



The Joystick

NEWSLETTER of the SOUTH AFRICAN POWER FLYING ASSOCIATION

VOLUME 11

ISSUE 3

OCTOBER 2006

Another RV Added to the Fleet



RV 7A ZU-JAD See page 2 for article

LETTER FROM THE CHAIRMAN

The focus of SAPFA has changed considerably over the past few years. The organisation has moved from being one that concentrated mainly on the organisation of competitive events to one that spends a great deal of its time and efforts on regulation and costs relating to recreational flying. As an organisation we believe that competitive flying is important as it hones the skills of recreational general aviation pilots and also gives rise to events where pilots can meet and talk about their passion. It would however be remiss of us to spend the majority of time on organising such events and ignore all the threats that are facing GA.

Issues such as regulation, fee structures and fuel costs are of constant concern and need to be watched continuously.

Continued on page 2



P.O. Box 27 013, Greenacres, 6057
<http://www.sapfa.org.za>



Chairman's letter - from page 1

By now all are aware of the revival of the 12 year overhaul issue. This issue has, on its own, the ability to wipe out GA. The issue is therefore receiving the highest priority from SAPFA and Aero Club. We have been communicating with CAA and are confident that AIC18.18 and 18.19 will be re-instated. This has been promised by the outgoing Commissioner at a meeting with Aero Club.

The SAPFA committee is small and we have limited resources. We do therefore need the support of our members and flying clubs around the country. We have some ambitious projects for next year so we will be calling on you for assistance.

Some good news for GA is that CAA has approved the Peterson Aviation STC's for the use of motor car fuel in certain aircraft. The use of car fuel can significantly reduce the costs for GA. This is covered in more detail in the accompanying article.

While writing this column I have heard of another aircraft accident resulting in a fatality of a SAPFA member. I once again appeal to the SACAA to ensure that properly investigated accident reports are issued timeously so that the GA community can use these to make our sky a safer place.

Fly Safely

Chris Booysen



Mogas STC's Approved

By now it is common knowledge that the SACAA has approved the Supplemental Type Certificates (STC's) that allow the use of motor vehicle petrol (mogas) in certain piston engine aircraft. This fact has been well publicised in the various flying magazines.

The approval of these STC's was motivated by SAPFA member Horace Blok after the avgas shortage earlier this year. Horace contacted the US developer of the STC's, did the necessary research and collected the necessary fuel expert to enable him to make the necessary presentation to the SACAA.

What is important to note is that the STC's are exactly that. They are amendments to the Type Certification of that aircraft and must be approved by CAA on an individual basis, aircraft by aircraft. The POH needs to be amended so it is clear to the pilot of the aircraft what his responsibilities are if the aircraft uses mogas. There could also be mechanical changes that need to be performed by an AMO, eg the fitting of a fuel pump.

It is interesting to note that in the US the engine manufacturers and fuel companies have not supported the STC's. In fact certain fuel companies have tried to discredit the use of mogas. This is mainly due to them being concerned that support for mogas will open them to liability if there is an accident with an aircraft using mogas. We all know how the US legal system works. It is also interesting to note that there are a large number of airfields in the US that have mogas pumps. One wonders if we will follow these trends in South Africa.

One thing is certain is that lead as a fuel additive is on its way out. Avgas is also expensive and uncompetitive against mogas. The fuel companies will have to develop an alternative that is lead free and cheaper or else the market for their avgas will slowly dwindle until it becomes uneconomic to produce. At that stage, if there is no alternative, then high performance piston aircraft will be grounded.



Contact details for all committee members are available on the SAPFA website <http://www.sapfa.org.za/administration/committee-members> or can be obtained by emailing mail@sapfa.org.za or phoning Chris Booysen at (041) 391 4400 (W) or (041) 391 4304 (F)

Speed & Altitude Records

SAPFA is still encouraging members to set some World or South African records in the speed or altitude categories. There are very few attempts on the record books and most of these are held by foreigners. We need to rectify that situation.

We have previously reported the record attempts in the Thunder City Lightning jets and the speed record attempt in a Sea Fury from Johannesburg to Durban.

