



2019 Annual Report

An aerial, low-angle photograph of a city skyline, featuring several tall skyscrapers and a prominent circular building. The image is overlaid with a semi-transparent teal color, creating a monochromatic effect. The buildings are arranged in a way that suggests a dense urban environment.

Declaration of the Responsible Body

20 March 2020

This annual report has been produced in accordance with FRD 30C Standard Requirements for the Design and Production of Annual Reports, in order to minimise our impact on the environment. Further information about the Sir Lawrence Wackett Centre is available at <https://sites.rmit.edu.au/Defence/>

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FIRST PEOPLES' ACKNOWLEDGEMENT

Sir Lawrence Wackett Centre RMIT would like to acknowledge Melbourne's Traditional Custodians, the Woivurrung and the Boon Wurrung of the Kulin Nation, and pay respect to their Elders, both past and present. We also acknowledge the ongoing and significant partnership maintained between the Victorian Koorie community and RMIT. Together we share the stories of over 38 distinct language groups, celebrating the culture and history of Victoria's First Peoples.

Message from the Deputy Vice Chancellor, College of Science, Engineering and Health



In response to the Defence White Paper of 2016 and Australian Government policy, RMIT has made a strong commitment to growing an Australian high-tech economy by establishing the Sir Lawrence Wackett Centre as RMIT's Defence flagship to support industry capability development, workforce reskilling and upskilling, and vocational and higher education. The Centre was formally launched by the Vice Chancellor, The Deputy Chief of Air Force and the Chief Defence Scientist at the 2019 Avalon Airshow. The Centre's aim is to bridge the gap between university, industry and government by bringing together and supporting interdisciplinary teams of experts across engineering, science, technology, health, design, social sciences and business to work side-by-side with our industry partners to help achieve sustainment of Australian SMEs. RMIT is well placed to lead the way in Defence with established strengths that strongly align with the key Defence priorities. Furthermore, the University has a long history of providing education and training for Defence and more recently, a strong record of success in large scale Defence-funded research and development.

RMIT's history in the Defence Sector in Australia dates back to World War II. At that time, the University was known as the 'Melbourne Technical College' and it is reported that more than 23,000 service personnel were trained, mostly in communications and munitions production. RMIT University has provided vocational education and training to the Australian Defence Forces in the areas such as Aerospace Engineering, Aviation Management, Reliability Engineering, Small Business

Management, Logistics and Nursing. RMIT was awarded royal patronage by Queen Elizabeth II for its educational service to the Commonwealth and contribution to the war effort.

We look forward to continuing RMIT's strong association with Defence and industry, nationally and internationally, through the efforts of the Sir Lawrence Wackett Centre.

Professor Aleksandar Subic

Deputy Vice-Chancellor, College of Science, Engineering and Health

“

RMIT is well placed to lead the way in Defence with established strengths that strongly align with the key Defence priorities.

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Message from the Director



As RMIT continues to extend the reach of our excellence throughout Australia and abroad, the Sir Lawrence Wackett Centre was launched at the Avalon Airshow in 2019 as a university-industry hybrid centre to support Defence and industry growth. The Centre enjoyed a record-setting year that illustrates our financial strength and positions us for even greater societal impact.

This past year our Centre has reached significant milestones, all with the intention of supporting the transformation and growth of Australia's Defence, Aerospace, and Transport Systems industries, while encouraging our students, researchers and academic staff to be changemakers.

Our industry volume totalled more than \$18 million in the most recent fiscal year, which

is the largest amount for any RMIT Centre. Our Centre was instrumental in establishing significant new relationships between the university and local and international industries and government.

The continued growth of RMIT's research enterprise demonstrates that the Centre is creating partnerships that are producing innovations that can address some of the world's most pressing questions and challenges. In addition, our researchers have achieved significant milestones in the translation of their research to the market and have been recognised for their achievements winning awards for Defence Scientist of the Year, Geospatial Research Institute of the Year, and Small Business Innovation Research for Defence.

All these relationships contribute to our success as a Centre and as a worldclass university. The partnerships our Centre fosters are ensuring that communities throughout society benefit from our activities.

RMIT has been a leader and a changemaker since 1887, and the Sir Lawrence Wackett Centre is continuing that tradition for many years to come.

Professor Michelle Gee
Director, Sir Lawrence Wackett Centre

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... the Centre is creating partnerships that are producing innovations that can address some of the world's most pressing questions and challenges.

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Sir Lawrence Wackett Centre

The Sir Lawrence Wackett Centre, at RMIT University, supports the transformation and growth of Australia's Defence, Aerospace, and Transport Systems industries. We work with organisations to build globally competitive and sustainable Australian industries delivering trusted technology, business solutions, and workforce skills development.

