



BRAKES ON ... THROTTLE SET...  
**CONTACT!**



**Sun n Fun**

**World Rally Championship**

**Aloe Bush Fly-in**



**Cessna 182 Ferry**

**SAPS Training**



## In this issue

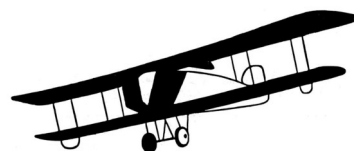
Sun n Fun	3
Cessna 182 Ferry Flight	4
World Rally Championship	5
Aloe Bush Game Lodge Fly-in	8
Royal Air Force Centenary	9
Aviation Policing and Security Training	10
Scout Air Experience	11
EAA 322 September Meeting	12
Flying Legends Talkshow	13
Airmail	14
Weird & Wonderful	15

## EAA FLYING LEGENDS TALKSHOW

**THURSDAY 11 OCTOBER 2018**

**FEATURING DR FRANS GROTEPASS**

**Interviewed by Dr Mike Brown - Book [Here](#)**



Our cover photo was taken by Greg Baytopp on 22 September at the African Aerospace and Defence Expo held at Waterkloof Air Force Base.

The photos below are by courtesy of Pilot's Post.

The aircraft featured is a Micro Aviation Bat Hawk, and is flown in the photograph by EAA National Vice President Sean Cronin, who was part of a large display of South African design and manufactured aircraft. These included the Ravin 500, Sling 4, Wagtail Gyrocopter and a colony of Bat Hawks.



Ravin 500 and Sling 4



Wagtail Gyrocopter



Bat Hawk Formation



# SUN n FUN

2018



Brits Airfield  
9 - 11 Nov  
[rsvp@eaa.org.za](mailto:rsvp@eaa.org.za)



- Camping: bring your own tent or hire one for the weekend.
- Accommodation is available in close proximity.
- Rob Jonkers will host his famous Adventure Rally on Saturday, starting with a briefing session at 08h30.
- Karaoke and musical evening on Saturday, thanks to Dr Frank Bonfils-Persson.

**Register**

Come along and enjoy a fun social weekend with fellow aviators at Brits Airfield.

#### Brits Airfield: Accommodation -

##### Suggested guesthouses near Brits Flying Club

##### BRITS (near Airfield):

##### Arotin Game Lodge

6km north of Brits on road to Brits Airfield

4km south of airfield

073 444 0045 Lorraine

[lorraine@arotinelodge.co.za](mailto:lorraine@arotinelodge.co.za)

[www.arotinelodge.co.za](http://www.arotinelodge.co.za)

Transport to and from BFC will be arranged by BFC

##### Esmarline Lodge

5km south of airfield on road to Brits town

082 372 9903

072 209 9999

[esmarlinelodge@gmail.com](mailto:esmarlinelodge@gmail.com)

##### Blommelot Bush Lodge

approx. 13km north-west of Brits

012 254 4727 3km north of Brits Airfield

078 751 2112

[info@blommelot.co.za](mailto:info@blommelot.co.za)

[www.blommelotbushlodge.co.za](http://www.blommelotbushlodge.co.za)

Lodge offers transport to and from BFC

##### Maroela Guesthouse

in Brits town

083 726 9564 / 082 775 7621

[maroelaguesthousebrits@gmail.com](mailto:maroelaguesthousebrits@gmail.com)

[www.maroelaguesthouse.co.za](http://www.maroelaguesthouse.co.za)



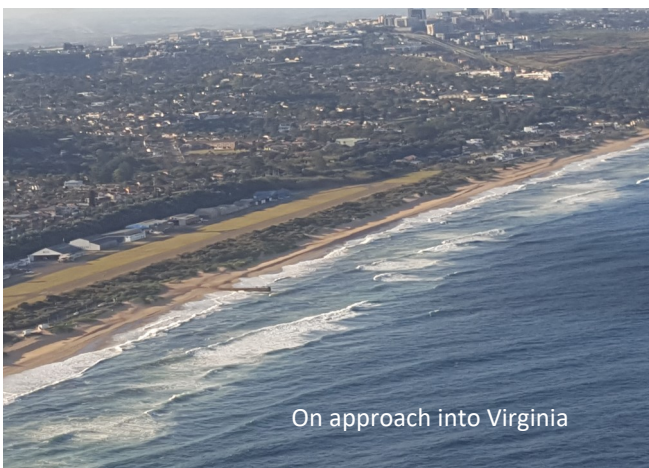
# Cessna 182 Ferry Flight

by Keaton Perkins – Chapter 322 Johannesburg

I was fortunate to be allowed to ferry a brand new Cessna 182T Skylane to its new owner in Zimbabwe recently. The aircraft is beautifully equipped with a Garmin G1000 Nxi and has quite a fair turn of speed, TAS'ing around 150 knots.

