



# AERONAUTICAL SOCIETY OF SOUTH AFRICA

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A DIVISION OF THE ROYAL AERONAUTICAL SOCIETY

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## AeSSA Newsletter September 2016

### A MESSAGE FROM THE PRESIDENT OF AESSA

Members of the AeSSA and all other aerospace friends -

In our September newsletter, we feature Liza Barnard as one of our #AerospacePeople in the series, Movers and Shakers in the South African aerospace domain. Liza is well-known as a valued colleague to our CSIR members; she now takes on an additional role as part of the AeSSA's operational support.

In line with our theme, Aerospace: 150 years of progress, for the IASSA2016 event, we have an article on vintage aircraft, an interest that brings together enthusiasts from all over South Africa. We thank John Illsley of the PBHS's Aeronautics Club for his contribution.

As it is always good to have "something old and something new", we also include an article by Robert Cathro on Top 100 aerospace companies in 2015.

Des Barker, who needs no introduction to this audience, is a keynote speaker at IASSA2015. His thought-provoking topic is "The Evolution of SAAF Fighter Technologies". He joins a bumper programme of contributions, both local and international. Please visit [www.iassa.org.za](http://www.iassa.org.za) where updates and developments are posted regularly.

Last but not least, we announce the names of the latest Fellows of the Royal Aeronautical Society.

We welcome your input to and comments on our newsletter; please send them to [admin@aessa.org.za](mailto:admin@aessa.org.za)

Regards

Glen Snedden

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*A series of interviews with movers and shakers in the South African aerospace domain.*

### **Liza Barnard takes on support role within AeSSA**

Liza Barnard, Group Secretary to the CSIR's air power research group, has become firmly embedded as an invaluable resource to both her colleagues and to South Africa's aeronautics community. She was recently appointed to take over various AeSSA administrative duties relating to secretarial functions and financial processes. This is in addition to her vital support for the AeSSA's annual International Aerospace Symposium of South Africa (IASSA) which takes place on 20-21 October 2016 in Pretoria.

Providing excellent support is second nature to Liza. As Group Secretary, she is responsible for administrative and operational duties that underpin the effective functioning of the air power research group of some 13 researchers. "These duties range from settling in new students to making travel arrangements for staff travelling all over the world, and assisting in capturing original research outputs on dedicated systems," she says. Her professional and relaxed demeanour makes her a favourite among her colleagues, who rely heavily on her efficiency to focus on what they



do best: world-class aeronautics. Testimony to this is the fact that she was the recipient of an excellence award (**right**) which was nominated by her colleagues. Air power is one of three tightly integrated research groups which house the CSIR's formidable capabilities in aeronautics systems.

Liza's secretarial training stood her in good stead during her career which included a stint at Trustbank (in various capacities), the City Council, the CSIR's former Satellite Application Centre and security firm Chubb, before joining the CSIR in her current position in 2012. Her varied background and exposure have sharpened her appreciation of the prospects and opportunities she enjoys in this post. "Joining the CSIR in 2012 was a huge highlight of my working career and I enjoy every single minute of my job," she says.

Her ability to adapt quickly to constant variations and new challenges inherent in her new role within the AeSSA are useful attributes. Dr Glen Snedden, President of AeSSA says, "We are grateful for the support provided in the past by Yvonne Raman of Aerosud, and look forward to working with Liza in the future."

Liza confirms, "I am keen to find my feet as part of team AeSSA. I enjoy taking on support roles as part of a team. It's great to see the outcome of well-managed and enthusiastic joint efforts, and let's be honest: I love the appreciation and recognition of my colleagues and fellow aeronautics enthusiasts for my support."

IASSA is one of Liza's favourite events and she has been involved for the past five years as part of the organising committee. "It's great to have all the participants come together for a few days to

share their passion about aeronautics.” Each year ASSA draws a range of speakers under a given theme. This year, the theme, ‘Aerospace: 150 years of progress’ has drawn over 30 presentations from international and local presenters.

As much as she enjoys the pristine working environment of the CSIR’s main campus, Liza loves her spare time après-work to fit in some vigorous exercise at the local gym, and relax with family and friends.

Please send an email to [Liza](#), if you wish to contact her.

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## Aerospace: 150 Years of Progress

### DH Dragon Rapide steals the show at Vintage and Classic Fly In



The only surviving De Havilland DH.89 Dragon Rapide (**above**) in Africa was the star of the show at the Vintage and Classic Fly In held on 20 August 2016 at the Petit Airfield near Benoni. A 1930s British short-haul biplane airliner for six to eight passengers, this rare aircraft (also used as a military aircraft) flew in from Queenstown in the Eastern Cape.

