

JANUARY 2020

BRAKES ON.....
THROTTLE SET.....



CONTACT!

THIS MONTH

FROM THE COCKPIT

CHAPTER CHATTER

SPECIAL FEATURES



AS A MATTER OF FACT....

TECH TALK

ADVOCACY

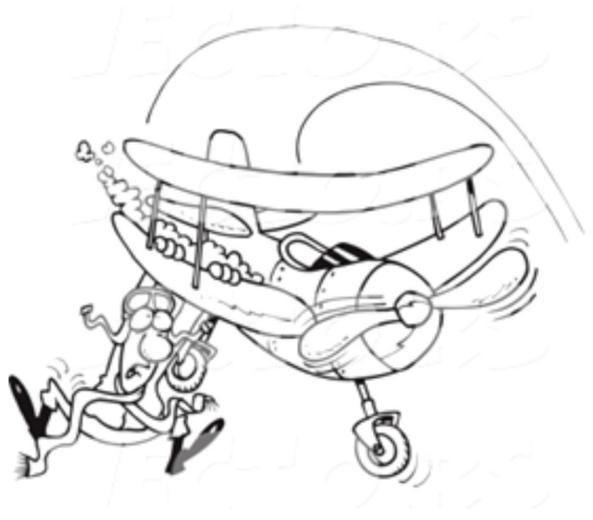
UPCOMING EVENTS

IN MEMORIAM

LAST WORD

FROM THE COCKPIT

SEAN CRONIN



Sean Cronin

PRESIDENT EAASA

Another year and a new decade is upon us again. Holidays are just way too short.

A few old faces have suddenly left us for the big hangar in the sky...This leaving a big gap to fill. May they all rest in peace.

One wonders what this year has in store for all of us as we pursue our passion and enjoy the freedom of flight. I recently had to do my ATF and was pleasantly surprised. Three days and it was done, signed off and in my hands also with the date of expiry now 30 January 2021. This is such a positive move from our regulators as they adapt to the recreational aviation world.

The next few months are going to be interesting with our National carrier being placed under business rescue.

Sad for all the pilots and crew who may not finish their careers in their own country.

I want to wish everyone a safe, happy and fun decade ahead. May the winds be tail winds in your travels. Keep it safe and always land with the rubber side down.

Sean Cronin

IN MEMORIAM

TRIXIE HERON 12 JULY 1949 - 25 DECEMBER



IN MEMORIAM

TRIXIE HERON 12 JULY 1949 - 25 DECEMBER

Trixie sadly passed away on Christmas day.

There is hardly any member of the local recreational aviation community who did not know Trixie and her bubbly and unbridled enthusiasm for the Experimental Aircraft Association (EAA). It is true to say that EAA was the centre point of Trixie's life and had been so for at least the last 17 years. In this time, she never missed a single meeting. She loved the EAA community, animals, younger people and music.

Trixie was born in Humansdorp in the Eastern Cape with the surname of van Rooyen and grew up as an Afrikaans speaker at school in Port Elizabeth. She married George Heron, a fine sportsman, who lived in Rhodesia. She also lived in the UK and Saudi Arabia where she worked for the Royal Saudi family as a tutor. Trixie was a rabid vegetarian and tee-totaller - she had the moral conviction of her love for all animals and vowed never to eat anything that had eyes. She was often referred to by Ricardo De Bonis as 'The Rabbit' at our frequent and happy braais at his hangar at Krugersdorp, when she'd bring her own salad or pasta.

She was an accomplished pianist. Wherever we went on EAA events and a piano was present, Trixie would tickle the ivories. I understand that she earned a stipend playing the piano at many weddings and church functions, this being one of the ways she made a meagre but honest living. Trixie was a copy writer as her main occupation and did proof reading for some large companies' advertorials. Nothing in the world is more common than unsuccessful people with talent.

Trixie was an aunt of the late Terry Hertz, who was EAA of SA National Chairman in 2003.

She was an erstwhile member of Microlight Society of SA (MISASA) when she owned and was learning to fly her microlight Trike. For a

while, she published her glossy African Skies magazine, which focussed mainly on the microlight fraternity. She often spoke of the Microlighters' annual fly-ins to the Numbi Hotel airstrip at Hazy View. Her plane was damaged in a tornado which collapsed a hangar and destroyed several Trikes, badly damaging others, including hers, which has not flown since.

I spent many years compiling the EAA newsletter which we named '...brakes on, throttle set, CONTACT!' Trixie would come to my home the week prior to our Chapter 322 monthly meetings to proofread my work so that the newsletter could be distributed punctually, with a reminder in time for the upcoming meeting. The proof reading was an immense task as she was an absolute stickler, almost to the point of pain, for accuracy of spelling and grammar. Her language proficiency in English, Afrikaans and French as well as Arabic was most impressive. Trixie was loath to be elected to any EAA Committee although she did act as secretary on occasion and attended most EAA Committee meetings of both the local Chapter 322 and the EAA of SA National Council.

Trixie will be remembered too, for handling registrations as well the sales of EAA regalia at countless EAA events, to which she would travel in EAA members' planes or cars. She kept a ledger of all members and guests at 322 meetings and was insistent that everybody signed in - her attendee lists were always useful as many members' contact details changed regularly.

Trixie was baptised recently in the Catholic Church. She will be sorely missed by so many people whose lives she made a little better for having known her.

May her soul rest in peace.

Karl Jensen

CHAPTER CHATTER

CHAPTER 322 JOHANNESBURG

EXTRACTED FROM THE MINUTES OF CHAPTER 322 MEETING: 8 JANUARY 2020

By Eugene Couzyn

The first meeting of the year opened with the customary welcome to attending personalities, visitors and members, which was followed by apologies and a tribute to the sadly departed Trixie Heron who passed away unexpectedly on Christmas day, following a fall at her home.

It would appear that she had been seriously ill for some time, but in typical Trixie form, she had not shared this with anyone at EAA.

For the first time in many years, Trixie was not available to record attendees and no attendance figures are available for the meeting.

A video featuring Burt Rutan's amazing aircraft designs was shown and under Homebuilders' Hoekie, the Bearhawks under construction by Wayne Giles, Sean Cronin and Trevor Davids were showcased.

A technical video on how to "fish-mouth" the end of a tube was shown, followed by a video

featuring Brian Stableford's last flight.

The meeting was notified of the upcoming Flying Legends Talk Show featuring "The General" and his incredible flying career.

Fly aways for December were:

A hugely successful trip to Groblersdal; and

A very well received elephant interaction at Zebula.

A fly in to Circus on 11 January was promoted as was The Auditorium event on 23 January.

SAPFA events were publicised for 25 Jan and 1 Feb.

Dickie Fritz Residents thanked EAA 322 members for the Christmas gifts donated to them.

Sean made a presentation on flying incidents experienced by our members and Karl presented a safety talk on Tail dragger flying.

AS A MATTER OF FACT

JOHN ILLSLEY

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION
THE DE HAVILLAND DH60 MOTH SERIES



THE OLDEST FLYING MOTH AND THE EIGHTH BUILT (IN 1925) IS THIS CIRRUS MOTH WHICH FLIES WITH THE SHUTTLEWORTH COLLECTION IN ENGLAND.

Of all the aircraft types that have featured in South Africa's aviation heritage, only one can claim to hold the collective distinction of having triggered the formation of flying clubs across the country; been the initial type utilized by the first national airline; and to have been chosen by several pilots who undertook the first solo trans-Africa flights. That aircraft type is the De Havilland DH60 Moth, one of the greatest success stories in British light aircraft production.

In terms of where the Moth fitted into the De Havilland lineage, its origins can be regarded as akin to Goldilocks' porridge. The earlier DH51 of 1924 was an attempt to design a practical light aircraft for private ownership, but its cost and engine size were among factors that prevented it from finding a ready market and only three were built. At the other end of the spectrum, the DH53 Humming Bird, designed as an entrant in the light aero-

plane trials of 1923 was, due to the exceedingly limiting rules of this competition, an underpowered single-seat monoplane. The happy medium that lay somewhere between these two designs was an all-wood, two-seat biplane utilizing a reliable four cylinder inline engine. Its handling characteristics, speed and range meant that it in Britain and its colonies it finally provided an affordable light aircraft that was suitable for touring and training. This, in turn, meant that flying clubs had an obvious choice and many would in fact owe their origins to the appearance of the DH60 Moth on the market. The prototype was first flown in February 1925 at the De Havilland factory at Stag Lane and by the middle of that year, five Moth-equipped clubs had been set up in Britain at the initiative of the Director of Civil Aviation, Sir Sefton Brancker. Many more would follow across the British Isles and the British Empire.

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION

THE DE HAVILLAND DH60 MOTH SERIES ctd...



AN ALAN HINDLE PAINTING OF THE CIRRUS MOTH THAT WAS DONATED BY SIR CHARLES WAKEFIELD TO THE JOHANNESBURG LIGHT PLANE CLUB AND NAMED IN HIS HONOUR.

The Moth owed much of its success to a basic airframe which was of spruce and birch ply construction in a structure that was almost entirely glued. This limited the number of metal fittings, kept down cost and facilitated manufacturing in a company with extensive woodworking skills. The name was adopted because the founder and owner of the company, Geoffrey de Havilland, was a keen lepidopterist and a entire line of Moth light aircraft would come to have this as the suffix in their names in addition to the DH type number that each was allocated.

The DH60 Moth series was to have three main variants based on the engine types which were known as Cirrus Moths, Gipsy Moths and Moth Majors.