I collected the aircraft at Lanseria and flew down to Virginia Airport to collect the owner. We then headed from Virginia to Kruger International Airport to clear customs. After a quick turn-around and top-up of the tanks, we left for Charles Prince Airport in Harare.

I left the aircraft in Harare with 15 hours on the Hobbs, 9 of them had been mine.





# World Rally Championship

by Rob Jonkers – Chapter 322 Johannesburg

WARM WELCOME FROM THE TEAM  
AT DUBNICA AIRPORT



The World Rally Flying Championship happens every 2 years and is hosted by one of the participating nations. This year Slovakia hosted the 21<sup>st</sup> FAI World Rally Flying Championships in the town of Dubnica, which is along the river Vah (which flows into the Danube) in the northern-most valley of Slovakia where the Carpathian Mountain range borders with the Czech Republic and Poland.

This year, 50 crews from 16 nations participated, with the South African team being the only one from the Southern Hemisphere. Team SA was represented by 4 crews in the Unlimited Class: Frank and Cally Eckard, Thys van der Merwe and Ron Stirk, Jonty Eссор and Sandi Goddard, Rob Jonkers (Team Captain) and Martin Meyer, with Mary de Klerk as the Team Manager, Hans and Ursula Schwebel, Jacques Jacobs, Barbara Freibose as International Judges, and Leon Bouttell as Judge Observer. The team was given superb support from Vera Jonkers and Alex Meyer, and was later joined by Dr Thys and Rentia Geldenhuys as South African supporters.

Our team's arrival was on Monday the 30<sup>th</sup> July – a full week before the championship. Team SA is normally the first to arrive, as we need the most exposure to the European conditions and terrain as well as aircraft familiarisation, as we need to hire local aircraft. By Tuesday mid-morning we had our first aircraft ready for us, a local Slovakian C172 OM-DCD (DOC) and we were joined the next morning by another local C172 OM-SNA (SNAP). Thus, as a team, we could get started with our training. Normally no validations are required, but back in 2010 this club had the bad experience of one of the participating teams having bent two aircraft (by the same crew no less...), so we all had to have a check-ride with the local instructor for 2 circuits to verify that we could fly, but fortunately this was completed by lunch time. Each team then had a chance to fly a navigation exercise in DOC for the rest of the afternoon until late, and with the European summer the light fades only around 21h00.

The organisers provided 3 official practice routes, and these were put to full use in the following days, where we were able to carry out the plot inside the aircraft as one would do in the competition week, giving us a good practice run-up.

The landscape varies radically between the valley at 800 ft and mountains going up to 3,500 ft, and within minutes of taking off some routes would see you facing a steep climb out over the mountains, with check-points often located just behind a steep incline and hidden behind forest features.

The weather for the practice week was good without much wind, although some thundershowers had to be avoided, with temperatures mostly above 34 degrees, making the cockpit a sweltering sauna – at least in the mountainous areas higher up the cockpit became slightly cooler.

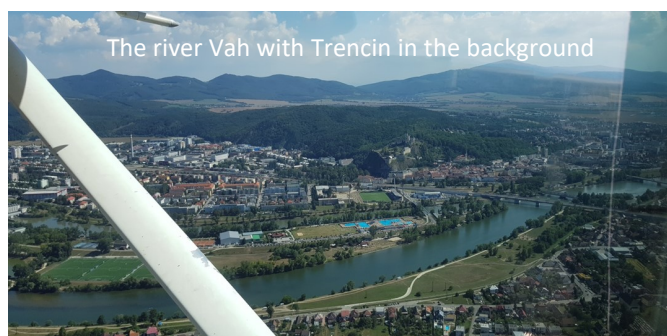
The scenic town of Trencin with the Castle on the hill