The 2016 Vintage and Classic Fly In at Petit Airfield (the third of its kind) was hosted by the Pretoria Boys High School (PBHS) Aeronautical Society; its members were marshals and assisted with the breakfast that was provided for all pilots and crews.

The Vintage and Classic Fly In was started in 2014 to provide an event where older privately-owned aircraft based on the Reef could be showcased. John Illsley, Second Master at PBHS who runs the school’s Aeronautical Society, explains, “Previously, no such event existed on the calendar and the most recent SAAF Museum airshow at Swartkops did not featured a ‘heritage’ item on the programme. This year’s event was scheduled for the day before the Rand Air Show to ensure that the DH Dragon Rapide would fly in at both events.”



About 22 aircraft flew in to the Vintage and Classic Fly In with de Havilland Tiger Moths and Chipmunks being the most common types, followed by several Piper Cubs and Super Cubs. **Pictured on the left from the top** are a Globe Swift: 1940/50s American touring aircraft; a De Havilland Tiger Moth: WW2 British training aircraft, used extensively in South Africa; and a DH Chipmunk: post-WW2 two-seat trainer, used mainly in Britain. There were also examples of the Globe Swift, Cessna 195 and Bowers Fly Baby. The biggest formation to fly in was from Krugersdorp, organised by Courtney Watson (see below, right).



Members of the PBHS Aeronautical Society were treated to flights in and out of the event in an Allouette II helicopter and the Dragon Rapide (**see left**). John confirms, "The flight in the Dragon Rapide was a very rare and unforgettable opportunity."

John's own vintage aircraft, the 1935 Aeronca C3, was the oldest aircraft at the event and was put on static display during the morning (**right with the Dragon Rapide in the background**). The Aeronca C3 is based at Petit Airfield.



A similar event is planned for 2017, for which sponsors are being sought. For more information, please contact [John Illsley](#).

## TOP 100 Special Report

We invite you to read Robert Cathro's report from *Flight International* | 13-19 September 2016, which is hyperlinked from the title of this article.

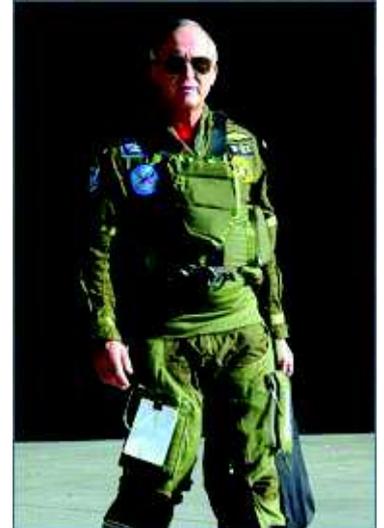
## ANNOUNCEMENTS

### IASSA2016

#### **Des Barker to deliver keynote address**

Maj Gen Des Barker, SM, MM, MSETP, MRAeS, (SAAF, Rtd) will deliver a keynote address, "The Evolution of Jet Fighter Technologies in the SAAF – 1948 to 2016" on 20 October 2016.

Until 2008, Des Barker was an experimental test pilot in the South African Air Force from which he retired as Chief of Air Staff Operations after forty years of service as a military pilot. His specific interest in fighter technologies stems from 35 years of flight testing during which the innovative technological advances introduced by engineers to ameliorate the shortcomings and deficiencies in the SAAF inventory, required considerable experimental and developmental flight testing.



The scope of technologies included the testing of new aircraft, new engines, new avionics and new weapons systems presented by manufacturers for evaluation, with the view retaining the balance of power in southern Africa for the SAAF's fighter inventory.

He is the author of the quintessential book on display flying safety published in 2003: "Zero Error Margin – Display Flying Analysed", which is now recommended reading for all display and aspirant display pilots worldwide.

As a test pilot, he authored a book for general aviation pilots in 2013, "Guidelines for the Flight Testing of Experimental and Homebuilt Aircraft".

