



A DIVISION OF THE
ROYAL AERONAUTICAL SOCIETY

Newsletter of the Aeronautical Society of South Africa

July 2017

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AeSSA Annual Conference

All the latest information on this event.

RAeS

The website of the Royal Aeronautical Society

Wonders of Aviation

Supports aviation outreach programmes for learners

Message from the President

Dear members

We have introduced a new format in our July newsletter and hope you find it easy to read. Let us know what you think by dropping us an [email](#).

Please take note of the updates on the AeSSA Annual Conference. The pre-events are on 24 October 2017, and the AeSSA Annual Conference runs from 25 to 26 October 2017.

Our AeSSA-branded jackets are quite something! This was Marié Botha's idea and I am very pleased with the outcome. Make sure you order one!

As a summary of this newsletter appears on the left of the page, I shall say no more, other than encouraging you to browse through it.

Kind regards

Glen Snedden

#AerospacePeople: movers and shakers in South African aerospace

Dr Madeleine Combrinck, who featured in AeSSA's June newsletter, has made media headlines in *Mail & Guardian*.

Madeleine was chosen as one of **200 Young South Africans** in the category, **Science and Technology**.

Her profile reads as follows: Dr Madeleine Combrinck is an exceptional engineer who holds the position of chief engineer: aerodynamics at the Armscor research and development division, Flamengo. She has a PhD in mechanical engineering from the University of Pretoria, specialising in aerodynamics. Combrinck sits on the council of the Aeronautical Engineering Society of South Africa and is a member of the technical committee of the South African Ballistics Organisation.

[Read more](#)



Congratulations, Madeleine: you are a wonderful role model for our aspiring aerospace professionals.

Contact Us

Aeronautical Society of
South Africa NPC

Registration number
2000/026325/08

P.O. Box 11928

Die Hoewes 0163

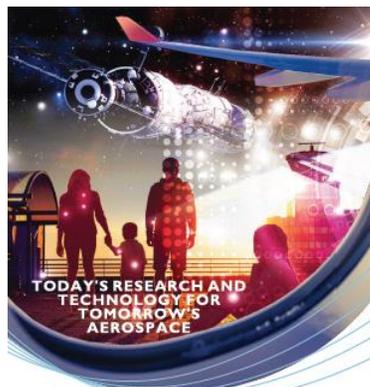
+27 (0) 12 841 4953

info@aessa.org.za

www.aessa.org.za

AeSSA Annual Conference 2017: Updates

The planning of the AeSSA Annual Conference is gaining momentum and the organisers are pleased to share the following updates. Make sure to follow [@AerospaceSA](#)



AERONAUTICAL SOCIETY OF SOUTH AFRICA
ANNUAL CONFERENCE 2017

24 October 2017
IFAR open session
CSIR ICC
25-26 October 2017
AeSSA Annual Conference
CSIR ICC

Register online at
www.aessa.org.za/Conference/index.php



PRE-EVENTS

Young Professionals Forum (*by invitation only*) 24 October 2017, CSIR ICC

Hosted jointly by the AISI (an initiative of **the dti**) and the AeSSA.

For more information, please contact **Busi Nkonki**

IFAR Summit Open Session 24 October 2017, CSIR ICC

Hosted by the CSIR. **NB: Please register for the AeSSA Annual Conference if you wish to attend the open session and the networking function.**

15:00 - 16:00 Empowering Aviation in Africa: panel discussion with the South African aerospace community

16:00 - 17:00 Brainstorming session

17:00 - 20:30 Networking function

AeSSA ANNUAL CONFERENCE 25-26 October 2017, CSIR ICC

Registration for AeSSA Annual Conference 2017

Please register [here](#) to attend the two-day event.

Please note that you must register to attend the Young Professionals Forum and the IFAR Summit Open Session (listed above) and the AeSSA Annual Conference **social events**. More details on dates, times, and the venue for collection of name badges, and the programme will follow.

Submission of a paper for AeSSA Annual Conference 2017

Please submit your papers [here](#) – please pay attention to the instructions on the submission form and consult the [guidelines](#).

Deadline for peer-review papers: 18 August 2017

Deadline for paper submission: 25 August 2017

Social events

Ahrlac, based at Wonderboom Airport, is the venue for the tour and the conference dinner on 25 October 2017. Make sure to book your place for this outing when you [register](#). Transport by bus to the venue will be arranged for registered conference attendees only.