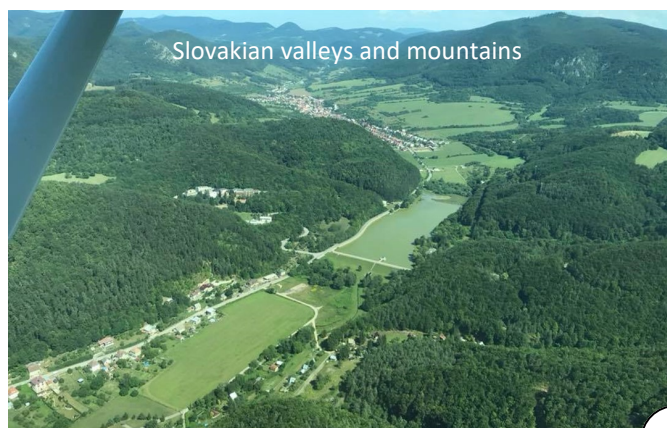
The team SA C172's DOC and SNAP



The river Vah with Trencin in the background



Slovakian valleys and mountains



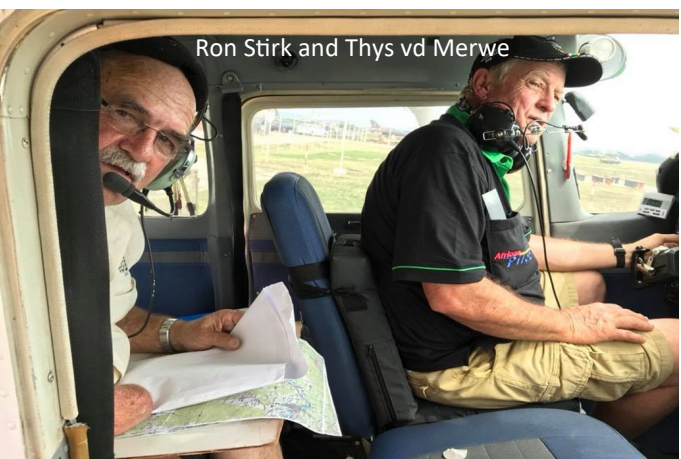




Team SA with DOC and SNAP in the background



Rob Jonkers and Martin Meyer



Ron Stirk and Thys vd Merwe



Team Manager Mary de Klerk with Frank & Cally Eckard

For this competition format, there was only an Unlimited Class, whereas in previous years there was an Advanced Class as well, which was intended to bring in newer or amateur teams, but which made the competition somewhat more difficult for those teams who had no year-round sponsorship or sports federation support. Clearly, in the case of Team SA, all of the competitors and judges have to fund their own costs towards the event, including travel, hotels and aircraft hire, which is almost three times the cost of Hire & Fly in SA.

For the 3 practice days left from Wednesday to Friday, each of the teams flew the given practice routes. The Red Route, which was mostly east of the city of Trencin, proved the most difficult, as the terrain was very undulating, with more densely populated areas, making following the route very difficult, especially recognising the map shades of the various features and looking for turn-points of minor river creeks and farm road crossings. The routes also had 2 arcs to follow, and with DIs suffering from precession, making them somewhat challenging to follow around, with the need to rely only on what is going on outside the window and what is on the map, to have at least some sense of direction. Some of us re-flew the Red Route a second time to get more familiar with the terrain in that busy eastern area.

At the end of each day, each of the teams did landing practice to get speed and descent control familiarisation at these near-sea level conditions to find that sweet spot of rate of descent at minimum control speed to bingo the landing line, and, as most pilots know, every landing is completely different. Saturday was a rest day, with some sightseeing flights and visiting the old town area of Trencin. On Sunday the whole team went to the airfield for our customary team photo shoot with DOC and SNAP, and then returned to the hotel for the opening ceremony in the late afternoon, which was a somewhat simple and short event, followed by an excellent dinner.

For the competition week, flights are organised into 2 groups - flights start around 10h00 at 5-minute intervals, with the last flight taking off around 14h00, and when returning, one spot landing needs to be done.

Frank (flying DOC) and Rob (flying SNAP) were divided into Group One, and Jonty (in SNAP) and Thys (in DOC) were in Group Two. There was a strict procedure of parking aircraft next to the grass runway in take-off sequence where crews were isolated prior to receiving papers, normally around 30 minutes prior the flight starting, with each of the routes having around 15 plotting points, allowing 2 minutes per plotting point to prepare the map, the cockpit during this period normally a frenzied affair.

As Monday 6<sup>th</sup> August dawned, the week's weather prediction was good, with the latter part of the week bringing possible rain and wind. There were 4 routes to be flown, one per day, with only 3 counting towards the competition results – the first day is generally excluded, and is only used if there are difficulties in completing the rest. Thus the teams set off on the first Green Route, which was mostly south across a mix of high ground and the next door valley, with 2 arcs to fly, and given the results of this first day, some of us would be happy to have this day excluded from the results!

