, aviation related things you find interesting or funny, or scary.



Aero Club Shop



Soft, comfortable 100% Cotton Polo shirts, peak caps, softshell jackets, pilot shirts, epaulettes,



Branded Clothes:

Softshell Jackets -rain resistant (Men)	R 750	In stock
Softshell Jackets -rain resistant (Women)	R 750	In stock
Pmb Aero Club Golf Shirts (Men)	R 360	In stock
Pmb Aero Club Golf Shirts (Women)	R 360	In stock
Pmb Aero Club Peak Caps	R 100	In stock
Pmb Aero Club ties	R 35	In stock
Pmb Aero Club Jersey	R 260	In stock
PAC Pilot Shirts (white)	R 250	In stock

Pilot Logbook (large)	R 315	In stock
Fuel Tester	R 215	In stock
Pmb Aero Club Wings	R 300	In stock
Epaulettes	R 50	In stock
Headsets	R2,736	Out of stock
Headset bag	R 364	Out of stock
Durban Maps – laminated one side for easy folding: 1:500 000 & 1:1 000 000	R 75	Stock arriving soon

Books:

PPL – by Jim Davis	R 130	In stock
The Air Pilot's Manual – by	R 700	In stock

Avex Study Notes for PPL:

Principles of Flight	R 230	In stock
Navigation	R 235	In stock
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Human Performance	R 225	In stock
Flight Performance	R 230	In stock

Aircraft General	R 280	In stock
Airlaw	R 170	In stock
Radio Handbook – Dietlend Lemp	R 230	In stock
Aero Club PPL Bag	R 340	In stock

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Until next time, happy flying!

Telani Lithgow Editor of the Telstar

Chief Flight Instructor

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