A few radial engine Genet versions and one Hermes-powered example also emerged. One sub-variant of the Gipsy Moth was the DH60M which used a metal tube fuselage frame and was sometimes referred to as the "Metal Moth". A number of these were licence built in the USA. All of the Moths featured folding wings, something which was common to many British light aircraft of this era as it reduced the costs of storing in a hangar.

One of the features which sets the DH60 Gipsy Moth apart is that it is one of the very few aircraft in history where all the major components were built by the same company. Hence, the airframe, engine, propeller and instruments were all De Havilland products.

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION

THE DE HAVILLAND DH60 MOTH SERIES *ctd...*



MAJOR ALLISTER MILLER
WITH THE FIRST DH MOTH IMPORTED
INTO SA IN MARCH 1927.
SEEN TOWING IT THROUGH THE
STREETS OF JOHANNESBURG

The first DH Moth to be seen in South Africa was the one imported by Major Allister Miller in March 1927 and initially registered as G-UAAG. Miller assembled the aircraft in Cape Town and then, to attract publicity, towed it through the streets of the city (with the wings folded) before flying it off the esplanade! Miller held the local agency for the Moth and was keen to show it off so as to attract orders. To this end, he flew the aircraft across much of the country, visiting towns and cities. This had the desired effect and a number of flying clubs emerged in the larger cities and purchased the type. By way of comparison, the seventy-five DH60 Moths registered in South Africa came to be as important in the inter-war decades as the Cessna (150 and 172) and Piper Cherokee would become in the post-WW2 flying scene in this country.

Two initiatives which assisted the formation and growth of flying clubs in South Africa deserve mention. The one arose from the benevolence of Lord Wakefield, the British oil

magnate, who in the late 1920s agreed to sponsor a Moth for each flying club in the British Empire. The other important boost to club flying came in the form of a SA government subsidy to all trainees at local flying clubs. Both of these helped ensure that the number of Moths flying with clubs increased. Others were purchased by well heeled private buyers.

As a club aircraft, the Moths in South Africa in the late 1920s and early 1930s not only saw use as trainers and for cross country jaunts, but were occasionally hired to carry out charter flights in the absence of companies (other than Union Airways) dedicated to commercial flying. The prevalence of Moths in clubs and private ownership meant that they featured in many air races, rallies and air shows in the inter-war period. The demise of some was also related to their involvement in these activities, with at least one Moth (ZS-AAL) colliding with the car which it was supposed to be flour bombing!

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION



CIRRUS MOTH ZS-AAL AFTER COLLIDING WITH A PRETORIA-REGISTERED CAR. IT IS BELIEVED THAT THIS WAS THE RESULT OF A FLOUR BOMB ITEM AT AN AIR SHOW THAT WENT WRONG.

ALLISTER MILLER FIRST FLEW THE MOTH AT YOUNGFIELD AND THEN TOOK IT ON A PROMOTIONAL TOUR OF THE COUNTRY. THE AIRCRAFT WAS NAMED "THE POINT" WHICH WAS HIS CONSTITUENCY IN PARLIAMENT.



One development which was very important to the continued operation of Moths in the country was the setting up of a subsidiary of the De Havilland Company in South Africa in 1930. This was in line with a similar pattern in Australia, New Zealand and Canada. Prior to this maintenance of civilian aircraft was all done by the SAAF at Swartkop (then Zwartkop) as this represented the only pool of expertise available in the sub-continent. Several Moths were extensively rebuilt by the ground engineers of the air force, including the building of complete new sets of wings. This type of work was now taken over by De Havilland South Africa in their facility at Baragwanath airfield. The number of De Havilland aircraft being operated in Southern Africa made this development worthwhile and gives an indication of how

large a share of the local market was made up of DH types.

Several Moths were still flying with clubs in South Africa when the government introduced the Thousand Pilot Scheme in 1937 as a means of using flying schools and clubs to carry out the ab-initio training of a large reserve of SAAF pilots. This meant that in their latter years, the venerable Gipsy Moth together with Tiger Moths, Ryans and other types, became in effect a military trainer as the international situation grew ever more threatening. This scheme was only open to men, a situation which prompted a group of women pilots to set up the SA Women's Aviation Association, some of whose members gained their licences on Moths.

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION

When Allister Miller established the first commercial airline company in South Africa in 1929, it was the Moth which made up the initial fleet of Union Airways. Four Gipsy Moths were bought new from De Havilland and fifth (originally G-AAAJ) was purchased second-hand from Malcolm Campbell who had visited the country to attempt a land speed record. The Moths were registered as ZS-ABH to ABL by Union Airways.

Noteworthy is that two of the Moths which Miller utilized were converted by the De Havilland company to have a canopy over both cockpits and were referred to as the Coupe version. Very few examples were produced of this variant. The rest of the Union Airways fleet retained the standard open cockpit layout.



THE FULL FLEET OF MOTHS WITH WHICH UNION AIRWAYS STARTED OPERATIONS. THEY ARE SEEN AT BROOKLYN AIRFIELD, LATER TO BECOME YSTERPLAAT AIR BASE. THE HANGAR WAS ONE OF THOSE USED BY THE SAAF DHGS FOR THE EXPERIMENTAL AIR SERVICE AND AMAZINGLY IS STILL INTACT TODAY AS PART OF THE SAAF MUSEUM, CT BRANCH.

ONE OF THE MOTHS BOUGHT BY ALLISTER MILLER TO START UNION AIRWAYS. THIS EXAMPLE, ZS-ABL, IS OF INTEREST AS BEING A COUPE VERSION WITH THE COCKPITS ENCLOSED WITH A CANOPY. FEW MOTHS WERE MODIFIED IN THIS WAY. THE AIRCRAFT IS STILL BEING ASSEMBLED IN THIS IMAGE.



AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH



A PASSENGER ENJOYS A FLIGHT IN ONE OF THE FIRST MOTHS REGISTERED IN THE COUNTRY. THE NAME OF THE TRANSVAAL DISTRIBUTOR, JH VEASEY CAN BE SEEN ON THE FUSELAGE.

Of course, the DH60 Moths were only the first in a series of light aircraft that the De Havilland company would produce in the 1930s, mostly for civilian use. The Puss Moth, Leopard Moth, Fox Moth, Tiger Moth and Hornet Moth would all feature in SA in clubs and in the hands of commercial enterprises or private owners. All of these types would also go on to see service with the SAAF when private flying was suspended in the country in 1940 and all suitable aircraft types were bought for military use as trainers or communications aircraft at the various air schools across the land.

One final reason for the fame of the DH 60 Moth was its use as a record setting and breaking aircraft, mainly in the hands of British and British Empire aviators. The fact that the Moth was used for long distance flights was certainly a tribute to the integrity of the design and no less to the skill and bravery of the aviators. The likes of Amy Johnson and Francis Chichester were among those who undertook long distance flights in the type.

In the case of flights associated with South Africa as the end point or the starting point, a number of significant examples (some of which set the initial records) can be mentioned. In September 1927, Lt Dick Bentley, a SAAF pilot, took unpaid leave and flew DH60X Cirrus Moth G-EBSO from London to Cape Town in 27 days. This represented the first solo flight from Britain to SA. The aircraft was named "Dorys" after his fiancé and was sponsored by the Star newspaper (earning it the nickname of the "Star Moth") which bought and insured the aircraft. Stan Halse and his wife flew a Gipsy Moth (G-EBYS) from England to the family farm Halseton (near Queenstown) in 1928. The next trans-Africa flights in a Moth were those completed by Lady Bailey (born Mary Westenra), the wife of Abe Bailey, in 1928-9 using DH60X Cirrus Moth G-EBTG. She achieved the first solo flight by a female pilot southbound and the fastest northbound flight by a female flight, reaching Britain in 117 days.

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION



MILLER AND THE FIRST MOTH IN SA SEEN AT BLOEMFONTEIN, WITH THE LOCAL CONSTABULARY, AMONGST OTHERS, TAKING AN INTEREST. THE AIRCRAFT WAS REGISTERED UNDER THE ORIGINAL REGISTRATION SYSTEM ALLOCATED TO SA AS PART OF THE BRITISH EMPIRE, NAMELY THE G-U PREFIX, WHICH MADE THIS ONLY THE SEVENTH AIRCRAFT FORMALLY REGISTERED IN THE UNION OF SA.

In September 1929 Lt Gosta Andree flew his Moth from Sweden to Cape Town in 130 flying hours and returned safely the following year.

A few years elapsed before another Moth was piloted from Cape Town to London. Victor Smith, who was only nineteen at the time, successfully flew Gipsy Moth ZS-ADB (named "Miss George") fitted with additional fuel tanks on the westerly route to Britain in November 1932, although not setting any speed record for the flight.

After this, the record attempts were undertaken in faster monoplanes and the DH60 Moth did not again feature in pre-WW2 trans-Africa flights.

Nevertheless, in recent decades a few Tiger Moths have accomplished flights of this nature in one or other direction, most recently as part of the Crete-to-Cape formation

Sadly, although as outlined above, the DH60 Moth type featured prominently in South African aviation in the 1920s and 30s, there are no surviving airframes in the country.



THE OTHER UNION AIRWAYS COUPE MOTH ZS-ABK COMES IN TO LAND AT FAIRVIEW AIRFIELD AT PORT ELIZABETH AND USED AS THE BASE OF UNION AIRWAYS OPERATIONS. THE MOTHS CARRIED BOTH MAIL AND PASSENGERS.

A few engines and propellers are to be found in museums and private hands, but no complete aircraft appeared on the SA register after World War Two.

The all wood construction was one of the major reasons why none escaped the ravages of air force usage, mainly as ground trainers and instructional airframes.

AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION

ANOTHER TRANS-AFRICA FLIGHT ACCOMPLISHED IN A DH MOTH WAS BY THE SWEDE GOSTA ANDREE IN SEPTEMBER 1929. HE IS SEEN HERE WITH A J.L.P.C MEMBER.



LT DICK BENTLEY AT BARAGWANATH IN HIS MOTH 'DORYS' WHICH HE FLEW TO CAPE TOWN FROM ENGLAND IN 28 DAYS IN SEPTEMBER 1927 AS THE FIRST SOLO FLIGHT ON THIS ROUTE.

THREE MOTHs OF THE RAND FLYING CLUB REFUEL AT NEWCASTLE DURING A 1930s CROSS COUNTRY EXERCISE THAT TOOK THEM TO DURBAN AND BACK. MOTHs BECAME THE MAINSTAY OF FLYING CLUBS ACROSS THE COUNTRY IN THIS ERA.



THE SETTING UP OF A DE HAVILLAND SUBSIDIARY IN SOUTH AFRICA IN 1930 WAS AN IMPORTANT STEP IN SUPPORTING AND MARKETING DE HAVILLAND AIRCRAFT IN THE REGION. THIS SHOWS THE INTERIOR OF THE MAINTENANCE HANGAR AT BARAGWANATH.

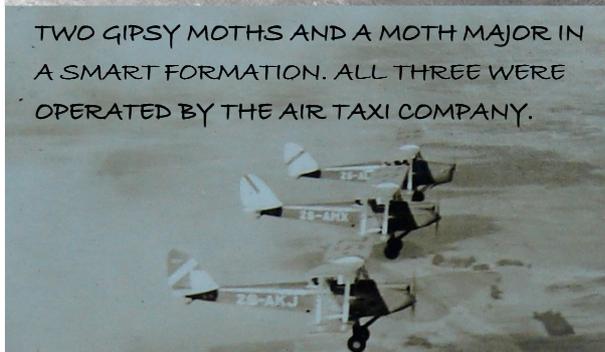
AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION



A FORMATION OF THREE GIPSY MOTHS AND ONE MOTH MAJOR IN THE VICINITY OF JOHANNESBURG, IN THE 1930S.

TWO GIPSY MOTHS AND A MOTH MAJOR IN A SMART FORMATION. ALL THREE WERE OPERATED BY THE AIR TAXI COMPANY.



GIPSY MOTHS OF JLPC FLYING NEAR BARAGWANATH WITH ONE OF THE FIRST TIGER MOTHS OPERATED BY THE CLUB.



A GIPSY MOTH ENGAGED IN A FLOUR BOMBING COMPETITION AT BARAGWANATH IN THE MID-1930S. THE HEALTHY FLYING CLUB SCENE INCLUDED FLY AWAYS, AIR RACES, AIR SHOWS AND COMPETITIONS OF THE TYPE SHOWN.



AS A MATTER OF FACT

IMPORTANT AIRCRAFT TYPES IN SOUTH AFRICAN AVIATION



ANOTHER OF THE UNION AIRWAYS GIPSY MOTHS OVER THE SUNDAYS RIVER MOUTH NEAR PORT ELIZABETH. THIS IS THE STANDARD CONFIGURATION OPEN COCKPIT VERSION. THE USE OF MOTHS FOR AN AIRLINE OPERATION IN SA IS BELIEVED TO HAVE BEEN UNIQUE.

AN UNIDENTIFIED GIPSY MOTH OVER THE BUILDINGS OF THE JLPC AT BARAGWANATH AIRFIELD SOUTH-EAST OF JOHANNESBURG IN THE EARLY 1930S.



THIS CIRRUS MOTH WAS THE FOUNDING AIRCRAFT OF THE DEFENCE FLYING CLUB, ONE OF THE EARLIEST CLUBS FORMED IN SA, BUT SADLY ONE THAT CLOSED A FEW YEARS AGO.

Although SA is blessed to have a good number of fine DH82a Tiger Moths still flying, not a single DH60 Moth can be found in South Africa today and you would need to travel to the UK, USA or Australia to see flying examples.

Given the importance of the type in the foundation years of SA civil aviation and even the

role it would play in training many of the country's wartime SAAF pilots, it ranks among the types most deserving of having a representative example put back in the air.

Perhaps someone will see fit to build a replica or import an original example to plug this gap in our flying heritage.

SPECIAL FEATURES

VNE.....

BY DR. ROBERT CLARK

Let's be honest. How many times have you been tempted to go, or physically gone beyond VNE (the never exceed velocity of an aircraft).

Just attend a braai at the airfield, have a few beers, and you will have people discussing their experiences when they exceeded VNE!!

They are also the guys who normally land up in hospital with a broken wrist from all the "High Five's" they get at the braai.

Before we get overly excited and congratulate these individuals, let's take an honest look at what VNE actually is and the perils associated with it.

The acronym VNE suggests that you should not go there. It states "NEVER EXCEED" for a very good reason as the aerodynamic forces before, and beyond VNE can have detrimental effects to the aircraft, and dire health consequences to you and your passengers.

Structural damage is common beyond VNE, and no pilot wants that headache to deal with in flight.

So, what is VNE? Some people believe it is 110% of the cruise speed and, therefore you are safe to exceed the VNE in clean air.

That cannot be true as the Jabiru 430 cruise speed is 120 knots, and the VNE is 140 knots. Research however, would suggest that there is no correlation between cruise speed and VNE.

VNE, according to research suggests that this velocity is 10% less than the maximum dive velocity where the test pilot did not experience buffeting severe enough to cause structural damage.

If this is true, why don't we descend at VNE, as we know that the aircraft has certainly gone faster during the testing phase?

VNE INDICATED ON THE ASI



SPECIAL FEATURES

VNE.....ctd

Well there are multiple reasons for not doing this, but let's just look at a few:

I believe the first reason, and certainly the most easy to understand, is that the red-line on your air speed indicator, must be telling you something. The colour red normally means, stop what you are doing, or, there will be consequences!.

In the case of your aircraft, it most probably will be structural damage. We also associated red with danger. Drive through a red traffic light a few times and your luck will eventually run out.

Likewise, exceed VNE once or twice, and your luck will run out! The warning of imminent danger could be an aerodynamic flutter, a high speed whistle or, the instantaneous destruction of the aircraft.

When this happens, you lose your status as the PIC (Pilot in Command) of your aircraft and become a passenger of a doomed fuselage without wings that is going to crash and burn.

The second reason is flutter. Have you ever watched our national flag in a nice steady breeze? It is stable and a beautiful sight but what happens when the wind speed increases? Things start to get unsteady and flutter starts to set in motion, which results in uncontrolled oscillations of the flag. The same phenomenon happens to your aircraft. When you approach or exceed VNE, the aerodynamic forces can induce a flutter that could be destructive of nature. Just go onto YouTube and google aerodynamic flutter. The videos are horrifying. Who on earth wants to be in an aircraft with the horizontal stabilizer flapping around uncontrollably.

Are you safe to descend at a speed just below VNE? Well lets unpack this and you decide for yourself:

When they test an aircraft for VNE prior to certification, the aircraft is brand new and in mint condition. It is most probably true to say that most aviators don't fly brand new aircraft. What about your 25 year old aircraft that has been in a training school for 20 years and withstood the abuse of student pilots, and flight instructors demonstrating flight maneuvers' that are not common in everyday flight? Do you still apply the same rules to VNE?

Materials do change when subjected to stresses, especially when these stresses exceed the elastic deformation limit of the material. Are you still prepared to stress your aircraft as if it was brand new?

The testing for VNE is done in a controlled manner, with a test pilot who has a parachute, in perfectly calm conditions and in a brand new aircraft. Have you thought what happens if you are approaching, or exceeding VNE and you hit turbulence or a gust of head wind. Just stop what you are doing and think about it. What you think is a good idea with the wind whistling in your ears could turn into a catastrophic event in half a second. Just think about that. Your entire life of working hard for a better future, raising a family, spending time with loved ones, having a loving spouse, having family holidays in Thailand, owning your own aircraft, living on a farm, being blessed with grandchildren.....all that ends in half a second. Is it still such a good idea?

The third reason is that there is no reason to ever go near VNE. If you are flying to your favorite destination for a weekend away with the family, start the descend earlier. Who really cares if you are not the first plane to arrive at the destination? It is not a race, and should never be seen as that. Aviation should be fun, not a race to see who lands first by pushing the flight envelope of the aircraft.

SPECIAL FEATURES

VNE.....ctd

I urge you to reconsider your actions if you have consciously exceeded VNE. The problem when you approach VNE or the exceedance thereof is that the associated aircraft failure is normally instantaneous, with dire consequences. Who wants to be 5 000 ft agl (above ground level) without wings, knowing that the next 20-30 seconds are going to be a totally helpless and terrifying situation?

There is also the debate whether VNE is based on IAS, or TAS? The answer seems to be type specific. Before your next flight, ensure you know what is applicable to your air-

craft before you land up on the wrong side of VNE.

As a responsible aviator, plan your descent and plan to consciously avoid VNE. Buy a faster aircraft if speed excites you, but don't be irresponsible and exceed the flight envelope of your aircraft. The consequences could be catastrophic to you, and your loved ones that you leave behind.

Rob Clark



SPECIAL FEATURES

STARS OF SANDSTONE 2019



SPECIAL FEATURES

STARS OF SANDSTONE 2019 ctd.....



SPECIAL FEATURES

STARS OF SANDSTONE 2019 ctd.....



SPECIAL FEATURES

STARS OF SANDSTONE 2019 ctd.....



SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER

BY REBECCA SEALES, BBC NEWS, IN MELBOURNE

THIS LITTLE-KNOWN INVENTOR HAS PROBABLY SAVED YOUR LIFE



Friday 19 On October, 1934, the passenger plane Miss Hobart fell from the sky to the sea.