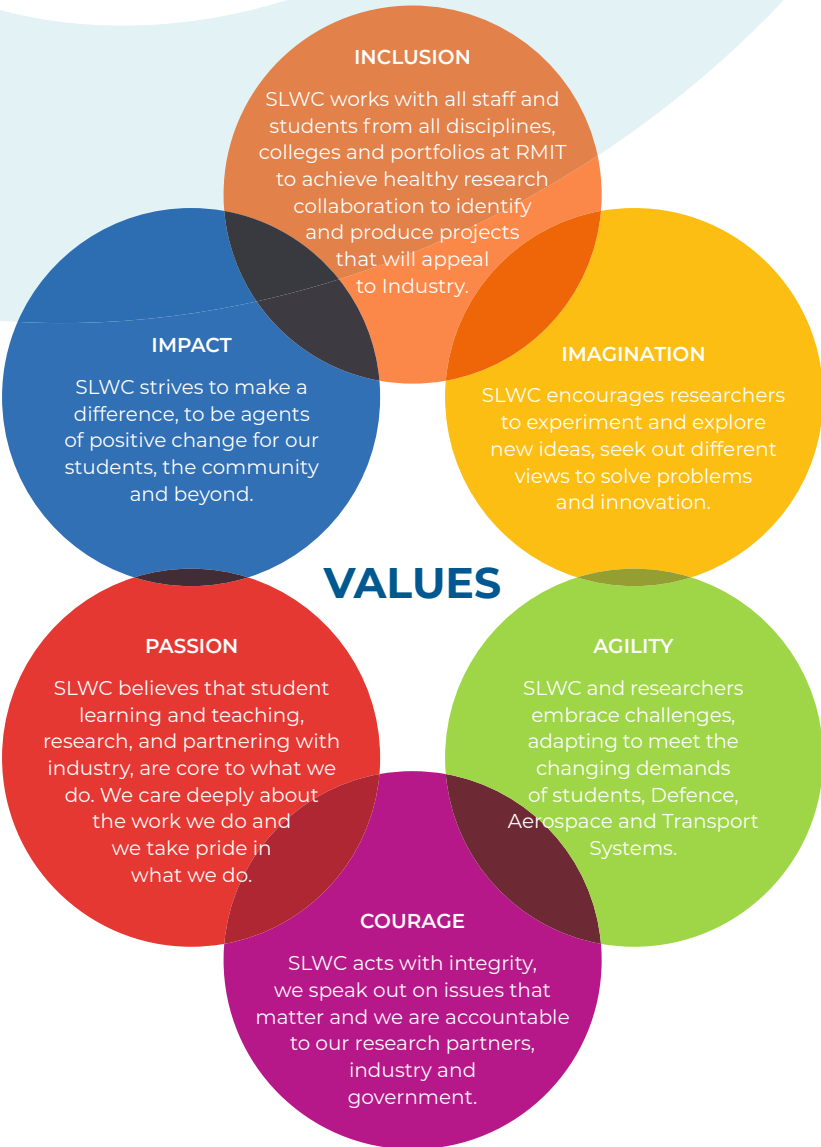
We have expertise in every stage of product development from concept, design and testing, to policy, and implementation. Through our commitment to industry best practice, transdisciplinary collaboration and cross-sector partnerships, we support the growth of Australia's high-tech economy.

Vision

The Sir Lawrence Wackett Centre fosters an environment of trust and leads the University to support transformational growth of Aerospace, Defence and related high technology industries in Australia.

Mission

Supporting transformational industrial growth by delivering high quality technological solutions, providing expert advice and developing human capability in an environment of university-wide multidisciplinary collaboration with trust, industry values, practice and enterprise embedded in everything we do.



The Centre's Strategic Framework

Strategic Objectives:

- 1 To provide the best support and facilities for our staff and students
- 2 To provide industry partners with the best technology and training solutions
- 3 To play an important public role as a valued organisation that supports the community and Australian economic development

Capability

POLICY, ETHICS AND LAW

- Global technology policy and regulation
- Ethics
- National and international law
- Human development
- Global business innovation
- Alternative applications and knowledge sharing
- Security and peace studies
- Procurement
- Health law and policy



WORKFORCE SKILLS DEVELOPMENT

- Naval shipbuilding skills
- Trade for manufacture, maintenance and logistics
- Aviation management, aeronautics and aerospace systems
- Pilot and UAV flight training
- Design and airworthiness of aircraft and UAVs
- Defence health and nursing
- System support engineering
- Simulation for team and individual training
- Digital manufacturing and Industry 4.0
- Tailored short courses

MULTIFUNCTIONAL MATERIALS AND ADVANCED MANUFACTURING

- Composites technologies
- Lightweighting
- Micro- and nano- materials
- Alloys
- Fabrics and textiles
- Additive and subtractive manufacturing
- Design, testing and manufacture



EDUCATION AND TRAINING

- Sector-tailored masters programs
- Defence Science and Engineering Masters and Undergraduate streams
- Cross-disciplinary sector-focussed streams
- Aviation, Engineering, Science, Management, Design
- Micro-credentials intensive courses



TRANSPORT, INFRASTRUCTURE, POWER AND ENERGY

- Traffic management and control
- Through-life support
- Civil infrastructure
- Logistics, optimisation and supply chain
- Hypersonics, energy conversion and propulsion
- Sustainability
- Energy harvesting and storage

DATA, INFORMATION AND COMMUNICATIONS

- Data analytics, data fusion, machine learning
- Network design and security
- Quantum technologies
- Cyber systems, cryptology and data security
- Wireless communication
- Geospatial data



TRANS-DISCIPLINARY DESIGN AND VIRTUAL PROTOTYPING

- Engineering systems and structures
- Industrial and environmental design
- Transport Systems
- Virtual design
- Modelling and simulation
- Life-cycle analysis
- Product design



BIOTECHNOLOGIES, HUMAN PERFORMANCE AND PROTECTION

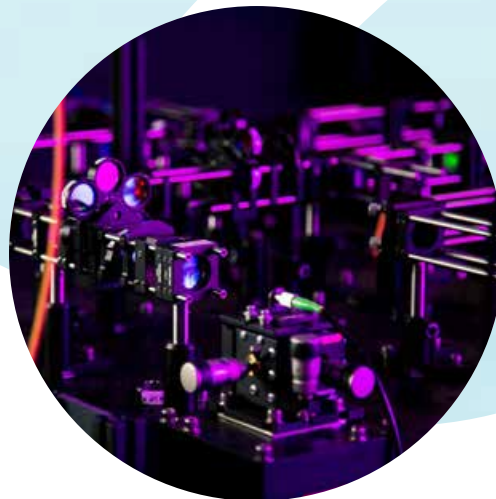
- Human factors
- Medical and biomedical countermeasures
- Preventative medicine
- Food technologies
- Human protection and comfort
- Physical and cognitive performance and functions
- Protective clothing

