



AERONAUTICAL SOCIETY OF SOUTH AFRICA

A DIVISION OF THE ROYAL AERONAUTICAL SOCIETY



WEDNESDAY, 22 JULY 2026

VENUE: ROOM 1 - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

08:00 – 09:00

REGISTRATION AND WELCOME COFFEE

Session chair: Michael Atkins

09:00 – 09:15

Opening Remarks - AeSSA President

Michael Atkins

09:15 – 10:00

KEYNOTE - Testing the Integration of the ACEPOD with the BAE Hawk Aircraft

Mr K Jamison; Lt Col J. Swanepoel; Lt Col G.S. Cooper

10:00 – 10:30

About the **AISI**

Natasha Botha

10:30 – 11:00

Early-Stage Multidisciplinary Aircraft Optimisation Using AeroSandbox and Differential Evolution

Adam Venter

11:00 – 11:30

COFFEE AND TEA

Session Chair: Marié Botha

11:30 – 12:00

Development and Flight Test Validation of a Climb Performance Model for a Light Sport Aircraft

TTim King

12:00 – 12:30

Sailplane Wing Root Aerodynamic Improvement Using CFD Geometry Optimisation

Attie Jonker

12:30 – 13:00

Exergy-Based Aerodynamic Optimization of Airfoil Profiles Using Far-Field Wake Analysis and Adjoint Sensitivities

Adam Venter

13:00 – 14:00

LUNCH

Session Chair: Johan Van der Spuy

14:00 – 15:00

KEYNOTE - Unexpected Discoveries in High-speed Aerodynamics: Stories from Experimental-Computational Collaboration

Dr Kshitij Sabnis

15:00 – 15:30

Micro-Gas Turbine Combustor Dome Shape Investigation

Bronwyn Meyers

15:30 – 16:00

A Fixed-pitch Propeller Design and performance Evaluation Tool for a Free Turbine, Micro Turboprop Application

Hano van Eck

16:00 – 16:30

Operationalising Collaborative Multidisciplinary Design Analysis and Optimisation

Mamokete Makhubo

16:30 – 17:00

ATAR 09K50 Engine Product Support & Upgrades

Gert Jansen van Rensburg



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WEDNESDAY, 22 JULY 2026

VENUE: ROOM 2 - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

11:00 - 11:30

COFFEE AND TEA

Session Chair: Kevin Jamison

11:30 - 12:00

Active Flow Control (AFC) Test Rig to Demonstrate Manoeuvring of an Aircraft with no Moving Control Surfaces.

Sagale Sodi

12:00 - 12:30

Investigation of Tip-Region Flow Anomalies Induced by Blade Flexure in a Low-Speed Single-Stage Turbine

Haseebullah Tajoodien

12:30 - 13:00

Evaluation of MULTALL-OPEN CFD capabilities using a low-speed model turbine

Darshan Nariansamy

13:00 - 14:00

LUNCH

Session Chair: Johnnie Van den Berg

15:00 - 15:30

AISI - Development of a Spectrum Monitoring Payload for Small Satellites

Dr Ewald van der Westhuizen

15:30 - 16:00

AISI - Navigation Antennas for Small Satellites in Low Earth Orbit

Vernon Davids

16:00 - 16:30

Will the Blended Wing Body Configuration disrupt the Airline Industry?

Joachim Huyssen

16:30 - 17:00

Area, Perimeter and Roughness Analysis of Additively Manufactured Cooling Channels for Aerospace Systems

Mathew Reynolds



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THURSDAY, 23 JULY 2026

VENUE: ROOM 1 - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

08:00 – 09:00

COFFEE AND TEA

Session chair: Michael Atkins

09:00 – 10:00

KEYNOTE - The Future of Aviation Talent: Universities, Industry and the Next Generation of Professionals

Prof Angelo Dube

10:00 – 10:30

Regulatory Fragmentation and Dispute Settlement in African Aviation: Implications for Market Integration under SAATM

Arthur Shirichena

10:30 – 11:00

System Safety Engineering: A Critical Foundation for the South African Aviation Industry

Sharon Dineo Matloga

11:00 – 11:30

COFFEE AND TEA

Session Chair: Gert Jansen van Rensburg

11:30 – 12:00

Airbus in Africa

Stephen Duley

12:00 – 12:30

Cape Winelands Airport - Aerospace Village

Brad Mears

12:30 – 13:00

UAS in Action: Advancing Public Safety Through Integrated Digital Twin and Command-and-Control Capabilities