On Tuesday we flew the Yellow Route, which was also towards



the south, and did a little better, with Wednesday the infamous Red Route, which proved to be as difficult as the practice Red Route in the busy eastern area, and the wind was around 20 kts, pushing many off course. We found, especially in this terrain area, that flying at higher altitudes gives a better view and perspective, but makes the timing over check-points more difficult to achieve within the 2-second window. Some teams drifted off course into the Czech Republic, so I guess most would have wished the Red Route would be forgotten. As it turned out, many teams complained that high wind conditions were not declared for this day, and that the day needed to be annulled, which the organisers duly did.

Thursday was the last competition day, and we flew the Blue Route, with high wind conditions predicted again, at around 15+ kts. The plots and timing were given with a wind compensation factor, so that was somewhat easier to fly in terms of consistent speed, although maintaining headings would remain a challenge. With this route, most of our teams started to improve on our scores, especially the photo recognition and finding the elusive white markers. So, just as we were finishing up on the competition, only then did we start to get a real feel for the landscape.

With the competition flights done, team SA organised the traditional international drinks evening at the field, making 'melktertjies' shooters, with the Germans, Italians, Russians, Norwegians bringing their traditional hooch. Needless to say, good fun was had by all. Our supporter, Dr Thys Geldenhuys, was the designated drinks judge, and he judged Germany the best team, with Norway being the best food team, having brought their traditional Norwegian Salmon all the way from Norway! Friday was packing-up day, and the closing ceremony and prize-giving was held at the Airfield, with most of us opting to go on a day outing for some excellent sightseeing before dressing up for the closing ceremony. This day is also when the heavens opened with torrential rain waterlogging many places, including the airfield. The top prizes went to the Czech Republic, Poland and France, with Poland winning the country team prize. Team SA was placed 10<sup>th</sup>, and with landings we were able to achieve 4<sup>th</sup> place.

It is clear that, for our teams to compete at the level displayed by the Polish and the French teams, we would need way more practice and experience, and sponsorship would of course also be a great help.

With the next competition being held in South Africa in Stellenbosch in 2020, we have an excellent opportunity in the intervening 2 years to get more teams to take part and improve our level of competitiveness.

Many thanks to our SA supporters who watched us from afar. also thanks to African Pilot and Absolute Aviation for the team clothing sponsorship – we always are the best dressed team with the best team spirit!

Here's a challenge: If you are among those who have adventure in your blood, and enjoy the prospect of sitting in an aircraft, ready to go anywhere without a clue where the route will take you, while figuring it all out in the air, and finding your way around with only a map and eye-ball Mk1... then how about taking up the challenge and joining the sport of rally flying? It's great fun!





# Aloe Bush Game Lodge Fly-in Breakfast

by Karl Jensen – Chapter 322 Johannesburg

Ron van Lear and Andrew Harding in Karl's plane on the way to Aloe Bush Game Lodge



Beautifully prepared airstrip and parking at Aloe Bush



Grounds of Aloe Bush Game Lodge



Ron van Lear and Andrew Harding at the entrance to the breakfast boma

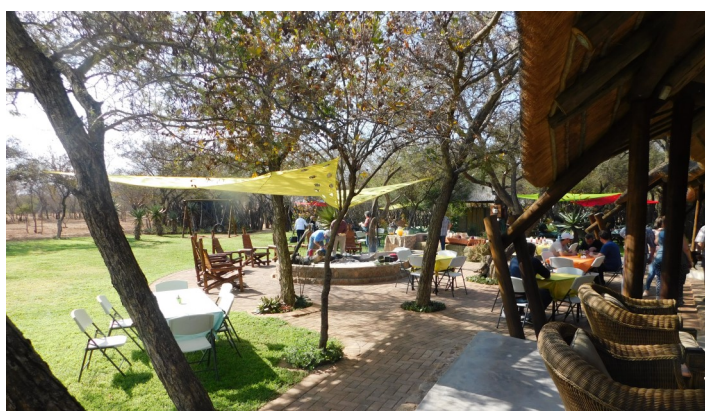
Once again it was proved that advertising & communication pays. Dave Jordan and his team certainly advertised extensively for the excellent 01 September fly-in to his Aloe Bush Game Lodge. Aloe Bush is located about midway between Marble Hall and Groblersdal in Mpumalanga. The preparation of the airstrip was terrific, with the immaculate strip, including the adjacent parking, having been freshly graded, watered and rolled to billiard table smoothness with very little dust.

The breakfast was available in very pleasant surroundings adjacent to the main lodge, with a view towards a clearing in the bush beyond the electric fence, where green feed had been spread for the game. While we 'kuiered', a herd of waterbuck visited, as well as a large eland which was led away from the humans enjoying their terrific breakfast spread.