AUTONOMY AND AUTOMATION

- Human-machine interface
- Mechatronics
- Artificial Intelligence
- Autonomous systems and unmanned vehicles
- Navigation and collision avoidance
- Optimisation and operations management

REMOTE AND EMBEDDED SENSORS

- Antennas
- Radar and sonar
- Remote imaging
- Photonics
- Situation awareness
- Surveillance and detection
- Environmental and tactile sensing

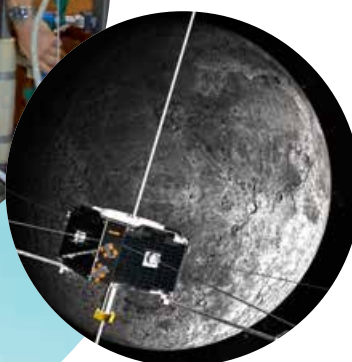


SPACE SYSTEMS

- Satellite technologies, tracking and positioning
- Remote sensing and remote communications
- Propulsion
- Weather and geospatial sciences
- Spacesuits and clothing
- Space debris monitoring and modelling



European Space Agency astronaut Andreas Mogensen wearing the SkinSuit on board the International Space Station. Photo: European Space Agency.



2019 Year in Review

The Wackett Centre at RMIT established significant new relationships between the university and local and international industries and government partnerships and programs for R&D and workforce training. New partnerships included contracts with Elbit Systems led by Dr Matt Marino, and Thales Alenia Space led by Associate Professor Suelynn Choy. Professor Cees Bil and Associate Professor Kate Fox are part of a multi-university team that was awarded a Medical Research Future Fund grant to build medical diagnostics into helicopters. The US Airforce funded new projects on Bioinspired Control of Unmanned Aerial Vehicles (led by Professor Simon Watkins), and Nanoscale biophotonics (led by Professor Brant Gibson).

Other new partnerships include R&D programs with the Royal Australian Airforce and the Australian Department of Defence. RMIT researchers Professors Stuart Bateman, Adrian Mouritz and Adrian Orifici and team won 4 of the 7 Small Business Innovation Research for Defence (SBIRD) program awards for integrating advanced materials onto military platforms.

Of note are the Trusted Autonomous Systems (TAS) Corporate Research Centre (CRC) projects:


1. Trusted Scalable Search with Expendable Drones is a joint DefendTex-led with RMIT University, the University of Melbourne, and the Department of Defence Science and Technology (DST) where the teams were set to compete in the USA on the Defense Advanced Research Projects Agency (DARPA) Subterranean Challenge. The Challenge was tasked with seeking novel approaches to rapidly map, navigate, and search underground environments during time-sensitive combat operations or disaster response scenarios.
2. Distributed Autonomous Spectrum management (DUST), led by Consunet Pty Ltd with RMIT University, the University of Melbourne, the University of Sydney and DST aims to research, develop and demonstrate near real-time autonomous spectrum management to deliver cost savings for Australian Defence and commerce.

The Centre was also successful in acquiring a \$5.2M Defence contract for the joint RMIT and Defence Science and Technology Group (DSTG) chair of structures and materials collaborative program and a strategic partnership with The Australian Transport Safety Bureau (ATSB).

RMIT's Centre for Additive Manufacturing, led by Professor Milan Brandt is the lead university in a new Cooperative Research Centres Projects (CRCP) with DefendTex and is a member of the new Smart Sat CRC, Australia's largest CRC.

RMIT University was named Geospatial Research Institute of the Year by the Geospatial World Forum. Professor Roberto Sabatini, Deputy Director of the Sir Lawrence Wackett Centre, was named Defence Scientist of the Year at the inaugural Defence Industry Awards. The RMIT-led rocket team, HIVE, won the Australian Universities Rocket Competition at Thunda Down Under.

RMIT's School of Engineering researchers, Dr Matthew Marino, Dr Abdulghani Mohamed and Dr Alex Fisher in partnership with DSTG were nominated for a National Defence Innovation Award at the Avalon International Airshow for their waterproof drone, known as the Black Kite, a world-first drone for maritime applications.

 <https://www.rmit.edu.au/research/research-institutes-centres-and-groups/multi-partner-collaborations/trusted-autonomous-systems>

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RMIT researchers Professors Stuart Bateman, Adrian Mouritz and Adrian Orifici and team won 4 of the 7 Small Business Innovation Research for Defence (SBIRD) program awards for integrating advanced materials onto military platforms.

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The RMIT-led rocket team, HIVE, won the Australian Universities Rocket Competition at Thunda Down Under.

*Geospatial Research
Institute of the Year*

*Photo by NASA
on Unsplash*



Highlights and Awards

DEFENCE CONNECT WRITE UP

RMIT supports the Australian Defence and Aerospace industries through the Sir Lawrence Wackett Centre by specialising in innovative capability development, policy advice, industry-focused courses and workforce training. The Centre was officially launched at the Avalon International Airshow 2019.



Royal Australian Airforce Air Vice-Marshal Gavin Turnbull AM; RMIT Director Sir Lawrence Wackett Centre, Professor Michelle Gee; RMIT Vice-Chancellor and President Martin Bean CBE; Acting Chief Defence Scientist Dr Todd Mansell and RMIT Professor Industry Fellow (Defence) Dr Ken Anderson at the launch.

AVALON INTERNATIONAL AIRSHOW 2019

The Australian International Airshow and Aerospace & Defence Exposition is one of Asia-Pacific's most prestigious events and the most comprehensive Aviation, Aerospace and Defence exposition in the Southern Hemisphere.

RMIT's and the Centre's presence included an outdoor marquee, al fresco area and indoor stand complete with RMIT designed 3D printed stools, model planes and big screen showcasing Defence research and projects.

The 2019 Show broke exhibitor and trade day attendance records.