Eight men, three women and a baby boy fell with her, swallowed - it's believed - by the waters of the Bass Strait that lies between Tasmania and mainland Australia.

The plane's wreckage was never found.

One of those on board was a 33-year-old Anglican missionary, Rev Hubert Warren, who had been travelling to his new parish in Enfield, Sydney. His wife Ellie and four children had stayed behind, intending to follow by boat.

The reverend's last present to his eight-year-old son, David, had been a crystal radio set that the boy treasured deeply.

As a boarder at Launceston Boys' Grammar School in Tasmania, David Warren tinkered with the machine after lessons, learning what made it work. He charged friends a penny to listen to cricket matches, and within a few years was selling home-made copies at five shillings each.

Young David was charismatic and a wonderful orator - a boy with star quality. His family, who were deeply religious, dreamed he would become an evangelical preacher.

SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER ctd.....



But that was not to be. The gift from Rev Hubert, Man of God, had launched a love affair with Science.

It would prove to be of life-saving significance.

By his mid-twenties, David Warren had studied his way to a science degree from the University of Sydney, a diploma in education from Melbourne University and a PhD in chemistry from Imperial College, London.

His specialty was rocket science, and he went to work as a researcher for the Aeronautical Research Laboratories (ARL), a part of Australia's Defence Department that focused on planes.

In 1953, the department loaned him to an expert panel trying to solve a costly and distressing mystery: why did the British de Havilland Comet, the world's first commercial jet airliner and the great hope of the new Jet Age, keep crashing?

He thought it might be the fuel tanks; but there were dozens of possible causes and nothing but death and debris as evidence.

The panel sat down to discuss what they knew.

"People were rattling on about staff training and pilots' errors, and did a fin break off the tail, and all sorts of things that I knew nothing about," Dr Warren recalled more than 50 years later.

"I found myself dreaming of something I'd seen the week before at Sydney's first post-war trade fair. And that is - what claimed to be the first pocket recorder, the Miniphon. A German device. There'd been nothing before like it..."

The Miniphon was marketed as a dictation machine for businessmen, who could sit at their desks (or on trains and planes) recording letters that would later be typed up by their secretaries.

David, who loved swing music and played the clarinet, only wanted one so he could make bootleg recordings of the jazz musician Woody Herman.

SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER ctd.....

However, when one of his fellow scientists suggested the latest doomed Comet might have been hijacked, something clicked for him.

The chances that a recorder had been on board - and survived the fiery wreck - were basically nil. But what if every plane in the sky had a mini recorder in the cockpit? If it was tough enough, accident investigators would never be this confused again, because they'd have audio right up to the moment of the crash. At the very least, they'd know what the pilots had said and heard.

The idea fascinated him. Back at ARL, he rushed to tell his boss about it.

Alas, his superior didn't share his enthusiasm. Dr Warren said he was told: "It's nothing to do with chemistry or fuels. You're a chemist. Give that to the instruments group and get on with blowing up fuel tanks."

'Talk about it and I'll have to sack you'

David knew his idea for a cockpit recorder was a good one. Without official support, there was little he could do about it - but he couldn't get it out of his mind.

When his boss was promoted, David pitched his invention again. His new superior was intrigued, and so was Dr Laurie Coombes, ARL's chief superintendent. They urged him to keep working on it - but discreetly. Since it wasn't a government-approved venture or a war-winning weapon, it couldn't be seen to take up lab time or money.

Dr Warren said the chief superintendent had cautioned him: "If I find you talking to anyone, including me, about this matter, I will have to sack you."

It was a sobering thought for a young man with a wife and two children.

But his boss's backing extended to sneakily buying one of the precious new dictation recorders, and chalking it up as "an instrument required for the laboratory..."

Encouraged, Dr Warren wrote up his idea in a report, titled "A Device for Assisting Investigation into Aircraft Accidents", and sent it out across the industry.

The pilots' union responded with fury, branding the recorder a snooping device, and insisted "no plane would take off in Australia with Big Brother listening".

That was one of his better reviews.

Australia's civilian aviation authorities declared it had "no immediate significance", and the air force feared it would "yield more expletives than explanations".

Dr Warren was tempted to pack it all in.

But his eldest son, Peter, says his father was stubborn, with a non-conformist streak that coloured his whole worldview.

"He took us skiing," he recalls, "but he did the skiing in washing-up gloves, because he wasn't going to pay \$30 for a pair of ski gloves. He wasn't the least bit afraid. He wasn't going to wait and follow the herd at all."

It was in that spirit that Dr Warren took to his garage and assembled his 20-year-old radio parts. He'd decided the only way to overcome his critics' mockery and suspicion was to build a solid prototype.

It would be the first ever "black box" flight recorder.

SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER ctd.....

'Put that lad on the next courier!'

One day in 1958, when the little flight recorder had been finished and finessed, the lab received an unusual visitor. Dr Coombes, the chief superintendent, was showing round a friend from England.

"Dave!" he said, "Tell him what you're doing!"

Dr Warren explained: his world-first prototype used steel wire to store four hours of pilot voices plus instrument readings and automatically erased older records so it was reusable.

There was a pause, then the visitor said: "I say Coombes old chap, that's a damn good idea. Put that lad on the next courier, and we'll show it in London."

The courier was a Hastings transport aircraft, making a run to England. You had to know somebody pretty powerful to get a seat on it. Dr Warren wondered who this man was who was giving away tickets round the world to somebody he'd never met.

The answer was Robert Hardingham (later Sir Robert), the secretary of the British Air Registration Board and a former Air Vice-Marshal in the RAF.

In David's words: "He was a hero. And he was a friend of Coombes, and if he gave away a seat, you took it."

A few weeks later, Dr Warren was on a plane bound for England - with strict instructions not to tell Australia's Department of Defence what he was really doing there, because "somebody would frown on it".

In a near-unbelievable irony, the plane lost an engine over the Mediterranean.

Dr Warren recalled: "I said, 'Chaps, we seem to have lost a donk - does anyone want to go back?' But we'd come from Tunisia and it was about 45 degrees overnight. We didn't want to go back to that hellhole."

They decided they could make it if they ploughed on.

He recorded the rest of the flight, thinking that even if he died in that limping transport plane, "at least I'd have proved the bastards wrong!"

"But unfortunately we didn't prang - we just landed safely..."

In England, Dr Warren presented "the ARL Flight Memory Unit" to the Royal Aeronautical Establishment and some commercial instrument-makers.

The Brits loved it. The BBC ran TV and radio programmes examining it, and the British civil aviation authority started work to make the device mandatory in civil aircraft. A Middlesex firm, S Davall and Sons, approached ARL about the production rights, and kicked off manufacturing.

Though the device started to be called "the black box", the first ones off the line were orange so they'd be easier to find after a crash - and they remain so today.

Peter Warren believes the name dates from a 1958 interview his father gave the BBC.

"Right at the end there was a journalist who referred to this as a 'black box'. It's a generic word from electronics engineering, and the name stuck."

SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER ctd.....



In 1960, Australia became the first country to make cockpit voice recorders mandatory, after an unexplained plane crash in Queensland killed 29 people. The ruling came from a judicial inquiry, and took a further three years to become law.

Today, black boxes are fire-proof, ocean-proof and encased in steel. And they are compulsory on every commercial flight.

It's impossible to say how many people owe their lives to data captured in the death throes of a failing plane - to the flaws exposed, and the safety innovations that followed.

'I'm a lucky bastard'

David Warren worked at ARL until his retirement in 1983, becoming its principal research scientist. He died on 19 July, 2010, at the age of 85.

For more than 50 years, his pioneering work on the black box went almost unacknowledged. Finally in 1999, he was awarded the Australian Institute of Energy Medal, and then in 2002 was made an Officer of the Order of Australia (AO) for his service to the aviation industry.

SPECIAL FEATURES

BLACK BOX FLIGHT RECORDER *ctd.....*

Asked why it took so long for him to be recognised, his daughter Jenny observes: "His battle was inertia."

He had this huge enquiring mind, scientifically visionary, and could see how it would work - how it would play out.

"He was sitting there in 1958, saying 'this device can make this happen.'"

Peter Warren blames "a 1950s colonial mindset which said nothing good could come out of this country, and everything good would get invented in either the UK, or Germany or America".

The historic secrecy surrounding ARL's work, which is now more widely understood, is another likely factor.

Dr Warren lived to see Qantas name an Airbus A380 after him in 2008. Jenny Warren says she's been trying to get a seat on it ever since.

But he never saw a penny in royalties from the black box.

He was often asked if he felt hard done by. Peter says his standard response was: "Yes, the government got the results of what I did. But then, they also didn't charge me for the other hundred ideas that didn't work."



David's children inherited his sense of humour.

At Peter's urging, Dr Warren's death notice included his personal catchphrase: "I'm a lucky bastard."

At Jenny's request, he was buried in a casket labelled: "Flight Recorder Inventor: Do Not Open."

Do they think of their dad when flying?

His daughter replies simply: "Every time."

SPECIAL FEATURES

AN ELEPHANT EXPERIENCE 28 DECEMBER 2019

BY KARLJENSEN



ADVENTURES WITH ELEPHANTS.COM

As a last-minute arrangement on Friday evening, Sean Cronin our EAA of SA National Chairman called me and suggested I join him and his Bathawk swarm at Zebula the next morning for breakfast. I called my cousin Andrew to join me – he never hesitates at having a fly in my 170. We flew to Zebula in 40 minutes at about 500' agl, arriving at 09h30. Seldom have I seen the countryside between Fly Inn and Zebula looking so lush and green with plenty of water. The Zebula airstrip is always a delight to land on being a silky smooth 1400m runway.