The "Time to Climb" attempts in the Lightning have resulted in South African records being established. The "Speed over a Recognised Course" by Glen Dell has not been recognised as a South African or World record as the distance of the flight fell slightly short of the distance required in the accordance with the FAI rules.

The latest record attempt was for a jet engined aircraft for a flight between Cape Town and Johannesburg in the C-1f weight class (Landplanes: Take off weight 6 000 to 9 000 kg). This attempt was flown by Terry Redman and Charles Laverty in a Bombardier Learjet 60 and was part of the marketing effort for Bombardier at AAD 2006.



Paul van Telling handing confirmation of the record times to Terry Redman and Charles Laverty.

The record attempt was flown in ZS-GSG, the Lear 60 (serial No 60-301) managed by The Aviation Co in Cape Town.

The Learjet was timed from take-off at Cape Town International at 07:59:57 (UTC) on 21 September 2006 and was overhead LIV

at 09:24:08 (UTC) – a time of 1 hour 24 minutes and 11 seconds and an average speed of 900.01 kmph.

The aircraft was refuelled under the watchful eye of SAPFA monitor Frank Eckard and took on 1 600 litres of fuel (1 286 kg) of Jet A1. The refuelling took about 15 minutes and the aircraft was on its way again. Unfortunately an ATC delay caused a wait of approximately 15 minutes at the threshold.

Records are based on total time including time on the ground (where appropriate). This wait was obviously detrimental to the time of the Cape Town-Johannesburg-Cape Town return flight. Eventually the aircraft left the ground at Lanseria at 09:57:37 and was overhead CTV at 11:33:05. On the occasion the time taken was 1 hour 35 minutes and 28 seconds and the speed of the aircraft 794.63 kmph.

The speed achieved for the round trip (including time on the ground) was 711.41kmph.

The times have been submitted to the FAI and we await their ratification and the recognition of a new World Record by a South African.



Note:

The opinions expressed in this magazine are not necessarily those of SAPFA or its committee.

RV7A - ZU-JAD

By Jan Hanekom

The story starts in the middle of 2004 somewhere when Deon and Attie told me that they were going to build this aircraft. Somehow I became the third partner and we immediately started to order everything we needed. We took delivery of the kit on the 6th of January 2005 that also happens to be my birthday.

Now not one of us has built an aircraft before and we come from vastly different backgrounds. Deon owned a wholesale food business as well as butchery. Attie is a dentist and I make a living out of electronics. I can clearly remember the excitement as we unpacked all the crates to do the inventory and how we have set up "The Nest" - a double garage at Attie's place in Brits.

Out came the first plans and bits and pieces. It took us a few hours to rivet 6 rivets, attaching a bearing assembly to the horizontal stabilizer rear spar! At that stage I thought we will never get this flying. Slowly but surely we started to understand all the terminology like: clecoe this skin to that d-section, match drill, counter sink, dimple, back rivet, edge rolling, fluting, etc.

During a build process like this it is very rewarding to see a part finally riveted together after you have assembled and disassembled it for about 4 times, which felt like a 100 times. It was not very long and we had the tail feathers complete and moved on to the wings. At this stage we got clever and realized that if you build both wings at the same time, it goes much quicker. The wings went together quite nicely as they are big and very soon you have something really nice to look at.

Then came the building of the fuel tanks! What a mess! The final assembly is done with fuel tank sealant, a silicone-like two part substance that one has to mix very accurately. This we had to put on each and every rivet and between all the

ribs and baffle plates and then try to rivet, using the pneumatic riveter and a bucking bar while it is sliding around on the excess sealant. We have also quickly learned that you cannot get sealant off your clothes, hands and anything else it landed on. We all promised ourselves to never again build tanks, but rather to get the pre-built form Vans (if we ever have to build again).

Then we moved to the biggest part being the fuselage, starting with the firewall, then the centre section and finally the tail cone. One has to realize that all the systems, controls, piping, etc. is actually part of or in the fuselage. So here is where you really spend a lot of time. We had most of it done and mounted on the under carriage in pretty good time. Then came the engine with all the baffling and at the same time I was busy at home in the evenings designing the layout of the instrument panel. I first made a cardboard template and then on to a cad drawing. Then all the instrument holes were laser cut and fixtures for the radios etc. welded.