The Centre's stand with big screen and 3D printed stools at Avalon International Airshow 2019

RMIT AEROSPACE ENGINEERS BUILD THE FIRST AUSTRALIAN SINGLE PILOT HOVERCRAFT FOR RECREATIONAL FLIGHT

A team of Aerospace engineers (staff and students) represented Australia in Boeing's worldwide GoFly competition worth \$1 million USD, with their entry on display at Avalon Airshow 2019.

RMIT Senior Lecturer Dr Graham Dorrington, who is overseeing the prototype's development, said "the team are blazing a trail by producing the largest personal electric flying vehicle in Australia".



RMIT GoFly Team at the Avalon Airshow 2019

ATSB AND RMIT PARTNER IN TRANSPORT SAFETY INVESTIGATION

The Australian Transport Safety Bureau (ATSB) announced a strategic partnership with RMIT that will see the University offer Transport Safety Investigator qualifications.



RMIT Associate Dean of Engineering, Aerospace Engineering and Aviation, Professor Pier Marzocca; ATSB Commissioner Chris Manning; RMIT Vice-Chancellor and President Martin Bean CBE; and ATSB Program Advisor Linda Spurr at the Strategic Partnership Agreement signing.

DEFENCE AND RMIT JOIN FORCES IN RESEARCH ON ADVANCED MATERIALS

DST and RMIT University signed a new four-year collaboration agreement to undertake experimentation and testing on advanced materials and structures that will benefit the sustainment of future Defence platforms.



L-R Prof Calum Drummond DVC R&I RMIT and Acting CDS Todd Mansell.

RMIT AND THE UNIVERSITY OF SHEFFIELD FORM A NEW PARTNERSHIP ON ADVANCED MANUFACTURING

RMIT and the Advanced Manufacturing Research Centre (AMRC) at the University of Sheffield entered a partnership for research collaboration and expertise exchange across advanced manufacturing and engineering disciplines.

Under a Memorandum of Understanding formalised at the Formula 1 Australian Grand Prix in Melbourne, the two universities will conduct industry-driven research that is relevant to a range of problems in advanced manufacturing.



RMIT's Advanced Manufacturing Precinct

RMIT UNIVERSITY NAMED GEOSPATIAL RESEARCH INSTITUTE OF THE YEAR FOR 2019 BY THE GEOSPATIAL WORLD FORUM.

The Geospatial World Leadership Awards announced in Amsterdam, recognise the professionals and organisations making an outstanding contribution to the global geospatial industry.



Professor Mark Shortis was part of a NASA team testing better ways to capture solar energy on the International Space Station. Photo: NASA.

RMIT'S PROFESSOR ROBERTO SABATINI NAMED DEFENCE SCIENTIST OF THE YEAR

Professor Roberto Sabatini, recognised for his work in Defence research, was named Defence Scientist of the Year at the inaugural Defence Industry Awards 2019, held in Canberra at the end of September.

Sabatini was commended for his leadership in research translation and for many years of hard work, passion and commitment to establish and grow the RMIT Cyber-Physical Systems Group.



Professor Roberto Sabatini at the Awards ceremony in Canberra ACT September 2019

Projects and Partnerships

RMIT STUDENT LED ROCKET TEAM WINS AT NATIONAL COMPETITION

HIVE is RMIT's student-led, multidisciplinary rocketry team comprised of over 50 students. HIVE was initially formed as an entrance to the inaugural Australian Universities Rocket Competition (AURC) where it placed first in the 30,000ft category.

In 2019 HIVE designed and built a rocket to fly just over 9 km in altitude winning the Australian Universities Rocket Competition at Thunda Down Under.



RMIT's student HIVE Team

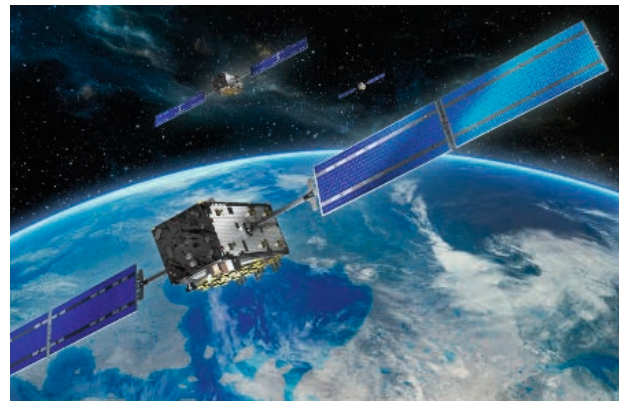
RMIT J-ARVIS LOCKHEED MARTIN SPONSORED A.I. DRONE RACING INNOVATION CHALLENGE

AlphaPilot teams battled it out at the Artificial Intelligence Robotic Racing (AIRR) Circuit for a chance at winning a \$1 million cash prize, sponsored by Lockheed Martin. An additional \$250,000 reward was given to the first team whose autonomous drone pushed the limits of performance between man and machine.



GPS SIGNALS TO MEASURE AIR MOISTURE FOR BETTER WEATHER PREDICTIONS

Scientists used GPS signals to measure air moisture for better weather predictions. The RMIT University, Geoscience Australia and Bureau of Meteorology (BoM) collaboration harnessed the growing network of GPS receivers to provide more accurate, real time weather forecasts. Following successful trials across Australia, the method is now part of BoM's weather forecast models.



Galileo Satellites



DRONE TECHNOLOGY AND UBER AIR TRIAL

Melbourne was named third city to test the aerial ride sharing scheme colloquially known as “flying taxis”. Regulatory bodies and invested parties actively establish relationships with research institutions including RMIT in the effort to make Uber Air a reality. The design of the passenger-carrying drone was looking both innovative and promising, with civil engineering firms also showing significant interest and investment, with ports planned for new high-rise buildings.