Andrew Mortimer

13:00 – 14:00

LUNCH

Session Chair: Johnnie Van den Berg

14:00 – 15:00

KEYNOTE - Chasing Light in the Air, The Art, Precision, and Trust Behind Air-to-Air Aviation Photography

Justin de Reuck

15:00 – 15:30

AISI - Beyond Assembly: Building Sovereign Autonomous Aerospace Capability in Africa

Amit Ramdath

15:30 – 16:00

Structural Durability and the Shifting Retirement Boundary: Extended Service Goal Programmes as a Strategic Lever for African Narrow-Body Fleet Growth

Des Warden

16:00 – 16:30

A Comparison of Two Advanced Manufacturing Techniques for Efficient Aerospace Design

Micaela Davids

16:30 – 17:00

Laser Peen Forming for Deformation Correction in Aeronautical Structures

Carina de Assis Lopes



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THURSDAY, 23 JULY 2026

VENUE: ROOM 2 - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

Session Chair: Marié Botha

10:00 – 10:30	The Development of a Propeller, Reduction Gearbox, and a Driveshaft Layout for a 35 kW Turboprop Micro Gas Turbine Engine	Tanaka Gilbert Matikiti
10:30 – 11:00	Engine Cycle Model for Micro Gas Turbine to Establish Combustor Boundary Conditions	Jacques de Klerk

11:00 – 11:30 **COFFEE AND TEA**

Session Chair: Johan Van der Spuy

11:30 – 12:00	Principal Component Analysis in Launch Vehicle Preliminary Design: Methodology and Open-Source Implementation	Marco Mariola
12:00 – 12:30	Cryogenic Chill-down Optimization Comparing Pulse and Continuous Flows in Rocketry Ground Support Equipment	Hermanus Richard Jacobs
12:30 – 13:00	Methodology for the Numerical Analysis of Solid Rocket Motors	Kevin Brian Long

13:00 – 14:00 **LUNCH**

Session Chair: Kevin Jamison

15:00 – 15:30	An Experimental Investigation of Liquid Rocket Engine Injector Element Geometries	Xolile Malembe
15:30 – 16:00	Development of an Impulse Turbine for a Commercial Rocket Engine Turbopump	Steffan Brundyn
16:00 – 16:30	Development of a Small-Scale Rocket GNC Flight Testing Platform	Gianpaolo Generoso Baisch
16:30 – 17:00	Atomisation Modelling of a Liquid Rocket Engine Injector	Jordan Bradley Marshall



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FRIDAY, 24 JULY 2026

VENUE: **ROOM 1** - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

08:00 – 09:00

COFFEE AND TEA

Session chair: Michael Atkins

09:00 - 10:00

KEYNOTE - The History of Flight Testing in South Africa

Lt Col (Ret) J.C.
Meyer

10:00 – 10:30

The Influence of AI on Future Aircraft Maintenance
Doctrine, Procedures and Processess.

Alan Nelson

10:30 - 11:00

Integrated Design, Modelling, Control and Embedded
Development of a Spin-Lift Variable-Pitch Unmanned
Aerial Vehicle

Rivoo Bagchi

11:00 - 11:30

Systematic Configuration and Dynamic
Validation of the X-500 V2 Quadcopter

Hlamulo Ndlovu

12:00 - 13:00

LUNCH

VENUE: **ROOM 2** - PROTEA HOTEL STELLENBOSCH, TECHNO PARK, STELLENBOSCH

Session Chair: Gert Jansen van Rensburg

10:00 – 10:30

Weather Intelligence as Aviation Infrastructure: Enhancing
Flight Safety and Airspace Efficiency in Africa through
Aeronautical Meteorology

Menthiam Sebesho

10:30 - 11:00

Advanced Air Mobility: South Africa's Opportunity to
Lead Africa's Next Aviation Revolution

Adrian Niken

11:00 - 11:30

Pitch Moment During Acceleration Flight

Irshaad Mahomed

12:00 - 13:00

LUNCH



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VOTE OF THANKS

Our sincere thanks to the employers of our Council members for supporting their voluntary service to AeSSA. Your willingness to invest in professional leadership enables the Society to continue serving and strengthening South Africa's aerospace community.



Where Passion Finally Achieves Results