The AeSSA Annual Conference 2017 concludes on 26 October 2017 with a cocktail function hosted by the Young Professionals Forum. This is the time for your final networking before you head back home! Please confirm attendance when you [register](#).

Outreach: Wonders of Aviation delegation 'blown away' by the CSIR's wind tunnels



The Aeronautical Society of South Africa hosted a visit on 3 July 2017 to the CSIR's wind tunnels by a delegation from **Wonders of Aviation**, led by Dy Moonsammy (Chairperson: Executive Committee), who is Senior Manager: Learning and Development at **Comair Limited**. The group also included students, learners and young professionals.

The CSIR's suite of wind tunnels provides an engineering test, measurement and evaluation foundation to the aerodynamic design efforts of the South African aeronautical industry. The CSIR wind tunnels include a closed circuit sub-sonic tunnel, a transonic tunnel, a trisonic tunnel and a large test section open-circuit low-speed tunnel. Read [more](#)

The CSIR's Mauro Morelli introduced the Medium Speed Wind Tunnel; one of the best-equipped and most sophisticated tunnels of its kind in the southern hemisphere, this was first up on the agenda. Dwarfed by the sheer size of the tunnel, the group learnt about the capabilities of this laboratory to simulate flying conditions within the Mach no. range of M 0.2 to M 1.4, and measure loads on airframes. (1 Mach = the speed of sound: 340,29 m/s)

At considerably higher wind speeds (Mach no. range: M0.6 to M4.3), the High Speed Wind Tunnel visit offered an exciting aural and visual experience, expertly introduced and set up by the CSIR's Dr Dave MacLucas and his team, who used flow visualisation to demonstrate these higher speeds.

Three teams were 'blown away' as part of the experiment set up by CSIR's Janine Schoombie in the 7mWT, where wind speeds go from 2 to 32 m/s. The teams measured the tension in the kite line (which is a load at an angle) and had to calculate lift and drag (aerodynamic loads), using the angle of the kite line. Team 2 walked away with the laurels.

With dedication of the CSIR presenters matched by enthusiasm of the visitors, the visit was clearly an unforgettable experience for all.

Upcoming AeSSA outreach event: The 2017 Aerospace Challenge on 14 October 2017 is open to universities and schools. Read [more](#)

AeSSA Lectures: Ovid/ACE

The Development of South Africa's Ovid/ACE, the world's first all-composite turboprop trainer aircraft



This lecture held at the CSIR's Knowledge Commons on 15 June 2017 was presented by Lyle Dodds, OVID/ACE Test Pilot; Gary Corderley, MRAS, Principal Engineer in the Light Metals Competency, CSIR; and John Monk, MRAS, Research Group Leader in the Aeronautic Systems Competency, CSIR.

John covered the history of the aircraft and its aerodynamic design, while

Gary spoke on structural design, manufacture and integration, and Lyle shared information on flight testing of OVID as the SAAF Test Pilot. Robert Speth, who managed the technical aspects of the OVID project, joined many people who had worked on the aircraft, in the audience.

John says, "Despite the fact that the videos we showed were really old and of inferior quality, they provided great insight into the project. Gary was directly involved in the structural design and manufacture of the aircraft, and Lyle Dodds was the SAAF test pilot who flew OVID for most of the first 90+ hours of testing

"I spent 10 months at the Test Flight and Development Centre (TFDC), Overberg, over a period of 18 months during the flight testing and I did the dive brake wind tunnel study."

The talk covered the history up to the point where (the then) Atlas took over the project. There is the possibility that Denel may do a follow-on talk on OVID's next development stages as the New Generation Trainer.

John concludes, "Some of the attendees had not seen one another in years, so a great deal of catching up happened in the foyer before and after the presentations."

Upcoming AeSSA lectures: All lectures are advertised on www.aessa.org.za

16 August 2017 *Marlin*. Presenters: Jaco Botha/Ian Gibbons. Venue: Denel Dynamics

13 September 2017 *CAA UAV regulations*. Presenter: CAA. Venue: tbc

For more information, contact [Kevin Jamison](#)

AeSSA annual award for best final year students



The annual award for 'Best 4th Year or Honours Degree Project' of the Aeronautical Society of South Africa (AeSSA) will be awarded for a second time in 2017. Students at any African university or university of technology are eligible for this award. Submissions may be made by individuals or teams in the final year of a four-year study programme in engineering, science, commerce, law or other disciplines, and whose final-year project focuses on the aerospace domain. The due date for submission is 31 October 2017.