*The aerial ride sharing
scheme “flying taxis”.*



NEW RESEARCH AGREEMENT WITH THALES ALENIA SPACE

A joint research agreement to define a Precise Point Positioning (PPP) service channel and standardisation of message format for use in the spatial information and positioning business sector was signed in Melbourne by Thales and RMIT University.

Benoit Broudy, VP Navigation Domain, Thales Alenia Space, said, "Thales Alenia Space is pleased to combine its complementary skills with RMIT to develop, deliver and sustain leading edge precise positioning solutions".



Spotlight on our researchers and research translation



PROFESSOR ALLISON KEALY

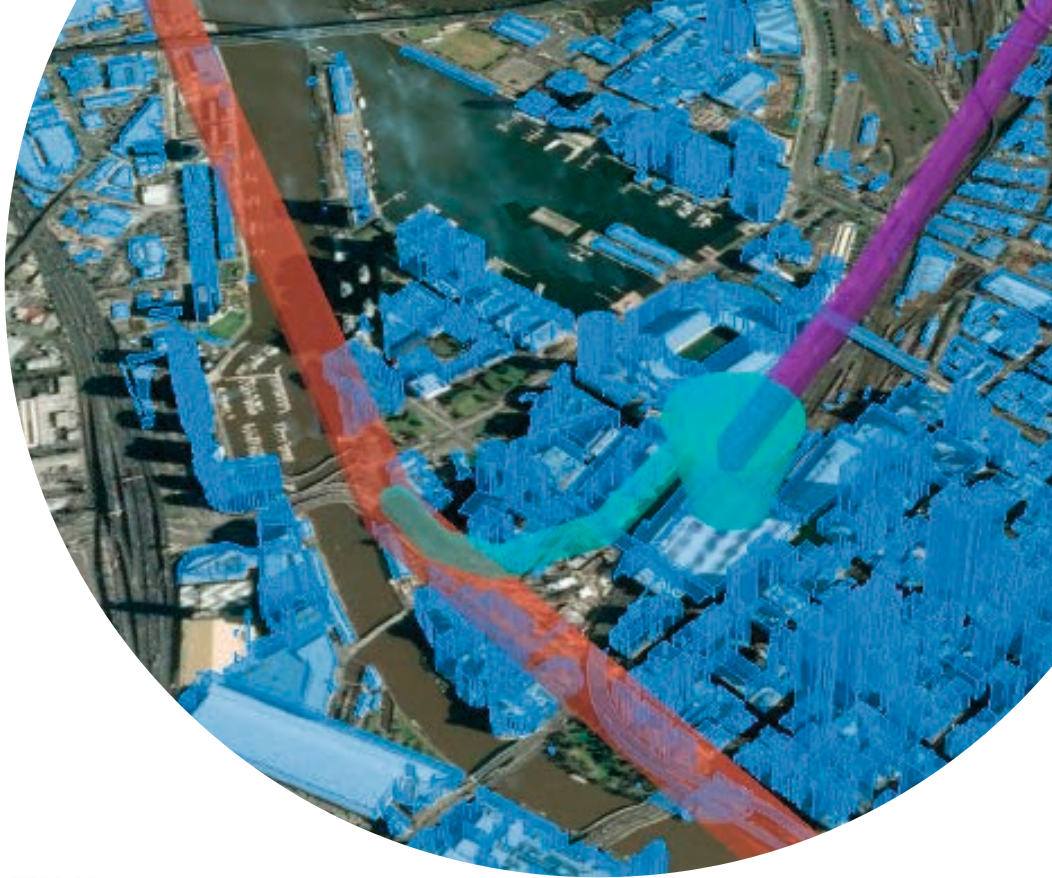
Resilient, Autonomous Mission Execution in GPS/RF Denied Environments.

The project will develop and demonstrate principled mathematical scheduling and estimation models for autonomously navigating and locating teams of Unmanned Aerial Vehicles.

The collaboration has brought together a multi-disciplinary team from Plan Jericho, Defense Science Institute (DSI), RMIT University and the University of Melbourne combining expertise across Signal Processing and Electrical Engineering, Aerospace Engineering, Mathematics, Geospatial Science and Mechanical Engineering.

Unmanned Aerial Vehicles





PROFESSOR ROBERTO SABATINI

Professor Sabatini and his group have contributed to national and international initiatives in the field of Avionics/Mission Systems, UAS Traffic Management (UTM), ISR/CNS Satellite Systems, Space Situation Awareness and Space Traffic Management. Significant contributions were provided by the CPS Group to the RMIT team that led the successful bids for the SmartSat CRC. Areas of strength for the CPS Group include:

- Intelligent Satellite Systems – Development of next generation systems to enable intelligent behaviour and autonomous decision making and operation by satellites and satellite constellations (artificial intelligence and machine learning software solutions). Novel systems for detection and characterisation of threats from Resident Space Objects (RSO) including autonomous capability and Space Traffic Management (STM).
- Advanced Communications, Connectivity and Internet of Things (IoT) Technologies – Development of algorithms and technologies for laser communication links with high data transfer rates. Development of adaptive intelligent radio technology allowing sensing and flexible use of spectrum. Development of systems that allow seamless connectivity between satellite and terrestrial communications.
- Next Generation Earth Observation (EO) Services – Development and delivery of industry specific EO analytics products and services for: agriculture/horticulture/aquaculture, mining and resources, and transport and logistics.