Unlimited coffee, from enamel coffee pots, was constantly on the boil over coals, cowboy-style, and served in enamel mugs with condensed milk for real bush coffee. The lodge personnel were very friendly despite the pressure of the excellent attendance. I understand there were 92 aircraft that visited from all points of the compass for the morning, including about 10 microlights. There were at least 25 EAA members and friends taking part in the excellent warm weather.

My only criticism that needs to be aired is the constant appalling standard of R/T, which was aggravated on the day by the very many stations on 124.8 Mhz. Much of the traffic in the circuit seemed oblivious of other aircraft transmitting simultaneously. There was far too much superfluous chatter – it is really not necessary to give your position every 10 miles and clutter the airwaves with pax, point of departure, rooting/routing and totally non-standard phraseology like 'currently' – leave out the unnecessary stuff and the skies will become safer. I do believe when there is likely to be such a high traffic volume, the convener should apply to CAA/ATNS for the use of a dedicated frequency for that day.

If we learn, we'll live!





# Royal Air Force Centenary

by Karl Jensen – Chapter 322 Johannesburg

Aviation has played a major role for our civilisation, both in times of peace and warfare. The founding of the world's first dedicated military air force, the Royal Air Force, in 1918 is directly attributable to the recommendations of Jan Smuts. The centenary of the founding of the RAF was celebrated in South Africa by the RAF Officers' Club at The Wanderers on Friday 14 September. The Chairman of RAFOC, Bruce Harrison, is a member of EAA Chapter 322, as are other members of the RAFOC Committee, including Jeff Earle, Geoff Fish and myself. The sumptuous luncheon was enjoyed by 196 guests, many of whom are EAA members. The celebration also included a 'Missing Man' fly-past by The Flying Lions to commemorate the 76<sup>th</sup> anniversary of the Battle of Britain. Gee, this was an emotional event!

The South African fighter ace and Officer Commanding 74 Squadron RAF during the Battle of Britain was 'Sailor' Malan, with 38 confirmed kills. 'Sailor' Malan, who passed away at the age of 52, is buried at the Western Cemetery in Kimberley. Sadly, his grave has been vandalised. To ensure that the memory of this hero is retained, the RAFOC has had a magnificent sandstone memorial plaque made by Roel Jansen at his Sandstone Contracts company. Roel is a major player in EAA's dealings with the Brits Flying Club. This plaque will be mounted at the Kimberley Club, which is now a National Historic Building. The stone was consecrated at St Margaret's Church in Bedfordview on 16 September. The service was attended by, among others, 2 senior serving Royal Air Force Officers who travelled to SA for the event. There was also a fly-past in honour of the occasion by the iconic Harvard 7111 'Nelson' of the SAAF Museum.



Missing Man Formation



Harvard 7111 'Nelson' at  
Battle of Britain Salute





## AVIATION POLICING & SECURITY TRAINING PROGRAMME



*by Karl Jensen, Chapter 322 Johannesburg*

As an EAA member, I was approached by a senior lecturer from the SAPS Border and Security Police, Corrie Carter, to carry out a practical training lecture at Kitty Hawk Airfield on Friday 07 September. There were 32 SAPS members including their trainers for this event. This is an ongoing requirement which I have no problem in carrying out voluntarily. As we all know, there are many instances that fall short of requirements in our State services. My personal sentiment is that, if we all pull together, we can help put things right.

The SAPS Border and Security Police are often faced with aggression when they have a requirement to search aircraft. The training the police receive is comprehensive in this field, with seemingly little practical experience. The management of Kitty Hawk Airfield are thankfully generous in making their premises available for these practical courses – this being the 6<sup>th</sup> I've led there. We show actual documentation that is required by law to be carried on board all aircraft, as well as Pilots' Licences and their validity. Audio-visual material is also presented. By adding our input as aviators, we make life easier for both the police and ourselves. The do's and don'ts of approaching aircraft are demonstrated. When the police are required to scrutinise aircraft, they are not permitted to do so unless they are in the company of the pilot or a designated representative.

I was assisted in the day's activities by fellow EAA members, Eugene Couzyn, Andre Swanepoel and our EAA National Safety Officer, Nigel Musgrave. Dawie Pretorius, the FAKT Airport Manager, kindly provided a video screen, a fine PA system and comfortable seating for all in a theatre-style layout inside the Kitty Hawk restaurant. The aircraft made available for the search module had contraband including illegal substances hidden for the most realistic search operation.