The stroll from the airstrip to the main clubhouse is about 2km. Richard Nicholson of Tail-draggers Weekend fame and more happened by as we started the trek, to collect us in a truck – nice touch!

We met up with the gang of EAA'ers who were already fed and just wanted to get going with Sean Hensman to go see the elephants and inspect a piece of land that he wanted to make into an airstrip. He wants to use the proposed strip for his newly acquired Bathawk to be able to patrol his turf where the elephants live and for anti-poaching work.

SPECIAL FEATURES

AN ELEPHANT EXPERIENCE ctd.....

Sean H's property is right opposite the road entrance to Zebula Estate. We measured the proposed airstrip length which unfortunately crosses seriously undulating terrain. We saw a fair amount of plains game in the area and suddenly right next to the road track we encounter a huge elephant with a few uniformed grooms monitoring him. This male elephant is 25 years old and is literally as meek as a lamb. It was gobsmacking to see the trust this huge 6 ton animal has in Sean H and the grooms

who are with the total of 7 elephants whenever they are wandering and foraging in the bush of the ADVENTURES WITH ELEPHANTS property. The animals are stabled at night in a shed made of massive gum poles where the adults are each fed 150 kg of cattle feed per day. There is thus no need for them to destroy the bush as happens when the environment is inadequate for their daily food intake as is happening in areas of the Kruger Park.



The 15 of us and were given simple instructions on how to behave in the ellies' company – simple stuff. Sean H went up to the elephant and stroked him and then invited us all to gently advance and touch the animal.

Well, this surreal experience simply got better

every moment. When one sees an elephant from your car in a game reserve, the animals are impressive, but you have to respect that they are wild animals and could easily hurt you in an instant.

SPECIAL FEATURES

AN ELEPHANT EXPERIENCE ctd.....



Now after a few minutes and being so close up to the elephant, I realised what an absolutely magnificent animal our ellie was – I was almost tearful at the awesome experience of being so close up to such an enormous creature that didn't mind us being there!

This particular elephant is the same one that appears in the Amarula adverts.

Sean H encouraged our people to feel the elephant's tongue. He commands the animal "trunk up!" and the animal curls his trunk and opens his mouth and several of us felt the silky tongue.

Each time the animal was rewarded with 2 or 3 lucerne pellets.

Sean even showed us that elephants, like humans are left or right-handed, grasping fodder and objects with e left curl of their trunks and favouring either a left or right tusk for gouging.

This is evident by the excessive wear of a particular tusk. There are even nodules on the underside of the trunk which show the favoured side.

SPECIAL FEATURES

AN ELEPHANT EXPERIENCE ctd.....



Elephant No 2, a female, was brought along for our next interaction and she was requested to lie down. Great contortions and there she was, lying on her side. Sean H then invited us to come and examine her ear which is tough and leather-like on the outside but velvety soft on the underside where the massive arteries are prominent – we understand the animal can lower it's temperature by 11°C by flapping their ears. I was permitted to feel the temporal area under which the temporal gland is situated – this cause the animal's gland to weep – a sign of contentment or pleasure. This unlike the temporal gland weeping when a male is in musth and the animal's normal behaviour is dangerously unpredictable. There was a lot more explained about these elephants which space here does not permit.

We were ferried back to the airstrip at Zebula passing a large dam where tourists are able to picnic and even swim with the elephants.

Word on the street is that Sean Cronin who is doing work on Sean H's Bathawk and Richard Nicholson who is teaching Sean H to fly his new plane, will arrange another fly-in to ADVENTURES WITH ELEPHANTS for our EAA

members – if this does come about, it is an adventure you don't want to miss

There were 8 EAA 322 members' airplanes that flew to Zebula for the adventure, 3 Bathawks, a J-5 Cub, a Bearhawk Patrol, a Jabby, a Bushbaby and a shiny Cessna 170B

Thanks, EAA and 'ADEVENTURES WITH ELEPHANTS'



SPECIAL FEATURES

CEMAIR ARTICLE BY ALEC HOGG



In the Daily Insider four months ago, I opined that the State's shoddy treatment of entrepreneur Miles van der Molen's Cemaair was an opportunity for [president Cyril Ramaphosa](#) to show he is serious about supporting the "heroic entrepreneurs" about whom he waxed lyrical at his 2018 Investment Summit.

That opportunity has now passed. [Van der Molen](#) has been granted a licence by the Canadian authorities and although Cemaair will continue operating in SA, the bulk of its operations will now be generating hard currency, taxes and jobs outside the country.

Van der Molen tells me it was only because of the politically-motivated grounding of Cemaair by local aviation authorities that he started looking to house the bulk of his operations elsewhere. Most of Cemaair's business is elsewhere on the continent, for example flying for

the Red Cross in Nigeria and multi-laterals in Tunisia and South Sudan.

Relocating the headquarters in Canada means around \$25m a year in foreign currency generated by Cemaair will no longer flow into SA, with more than 100 jobs also going. Van der Molen says had he been faced with an aviation problem, he'd have worked through it. But Cemaair was hit by "a political problem – and the country has shown it isn't business friendly. It's that simple." Is anybody in Pretoria listening? Or joining the dots?

Best
Alec Hogg

SPECIAL FEATURES

BRIAN STABLEFORD — CAPTAIN AND GENERAL

BY JURI KEYTER, PILOTS POST

Waiting for some action with my camera next to the runway at Krugersdorp some time ago, I saw a beautiful Stampe biplane taxiing out not long after it was shipped to South Africa and reassembled here. The cross-wind was pumping and although I am an amateur taildragger pilot with less than 500 hours, I had enough experience to know that these conditions were not ideal for these types of aircraft and it will truly require an exceptional pilot to fly it now. I therefore assumed that this will simply be some high speed taxi tests and watched him for his first

run. Halfway down the runway I was sure that something was wrong and that it accidentally took off. I moved to the threshold to get some photographs as I knew that there would only be one landing and one opportunity to get some landing photographs. The Stampe side slipped to the left on short finals, gently touched down and to my amazement, took power and flew again. This was obviously not your average pilot and I realised that it was Brian Stableford, sometimes referred to as “The General”.



SPECIAL FEATURES

BRIAN STABLEFORD ctd....

In 1954 and aged 11, Brian had some fun with a few friends at the *Wingfield Airport in Cape Town* and while playing in a small go-cart, Brian noticed the magnificent DC-4 ZS-BMH.

He loved it so much that he took a photograph of it not knowing that forty years later he would be the captain on this same aircraft.



SPECIAL FEATURES

BRIAN STABLEFORD ctd....

Shortly after starting high school at Pretoria Boys High, Brian's father accepted a position in the Rhodesian air force and the family re-located to Salisbury. During those years the British Royal Air Force offered cadetships to young students and after being accepted, Brian joined the RAF as a cadet in Cranwell in

1962. During this three year pilots course, Brian trained on the legendary Chipmunk and Jet Provost and travelled back home on odd occasions with aircraft which he also flew as captain in later years.



SPECIAL FEATURES

BRIAN STABLEFORD ctd....



With Jan Smuts being instrumental in the establishment of the British RAF, his portrait can be seen on the wall on a photograph taken during Brian's passing out parade with his mother and father proudly standing with

him. Brian was also awarded with the "Battle of Britain" aerobatics award, an award inspired by Alan Deere, one of the RAF's leading aces during World War II.



SPECIAL FEATURES

BRIAN STABLEFORD ctd....



Brian completed advanced and multi-engine training on the *Vickers Varsity* at RAF Oakington before being assigned to RAF Transport Command at Thorney Island where

he flew the *Argosy* and served in *Aiden* and *Bahrain* during 1966 and 1968



SPECIAL FEATURES

BRIAN STABLEFORD ctd....



After flying many NATO type sorties to Malta, Scandinavia, Gibraltar, Cyprus and other countries in Europe, Brian started to experience problems with his Rhodesian passport and based on a technicality in the regulations (a six beer story as Brian puts it), Brian accepted voluntary early retirement from the RAF at the age of 27 and returned to South Africa. While waiting for his SAA application to be processed, crop spraying kept him busy until he finally received his acceptance letter

to join SAA. Brian started his career with SAA as a Boy Pilot (an inflight relief pilot) on the 707 and one year later on the 747. Although Brian had a distinguished career in the SAA from this point on serving as a co-pilot, captain and training captain on the Hawker Sidley, Boeing 727, Boeing 737, Boeing 747, Airbus A300 and others, it is his experience and stories flying the JU-52 (Tante Ju), DC-3, DC-4, DC-6 that captures the fascination of us all.



SPECIAL FEATURES

BRIAN STABLEFORD ctd....



With flying hours totalling more than 24000, Brian retired in the year 2002 but is still actively involved in aviation, providing instruction, guidance and of course, having fun by flying with friends he has made over this long but fascinating aviation career.

His favourite aircraft remains the Boeing 747 and the DC-6 and he has many riveting stories

about flying these aircraft, which we hope to capture someday for the generations to come.

I am honoured to know Brian as a friend and I look forward to flying with him for years to come!!

SPECIAL FEATURES

BRIAN STABLEFORD ctd....



AND AFTER ALL THESE YEARS, I FINALLY GET TO FLY A REAL FLYING MACHINE!!!

SPECIAL FEATURES

FLYING INTO OSHKOSH - A BUCKET LIST EXPERIENCE!

By NEIL BOWDEN

We've all heard about the crazy rush into Oshkosh AirVenture – 10 000 airplanes, no radio calls, rock your wings To most of us it all seems pretty frightening and possibly dangerous, many pilots in the USA choosing to drive to Oshkosh rather than subject themselves to this stress!