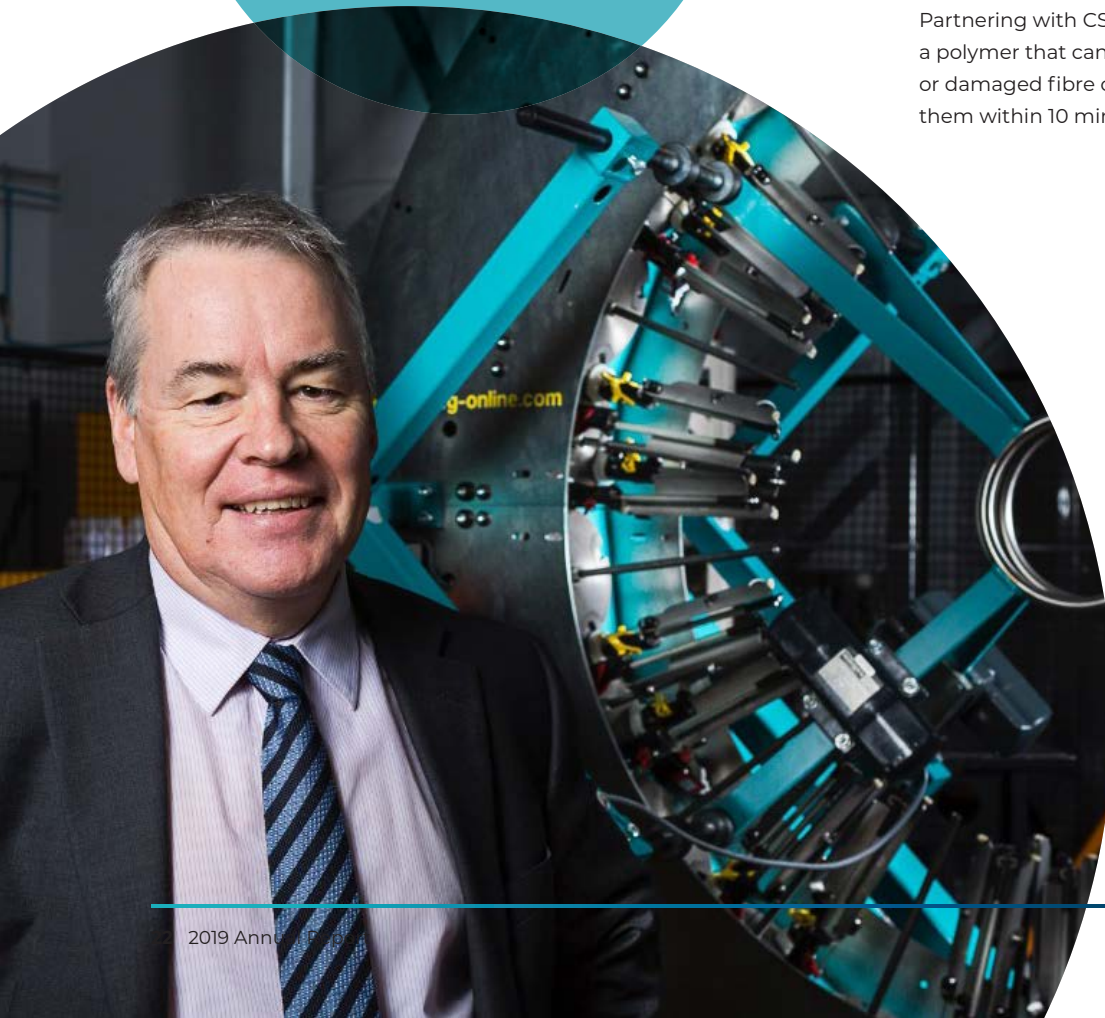


PROFESSOR ADRIAN MOURITZ

Ships that repair themselves best line of defence

The research led by Professor Adrian Mouritz and funded by the Australian Department of Defence and the US Navy, effectively allows ships to repair themselves while at sea. Partnering with CSIRO, Mouritz is developing a polymer that can be squirted onto cracked or damaged fibre composite surfaces to repair them within 10 minutes.

*Professor Adrian Mouritz
with a carbon fibre loom*





PROFESSOR ADRIAN ORIFICI

Industry 4.0 comes to Defence

Bold new research shows how sensors and artificial intelligence can revolutionise the way Defence technology is managed. RMIT University engineers have developed a radical proposal for an “allknowing system of systems” powered by artificial intelligence (AI) to manage procurement and maintenance decisions and calculate fleet readiness. The Virtual Design, Optimisation and Testing framework, or VDOT, was presented at the 18th Australian International Aerospace Congress in Melbourne.

Associate Professor Adrian Orifici from RMIT University’s School of Engineering said making sense of the mountains of incoming data was a major challenge facing Defence and other complex industries.

Orifici said VDOT could transform the industry by providing a framework to do just that, including virtual testing to evaluate mission performance for new aircraft or other assets, or even recommend design changes based on previous performance data.





DR MATTHEW MARINO, DR ABDULGHANI MOHAMED AND DR ALEX FISHER

RMIT's waterproof drone that can land on sea has been nominated for a top Defence innovation prize.

Known as Black Kite, the drone was designed and manufactured by The RMIT Unmanned Aerial Systems Research Team under the supervision of Dr Abdulghani Mohamed and Dr Alex Fisher in partnership with DSTG. Dr Matthew Marino leads the commercialisation and deployment effort. The Black Kite was nominated for a National Defence Innovation Award at the 2019 Avalon International Airshow.

Black Kite represented a successful “world first” drone for maritime applications due to it being entirely waterproof and can land and take-off on water, even with some level of swell and in all-weather conditions. The project had its beginnings as a student project, then developed through several prototype stages and testing using RMIT's industrial wind tunnel facilities.

The drone has been presented before top US Navy officials and, and has captured interest from various Maritime entities and is currently undergoing IP transfer agreements to British Maritime Technologies (BMT), a method to use the Black Kite as a man overboard system to track floating people or humans in emergency overboard situations.