I do hope more EAA members will make themselves and their aircraft available, should we be requested to run a course in the future.

Eugene Couzyn with Corrie Carter  
from SAPS



Nigel Musgrave, Eugene Couzyn and  
Corrie Carter after the lecture



SAPS group that was assisted with  
practical search exercise at Kitty Hawk



# Scout Air Experience

by Tyron Dolloway, 1st Hillcrest Scouts



*EAA Chapter 1502 East Coast shares the spirit of aviation whenever possible. The following report is from a Scout who undertook a flight with some of the members of the Chapter, who graciously offered their time and aircraft to hopefully instil a life-long passion for aviation into these young men.*

We met the pilots at Grass Roots Airfield, Cato Ridge. The weather conditions were looking positive. We had some light rain early in the morning and the skies were clear. The morning ground temp was 20 degrees, with very light wind.

Three pilots met us on the ground, and the other two flew in to pick us up. We had five planes in total, which allowed all scouts to fly twice.

Robbie, one of the pilots, gave us a safety talk and showed us how to check fuel for water. Each pilot checked their own planes and showed us how to communicate during flight. We all took off, one after each other, and the pilots treated us to a bit of sightseeing rather than a direct flight to the destination.

We flew for almost 80 km. Our altitude was 4,000 feet. Our highest speed was around 55 knots. Our route took us directly over Tala Game Reserve and the rugged Umkomaas Valley, before continuing onwards towards the scenic town of Richmond. We could see the Drakensburg in the far distance.

We all landed smoothly at McKenzie Airfield. The group sat down at The Hanger, a restaurant positioned right on the landing strip, and enjoyed a meal in the setting that included a vegetable garden – it looked like they had prepared the food from scratch. Toby, Stewart and I ordered a 'Full Breakfast' and Gus ordered a 'Small Breakfast'.

We enjoyed our time outdoors in the winter sun. We watched several planes land and take off. While we were there, the wind picked up.



The pilots were initially concerned about the wind, so when it settled down we quickly took off.

The flight home was very different! Take-off was a scary experience, with a strong crosswind pushing all of us. The flight home was challenging, and we felt the vibrations and dips of turbulence. When we approached the end of our journey, the pilots started communicating as to which runway would be best for landing, due to the cross-wind conditions.

For safety reasons, some of the pilots chose to land at Emoyeni Airfield, whereas the two planes that my Dad and I were in landed at Light Flight. These airfields both have cross-runways, so we were all able to land straight into the wind. At Light Flight, some of us packed the planes into the hangar, and then walked the short distance back to Grass Roots airfield where we had set out from.

We sat down in the lounge area, discussed our flights and waited for the others to arrive. They also went to buy some hot cross buns to have with tea. We then proceeded to have a group picture, thanked the pilots, and headed home.



# EAA Chapter 322

## September Meeting

*by Kevin Marsden, photos by Stephen Theron - Chapter 322 Johannesburg*

The EAA Chapter 322 monthly meeting was held on Wednesday 05 September.

There were two excellent guest speakers – Larry Homann, who explained his involvement in the 'LINK', the aviation outreach programme of Airlink SA, and Rob Jonkers, who told the members about the trials and triumphs of team SA at the recent World Rally Championships held in Slovakia.

The monthly meetings are always a pleasure to attend, and I look forward to the next meeting on Wednesday 03 October, which will be hosted by Neil Bowden, the chapter's Vice Chairman.





# Flying Legends Talkshow

*by Karl Jensen, photos by Stephen Theron - Chapter 322 Johannesburg*

Lt Colonel Musa Mbhokota, whose Air Force callsign is 'Midnight', has proved to be an outstanding individual, as can be attested by the packed EAA Auditorium for his appearance as guest on 13 September 2018. Musa was born in a Limpopo village 10 nm south-west of the Pafuri Gate of the Kruger Park. At the age of 10 he watched jet fighters from the Hoedspruit or Louis Trichardt Air Force bases flying overhead, and from that day on he was determined to fly that type of aircraft. He had his first flight with Scully Levin, and about 25 years later he can relate every sensation he experienced during that memorable event.