This year (2019), after 23 years of attending Oshkosh, I had the fortunate opportunity to experience the procedure for the first time.

It all began with the unusually heavy rains Wisconsin had prior to Oshkosh. Much of the campground and airplane parking areas were too soggy to accommodate planes and campers. As a result planes had to be parked in undesignated areas and campers and motor homes were parked in long lines down Poberezny Road, the service road for Highway 41.

Craig Ritson, an ex-South African now living in the USA, flew a rented C172 into Oshkosh,

but on the last leg was informed that due to the soggy conditions, GA Camping was full and would have to either divert to another airfield or go for a temporary GA parking in a “no-camping” zone on the Eastern side of the airfield. The latter option he chose and came and camped with us in the SA campsite.

However, Craig was anxious to get his plane moved back to his designated parking area on the western side as this would make his departure a whole lot easier. Problem was that the temporary area was locked between two runways, and the only way to move the aircraft was to fly to Ripon and join the mad rush back into Oshkosh.

Craig invited myself and fellow South African Brett Williams, to join him on this mission. I was very privileged to be given the opportunity to fly the aircraft – thank you Craig for that!



SPECIAL FEATURES

FLYING INTO OSHKOSH - A BUCKET LIST EXPERIENCE! CTD

We taxied down to Runway 27 and waited for about 30 minutes, watching warbirds, GA aircraft and Exec Jets arriving and departing. Finally the instruction from one of the pink shirted controllers standing about 50 meters from us came through "Cessna 9790G line up and wait". We lined up and next thing we heard over the radio "Cessna 90G go go go!". We climbed straight out levelling off at 1 800' while in the Oshkosh Class Delta Airspace.

Our original plan was to go land somewhere and Brett and myself would swap seats so that he could do the landing. However, the airfield we chose looked a bit short so we decided to stay in the air.

We dialled into the Fisk (a small town east of Oshkosh) Approach frequency and learned that they were moving the Ripon entry way-point 15 miles south to the South West end of Green Lake. We would see why when looking at the ADSB traffic on the iPad. There were dozens of aircraft in the pongoline! ATC were great and encouraged pilots with calls like "you're doing great guys, keep it up - we're going to have a blast in Oshkosh!" No one talks back, you just keep your eyes wide open and follow the line of aircraft.

We eased in behind another aircraft, maintaining a distance of about a mile behind and a height of 1 800' with the required speed of 90 kts.

Faster aircraft that could not maintain 90 knots were zooming directly above us at 2 400'. We flew to Ripon following the railway line observing a confused Cherokee 500' too low and flying directly below us. Luckily he bailed out and returned to Green Lake to restart the procedure. You really need to keep your eyes open and extra passenger eyes are a must!

Overhead Ripon we heard the call "White Cessna with landing light - Rock your Wings" followed by the command "turn right to Runway 36". At this point aircraft are split - some for Runway 36 and some for Runway 27. Different frequencies are used for each runway (approaching aircraft) and two frequencies are also used for departing aircraft, making 4 active frequencies on one airfield!

From Ripon we followed another aircraft into 36 and landed on the Orange dot. In the front window we displayed our sign GAC (General Aviation Camping). Without having to explain on the radio our intentions or destination, the marshalls knew exactly where to send us. The system is simple, works well and should not frighten anyone into driving to Oshkosh instead of flying!

Thank you Craig for this great experience which I would repeat anytime!



NEIL

BRETT

CRAIG

SPECIAL FEATURES

AERO CLUB OF SOUTH AFRICA UPDATE

BY ROB JONKERS

This past year the Aero Club has seen challenges on many fronts, requiring a concerted effort by the Council to navigate through these at times stormy clouds.

2019 has been a year of reflection and consolidation and a springboard for our 2020 Centenary year, where we will be making concerted efforts to ensure Recreational Aviation is embraced by you the Recreational Aviator and supported by the Regulator to uphold our charter of ensuring Freedom of Flight.

The announcement by the CAA of the integration of the functions of RAASA into the CAA in 2018 came with some trepidation. The implementation date was the 1st of April 2019, where restructuring of the functions of the Rand Airport RAASA office was carried out into the main stream CAA management structure, although much of the personnel and activities remained in place at Rand Airport. Renewals of NPLs and ATFs could continue as normal, however the Service Turnaround times took a serious knock as the process of these renewals had to follow the CAA workflow procedures. Similarly the ease of posting in documentation from far & wide and having documents reposted was also ceased, and as such with the Aero Club next door, it was agreed that we would offer a documentation submittal and postal service, where so far since August around 100 members have taken up this support initiative. Although this may seem a regressive solution, in the background we are working with the CAA to improve their Service Delivery targets and challenging the turnaround times promulgated today for their various services, knowing that there are prevailing factors to be considered to be in compliance to ICAO requirements, even though Recreational Aviation in the main is not an ICAO subject activity, there are plenty of overlaps that come into consideration. Our main

objective remains keeping costs down, barriers of entry low as Recreational Aviation is the spawning grounds of Aviation growth in SA. The details of the Aero Club Membership Support Initiative can be found on the website.

Two other subjects of engagement the Aero Club has held with the CAA over the last year has been the AP Scheme under Part 66.4 and the review of the AROs under Part 149. The AP Scheme was essentially run from within the Aero Club with RAASA oversight, the administrative burden became prevalent over time, and as such there were structural problems with Part 66.4 governing APs which led to a joint CAA and Industry review resulting in the formation of an AP Panel led by the CAA where a workshop was convened over a number of days to review the regulations and Terms of Reference. The proposed update to part 66.4 will shortly be submitted to the next CARCom, and follow up AP Panel workshops will further develop the workings and administration of APs, there is no doubt a lot of work still to be done. On the matter of Aviation Recreational Organisations (ARO's) governed by Part 149, there was also a week long workshop held with all the Sections of the Aero Club on the future possible structure of AROs, Regulator oversight requirements, autonomy of operation under each ARO's Manuals of Procedure (MOP). Although not a conclusive engagement, there is an understanding of the diversity of each of our Recreational Disciplines, and that expertise within each has merit to enable Self-Regulation with some level of oversight, as such further work needs to be done between the Regulator and each Recreational Discipline, in particular to review what organisations are representative of disciplines and sub-disciplines, with an outcome to enable Recreational Aviators to join with the minimum barriers of entry.

SPECIAL FEATURES

AERO CLUB OF SOUTH AFRICA UPDATE ctd.....

Over the last number of years the overall membership of the Aero Club and its constituent Sections has been in decline, a loss of 1000 members over the last four years where we are now at 3200, surely a sign of increasingly tough economic conditions, a turbulent regulatory environment and a few other challenges that we find ourselves in that plays a large part in lessening the recreational participation within the sections. This put significant pressure on the Aero Club budget, also membership fee structures in the sections, as such to ensure fiscal survival, significant budget restructuring had to be done, where the Aero Club had to continue without the services of a General Manager, the workload having agreed to be shared amongst members with the requisite skills in various advocacy and technical areas co-opted to represent us on the various forums dealing with these matters. For the immediate future, this model will be continued, the Aero Club membership fee has also been reduced significantly primarily to enable a re-invigorate growth in membership, which has been a similar theme within each Section and we trust this will be a springboard to start out a good year for 2020.

One of the many benefits of being an Aero Club Member is the third party insurance scheme, as within context of a wide membership base, can enjoy significant discounted premiums especially in the category of aircraft below 600 kg from 25% to 75% depending on aircraft type (see the Aero Club website for details). Similarly with NTCA aircraft above 600 kg and below 2700 kg, there is also an Aero Club beneficitation Third Party Liability Scheme. The premiums in terms of benefit as such far outweigh the membership fees in many cases. The Aero Club is also still working on Insurance to cover APs, as well as benefits for Aero Club Members on wider Insurance coverage, these will be communicated early in the new year.

The Aero Club has also renewed its Airmeet Third Party Policy, which covers all the events that the Aero Club and its Sections hold throughout the year, which number close to 80 or so events.

The Aero Club is also the National Aero Club representing sporting events for competitions held Internationally under the auspices of the FAI, as such is affiliated to SASCOC in governing the conferring of Protea Colours. The FAI has also gone through some troubling fiscal times in the last 2 years with the withdrawal of major sponsorships, the General Conference held in early December in Switzerland saw significant budget cuts in the management structures and an introduction of competitor registration fees, which is not good news in keeping participation costs down, as some of the costs are just passed on to the end competitor. Further turbulence is envisaged with the Ministry of Sport considering "Nationalising" all sports and sporting bodies, proposed legislation is already available, the practicality of this is still to be seen.

Coming up to the Centenary Year of 2020, planning is well under way, there is still a vast amount of work to be done in preparations for the celebration, and we need many volunteers to assist where they can, the current team have completed a prospectus of activities which will be executed on. These will include amongst others, Airweek as our signature Centenary event to be held end of April at Middelburg Airfield that encompasses all our sections with the ambition to achieve an Oshkosh type of event which is a fly-in, forums, air displays, flymarkets, camping, to bring together our recreational fraternity and also promote youth development. Furthermore a planned Silver Queen Air Rally will be held in conjunction with the SAAF who also celebrate SAAF 100, a Centenary Yearbook is also underway with input from all Sections.

SPECIAL FEATURES

AERO CLUB OF SOUTH AFRICA UPDATE ctd.....

Our aim continues to focus to make aviation appealing to the recreational aviator and the youth, in order for them to share and progress in the wonderful passion of all types of aviation sport offered by the various sections of the Aero Club in South Africa, as such we are fortunate to have in our midst many professional and retired professional career and military aviators that continue to share their mentorship and guidance freely to anyone who is interested in aviation in South Africa.