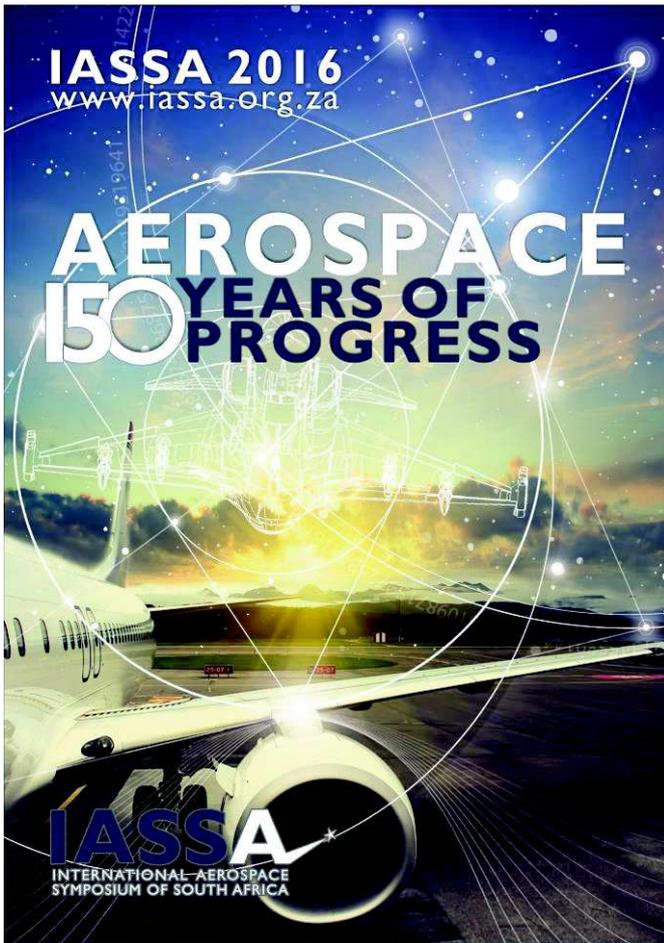
He has published more than 100 papers and articles nationally and internationally on flight testing, aviation safety, display flying safety and air power.

He is currently the Contract R&D Manager at the CSIR and serves as the Vice President of the Society of Experimental Test Pilots (South Africa). He also sits on the Civil Aviation Authority's General Aviation Safety Initiative (GASI). He is a member of the Royal Aeronautical Society. He serves on the board of Airshow South Africa as the safety representative and is an active member of the South African Air Force Reserve.

Considering that he has in excess 7,000 flying hours on 45 different aircraft and has flown all the fighter aircraft types in the SAAF in flight test, Des Barker is eminently qualified to talk on the evolution of fighter jet technologies in the SAAF.

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## Bumper programme lined up for IASSA2016



Strong contributions from industry, academia and science councils have ensured a bumper programme for the 2016 International Aerospace Symposium of South Africa (IASSA2016). This Aeronautical Society of South Africa (AeSSA) annual event takes place at the CSIR International Convention Centre from 20-22 October 2016, in partnership with the Department of Science and Technology, and with hosting support from **the dti's** Aerospace Industry Support Initiative.

Dr Glenn Snedden, President of AeSSA, leads the Technical Committee of IASSA2016. He says, "We are delighted to welcome our two overseas keynote speakers, Karl Rein-Weston and Dr Alex Cenko, who have also committed to participating in the different sessions planned over the two days.

"It is indeed gratifying to see the range and quality of the local contributions, some of which will be presented by students. The technical sessions cover turbomachinery, control, test flight, space launch, AHRLAC and mixed topics. I have no doubt that we are in for two full and very informative two days."

Delegates are reminded of the visit to SANSA Space Operations on 20 October; transport will be supplied for those who have indicated an interest to go by bus.

The panel session, Building a career in aerospace, promises to deliver some interesting insights from the Young Professionals networking event on 19 October, as well as a lively discussion by diverse panel members.

For more information, please visit [www.iassa.org.za](http://www.iassa.org.za)

## RAeS News

### New RAeS Fellows announced

The Aeronautical Society of South Africa (AeSSA), a division of the Royal Aeronautical Society (RAeS), is pleased to announce three recently appointed Fellows of the RAeS: Dr Anton Maneschijn, University of Johannesburg; Lt Col. Ronald Powrie, Chief Engineer, SA Air Force; Prof. Robert Reid, University of the Witwatersrand.

Dr Glen Snedden, President of AeSSA, says, "Our society is well represented through our affiliation with the RAeS and we are pleased to see that the number of Fellows is growing." Fellows are entitled to use the postnominal title, FRAeS, after their names. Please [click here](#) for more details of the requirements for Fellowship.