Musa, who is a most humble man with a sharp wit and sense of humour, went on to learn to fly in the South African Air Force. He attained phenomenal success as (in his own words) the first black man to become Officer Commanding 2 Squadron SAAF and subsequently was the Chief Fixed Wing Test Pilot at AFB Overberg. Musa's aim in life is to inspire all young people to follow in his big footsteps. Musa became the 1<sup>st</sup> black man to become a qualified Fighter Pilot in the SAAF in 1997 and a Fighter Weapons Instructor 10 years later. He became the 1st black Test Pilot in South Africa in 2012. He was also on the Gripen Initial Cadre in 2008/9. The list of Musa's qualifications is long, but certainly noteworthy: more than 3,000 fighter and test pilot flying hours with 1,200+ hours' experience on the Gripen, A Cat Pilot Attack Instructor. He flew Cheetahs, Impalas, etc., and was an Instructor on Pilatus PC7 Mk II, Hawk Mk 120 and Gripen C/D.

He has flown more than 30 aircraft types. His formal training internationally took place in the USA, Sweden, Cuba and the UK. Musa has 11 years' Flight Instructor experience on the SK 60, Hawk Pilatus PC-7 and the Gripen.

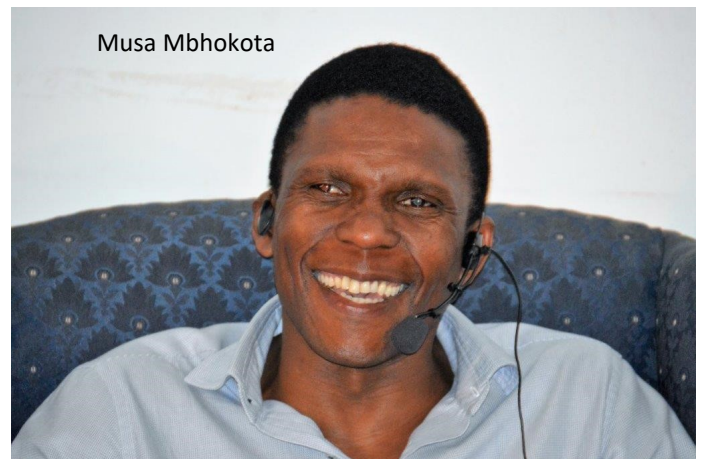
In a USA International Test Pilot's Course, Musa graduated 2<sup>nd</sup> on a course of 30 students from 5 countries. Musa attributes this success in part to the rigid training he received in the SAAF. Amongst his many other qualifications he became a Qualified Accident Investigator (US Air Force 2000) and is regarded as a distinguished graduate.

Musa's presentation at our Auditorium was flawless with a background slide show that he made. He spoke without hesitation and nary a single written note! We were regaled by his experience as the Airspace Controller during the 2010 FIFA Soccer World Cup, the Air Force operations during President Nelson Mandela's funeral, as well as the Gripens accompanying the C130 that carried his coffin to the Eastern

Cape for burial at Qunu in the Transkei were terrific.

Very interesting, too, was the operation of 4 Gripen aircraft flown to assist SANDF troops in the DRC.

Instead of the regular 2 hours allocated to our Flying Legends Talk Shows, the audience was kept spellbound for nearly 3 hours. What a memorable evening was had by those who managed to be there. I send our best wishes, on behalf of EAA, for Musa Mbhokota to continue with his phenomenal success as he endeavours to make our country a better place for all.



Musa Mbhokota



Stephen Theron and Musa Mbhokota



*Karl Jensen, Musa Mbhokota, Marie Reddy, Jeremy and Anne-Louise Woods.*





# Airmail

## Aircraft Sheet Metal Availability – Karl Jensen

We seem to be having a slow-down in General Aviation in SA. At AAD 2018 I was pleased to see Ed Knibbs revitalising his interests in ALCLAD. He will be stocking a large range of their products from January 2019

**ALCLAD**  
SHEETMETAL SERVICES cc

**ED KNIBBS**

Cell: +27(0)83 251 4601  
Email: ed@alclad.co.za  
Website: www.alclad.co.za

PO Box 84  
Lanseria 1748  
South Africa

## South African-built Bearhawks – Karl Jensen

EAA 322 Member Wayne Giles was the first person in SA to build a Bearhawk Patrol powered by a Lycoming IO-360 with constant speed 3 blade MT propeller. This delightful aircraft ZU-BHP was purchased recently by Jeremy (Moose) Woods, EAA 322, and son William (Mooselet). They have both been having lots of fun with this hot performer.

Wayne then decided to build the Bearhawk Lite to slot into the LSA Category. The LSA version is powered by a Continental O-200-D fitted with a fixed pitch Cato propeller. Although the Bearhawk LSA is capable of a 750 kg MAUW if in the normal NTCA Category, it was intentionally certified in the LSA Category with a MAUW of 600 kg.

Both aircraft are presently fitted with Tundra tyres to allow 'back-country' fun and off-airfield landings. Wayne has the 4-place Bearhawk kit on order and we all eagerly await the completion of this model and seeing it in our skies.