With this, and with 2019 essentially behind us, let us all work together and support the structures that represent recreational aviation to make 2020 a year of growth, focus and revitalisation, as it will only be our coordinated collective efforts that will ensure the survival

of our disciplines into the future.

If you have any comments or contributions to make you are most welcome to contact us at the Aero Club.

As 2019 draws to a close and we are now at the verge of our centenary year, the Aero Club will continue to find ways to ensure that recreational aviation in South Africa is easy to enter, and will continue to strive for fair and equal representation to all our members that share and participate in the passion of aviation.

Rob Jonkers.



SPECIAL FEATURES

"STATE OF THE NATION" IN THE EAA OF SOUTH AFRICA

BY PAUL LASTRUCCI

As an organisation, the EAA of South Africa is on a journey of "self-discovery". We have had many changes in our management and the various facilities and services that we provide for our members enjoyment in the last year. Some changes have been planned through membership and committee status changes and others have been untimely. The organisation has had to adapt as best possible with the limited resources available. While it has sometimes felt like we have been stumbling along, there has been much that has gone on behind the scenes to put the EAA in a better position than before.

While as members, we all enjoy the camaraderie and the shared information, we are not always aware of what is going on in the background to ensure that we can continue to enjoy the freedom to fly with as little restriction as possible. This is only made possible by a small group of members that work away tirelessly. Some of the matters which we have been dealing with over the last year have really stretched these volunteers. These matters have ensured that we can continue to operate as a viable organisation.

The AP scheme has been under discussion for some years and has picked up pace in the last few months with Peter Lastrucci and Andy Lawrence really getting involved to assist with the foundation of this scheme from an EAA perspective – building and restoring NTCA. A meeting was held with the CAA and other interested parties on this matter in September 2019. Work was undertaken at this meeting which Pete and Andy reported as follows on :

"Overall we are happy with the progress made so far, but I still caution – there is still a lot of work to be done, we haven't started on things like ATF renewals, Part 94/ 96 operations etc etc.

We have also been requested to please ask our AP's to be civil to CAA inspectors!"

After some confusion with AMS being issued for approval late 2019 - Pete, Andy and Kevin Hopper did a quick update at Chapter 322 Monthly meeting in December focussing on the Acceptance of Maintenance Schedule for NTC aircraft and the requirements thereof. The maintenance checklist from your applicable aircraft should be incorporated into this AMS, alternatively the generic checklist adapted from CATS part 44 can also be used. The relevant information was circulated.

The CAA is in the process of finalising a further session on the AP scheme with all interested parties. This is planned for January 2020 at this stage.

EAA of South Africa **ARO (Approved Recreational Organisation)** renewal is eventually almost finalised. The annual process of renewal was amended through the changeover of RAASA being incorporated into CAA, which caused an added delay for the EAA. Part 149 was drawn up in 1997 and enacted in February 2000 (GN No. R171). This has not changed much, however, it has not always been interpreted as it is interpreted now and much time has been spent on reworking our MOP and other documents that are required according to this regulation.

A meeting was held with the CAA in September 2019 to further discuss the matter after our submission of all the documentation.

Further discussions and submissions have taken place and we have received notification in January 2019 that the documentation has been reviewed and approved, pending an audit later this month. We will now undergo the required audit before the ARO renewal is finalised.

With the assistance of a few members and the CAA department dealing with this matter, we are hopeful that this will be resolved by end January 2020.

SPECIAL FEATURES

"STATE OF THE NATION" IN THE EAA OF SOUTH AFRICA CTD....

While this process is underway, we continue as normal as the EAA of South Africa and we encourage members to renew their membership of the EAA and Aero Club (if applicable) as soon as possible in the new year please. Increased membership does aid us in negotiations with regards to regulatory matters.

Although **CONTACT! Newsletter** has been able to continue with Eugene Couzyn at the helm, he only agreed to take this on temporarily in order to try and keep it going. This Newsletter is a challenge to publish consistently when members do not make ample regular contributions to ensure good content. Members are encouraged to contribute to CONTACT!

After a number of years of discussion at national level, the EAA undertook the start of renovations at **the Auditorium**. While desperately needed, this has been put off for many years mainly due to the fact that we do not have a renewal of the lease for this property that we have made use of and managed since 2003.

Discussions were held with Rand Airport management as to the viability of this undertaking as EAA would need to spend significant capital on this facility, which is regarded as a home. Jeremy and Anne-Louise Woods took more than 10 years to build up a great reputation for the fantastic Flying Legends Talk Shows that have been hosted at this facility for many years. Following a management change, we seemed to have lost some momentum, which we are now trying to re-energise.

The Auditorium is looking good but we still have work to be done, which will be phased, depending on available funds. We relaunched in September 2019 after renovations, with an excellent Talk by Scully Levin and our EAA Flying Legends Talk Shows will reconvene from January 2020.

While the management has changed slightly, it is still under the guidance of Jeremy and Anne-Louise Woods and this will evolve to a sustainable facility.

This facility does however require continuous maintenance, administration and in order to survive, we require volunteers to assist with tasks on a regular basis.

Once again a big thanks to the Woods' for all their work, guidance and continued assistance.

While many of the volunteers have chosen to withdraw their services for various reasons, we are thankful for the assistance of those that have always been there to assist and to those that have stepped up to help out in an attempt to make it a viable facility to entertain our members.

Although the **Annual Convention** was discussed as taking place in Pietermaritzburg this year, the EAA Convention 2020 will in fact take place 1-3 May 2020 at Middelburg Airfield (it is still to be confirmed if arrivals may start from 30 April). This decision was agreed to by committee members and Chapter 1502 based on two major factors :

- 1.) We were battling to get written approval from the airfield owners to host the convention at Pietermaritzburg Airfield.
- 2.) The Aero Club celebrates its Centenary in 2020 and as most Aero Club affiliated ARO's, the EAA would be able to make better use of shared resources by supporting the Aero Club and hosting the annual Convention at Middelburg Airfield in conjunction with the Aero Club AirFest 2020.

While this will all be at the same facility and we will be part of one big Recreational Aviation gathering in 2020, we will still have our own EAA sessions as required.

SPECIAL FEATURES

"STATE OF THE NATION" IN THE EAA OF SOUTH AFRICA CTD.....

The Convention takes a lot of work and time to pull together and promote successfully and volunteers are required to manage this, if we are to make this as enjoyable as possible.

Please volunteer if you have the know-how and time, or even just the time and enthusiasm.

Our two active Chapters – 322 and 1502, both underwent **significant Chapter Committee changes** at the end of 2019.

After many years of dedicated service, both Karl Jensen and Gerald Maddams have stepped down from their positions on their respective Chapter Committees and we are thankful that they are available for continued guidance.

We also wish to thank the incoming Committee Members for taking on the huge challenge which lies ahead of them.

We will endeavour to continuously support our members and the Chapter Chairmen as

much as possible, while we evolve as an organisation in this new decade.

To those few members that have made the commitment and continue to support the EAA, we salute you and thank you for your continued support.

Trixie Heron was one such member and she will be sorely missed following her untimely passing in December 2019.

Our desire is to succeed and continuously evolve into a great organisation that is in a better position to serve its members. Ideally, we would like to have a dedicated full time person appointed, however this is not financially possible at this stage and in order to meet the need of our members, we ask that as members, you commit to the organisation by renewing your memberships and, volunteering for duty wherever possible.

Paul Lastrucci,

Vice President, EAA of SA



SAFETY MATTERS

NIGEL MUSGRAVE EAA NATIONAL SAFETY OFFICER

- Aviation speed rally at Witbank Airfield (1st Feb 2020).



I am facing some frustration with the CAA over the upcoming Witbank Speed Rally, scheduled to take place on 31 January and 1 February 2020.

Towards the end of November 2019, I applied to CAMU for an AFIS service for the duration of the WB event which, because of the increased traffic movement in the area, constituted a safety concern.

I was advised that I had missed the AIRAC (Aeronautical Information Regulation And Control) Cycle (WITH THE EVENT MORE THAN 2 MONTHS AWAY !!) and that they would not supply the AIFIS requested.

However, CAMU advised that with instruction / approval from SACAA, they would issue a NOTAM advising of the event, so that Pilots would be alerted to the additional traffic and could take appropriate action to remain safe.

SACAA however, declined to sign off a NOTAM, and unless something can be pulled out of the hat, the event will be held without AFIS

and without a NOTAM.

This is clearly not ideal and raises questions about the seriousness of SACAA's concern for making our skies safer.

After the initial advice that we had missed the AIRAC Cycle for Witbank, I immediately (3 days later and still in November), applied to CAMU for AFIS for the upcoming Speed Rally scheduled to be held in Bethlehem in March 2020.

I was advised that here, too, I had missed the AIRAC cycle and no AFIS would be forthcoming for the event.

Fortunately, after making special representations to CAMU, reason has prevailed and ATNS have agreed to supply the requested AFIS on 20 March in Bethlehem.

This is definitely akin to pushing water uphill with a fork!

Nigel Musgrave

National Safety Officer.

ADVOCACY

MINIMUM STANDARDS FOR QUALITY ASSURANCE SYSTEM (QAS)

By PAUL LASTRUCCI

Happy New Year fellow aviators and enthusiasts

As part of the regulations the EAA of SA has just gone through a tedious regulation requirement that has necessitated that the organisation renews the ARO in accordance with Part 149 Aviation Recreation Organisation with an added requirement being a Quality Assurance System (QAS) which has differed significantly from the original requirement from 2011 and subsequent years as an ARO when we first adhered to the regulatory standard and compliance to this Part.