Ready for flight – no leg fairings or wheel spats to assist engine break in

At this stage the plans were very difficult to follow and the written instructions became less and less. They just assume that by now you will know how to do things. Not always the case. What we have also learned is that while for example it takes 4 hours to set up a spat on one side, the spat on the other side will take you 1 hour because you now know how to do it. We kept on saying to ourselves "With the next RV we will know!"

Before we really knew it, we had been busy on and off for more or less a year and a half and just over two thousand man hours. We were now getting very excited because we have reached the stage where one could say that "I am now fastening this for the final time".

In September this year we moved the project to the hangar at Brits airfield. We also started putting the final layers of paint on the AC and like with everything else, it was a steep learning curve. None of us has really painted an AC before, leave alone base coat clear coat.

We finally got our Proving Flight Authority on the 4th of October that was another milestone. On Saturday the 7th of October none other than Chalkie Stobbs arrived at Brits to do his own inspection and the maiden flight. Chalkie first went through the whole AC with a magnifying glass. Obviously he did find a few snags, but nothing that would stop the attempt to do the maiden flight.

With the first proper run-up the oil pressure was too high as was the vacuum. So we then adjusted the oil pressure and disconnected the vacuum pump as it was not needed as we have a Dynon EFIS.



ZU-JAD – First Take off

Then Chalkie taxied out again and immediately took off! I cannot explain the feelings that went through the three of us. All I can say is that will forever be one of the highlights of our lives. I would also like to salute Chalkie - what a guy and what a test pilot!

Last but not least - we are very thankful and would to thank the Good Lord for this opportunity. I would also like to thank our wives, everyone present and all our friends and Avcommers for their support!

For those not so informed of what our RV7A can do I would like to give a few basic specs.

Engine: Superior 180HP fuel injected with dual electronic ignition with magneto backup turning a 72 inch Sensenich fixed pitch prop.

Airframe: Empty weight: 1100 LBS (500KG). Same as a C150. Useful load: 700 LBS.

Take off in 575ft at gross weight of 1800 LBS. Climb at 1650ft/min at gross weight.

Cruise at 200 MPH at 75% power at 8000 ft while burning about 35 litres per hour. Stall speed 51 MPH. Fully aerobatic at +6 and -3 G's.

Avionics etc: Garmin GNS430 nav/com/gps with GI-106 indicator, Audio panel, Transponder, Pioneer CD. Conventional flight instruments plus EFIS. Dynon EMS for engine monitoring. Auto pilot and electric trim and flap. Plush leather upholstery.

Was it worth building it? Absolutely YES! Ask anyone who has experienced it about the so-called RV grin and you will know.

Will we build another one? Yes.

Is it for sale? NO!

Keep a good lookout for ZU-JAD.



2007 GAC Meeting

The South African Power Flying Association has been requested to host the 2007 annual meeting of the General Aviation Commission of the Federation Aeronautique Internationale.

The meeting will be held in Cape Town in November 2007.

World Flying Championships

The Protea Flying Team competed in the 2006 World Rally and Precision Flying Championships in Troyes, France in July this year.

In summary the team achieved some of its objectives but fell far short with others.



The highly visible Team transport

Flying conditions were difficult with the whole of Europe suffering in a heat wave with temperatures in the high 30s even late at night. Having such conditions in a country that is not really geared for hot weather made the competition demanding for all competitors.



Trying to keep cool

The Team arrived in France a week before the competition so that they could familiarise themselves with the local flying conditions. As is expected in Europe the maps supplied are accurate but there is a total overload as the ground is so busy. One of the team members calculated that if you drew a line on the competition map in France it would pass through more than double the marked features when compared to a South African map. In addition, the French map would only include about 50% of

the features. This results in a complete information overload until you get used to the flying conditions.

The first competition to be held was the World Precision Flying Championships. Our team comprised Jan Hanekom (Captain), Ernie Alexander, Barry de Groot, Mary de Klerk, Frank Eckard, Hans Schwebel, Ron Stirk and Chris Booysen (Manager) and Dicky Swanepoel (Coach).