Both the Bearhawks were immaculately built and have evoked much publicity and have the honour of appearing in our local aviation magazines. The LSA version appeared on the cover of the September 2018 edition of SA Flyer, with an imaginative written and beautifully illustrated report by EAA 322 member Greg Clegg.

It is not often that a South African built aircraft features on the front cover of the iconic Trade-A-Plane second September edition – and ZU-BHP made it!





# Weird & Wonderful

## PZL M-15

by Kevin Marsden - Chapter 322 Johannesburg

The info in this article originally appeared on [foxtrotalpha](#)

What do you get when the Soviet Union wants a jet aircraft purpose-built to service its massive farms and agricultural collectives? Well, according to Poland, you get the demented-looking PZL M-15, nicknamed 'Belphegor', which means a hideous mythical demon that tricks people into thinking they have an invention that will make them rich!

Since the late 1940s, the Soviets used the An-2 'Annushka' biplane in the crop dusting role, an aircraft that was about as complex as a tractor, and as slow. Still, the An-2s were incredibly reliable, cheap to produce and forgiving to fly. But by the mid-1960s the USSR was looking at new ways to increase food production and cut food imports, and the AN-2 was seen as a handicap to their ambitions. Additionally, having a biplane doing Soviet farm-spraying was seen as a relic of the past and was ill suited for servicing some of the massive farms that struggled to support the proletariat's appetite. As such, a request for new aircraft was made, one that relied specifically on jet power, to become the technological all-star of communist farming.

Since Poland was already producing the An-2s specifically configured for the agriculturist role, they moved forward with Moscow's request. The first step was to build a test-bed to study exactly how jet technology would work in the agricultural role. As such, the Polish-Russian design team of Kazimierz Gocyła and Riamir Izmailov came up with a franken-plane of sorts called Lala-1, short for 'Latające Laboratorium 1' or 'Flying Laboratory 1'.

Lala-1 utilised the forward section of the an An-2, while its rear fuselage and tail were completely new. A jet engine out of an

L-39 Albatross jet trainer was mounted in its shortened rear fuselage. For almost a year various tests were ran with Lala-1, while at the same time a completely new design was taking shape. This design would become the PZL M-15.

The PZL M-15 was totally unique in appearance, with a twin boom tail, a pair of over and under wings connected by struts and huge tanks 377 gallon tanks for chemicals. It had a fixed tricycle landing gear and room for three crew. Up top was the aircraft jet engine, which put out around 3,300 pounds of thrust. The aircraft's high air inlet helped to keep foreign object and debris (FOD) out of the jet engine during operation, a key design feature for rough-field operations. Regardless of its jet engine, the design had a unique operating envelope, with a stall speed of just 67 mph, a top speed of only 124 mph and a range of just 250 miles.

On 30 May 1973 the first PZL M-15 prototype took to the skies, with another following nine months later. By 1976 the 'Belphegor' was put into production with the idea that thousands would be built, just like its An-2 predecessor, but that dream was short-lived. Under test conditions, the PZL M-15 with its highly trained crews and support personnel, accomplished its mission, but once the new aircraft was put into the hands of real farmers who were accustomed to flying the more forgiving An-2, the aircraft was downright troublesome and very inefficient. In addition, it was grossly expensive to build, which was far from ideal for an aircraft that was supposed to replace thousands of An-2s that were in operation at the time. As for the aircraft's nickname, the story goes that, when it attended the Paris Air Show in 1976, it looked and sounded so strange that the only suitable nickname for it was Belphegor.





In the end, only 175 M-15s were built, with production halted in 1981. Even though it was not a success, it is thought to hold some weird records as the world's slowest production jet aircraft, the world's only production jet biplane, the world's only agricultural jet plane, and somewhat subjectively the ugliest jet aircraft ever put into production.

As for the An-2 which it was originally planned to replace, it went on to be one of the most successful aircraft ever created, with over 18,000 airframes built, and it is still in services around the world today.

Visit [YouTube](#) for more footage on this strange aircraft.



**In next month's Weird & Wonderful feature, we will discuss what you see above... it's one for the real business cowboys!**



CONTACT! Is the official newsletter of EAA of SA. This edition was compiled by Kevin Marsden and edited with love and kisses by Trixie Heron. All material is gratefully received from Chapters, members and non-members alike. Remember that this is your newsletter, so please submit material as it happens to [info@eaa.org.za](mailto:info@eaa.org.za) to reach us by the last Wednesday of the month. Please remember... we want your news!