It is now incumbent on the EAA executive committee to tabulate and issue and review a Quality Assurance System process in compliance with Part 149.02.3. as the applicable ARO.

One of the requirements is that we set up a Quality Assurance System (QAS) that provides an audit tool that can be reviewed annually by the SA CAA on the quality and method of how we conduct our affairs. We really had to dig deep to understand how you have to introduce counter-bility into an environment that essentially provides a platform for like-minded folk that share a passion for aviation and camaraderie to determine how to check the checker however it has been completed and our ARO for 2020 is save a few crossing the T's and dotting the I's is in place for another 12 months.

The EAA in South Africa operates fosters and promotes aviation primarily in the domain of the amateur home builder, aviation enthusiast and amateur aircraft design and piloting of non-type certified vintage, ex-military aircraft and helicopters. Progress review by way of review and any findings noted and tabled during monthly EAA Chapter meetings as well as at an annual Safety Inspection and or Audit are to be tabulated and noted for review.

This is so as to find improvement avenues going forward, and to be more aware of safe operations. So once a year we will be audited for safety so all our operations need to comply to a safety level as designated in this QAS.

We do this in any case by the series of hoops we jump through when we plan the Convention/ Sun n Fun or any of these type of events, licences are issued authorities to fly etc are issued by the regulator and the EAA does not delve into these operations so why would it be necessary I argued that we have always been compliant with the regulations however we either fit in or remain non-compliant with the regulations which are detrimental to our regulatory existence, so we dug deep and produced the requirement. The gist of the QAS seeks to ensure that the EAA requires of its members to remain compliant of the SA CAA CARs and relevant CATS documents pertaining to safe operation of Experimental and Amateur built aircraft within the EAA ARO operations to ensure the requisite level of quality is maintained as indicated in Part 149.02.3

Where there are any findings we must then elevate and achieve through a consultative manner, any oversight and or highlight best practices, within its member group in South Africa promoting quality at all levels within the ARO.

This QAS is to ensure applicable compliance, monitoring, recording and to include the dissemination of any findings to promote safe and informative operations within the EAA of SA and its Chapters, and complies with CARS 149.02.3 (1) (2) and CATS 149.02.3 (1).

ADVOCACY

CONTINUED

We must ensure we have fun, but our fun must have compliance and where it's deemed a situation is non-compliant we then as an exco needs to investigate and remedy this via this process and steer the fun to ensure its safe so that we co-exist within the regulations along with the other ARO's in a self-styled regulatory manner.

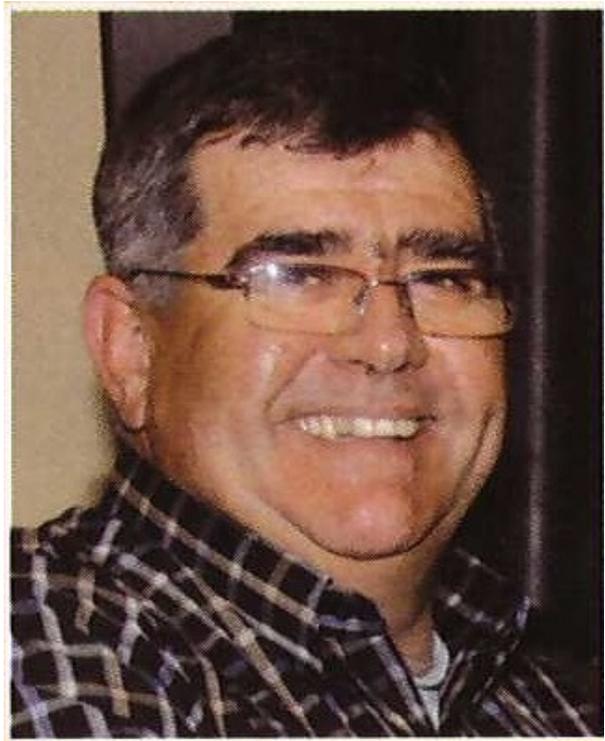
This is a bit more bureaucracy which when reasoned deeply has a small place however our regulators on more than one occasion in my view, have a tendency to revisit what is

working, elevate it and then charge for it.

The process and requirement of the QAS system and its contents will be shared and at the first meeting after the yearly EAA of SA AGM.

Fly Safe

Paul Lastrucci



UPCOMING EVENTS



A promotional poster for the EAA Legends Talk Show. It features a collage of four images: a pilot in a military uniform, a pilot in a green flight suit, a pilot in a helmet, and a smiling man in a dark shirt. The EAA South Africa logo is in the bottom left. A large red 'SOLD OUT' stamp is overlaid diagonally across the center. The event details are in the bottom right.

SOLD OUT

**EAA LEGENDS
TALK SHOW
23 JAN 2020**



A promotional poster for the Rustenburg Breakfast Fly-in. The top half shows a large formation of colorful aircraft flying over a green field under a blue sky. A white arrow points from the word 'RUSTENBURG' towards the formation. The bottom half has a red header with yellow text, followed by a yellow background with black text providing event details.

RUSTENBURG

BREAKFAST FLY-IN
Saturday 8 February

**JOIN US AND THE FRIENDLY
PEOPLE AT RUSTENBURG**

 Details: FARG
S25 38 32.0 E27 16 04.0
Unmanned Freq 122.4 MHz
R/W 16/34 3700' amsl
Avgas & Jet A1 Avlbl
**IMPORTANT: RSVP numbers to
this site please to assist with
catering arrangements!**

If you want your event publicised, please send the information to:
contact.eaasa@gmail.com

SPECIAL REPORT

THE FUTURE OF TOURISM IN THE EASTERN CAPE ??????

By Eugene Couzyn

TSITSA FALLS INCIDENT



AFTER AN INCIDENT IN THE EASTERN CAPE IN JANUARY 2020, I WROTE THE FOLLOWING LETTER, COPIED TO THE MINISTER OF POLICE AND THE MINISTER OF TOURISM. I ALSO TRIED TO LAY A CHARGE OF ATTEMPTED MURDER WHICH THE POLICE REFUSED TO RECORD, INSISTING THAT IT WAS SIMPLE ASSAULT.

I HAVE HAD NO RESPONSE.

The Head,
Tourism,
Local Environmental Development,
Tsolo District,
Eastern Cape.
Attention Mr. Malibongwe Nqeketho.

Dear Sir,

Re: Attack on tourists at Tsitsa falls.

At approximately 12:00 noon on 4th January 2020, I was at the bottom of the Tsitsa Waterfall with a group of 10 tourists including myself, admiring the waterfalls.

ctd.....

SPECIAL REPORT

TOURISM IN THE EASTERN CAPE ??????.....ctd

We had been there for about 30 minutes when a group of 6 youths collected at the top edge of the waterfall, approximately 100m above us and started throwing rocks at us.

One of these rocks narrowly missed one of the women in our party, Ms Yvonne Corrigan, by less than 500mm, landing at her feet. The rocks being thrown at us were sizeable rocks, the one just missing Ms Corrigan being approximately the size of a tennis ball, *which, had it hit her, would no doubt have killed her.*

We could clearly see that there were 6 youths, with 2 of them being noticeably bigger than the other 4, although In the scramble for us to get away from the area, I would not be able to identify the individuals.

We tried to shout at them but they took no notice and eventually moved back from the edge of the waterfall until we could no longer see them.

We had traveled to the site by helicopter as the base of the waterfall is largely inaccessible in any other way, so when we took off after this incident and fearing for our safety, we flew to the top of the waterfall where there is a small village. We saw 4 of the youths, one of whom appeared to be a young girl, fleeing the site towards the nearby village but we were unable to see the 2 bigger boys.

We were nervous to land as we did not know what reaction we would get from the Community and so we flew back to Mbotyi where we were staying.

Included in our group were 4 young children

(aged between 6 and 15 years) who were lying on a large rock at the base of the falls and it was just good fortune that none of them were struck by rocks hurled from the top of the waterfall.

Our group included a family of 4, being the parents and 2 young children who had experienced an incident several weeks prior in which their 8 year old daughter was accosted by a vagrant in a public park. The attack at Tsitsa was the last straw for them and they will be emigrating from South Africa as soon as they are able to do so. Both parents are highly qualified Environmental Scientists and the loss of their skills to our country is something we cannot afford.

In an area of our country where Tourism is one of the most important ways in which the local community can be uplifted, I find it impossible to understand or condone the type of attack to which we were subjected and I will be laying Criminal charges of Attempted Murder as soon as I am able to get to a Police Station.

I will be reporting the attack to the Minister of Tourism as well as the Minister of Police and will also brief the Media.

Sadly, other than an acknowledgement of receipt from the PA to the Minister of Tourism, I have had no response at all.

This does not bode well for our country.

Eugene Couzyn

LAST WORD

TRIXIE HERON passed away under very sad circumstances in December 2019.

She had been a key member of EAA for longer than I can remember and was instrumental in persuading me to join 322 in 2009.

Trixie was never shy to voice her opinion on matters EAA and she was totally passionate about its well-being. It was her life.

Trixie was involved in the proof reading of CONTACT! for many years, initially with Karl Jensen and later with Gus Brown, and between them, the bar was set at a very high level for anyone to try to follow.

Trixie's attention to detail was legendary and I can never hope to produce the level she did.

My thanks to Trixie for the years of friendship she gave me. I hope I am a better person for having known and worked with her.

She will be remembered with love.

PAUL LASTRUCCI has for many years carried the baton for General Aviation in SA and continues to be a key player in the struggle to keep GA alive.

We really appreciate the time and effort you put into GA in South Africa Paul.

On behalf of all our EAA members, **A HUGE THANK YOU.**



Fly safe.

Eugene Couzyn