The first day started with the landing competition. Each competitor performed the first of the four compulsory landings as a full stop until the whole field was complete. Then the whole field completed the second landing before a stop for lunch. After lunch the last two landings were done on the same basis.



Ron Stirk receiving the Air Canada Trophy

An official protest was made by some teams as they felt that the tail wind component for the first session was above the limits (even though the conditions were the same for all competitors). South Africa did not support the protest even though we would benefit by it being upheld. The jury ruled that the scores of the first two landings be cancelled. This resulted in Ron Stirk being crowned as World Landing Champion, the second time he has won this trophy. Well done Ron!!!

The two competition navigation exercises were difficult and scores for all competitors were

much higher than in 2004. After 2 days of competition South Africa ended in 4th place, behind Poland, the Czech Republic and the hosts, France. In the individual results our lowest scoring team member is Mary de Klerk, a fantastic effort as this is her first competition in the precision event.



Daily briefing

After a break of a day the World Rally Flying Championships commence.

South Africa entered five teams in this event. The teams are (pilot/navigator):

- Ernie Alexander/Francois du Toit,
- Barry de Groot/Mary de Klerk,
- Frank Eckard/Quentin Taylor,
- Jan Hanekom/Henk Koster, and
- Hans Schwebel/Ron Stirk.

The manager and coach are as for the precision team.



The Precision team

The flying for the first day was cancelled due to forecast thunderstorms which never appeared. Most teams used this as an opportunity to get a bit

of practice and almost every team flew the competition route with no problems. The rules provide for one official practice day and three competition days.

The forecast for the second day is also for severe thunderstorms but the official practice is held. Once again the forecast was wrong and the day went off without a hitch.

The competition was limited to two competition days as the last (reserve day) was also cancelled due to low cloud on the course. The SA team results for the two competition days is disappointing as on both days our team members have made silly mistakes that have cost an enormous amount of penalty points. Missed turning points, abnormal landings, not following departure instructions and incorrectly plotted photos cost the team.

When the final results are announced the team finds itself in 9th position. This is our worst performance since our 10th place in 1996. Since that year we have ended in 4th place or better.



Chris receiving the Credit Agricole Trophy

The spirits of a fairly despondent team are however lifted when the Credit Agricole Trophy for "Team Spirit and Fair Play" was handed to Chris Booyesen, manager of the team.



Representation issues

SAPFA continues to engage various bodies (mostly state and parastatal) in order to represent the interests of its members. The more important issues that currently face us are:

12 Year Overhaul

Temporary exemptions are being issued while we are waiting for the revised AIC18.18 and 18.19. There are delays in issuing the exemptions at CAA and the requirements are not clearly laid out so applicants are being sent away for further documentation. SAPFA is in constant communication with the Airworthiness section of the CAA in this regard.

SAPS and private airfields

This matter has been taken up by Aero Club with the Commissioner. If members are unhappy with the conduct of the SAP then report it to us so that the matter can be taken up again.

Part 61

The next revision of Part 61 will be released within the next few days. It is expected that this will be the final release for comment before the Part is promulgated, together with the Technical Standards. SAPFA will be providing comment on behalf of its members. Please let us have any comments you might have for submission.

Registration of new imported aircraft

CAA wants to inspect the overseas factories of imported aircraft before registration. Aero Club has taken this up with the Commissioner as we believe that unnecessary in most cases.

ATNS Fees

SAPFA has attended meetings between the aviation industry and ATNS with regard to the new ATNS fees to ensure that GA continue to enjoy the zero rating of ATNS fees except in the Johannesburg TMA

ACSA fees

SAPFA has addressed a letter to ACSA requesting a reduction in fees for GA, similar to the relief supplied by SAWS and ATNS

The GAC

We sent a representative to the annual meeting of the General Aviation Commission of the Federation Aeronautique Internationale to ensure that South Africa have a voice at this important international body.

Protected Areas Act

As a representative body we believe that the regulations affecting the over-flying of designated protected areas should not be legislated by the Dept of Environmental Affairs as they are not the designated body to control the use of airspace. This responsibility lies with the Dept of Transport through the SACAA. We have had no success with this at NASCOM and will now have to elevate it to the Minister of Transport.