Aspiring students will be required to submit the following:

- A technical report (in English) in the format required by their university
- A hyperlink to a YouTube clip of an audio-visual presentation (in English) of the project
- Contact details of the team leader or sole author

In addition, a supervisor's report with a short motivation (in English) supporting the submission, is required.

For more information, send an [email](#).

RAeS news: Corporate Partners briefings

A full programme of Corporate Partner Briefings for the remainder of this year appears below.



Monday 11 September 2017

Brexit – sleepwalking to disaster

Guest speaker: Chris Chalk, Global Aviation Practice Leader, Mott MacDonald and Vice Chairman, British Aviation Group

[Click here to make a booking or view this event online](#)

Monday 2 October 2017

Punching above our weight – the role of Flybe and the regional airline industry in a rapidly evolving European airline market

Guest speaker: Christine Ourmières-Widener FRAeS, Chief Executive Officer, Flybe

[Click here to make a booking or view this event online](#)

Wednesday 8 November 2017

Partnering with UK MOD to deliver weapon capability now and into the future

Guest speakers: Keith Garden BA FRAeS, Portfolio Programme Director & Deputy MD UK and Rear Admiral Simon Charlier CBE FRAeS, Senior Defence & Political Adviser UK, MBDA Missile Systems

[Click here to make a booking or view this event online](#)

Thursday 23 November 2017

Title tbc

Guest speaker: John Slattery FRAeS, President & CEO, Embraer Commercial Aviation

[Click here to make a booking or view this event online](#)

Corporate Partner Briefings take place at the Royal Aeronautical Society headquarters, No.4 Hamilton Place, London W1, UK, and the programme for each of the above events will be as follows:

4.30pm	Refreshments & registrations
5.00pm	Briefing & discussion
6.00pm	Reception
7.00pm	Finish

Gail Ward, RAeS Events Manager – Corporate & Society, explains: "Attendance at these events is free of charge and an exclusive benefit of RAeS corporate membership. As a Corporate Partner of the Society, any employee of your organisation is entitled to register. Please follow the 'Book Now' link on the relevant event listing to access our online booking system, ensuring that you are logged in to your personal and not your corporate partner account."

AeSSA-branded jackets on sale

We take pleasure in offering you an Aeronautical Society of South Africa-branded Hi-Tec jacket (see pdf attached) for sale.

All members have the opportunity to buy one jacket at a 50% discounted price. Should you wish to purchase additional jackets at the full price, please send an **email** to info@aessa.org.za to request the price list. Purchasing of jackets for non-members can be arranged, following the successful application to the Aeronautical Society of South Africa. Membership forms are available at www.aessa.org.za



All jackets feature the logos of both the Royal Aeronautical Society as well as the Aeronautical Society of South Africa, as displayed on the *Lady Neri insulated vest* (left). As the AeSSA has secured a limited number of these items, you are encouraged to forward details below (1&2) to info@aessa.org.za with the following information:

1. Jacket style e.g. *ORION 3 in 1 Jacket*.
2. Size (M, L, XL, 2XL, 3XL, 4XL)

Your jacket can be collected from Liza Barnard, Building 12, CSIR, Meiring Naudé road, Brummeria. Postage can be arranged at a minimum cost of R100 per item; please supply the address of your closest Postnet office.

NB: No items can be exchanged after delivery.

ECSA vs the Engineering VAs

The South African Institute of Civil Engineering (SAICE) hosted a talk titled: *ECSA vs the Engineering VAs*, on 22 June 2017. The talk provided an opportunity for the voluntary associations (VAs) to engage with members in an open discussion about:

- 1) their relationship with the Engineering Council of South Africa (ECSA);
- 2) the impact of the ongoing litigation on both parties; and
- 3) the future of the engineering profession and industry in the country.

The discussion was led by a panel comprising SAICE CEO Manglin Pillay; Consulting Engineers South Africa (CESA) CEO Chris Campbell; Former Council member and Central Registrations Chair Dr Titus Mathe and Former SAICE President Mike Deeks. The discussion was facilitated by Sean O'Beirne.

An invitation was extended to ECSA to be part of the discussions; however, the invitation was declined.

The entire session was video recorded and can be viewed by clicking below.

[Highlights and interviews](#)

[Full version](#)