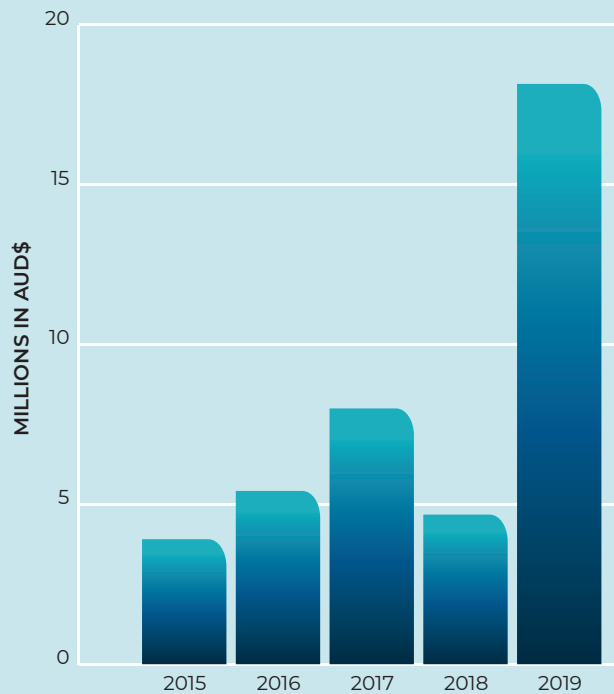


The Black Kite drone was developed in RMIT's industrial wind tunnel.

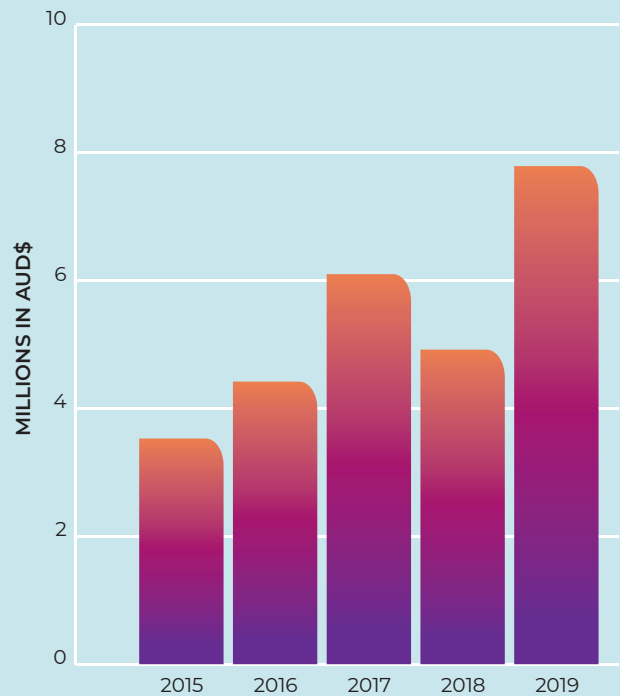
2019 Financial Summary

R&D INCOME

Total Value of Defence Contracts Executed by Year
2015–2019



Total Defence Funding Received by Year
2015–2019



2020–2021

Priorities, Engagement and Activities

The next two years will see the Centre attending strategic events to increase our presence in the Aerospace, Defence and Transport Systems marketplace.

1. Singapore Airshow February 2020

The Show is a unique platform for industry thought leadership through its high-level conference, forums and co-located events. Leading industry players, government and military chiefs gather bi-annually to contribute to dialogues, exchange ideas and seek solutions and strategies to advance the interests of the global Aerospace and Defence sector.

The Centre will have RMIT staff at the 2020 Show to connect with industry and defence representatives.

2. Formula 1 Rolex Australian Grand Prix March 2020

The Grand Prix provides technology and innovation focussed businesses to showcase their commitment to innovation and to highlight their advanced technology.

The Centre will purchase an exhibitor stand in the Innovation and Technology Hub and coordinate RMIT researchers to demonstrate their technology in the 10m x 10m drone zone.

The Centre's branded stand in the Hub will expose RMIT's Defence related research to government and industry during the two industry and student focussed days.

3. Why Space? – Designing Australia's Space Sector

Why Space? will gather local and international leaders from Space and Space related research, industry and design to consider what the future may look in this exciting field. Bridging engineering, aerospace, material science,

advanced manufacturing, design, urban planning, software and more, Why Space? seeks to turn silos into networks. This dynamic forum will generate new ideas and opportunities by bringing Australia's creative sectors together with policy, research and industry leadership.

4. Property Rights and Real Estate Interests in Outer Space

This virtual mini-conference will provide an opportunity to share ideas on, and apply traditional notions to the unknown domain of outer space. With NASA reinvigorated, and keen for Australia to play an important role in its journey to Mars, this timely event will discuss research, products and services, and general ideas about property and real estate in outer space.

The event will be presented by the School of Property, Construction and Project Management, and is supported by the Sir Lawrence Wackett Centre and the Space Industry Association of Australia.

5. Land Forces September 2020 Brisbane

Presented in collaboration with the Australian Army, LAND FORCES 2020 is an international industry exposition to showcase equipment, technology and services for the armies of Australia and the Indo-Asia-Pacific. The biennial LAND FORCES exposition is a powerful forum for key decision-makers from throughout the region, enabling government representatives, Defence officials, military procurement managers and senior army officers to network with Defence materiel manufacturers, equipment suppliers and service providers.

6. CIVSEC 2020 International Conference and Exhibition September 2020 Brisbane

CIVSEC 2020 will host a comprehensive program of conferences, seminars and symposia, organised and



delivered by distinguished thought-leaders in the civil security domain.

It will include:

- Humanitarian Assistance & Disaster Relief Conference and Panel Discussion
- Critical Infrastructure Protection Conference and Panel Discussion
- Cyber Resilience Conference and Panel Discussion
- Corrective Services Emerging Technology Working Group meeting
- Unmanned Systems Conference
- Simulation Conference

7. SCINDICATE 2020

SCINDICATE brings together representatives from science and industry to promote a shared interest; delivering enhanced capability to Defence.