Organisation of Events

A number of SAPFA events have been postponed or cancelled this year due to a lack of manpower to organise the event or the lack of an appropriate venue.

SAPFA intends to organise some exciting new events in 2007 and is looking for flying clubs that would like to act as organisers for these events. Please contact us if your club would like to be involved.

A calendar for events for the rest of this year can be found on the SAPFA website at:
www.sapfa.org.za/



The SAPFA Committee would like to express its condolences to the friends and family of Ray Gleimius, a true aviator and a gentleman.

IMPORTANT NOTICE

NOTICE IS HEREBY GIVEN THAT THE **SAPFA AGM** (ANNUAL GENERAL MEETING)
WILL BE HELD AS FOLLOWS

Date: 4 November 2006 Time: 15h00

Venue: Aero Club House, Hangar 4, Rand Airport

PROXY FORM

Please complete and fax or e-mail to any SAPFA committee member if you cannot attend the AGM.
We need this to make up a quorum.

PROXY

South African Power Flying Association – Annual General Meeting 4 November 2006

I, hereby grant my proxy

To or failing him to the Chairman of the meeting,
For the sole purpose of to obtain a quorum for the AGM.

Date: Signature:

NOMINATION FORM

**Please make nominations for any member that would like to serve on the committee.
The existing committee members that are available to serve another term have been
nominated. Their names are set out below.**

2006 committee members nominated:		New Nominations
Chris Booysen (Chairman)		
Ron Stirk (Vice-chairman)		
Barry de Groot		
Dale de Klerk		
Frank Eckard		
Chris Linakis		
Glen Meyburgh		
Jack Onderstal		
Hans Schwebel		
Robin Spencer-Scarr		
Dicky Swanepoel		
Paul van Tellingén		
Walter Walle		

PLEASE fax back to 041-391 4304 or e-mail to: mail@sapfa.org.za before **30 October 2005**

AERO CLUB AGM – 24/10/2005

NOTICE TO MEMBERS

NOTICE IS HEREBY GIVEN that the 65th Annual General Meeting of members of the Aero Club of South Africa will be held at 6:30pm on Tuesday 24th October 2005 at Rand Airport, Hangar 4, Germiston for the following purposes:

1. To verify and sign the minutes of the 64th Annual General Meeting held on the 25th October 2005.
2. To consider the Annual Financial Statements for the year ended 31st March 2006, together with the reports of the Auditors and the Directors.
3. To receive the Chairman's report
4. To receive the reports submitted by the Chairmen of the various Member Associations.
4. To appoint Auditors for the ensuing year.
6. To elect the Honorary President of the Aero Club of South Africa by ballot, in terms of Paragraph 2.1.1. of the Articles of Association.
7. To elect to the President's Council by ballot any community leader or personality who has promoted the aims of the Aero Club of South Africa in terms of Paragraph 2.1.1. of the Articles of Association.
8. To elect a maximum of Four Members to serve on The Board in terms of Paragraph 5.8. of the Articles of Association.
9. To elect any duly proposed individual person or persons as Honorary members.
10. To transact such other business as may be transacted at an Annual General Meeting.
- 10.1 To elect the Chair person.
- 10.2 To elect the Vice Chair.
- 10.3 To elect the Treasurer.

An Ordinary Member is entitled to appoint another Ordinary Member as his proxy to attend, speak and vote in his stead except that a proxy may not vote on the election referred to in 6 and 10 above. Proxy forms appointing a proxy must be filed with the Chairman or Secretary before the meeting begins. The vote of an Ordinary Member whose subscription is in arrears will not be taken into account.

BY ORDER OF THE BOARD

HALFWAY HOUSE

30 September, 2006

PROXY

THE AERO CLUB OF SOUTH AFRICA

ANNUAL GENERAL MEETING

TUESDAY OCTOBER 24th, 2006

RAND AIRPORT, GERMISTON

I, _____ Member number _____, HEREBY GRANT MY PROXY

TO _____ Member number _____,
OR FAILING HIM TO THE

CHAIRMAN OF THE MEETING, TO VOTE AS DIRECTED BY ME OR AS HE CHOOSES ON ANY ISSUE REQUIRING A VOTE AT THIS MEETING.

DATE

NAME

SIGNATURE