Held annually, the event provides attendees with an opportunity to hear from key figures in Defence, industry and the research sector; and explore opportunities for increased collaboration and engagement.

8. Defence Webinar Series 2020

The Centre will hold a series of webinars for RMIT researchers, Higher Degree by Research students, Defence and industry partners throughout 2020 on a range of topics including:

- Decision Making in Defence
- Defence Ethics
- Health and Human Sciences in Defence
- Disruptive Technologies in Defence and National Security
- Working with Defence
- Artificial Intelligence

9. Defence Micro-credentials

The Centre will facilitate the launch of the RMIT micro-credentials for Defence personnel-upskilling and customised courses to provide professional development for Australian Defence Force members.

10. AVALON 2021: Australian International Aerospace and Defence Exposition

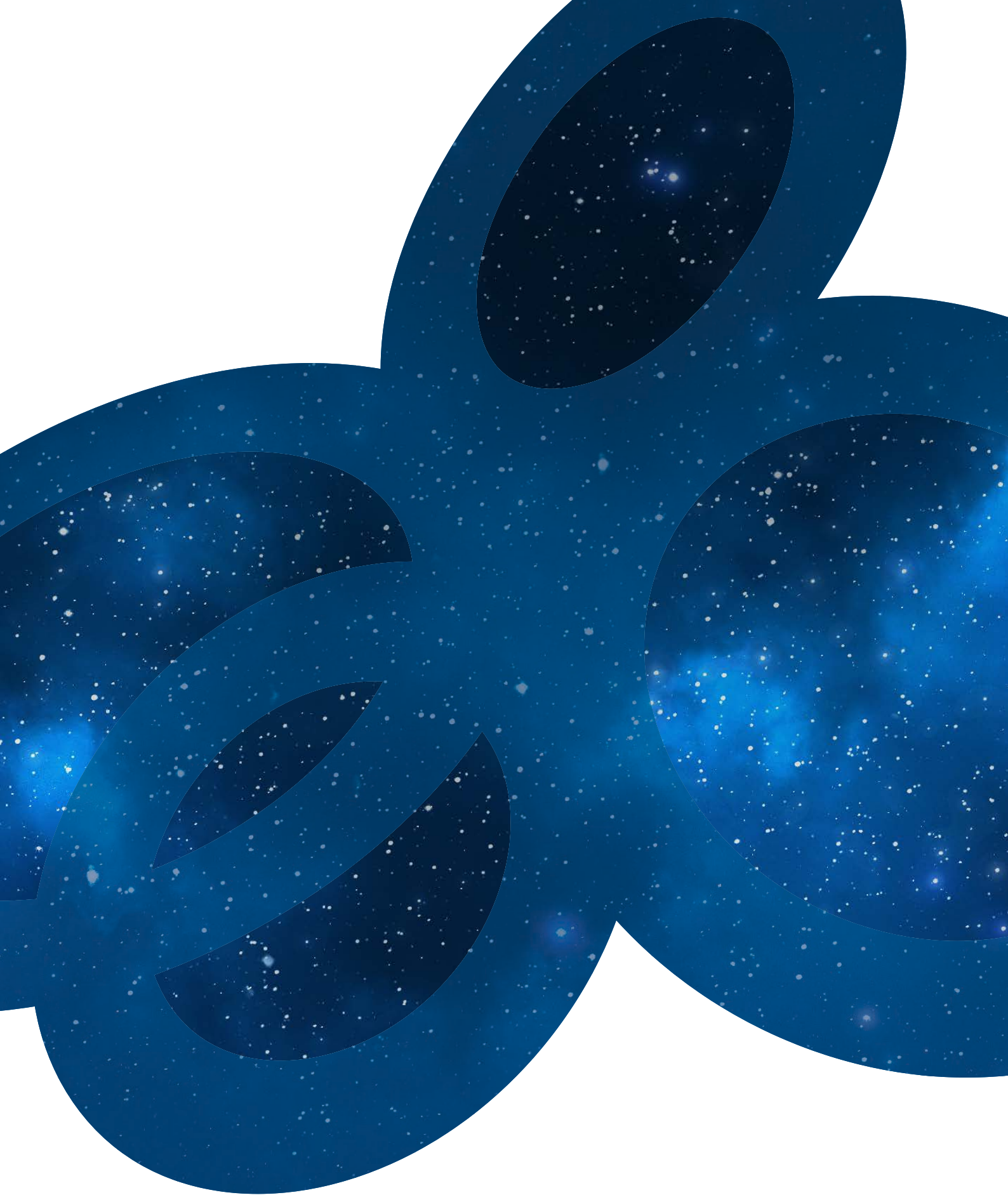
AVALON 2021 will be a valuable opportunity for decision-makers to be informed and for exhibitors to connect with their customers. Avalon Airshow is the essential aviation, Aerospace and Defence event for the Asia Pacific.

As a cornerstone of the Royal Australian Air Force's Centenary Year celebrations, AVALON 2021 is expected to surpass previous attendance records. RMIT and the Sir Lawrence Wackett Centre will again exhibit in the outdoor and indoor marquees at the Show after the resounding success of 2019.

11. Pacific 2021 International Maritime Exposition

This global business event attracts senior merchant marine, shore services, maritime and Defence industry, military and government decision-makers from around the world.

PACIFIC is strongly supported by the Royal Australian Navy, Sydney Harbour Foreshore Authority, the Capability Acquisition and Sustainment Group (CASG), Defence Science and Technology, the Department of Industry, Innovation and Science, the Department of Infrastructure, Regional Development and Cities and the Government of the State of New South Wales.





Sir Lawrence Wackett Centre
AIR SPACE LAND SEA

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